Treaty 8 First Nations (T8FNs) Community Assessment Team

Telling a Story of Change the Dane-zaa Way

A Baseline Community Profile of:

-Doig River First Nation
-Halfway River First Nation
-Prophet River First Nation
-West Moberly First Nations

November 27, 2012

Submitted to BC Hydro as part of the Site C Environmental Assessment

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A Baseline Community Profile of Four Treaty 8 First Nations

-Doig River First Nation
-Halfway River First Nation
-Prophet River First Nation
-West Moberly First Nations

Submitted by the Treaty 8 Environmental Assessment Team to BC Hydro for the Site C Environmental Assessment

Disclaimer

The information contained in this report is based on primary research conducted by The T8FNs Community Assessment Team in 2012, as well as information from published works and archival research. It reflects the understanding of the authors as generated within time and funding constraints, and is not a complete depiction of the dynamic and living system of use and knowledge maintained by T8FNs elders and members. The information contained herein should not be construed as to define, limit or otherwise constrain the Treaty and aboriginal rights of any of the above-listed First Nations or other First Nations or aboriginal peoples.

Authored by:

The Treaty 8 First Nations (T8FNs) Community Assessment Team and The Firelight Group Research Cooperative

On behalf of:

The Treaty 8 First Nations of Doig River, Halfway River, Prophet River and West Moberly

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Abbreviations and Acronyms Used in this Report

Acronym/Abbreviation	Full Name/Title
AANDC	Aboriginal Affairs and Northern Development Canada (formerly INAC or Indian and Northern Affairs Canada)
B.C.	British Columbia
BRFN	Blueberry River First Nation
CD	Compact disc
CPA	Consultation Process Agreement
DCAT	BC Hydro's proposed Dawson Creek/Chetwynd Area Transmission Project
DR01, DR02, etc.	Code for interviewees and focus group attendees from Doig River First Nations
DRFN	Doig River First Nation
Firelight	The Firelight Group Research Cooperative
FNFNE Study	First Nations Food, Nutrition and Environment Study UNBC et al. 2010a; 2010b)
H_2S	Hydrogen sulphide (or sour gas)
HBC	Hudson's Bay Company
HR01, HR02, etc.	Code for interviewees and focus group attendees from Halfway River First Nation
HRFN	Halfway River First Nation
I.R.	Indian Reserve
kg	kilogram
km	kilometre
km^2	square kilometres
NAADAP	Native Alcohol and Drug Abuse Program
NENAN	Nenan Dane Zaa Deh Zona Child and Family Services
NENAS	Northeast Native Advancing Society
Pers. Comm.	Personal communication with…

Acronym/Abbreviation	Full Name/Title
PR01, PR02, etc.	Code for interviewees and focus group attendees from Prophet River First Nation
PRFN	Prophet River First Nation
PRRD	Peace River Regional District
RCAP	Royal Commission on Aboriginal Peoples
RSA	Regional Study Area (used by BC Hydro in its impact assessment)
SEIA	Socio-economic Impact Assessment
SFN	Saulteau First Nations
Site C or the Project	BC Hydro's proposed Site C Hydroelectric Project
STI's	Sexually transmitted infections
TARR	Treaty and Aboriginal Rights Research (branch of T8TA)
T8FNs	The four Treaty 8 First Nations involved in this study, consisting of DRFN, HRFN, PRFN and WMFNs
T8TA	Treaty 8 Tribal Association
TLUS	Traditional Land Use and Occupancy Study (primarily Candler et al. 2012)
UBCIC	Union of BC Indian Chiefs
WM01, WM02, etc.	Code for interviewees and focus group attendees from West Moberly First Nations
WMFNs	West Moberly First Nations

PREAMBLE: A TRIP ALONG THE PEACE RIVER VALLEY

This T8FNs Baseline Community Profile Report is a baseline and trends conditions assessment not only of a people – the four T8FNs – but also of their relationship to a place – the Peace River valley – and how that relationship has changed over time and what values the T8FNs have and continue to hold in this place. As a result, it makes sense to start with a discussion of the specific location in question.

Much has changed in the Peace River valley in the past century. The amount of land use and occupancy within the immediate Peace River valley by Dane-zaa - the "Real People" in Beaver language[1] - has been reduced in recent years due to the alienating effects of modern industrial activities. These activities, including the uptake of lands for farming and other private holdings, habitat fragmentation resulting from increased oil and gas development, and forestry, and reduced faith in certain food sources (especially fish in the Dinosaur Lake and Williston Reservoirs) have undermined the ability of the T8FNs to exercise the rights promised to the T8FNs under Treaty 8. There are roads now, and farms, and two dams that have altered the flows of the River, the climate, transportation, and the ecology of the area. And, there are towns small (Hudson's Hope, Taylor) and large (Fort St. John) in close proximity to the Peace River.

All of these cumulative effects are taken up in more detail in section 4 of this Baseline Community Profile. Nonetheless, the Peace River valley remains important to all four of the T8FNs for land use and other values. Hendriks (2011) notes that the Peace River valley remains"integral to the T8FNs oral traditions, seasonal round, and mode of life". To understand why requires a tour.

A long day's travel via canoe or kayak, or less than an hour's drive along scenic Highway 29, can take a person today from the base of the Peace Canyon Dam to the site of the proposed Site C hydro electric Project, some 83 km downstream. Most travellers will never know that they are passing hundreds if not thousands of years of history written in the walls, forests, and waterways of the Peace River valley. This place embodies much that the Dane-zaa value. As written down in historic documents, countless oral histories, and the recent mapping of traditional land use and occupancy in the Peace River valley by members of the

[1] In this Report, the spelling "Dane-zaa" is typically used for "the Real People" (this is the spelling used by the Dane-zaa Language Authority (pers. Comm.., Shona Nelson, October 3, 2012). Different T8FNs use different spellings (DRFN and HRFN- Dane-Zaa; PRFN – Dunne Tsaa; and WMFNs - Dunne-za (or Dunne Za)). Where other spellings are used in citations, such as Dunne-Za (e.g., Ridington 1988), they are kept intact and are synonymous with Dane-zaa. The term Beaver should also be treated as synonymous.

T8FNs (Candler et al., 2012),[2] the Peace River valley and **in particular** the area between Hudson's Hope and Taylor, is described by T8FNs members as a critical, essential and irreplaceable part of the T8FNs cultural landscape.[3]

Figure 1 below identifies some of these important locations in the cultural landscape that is the Peace River valley. Locations and details have been generalized as necessary for the purposes of protecting critical cultural information. The numbers in brackets in the text below refer to locations identified in Figure 1.

In order to set a paddle in at the Fingers (1), a popular fishing site at the base of the Peace Canyon Dam, a traveller needs to walk past an area frequented by the Mountain Dane-zaa (primarily present-day WMFNs members) long before the fur trading years. There is a place on this south side of the valley, east of the present Peace Canyon Bridge, where WMFNs members speak of a landbound spirit rock that people used to walk or dance around in ceremonies. In addition, in the waters of the Peace River itself downstream of the Fingers near Hudson's Hope is another spiritually important landscape feature (2):

> It's called Dreamers Rock. The story I know of this is years ago before there were any settlements here, a dreamer was camped on the shores here... and he was camped there with his family, and he had a horse and he had a dream that night that he was floating over the water. He was looking for a place to do a vision quest. When he woke up in the morning he found himself on that little rock and he had no way, there was no way of getting up there so him and his horse were over there and his family was on the shore calling for him; in order for him to get off the rock he had to push his horse off and jump into the river and swim back across, and what I have been told about the area that's become known as Dreamers Rock is because he had his dream there so it's become a spiritual area if you go in here there is a bunch of or a bit of a canyon in here. When I go in here I know it, we have been there for a long time; there has been a lot of use in this area (W08, Site C TLUS, July 6, 2011).[4]

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[2] Unless otherwise noted, all the information provided herein is based on interviews either for the Baseline Community Profile or from the 2011 TLUS (Candler et al. 2012).

[3]Cultural landscapes have been defined as "landscapes that are lived in" and which bring attention "to the way people within the landscape live, their traditions and everyday life" (NWT Cultural Places Program 2007). Cultural landscapes are typically broad areas that are reflective of Aboriginal culture and valued in their current state as:

a. Landscapes that are lived in and used by culture holders for cultural activities (e.g., hunting, fishing, trapping, spending time on the land, teaching)
b. Viewscapes that are tied to a sense of local or regional identity or historical importance
c. Physical characteristics of the landscape that together lend a sense of history, security, safety, or other cultural connections.

4 The people of Halfway River also value a spirit rock up on a hill north of Butler Ridge. The rock has many stories associated with it, including that it points to where you will find moose. There is a story of a hunter who fell asleep on the rock and it moved. Also, there are stories of people hearing singing there (Verification Focus group, October 10, 2012).

Heading downstream, a traveller passes by the present day community of Hudson's Hope, which was known as *tse t'aik'wa de* or "House Before the Rocks" (3) by resident First Nations.

This community houses an important Dane-zaa graveyard and was a fur trading fort starting at the turn of the 19th century. Across from Hudson's Hope lies an important Dane-zaa gathering and occupancy site, which housed many T8FNs families for parts of the year back during the fur trade. Indeed, Hudson's Hope was chosen for a fur trading post precisely because it was already an established habitation place:

> That's why Hudson's Hope is there (…) when they [fur traders] were coming through there was a group of us living there and the people from West Moberly would travel from Hudson's Hope and the people from Halfway would come down and gather there same as Prophet and Doig, all along the Peace River. There are places all the way along (W08, Site C TLUS, July 6, 2011).

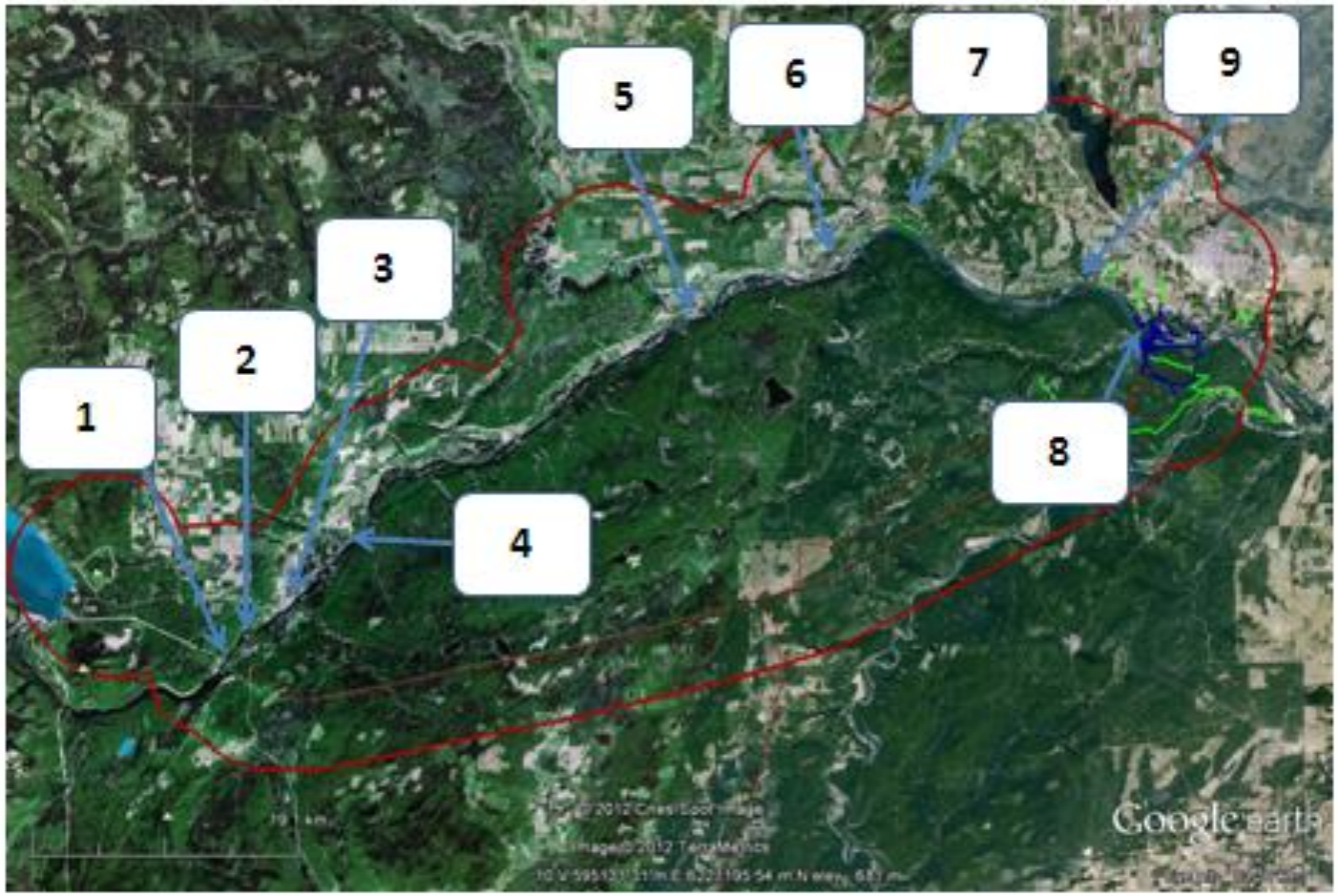
Heading down the Peace River on past its confluence with Lynx Creek (4 - *nodaa saaghae* - a noted gathering and fishing place) and Farrell Creek, beavers and eagles are often encountered. Moose, elk and deer frequent the numerous islands in the Peace River, many of which are important refugia and calving sites for these ungulates, which are central to the diet and way of life of the Dane-zaa. These islands are recognized as "sacred refuges" for the animals, and T8FNs members report a cultural restriction against harvesting them from these sensitive locations (W08, Site C TLUS, July 6, 2011).[5] The land on the south side of the River slopes sharply upwards toward the rich game country of the Peace-Moberly Tract, while the land to the north is a wide former floodplain with fertile soil ideal for agriculture. Much of this land was frequented by T8FNs during their seasonal rounds prior to the settling of the area by non-Aboriginal farmers in the early to mid 20th century.

Appropriately, near the halfway mark between the Peace Canyon Dam and the proposed Site C Project location is the Halfway River (5), one of the most important cultural sites within the Peace River valley. The Halfway flows down from the Halfway River First Nation (HRFN) reserve some 50 km north, and has traditionally been a major transportation route, fishing (including for bull trout and dolly varden), hunting, and harvesting area; a main artery for area First Nations. Its confluence with the Peace River is an important gathering place known as Attachie,[6] after the Chief buried there in 1919 along with many other victims of influenza. References to Attachie abound in the oral history of the Peace River valley. The south side of the Peace River just east of here still shows the scars of the Attachie Slide of 1973. Trout (including brook, dolly varden, and rainbow), whitefish and

[5] Excerpts of transcripts from several 2011 TLUS (Candler et al. 2012) interviews are incorporated into this Report. In each instance, the participant code and date of the interview are provided herein. D indicates DRFN membership; H indicates HRFN, P indicates PRFN, and W indicates WMFNs.

[6] Some Dane-zaa know the same area also by the name "Canoe in the Bush" (W08, Site C TLUS, July 6, 2011).

Figure 1: A Trip Along the Peace River valley



northern pike are harvested from the confluence of the Halfway and Peace. The place name Attachie reflects the deep connection of members of the DRFN to this place:

This was their land; their country... This is the place where our people met the explorers, early settlers, and some of the tribes that came later from the east who all travelled by canoe and boat down the [Peace River] (Attachie no date).

Bear Flats (6 - *as tluuge*) and nearby Cache Creek (*juuzhe saaghae*), further downstream to the east, are also strong reflections of the relationship of the T8FNs to the Peace River valley. This area was another important gathering place, and remains so to this day with the Bear Flats campground used by the T8FNs for a variety of pan-T8FNs gatherings. It too has many Dane-zaa burials associated with it, a strong indication of intensity of use. According to T8FNs members, this use was strongly related to the productive ecological characteristics of this reach of the Peace River - good habitation sites, proximity to ceremonial and sacred areas, good hunting and fishing opportunities, a nearby freshwater spring, and multiple trails and transportation routes (Candler et al. 2012). Many of the trails which criss-crossed the Peace River valley came into or close to this gathering place, and were often used as horse pack trails by families on their seasonal rounds.

East of Bear Flats, Highway 29 leaves the valley, providing stunning views of the Twin Sisters to the southwest, another critical cultural area for the T8FNs. Members report intense visceral connections with this view of the Peace River valley, and strong senses of well-being and contentment:

> The only thing I know is that when I drive through that road, at least twice a week to go to Fort St. John, I always think this is my special place, I love this place. I just look across the River, and I just thought that's so beautiful... That's my special place there (WM03 June 28, 2012).
>
> That stretch of the Peace between Hudson's Hope to Fort St John is the most beautiful place in the province. It is stunning (WM06 October 10, 2012).

As the road climbs out of the valley at a steep pitch, one can see land to the east where Beaver elders speak of the final buffalo jump hunt (7) that occurred after bison numbers plummeted during the fur trade.[7]

While Highway 29 leaves the valley, the Peace River continue on, heading east to meet the Moberly River flowing from the southwest (8) and later – past the proposed Site C Project location – the Pine, Kiskatinaw and Beatton Rivers, to name but a few of the many tributaries.

[7] Community Advisors also spoke of a second buffalo jump near Hudson`s Hope (Verification focus group, October 10, 2012).

As one drifts closer to Fort St. John and Taylor, other traditional gathering places either emerge (Old Fort south of Fort St. John (9) was a Hudson's Bay Company (HBC) post) or are hidden on the plateau above (one of the primary locations for such gatherings is now Fort St. John's WalMart). Elders relayed stories passed down to them of bodies and burial sites from war and disease on both sides of the River in this area (Candler et al. 2012). Stories written on the landscape emerge of fur trading days, with the ancestors of the T8FNs both the backbone and the engine of the fur trade. Dane-zaa fed HBC forts through the winter, providing them with furs, and pulling their boats up the River. Stories emerge of times of war between the Beaver and the Cree across the Peace River, disease, famine and entire families dead in their homes and thrown frozen into mass graves near the HBC fort (DR03, April 26, 2012); and, amidst this hard work and suffering, stories of annual gatherings full of joy. This is the rich oral history of the valley.

Many T8FNs stories, whether history, myth or a mixture, take place in the Peace River valley and are widely known by members, such as that of the Peace River valley.

> There was actually some sort of encampment somewhere around Taylor Flat at that time. ... But the flu epidemic was coming through and the father of this family had died and it was just the mother and the little baby that were left and she also started succumbing to the sickness and she had no idea what to do with her baby and her last hope, because she knew she was getting weaker and she wasn't going to survive, she thought she was getting worse. To help her baby survive she built a raft and fixed it all up and put the baby in the middle of the raft and put it out on the river to float so that at least somebody would find the baby; and coming along towards Taylor Flats area there was a guy – I don't know if he was on a canoe at the time but anyways – he noticed this thing floating down the river and there was a cry coming from it. So anyways, he got this raft and there was this little baby, tiny little baby, then apparently he was actually the uncle of this baby, that actually found this baby... It would have been people utilizing the river, the baby had more of a chance than just being stuck in the cabin, that way I think, and she was a pretty smart woman to do that (P05, Site C TLUS, May 26, 2011).

These stories written on the landscape are often recounted by multiple Dane-zaa at different times, evidence that their oral cultural history is still vibrant, and the central role of the Peace River valley in it.

Areas on the north side of the Peace River in and around Fort St. John are also noted by current Dane-zaa as having plentiful berries and medicinal plants, invigorated by the temperate climate of the valley and the well-sunned south facing slopes.

What makes Peace River valley valuable to the Dane-zaa?

In terms of describing Dane-zaa uses – and values – associated with the Peace River valley, the T8FNs Community Assessment Team incorporated information from a variety of sources.[8]

1. Mapping data and transcripts from the 2011 T8TA Traditional Land Use and Occupancy Study (TLUS) of the area that would likely be impacted by the proposed Site C Project. This study was a powerful tool for the identification of many of the values associated by T8FN members with the Peace River valley;
2. Focus groups and interview data from the T8FNs Community Assessment; Collation of prior oral history from the Treaty 8 Tribal Association's (T8TA) Treaty and Aborignal Rights Research (TARR) Archives and other sources; and
3. Academic and other studies.

From this information emerged the following picture of different types of meaning, value and use associated by the T8FNs with the Peace River valley:

Home:

> To me it's just a picture of richness of our place. This is our place, our corner of the world, it's all important I mean, we don't live in little lots and blocks like urban people do. If we don't have our land, we don't survive. So, when I see that [Peace River valley from Highway 29] it takes my breath away (WM11 May 24, 2012).

Simply put, the Peace River is regarded as home for the First Nations of the region:

> It is our home and our back yard. We utilize it for a lot of different things. We enjoy moose meat. We use it for camping and fishing and training our children. We try to be stewards of the land (DR08 August 7, 2012).[9]

> About a year ago, I came down here with my son and we came down to the water and we put tobacco in there and I was talking to the water, saying I will fight for you, I don't know what I'm going to do yet but I'm going to fight for you, and that's what

[8] However, any contribution by the T8FNs Community Assessment Team to the characterization of the social, economic, ecological and cultural role of the Peace River valley for the Dane-zaa, even from these multiple sources, must be treated as a partial one. Deep examination of the role of this location in the cultural landscape for the T8FNs would require dedicated primary cultural impact assessment research beyond the scope of this Baseline Community Profile.

[9] Excerpts from various Site C Community Assessment interview and focus group notes and transcripts are clearly identified throughout this Baseline Community Profile. All respondents are anonymous. In each instance, the participant code and date the information was collected is provided. Interview excerpts from other studies are clearly identified (e.g., Site C TLUS).

> I'm going to do. Even though I'm moving for school and I'm going to be gone for two years, but I plan on living here (PR12 August 8, 2012, speaking at Attachie).

Gatherings:

The Peace River valley was and remains a primary gathering place for area First Nations. In a survey conducted by the T8TA in 2009, the three biggest uses of the valley were for community gathering, hunting, and fishing (First Light Initiatives 2009). Over 75 per cent of T8FNs respondents indicated the Peace River valley is an important gathering place (see Figure 2 on page xx). In the same survey, people who frequent the area for gatherings (including family trips) and spiritual ceremonies indicated on average they come to the Peace River valley between three and five times per year for this purpose.

> The campground is where I have stayed at Bear Flats. I have stayed there I don't know how many times because that's an old ceremonial site, that's an old historic area that the Dane-zaa people used in the past. The Boones own it now but they know about the history and so they are very accommodating. We have had lots of our big celebrations like elders gatherings, youth and elder gatherings, we have had Treaty 8 meetings, its fairly central so we can bring people from Fort St. John and Prophet River, Halfway River we have had lots of camps there (W17, Site C TLUS, July 13, 2011).

Within the Peace River valley, the most commonly identified current gathering places are the Bear Flats campground near Cache Creek and the Attachie area where the Halfway River meets the Peace. Other historic gathering places include Hudson's Hope, Old Fort, Fort St. John and Taylor Flats.[10]

It would be difficult to over-estimate the value of these summer gatherings for the social, economic and cultural well-being of the Dane-zaa:

> This is where the tribes would come in the summer to gather, to engage in cultural practices, the dancing, the drumming, they meet each other, boys and girls would meet and make babies… it was a real kind of social networking site for the Dane-zaa… but certainly it's ingrained in the current group of Dane-zaa that the Peace River and that valley, Bear Flats, that whole area, was where everyone came and gathered in the summer. It was of very important cultural significance for them to be able to do that at that location. That was where you went (Key informant 04 July 26, 2012).

[10] In 2003, elders reminisced that people from the south side of the Peace River had to cross with their horses to get to Taylor Flats for annual gatherings (T8TA Treaty Education Team 2003c).

People from all the T8FNs have memories, both personal and communal (historic), of travelling to gatherings in the Peace River.

> Over a lot of the years our family has travelled up and down that valley. It's been our route to our relatives we have relatives in Prophet River as well … It's just the memories, you know. I have memories of me and my grandparents and parents, all of us, camping just outside of Hudson's Hope just by Farrell Creek. We camped there and they used to have a rodeo there. That was one of our summer fun things to do, was taking time out to go to that rodeo and camp there for a week or so (WM11 May 24, 2012).

> There are a lot of stories about Taylor too. People used to meet in Taylor; they called it the Base like Basin, big valley. And then later on they meet right in the Wal-Mart, that area [that is now Wal-Mart in Fort St. John] (DR03 April 26, 2012).

History:

According to Dane-zaa oral history, the Peace River is named for the settling of a conflict between the Beaver and the Cree.[11] The Cree traditionally lived south and east of the Upper Peace River region. Due to their trade with settlers, they had guns and they pushed the Beaver northwest in the late 1700s. A peace treaty was negotiated in the late 1700s or early 1800s which saw the Cree agree to stay south of the Peace River, and the Beaver north (Chillborne Environmental 2009). The Peace River, before and after its new name, has long marked a boundary zone, where groups meet for trade, celebration and the settling of disputes.

The Dane-zaa recognize certain people as special Dreamers who are able to organize the group, communicate through songs about the future, and make sense of change. There are many references in stories and songs to the Peace River area by Dreamers such as Charlie Yahey. The Peace River valley is revered in part for its connection to these Dreamers. Not surprisingly, the sites in the valley that found their way into the stories, songs, and journeys of the Dreamers are frequently used as teaching areas, and for cultural training of Dane-zaa youth. Many T8FNs members also know of the prophecies associated with damming of the Peace River:

> My grandpa prophesized, that they are building the dam to kill themselves… The prophecy said that they would build Site C and the dam would burst (DR05 May 22, 2012).

[11] The Beaver name for the Peace River is also *Saaghii Naachii*, meaning big river. For the Cree, the term for the river became "making the peace" or *chegeh newaaho*.

> At one time our dreamers… they said that at some point in town the men will come and build like a beaver dam across the river and dam the river off and stop the flow and prevent the flow from continuing naturally. And way in the future, that beaver dam will break and they saw the community down from this man-made beaver dam, these communities were probably swept up in it (P05 Site C TLUS, June 11, 2011).

The influenza of 1918-19 also figures strongly in the oral history of the Peace River valley:

> I want to tell them, this is where the 1918 small pox killed all the native people here, and there was a mass grave, right up in Cache Creek somewhere, and a big mass grave at Bear Flat... They buried a lot of people there, my two grandmas... and then the Hudson Bay Company, or the rest of the people, they all buried all the dead people in one hole (DR03 June 28, 2012).

Transportation:

> That's how native people used this, like a highway this Peace River. A one thousand mile trail right from Dunvegan all the way up to Rocky Mountain. We got stories about those, lots (DR03 April 26, 2012).

Water in general is sacred and the Peace River is the largest water body in the region. The Peace River was a highway for native people, bringing people from community to community and bringing goods into the region. It is an important water route, with constant boat traffic of people visiting, fishing and camping up and down the river.

> All Dane-zaa are river people; all rely on rivers and Peace River is the largest and most important of those rivers. All other rivers flow into it (DR02 June 29, 2012).

The river was critical to transportation throughout the year. Elders reminisced about crossing the frozen Peace River in winter time prior to the W.A.C. Bennett Dam being built (DR19 August 8, 2012). One elder noted that "Aku [an important elder] talked about trapping along the Peace in winter on snowshoes on the frozen river, all the way up to Hudson's Hope (DR02 June 29, 2012).

Ecology:

There was considerable discussion by T8FNs members about the intensity of use of the Peace River valley by wildlife. According to members, places like Moberly Lake have wildlife because of the Peace River valley. If animals do not have access to this ecological

corridor, members are concerned that it will destroy the animals on both sides of the river (Verification focus group, October 10, 2012).

Portions of the Peace River valley are critical habitat for animals, birds, and caribou that travel through on their way to their calving or wintering grounds (Chillborne Environmental 2009). It is renowned for elk and also is important for the north-south movement of *dlezhe* (grizzly bear), a culturally revered and at risk species. There are fish and spawning runs in the Peace River and its major tributaries. The south shore of the Peace, much of it covered by the Peace Moberly Tract, an area important to the WMFNs harvesting and way of life, is highly valued as habitat for ungulates and other harvested species. So too are the islands in the Peace River and the lowlands on the north side, especially for ungulates and birds during sensitive life stages (calving, nesting, and early rearing). This is in part due to the shelter provided in these areas for the avoidance of predators. The islands are also key breeding areas for birds. Deer are widely abundant, with T8FNs members indicating they often seen them in their hundreds between Bear Flats and Hudson's Hope. Overall, the Peace River valley is considered a world-class wildlife refuge:

> When you look at it this is a major river corridor, the only river corridor in our area that the animals use, that's why it's so important. The river corridor has its own climatic zone, it's different from the higher level areas, and there is lots of food and water there right. [...] In the wintertime, a lot of them spend the winters along the river because there is not so much snow and the feed is a lot easier to get at (W08 Site C TLUS, July 6, 2011).

T8TA (2010), in its *WQchiigfi Yededze? Dane Godineh Ya t'a doh aah? Kaa* Declaration regarding the proposed Site C Project, notes the area has:

> Regionally rare and important ecosystems, including old growth deciduous and mixed wood forest of the Peace, Halfway, and Moberly Rivers, riparian forest important to furbearers, habitat for red and blue listed neo-tropical migrant birds, and traditional and medicinal rare plant communities.

According to T8FNs members, the importance of the Peace River valley as a wildlife refuge has never been higher because animals are being "pushed down into valley" by industrial impacts in places like Farrell Creek north of the River, and Del Rio to the south (Verification focus group, October 10, 2012).

Sacred and Spiritual Sites:

> My great grandfather that's his territory. There are a lot of people buried on that

> river; there are a lot of burial sites along that Peace River (DR03 June 28, 2012).

A 2009 T8TA survey found that 54% of respondents (primarily made up of members of the four T8FNs) felt a spiritual connection to the immediate Peace River valley area (First Light Initiatives 2009).

For First Nations the presence of graves in an area is one of the surest signs of strong occupancy and use values. There are many burial and similarly sacred sites in the Peace River valley, only some of which can have information shared about them by members.

> There's one area [in the Peace River valley], and I'm not going to identify it….just that it is a spiritual location, there's stories about it from the past for my own reasons I can't [say anything about it] (P05 Site C TLUS, May 26, 2011).[12]

In some cases, gravesites have suffered in recent years from a lack of care and respect from non-Aboriginal newcomers to the Peace River valley:

> The gravesite? Everyone knows about it… They knew people that were buried in there. It was so run down… Hudson's Hope had fenced off the non-aboriginal site and left the aboriginal side open and people just knocked down the grave stones and crosses and there is a quad trail right through the middle of it. The elders when we took them up there they cried (W08 Site C TLUS, July 6, 2011).

Traditional Use:

According to T8FNs members, before land was privatized, the Peace River valley was an important part of the seasonal round of all four T8FNs– it is where the animals winter and calve. The trails through the area have been important for both animals and First Nations communities. Before land was privatized, there were trails on both sides of the River (Verification focus group, October 10, 2012).

The communities used it as an important transportation corridor but also lived there and gathered there for part of the year. It has been a place of much more permanent use than just transit; a place for social and cultural practices.

[12] It is not unusual for First Nations and other Aboriginal groups to be extremely secretive about the location and nature of important spiritual areas, for a couple of reasons. One, they may have legitimate concerns about potential mis-management of those sites should their locations be revealed, based on previous history. Secondly, there may be personal or cultural taboos associated with revealing critical cultural information (Gibson, MacDonald and O'Faircheallaigh (2011).

Results of the 2011 TLUS as well as interviews and focus groups for this study and previous scoping work for the T8FNs (e.g., Hendriks 2011) indicate that a number of Dane-zaa families continue to use the Peace River valley as their "grocery store", especially for game, but also fish and food plants. In the TLUS, 796 traditional use, occupancy and other values were mapped within 5 km of the proposed inundation zone and associated proposed Site C Project components (Candler et al. 2012).

> Anywhere that river runs, just put a big circle around the whole river system because the whole river system, anything that goes within that area is of absolute significance to the people. There's stuff in the marshes that come along the side, there's stuff in dryer lands right along the river, there's carrots, vegetables, food like wild potatoes, wild carrots, wild celery. There are all these different kinds of food. Medicinal plants are found anywhere along that system, the whole thing is just... If there's not one thing you can find here it's another thing you can find (P05 Site C TLUS, June 11, 2011).

The T8FNs hunt, fish and gather medicines and berries in the Peace River valley. Plants have always grown well and in wide variety in the high quality soils, especially on south facing slopes on the north bank of the Peace River. Moose is a preferred species (caribou was previously but are extremely rare now), but elk and deer are also harvested. People harvest in all seasons, with the fall moose hunt, spring beaver hunt, and winter trapping most critical. Fish have traditionally been abundant in area lakes and streams. People also gather the plentiful berries during the summer and fall along the banks of the Peace River and its tributaries. Medicinal and food plants are also gathered in the region, and some traditional medicines are reportedly only found in the Peace River valley.[13] Members also reported trapping along the Peace River and its tributaries and in upland areas (Candler et al. 2012), due to the abundance of beaver and other furbearers.

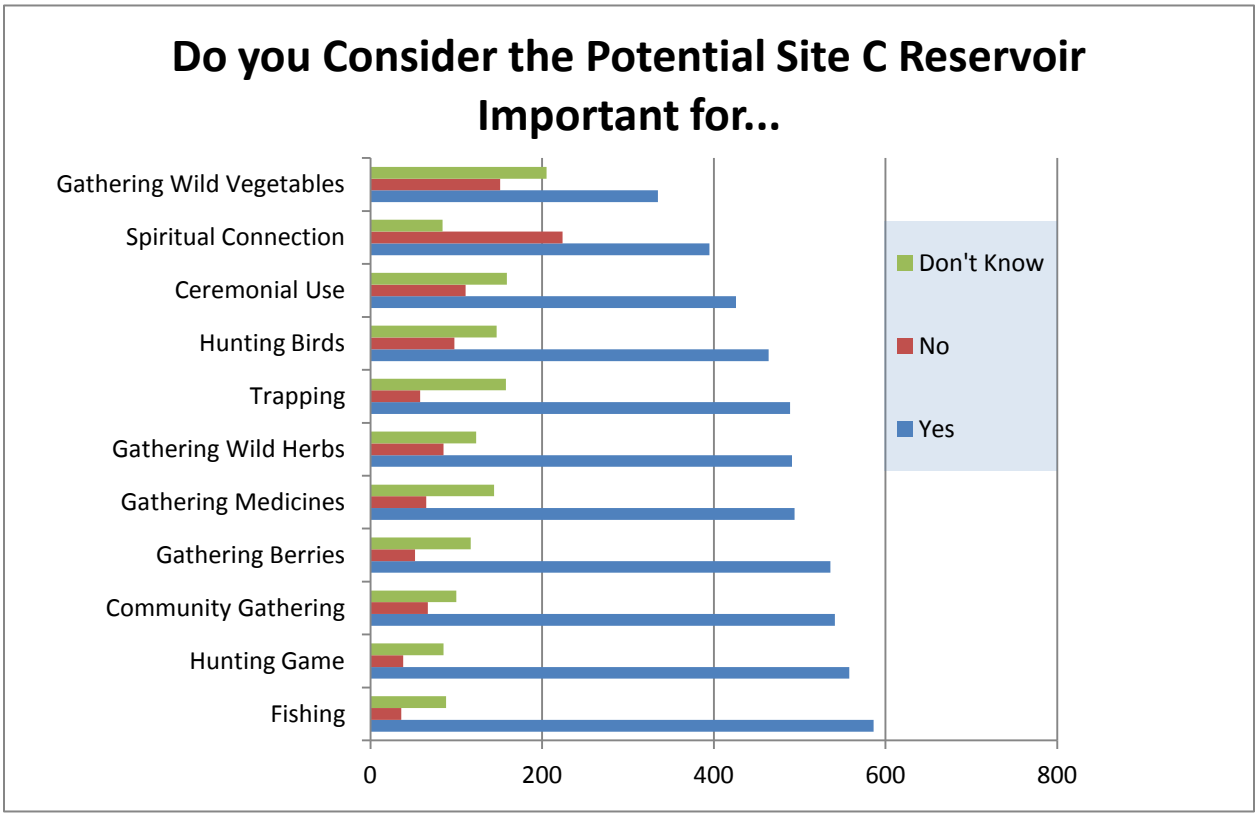
Members from each T8FNs community report using the stretch of the Peace River between Fort St. John and Hudson's Hope for a variety of harvesting purposes (Candler et al. 2012). Youth also report using the Peace River valley extensively (e.g. DR10-16 July 5, 2012):

> We canoed down every year for five years, all over to Fort St. John from Bear Flats, so it is a pretty neat experience, and I've done a lot of hunting up there.

The aforementioned 2009 T8TA survey found that large numbers of T8FNs members use the Peace River valley for harvesting and other purposes, as shown in Figure 2:

[13] One T8FNs member indicated that some traditional herbal medicines, including rare medicinal plants (referenced one for lung problems) identified by healers, are only known to grow in the Peace, Moberly and Halfway River valleys. (WMFNs member 01, Site C Open House, May 9, 2012).

Figure 2: Importance of the Peace River Valley to T8FNs (First Light Initiatives 2009)



In every traditional use category other than the gathering of wild vegetables, the majority of nearly 700 T8TA respondents indicated the portion of the Peace River valley that would be flooded should Site C proceed is important to them.

Practice of Dane-zaa Culture:

> The Peace River valley is a very significant link to their past culturally and economically, to the fur trade and they really identify with that valley. It's one of the few areas left that's just so identifiable to who they were as a people (Key informant 02 July 26, 2012).

In Aboriginal communities, the stories, knowledge, and practices that are essential to living well are transmitted while people are out on the land engaged in the traditional economy - as they pick berries and plants, hunt, trap and fish. In these primarily oral societies, historical and mythological events or useful descriptive information are often recorded in the names of landscape features (e.g., Attachie, Bear Flats). As young people travel on the land, they engage with their elders, leaders and families, strengthening communal bonds and gaining knowledge as they come to know their history through storytelling at the

significant places to their community. The shared stories ensure that the younger generation acquires appropriate information about how to hunt, trap, fish and harvest from the land, wildlife behavior, the location and purpose of medicinal and other plants and materials, navigation, and environmental management values. At the same time, cultural lore, values and spirituality are only properly learned on the land through observation, listening to elders, practicing ceremony, and personal experience.

The Peace River valley has played an essential role in this passing down of cultural skills and values for Beaver, Cree and Sekani T8FNs members and their ancestors for countless generations and is still commonly used as a teaching area. A DRFN elder involved in the 2011 Site C TLUS (Candler et al. 2012) stated: "If we lose the land where we have our stories, our kids will never know". WMFNs Chief Roland Willson (2008) noted:

> It is about my ability to take my son to the islands. It is not just about going to shoot an animal. The islands on the river are calving grounds. My understanding of what Indian-ness is to transfer that knowledge. My way of what Treaty means. The piece that always gets lost is our spiritual connection to the earth.

The 2009 T8TA survey also found that over 60% of T8TA respondents consider the Peace River valley important for ceremonies (First Light Initiatives 2009).

Well-being and Quality of Life:

> When you have a perspective of life bigger than your own then it's a good place. When you can have remembrance of a space where you know that you're a part of something greater, which is the past and you're the present, and you may leave something for the future generation to think about as they live, that's a good place. When you can be able to go to a gravesite of your ancestors and sing their traditional songs, that's a good place. When you can see between trees and see different points of view and when you put all the different types of textures of trees and colors together especially in the fall in the [Peace River] valley there, you see how lucky we are to be able to live on the land that our ancestors dreamed about, that's inspiring. We need to be inspired everyday to look for something greater than ourselves, and that's what the Peace River valley does. It's greater than ourselves (DR04 July 23, 2012).

T8FNs members simply feel better when they travel to the Peace River. It is there that their history, their ancestors, and the land and animals they know, surround them. Several T8FNs parents identified that their first memories of being on the land were at key places in the Peace River valley, and that they want their children to have a similar opportunity.

One DRFN elder indicated during a trip to the Attachie area that "I get a good sleep in this area. I haven't slept well in two years… This place lifts me up spiritually" (DR18 August 12, 2012).

Another T8FNs member spoke of the solace, solitude and beauty to be found berry picking on the north side of the Peace River just upstream of the proposed Site C Project:

> Throughout the 90's, off and on, this was our little driving area where we could go and relax and watch wildlife or whatever, so we would take this little road, we just wandered through it, it's so beautiful, throughout the summers and into the fall. So we usually wandered through it because it's closer to the river. There are not a whole lot of areas where you can get down to the river and just enjoy, that's close in by our home (P05 May 26, 2011).

On a given day, whether floating down the Peace River, camping at Bear Flats, or driving along Highway 29, Dane-zaa people indicate they can quietly enjoy nature in a meaningful way. Several T8FNs members indicated a strong connection to the current viewscape of the Peace River Valley as seen, in particular, from Highway 29:

> When I drive through that highway, I don't listen to the radio. I don't have anything on. I am thinking. I use that time to just drive think and look at that landscape. I am always looking for the caribou or the elk. I have seen herds of elk swimming across the river, bears, deer. My kids, we used to count the deer there. Used to be way more than there is now. There used to be 400 to 500 deer in one field and the geese in the spring … Participating in the Paddle [for the Peace] over the last few years has really opened my eyes to like just being on the river and seeing it from that whole other perspective. Where basically my ancestors traveled that river and that's what they saw you know. It just kind of brings me a lot of peace. Driving through there is soothing for me (WM11 May 24, 2012).

Summary:

> Our people's history to the Peace River valley and maintaining the future generations' connection to this land matters more than profits from selling our rivers and land (Attachie no date)

Section 7 revisits the question of what role the T8FNs see now and in the future for the Peace River valley in their lives.

This is a mere introduction to the layers of values, history, and use in the Peace River valley for the people of the Doig River, Halfway River, Prophet River, and West Moberly First Nations. To fully understand the meaning of the Peace River valley to the T8FNs, one must first understand the "Real People" themselves. The fundamental purpose of this Baseline Community Profile is to identify who the T8FNs are, where they come from, how they live and how that has changed over time, what they value most, what challenges they face, and what they want their future to look like. Only once this context emerges can the important questions of what the Site C Project would likely do to impact on their lives be answered in a meaningful way.

1 INTRODUCTION

1.1 Background

This "T8FNs Baseline Community Profile Report" (Baseline Community Profile) is provided to BC Hydro by the Treaty 8 First Nations (T8FNs) Community Assessment Team (T8FNs Team), in relation to the environmental assessment of the proposed Site C Hydroelectric Project (the Project or Site C). The T8FNs Team is conducting a Community Assessment for the Doig River First Nations (DRFN), Halfway River First Nation (HRFN), Prophet River First Nation (PRFN) and West Moberly First Nations (WMFNs).[14] This study, funded by BC Hydro, is a community-based baseline conditions assessment and initial impact assessment of the likely effects of Site C on these T8FNs, conducted by Treaty 8 Tribal Association (T8TA) staff and The Firelight Group Research Cooperative (Firelight).

The overall T8FNs Community Assessment was a three-stage process:

- **Stage 1: Baseline Study Scoping and Training Stage (Scoping Stage),** which was completed and submitted to BC Hydro in June, 2012.

- **Stage 2: Baseline Community Profile Stage,** the findings of which are presented in this Baseline Community Profile, where the T8FNs Team collected and collated existing secondary data on conditions in the T8FNs communities, conducted interviews and focus groups with key contacts and T8FN members, and developed a Baseline Community Profile for the four T8FNs across a series of social, economic and cultural aspects of the environment, or "valued components", considered important by the T8FNs.

- **Stage 3: Initial Impact Pathways Identification Report Stage**, completed in November 2012, where the T8FNs Team worked with key contacts in the communities to provide a preliminary estimation of potential impact pathways of the Site C Project on the previously identified valued components, from the perspective of the T8FNs.

As per the Workplan Agreement for the overall T8FNs Community Assessment, this Baseline Community Profile is Deliverable #2 of the T8FNs Community Assessment, and marks the culmination of Stage 2 of the Workplan Agreement. This Baseline Community

[14] Please note that when this document refers to the T8FNs or T8FNs communities, it is referring only to the DRFN, HRFN, PRFN and WMFNs. The other T8TA member – Saulteau First Nation (SFN)- and other potentially affected First Nations are not part of this assessment.

Profile is provided to BC Hydro without prejudice to any other submission made by the T8FNs collectively or by any of the individual T8FNs in relation to the proposed Site C Project. Additional knowledge and information, including information that relates to additional T8FNs valued components may have been gathered and presented prior to this Baseline Community Profile or may be gathered subsequent to the release of this Baseline Community Profile. Therefore, this Baseline Community Profile cannot be treated as definitive.

1.2 The Site C Project[15]

The Site C Project would be the third BC Hydro dam on the Peace River, following the W.A.C. Bennett Dam upstream of Hudson's Hope, completed in 1968, and the Peace Canyon Dam near Hudson's Hope, completed in 1980. The Site C dam and power plant would be located about 83 km downstream of the Peace Canyon Dam, approximately seven km southwest of the city of Fort St. John. The location of the dam site and the closest project components to each of the four T8FN communities are identified in Table 1:

[15] The material provided in this section is based on information provided by BC Hydro. It is based on information that is as up to date as possible but is subject to change should the Project Description be altered by the Proponent. Previous BC Hydro materials (e.g., Lions Gate Consulting Inc. 2009) identify some uncertainty with the location of certain project components such as the re-routing of Highway 29 and the location of the transmission infrastructure. The information provided here is primarily based on information provided in the May 2011 Site C Project Description (BC Hydro 2011), accessed at http://www.ceaa-acee.gc.ca/050/documents/52730/52730E.pdf.

Table 1: Location of the Four T8FN Communities in Relation to Proposed Site C Dam

T8FN Community	Straight Line Distance and Direction from Site C Dam	Straight Line Distance and Direction from Closest Project Component
Doig River First Nation	50 km north	50 km north – Site C dam and support infrastructure
Halfway River First Nation	85 km northwest	Flooding of Halfway River – 40 km north (Rhodes 2009)
Prophet River First Nation	Approximately 240 km north	Flooding of Halfway River – 210 km north
West Moberly First Nations	75 km southwest	Transmission line – 15 km south Portage Mountain borrow site 20 km south

In addition to the proximity of the proposed Project components to the communities themselves, each of the four T8FNs identified considerable traditional territory, land uses, meaning and values within areas that would be impacted by the proposed Project (e.g., in Candler et al. 2012). Some of these values were discussed in the Preamble to this Baseline Community Profile. In addition, many members of each T8FNs live, work, or access goods and services in Fort St. John, the most impacted urban area, should Site C proceed.

According to BC Hydro documentation, the facility would have a capacity of 1100 megawatts and an annual average long-term energy production of about 5,100 gigawatt hours. Some of the major physical components of the project as currently proposed include:

- A 1.1 km long, 60 m high earthfill dam.
- A 9,310 hectare reservoir, including 3,970 hectares of the existing river and a new flooded zone of 5,340 hectares, including both along the main length of the Peace River and upstream on the following tributaries:
    - Approximately 14 km of the Halfway River (Rhodes 2009);
    - Approximately 10 km of the Moberly River (Rhodes 2009);
    - Approximately 2-3 km of Farrell Creek; and

    - Some portion of Cache Creek.[16]
- Excavation of material on the left (north) bank slope above the dam to stabilize it.
- A spillway adjacent to the dam on its right (south) side.
- Water intake, powerhouse and switching facilities adjacent to the spillway near the south shore.
- Cofferdams and diversion tunnels to temporarily divert the river flow during construction of the dam, spillway and power installations.
- Several borrow and spoil areas for construction and waste management purposes, including potential borrow sites at Bullhead and/or Portage mountains west of Hudson's Hope in the Del Rio area northeast of Moberly Lake, and at West Pine in the Pine Pass, south of the Project area.
- A new project access road would be constructed.
- Relocation of four sections (approximately 25 km) of Highway 29 to avoid flooded areas.
- The existing 77 km transmission line right-of-way from the Peace Canyon switchyard to the Site C Project location would be expanded to accommodate two new 500 kV lines.
- Expansion of electrical transmission capacity to the southwest part of the province.

The construction labour requirements of Site C are estimated by BC Hydro to be 7000 person years of work, with a labour force peaking at 1700 during the fifth year of construction (BC Hydro 2011). Temporary accommodations along with existing accommodations would be used to house many of these workers, the bulk of whom would likely come in from outside of the region.

At the present time, it is understood that a seven-year construction period is required for the Project, with a predicted project life in excess of 100 years (BC Hydro 2011). The most recent capital cost estimate for the Project is $7.9 billion. Labour requirements during Project operations are understood to be much lower than during construction.

[16] BC Hydro (2011) estimates that river upstream of Site C would on average be two to three times the width of the current river.

1.3 Purpose of the Study

The purpose of this second stage of the T8FNs Community Assessment is to develop a baseline community profile for each of the Treaty 8 First Nations, characterize the current and trend status of valued components, and to identify goals, aspirations, and issues/concerns common to the four First Nations. These community-specific and pan-T8FNs baseline profiles create a foundation against which to identify potential pathways and effects of the Project on T8FNs rights and interests.

The Report identifies the following relevant contextual information:

- Values and valued components of the T8FNs (Section 3);
- Way of life of the T8FNs, and how this has changed over time (Sections 3 and 4);
- History of the T8FNs and causes and effects of change over time on the Nations (Section 4);
- Current social, economic and cultural conditions in the T8FNs today, and how this has changed over time (Section 5 and Section 6); and
- Goals, aspirations and concerns for the future of the T8FNs, including examination of resilience and vulnerability of the T8FNs to future change (Section 7).

An understanding of the T8FNs across all of these categories is essential to the environmental assessment of the proposed Site C Project.

1.4 Scope of the Baseline Community Profile

A baseline community (aka baseline conditions) profile identifies current status and (where data is available) trends across a series of valued components. Here, the focus is on the human environment of several First Nations, whose cultural ancestry is primarily Beaver, though also including Cree and Sekani elements. It collects information that will primarily be used for subsequent social, economic[17] and cultural impact assessment.

[17] The term socio-economic impact assessment is commonly used to represent the intersection of social and economic impact assessment. It is commonly used in this T8FNs Baseline Community Profile. In addition, the terms effect(s) and impact(s) are used synonymously throughout.

1.4.1 Geographic Scope

This study is limited to the following geographic scope:

1. The four T8FNs communities[18] (see Figure 3);
2. The administrative boundaries of the four T8FNS communities (also shown in Figure 3);
3. The traditional land use and occupancy areas of each T8FNS, with the recognition that the Treaty 8 rights of each Nation are held throughout the entire boundary of Treaty 8, as depicted in Figure 4;
4. The relationships of the four T8FNs and their members to those larger communities from which they access goods and services, including larger communities such as Fort St. John, Chetwynd, and Hudson's Hope, within the Peace River Regional District (PRRD); and
5. The Peace River valley itself, especially between the proposed Site C Project site and the existing Peace Canyon Dam. Figure 5 identifies the portion of the Peace River valley, including tributaries, that would be flooded should the Project proceed.

[18] Given data constraints, the primary focus of the Baseline Community Profile is on the on-reserve communities for each T8FN. It is recognized (and reported on, in sections 5 and 6.6) that substantial proportions of each T8FN's population lives off reserve. However, minimal data is available from any of the First Nations about the characteristics of these off-reserve members. Where possible, data about off-reserve Aboriginal populations is used to compare socio-economic status between on-reserve and off-reserve Aboriginal populations.

Figure 3: Location and Administrative Boundaries of the Four T8FNs

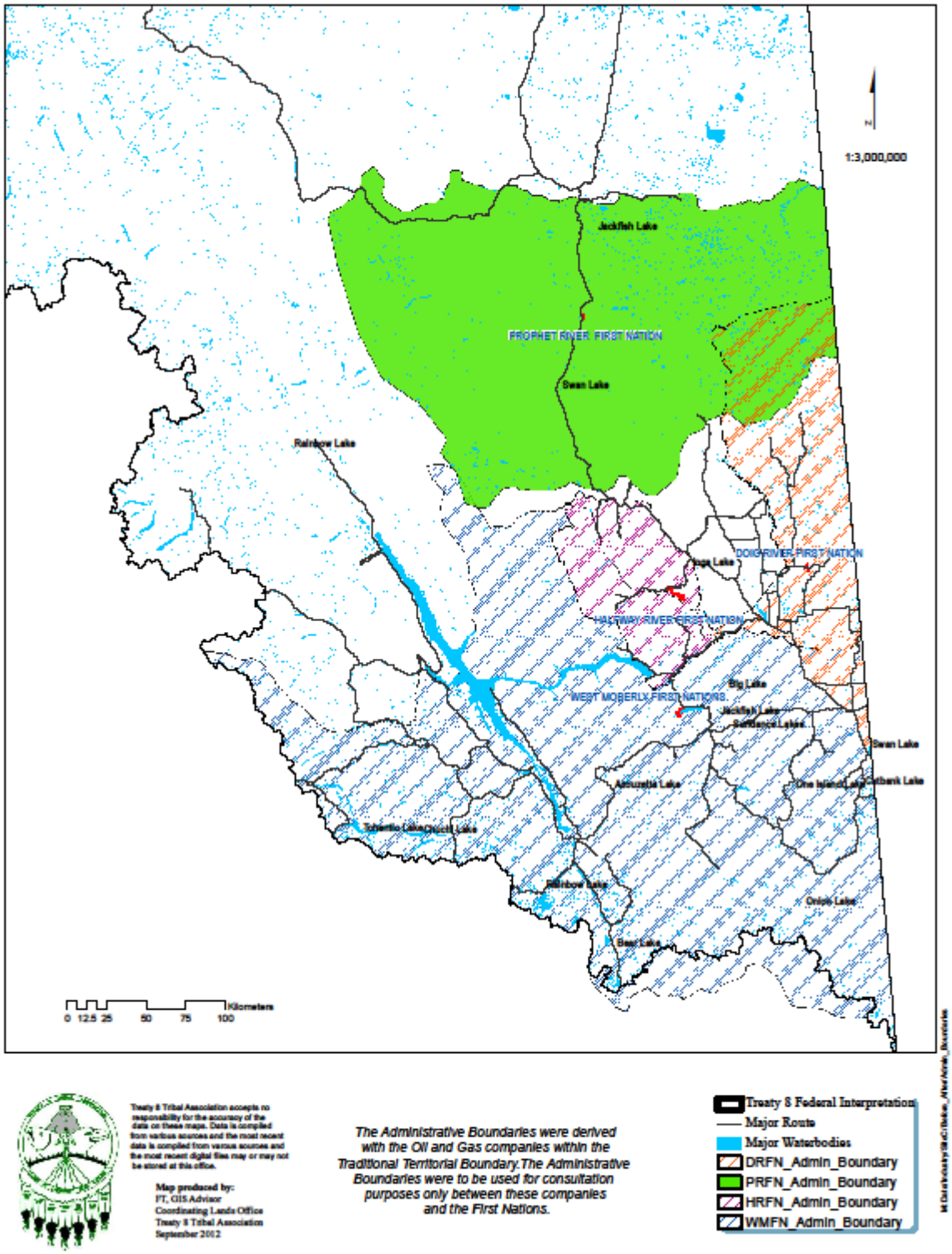


Figure 4: Treaty 8 Territory (courtesy T8TA GIS Department)

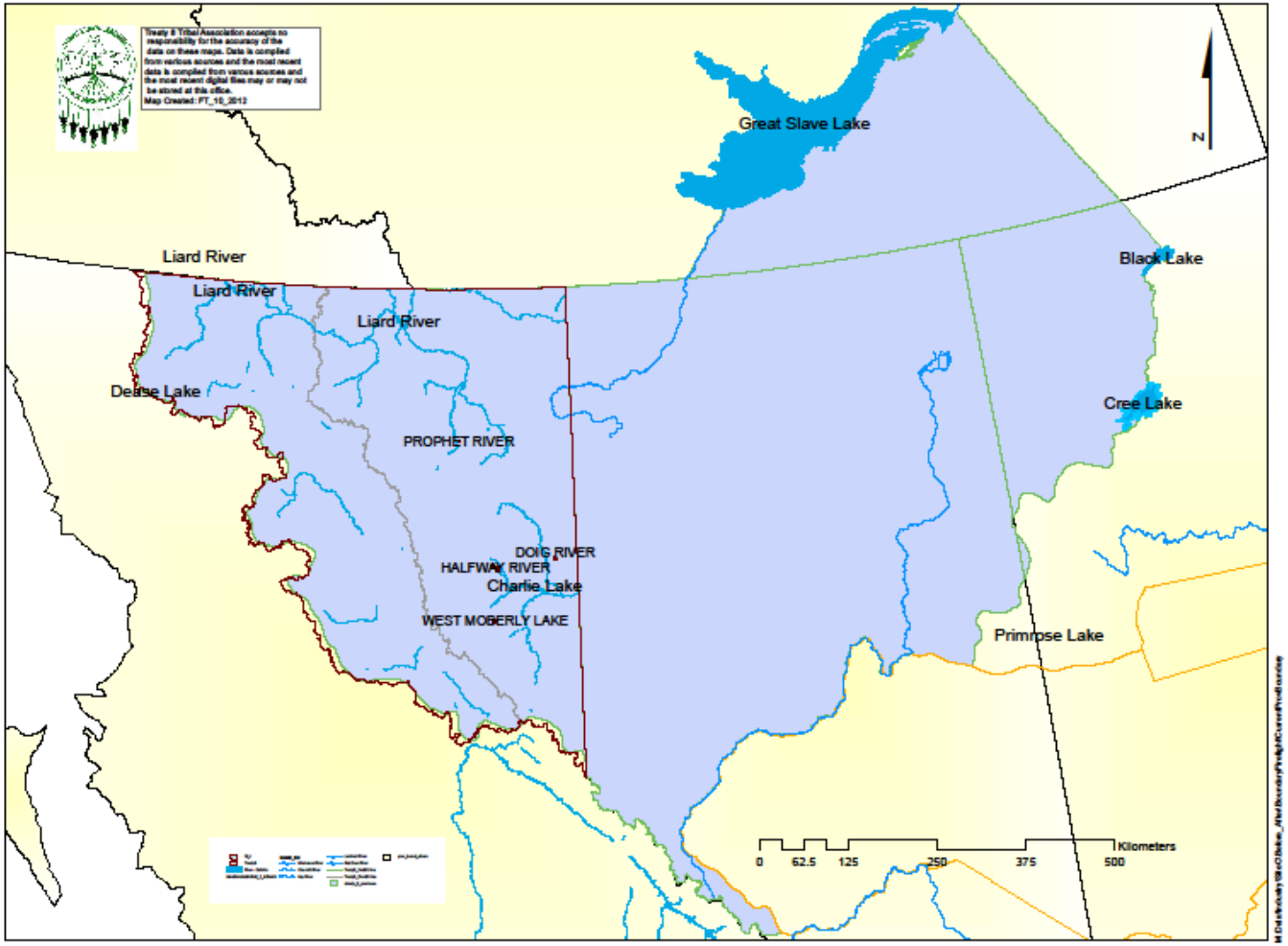
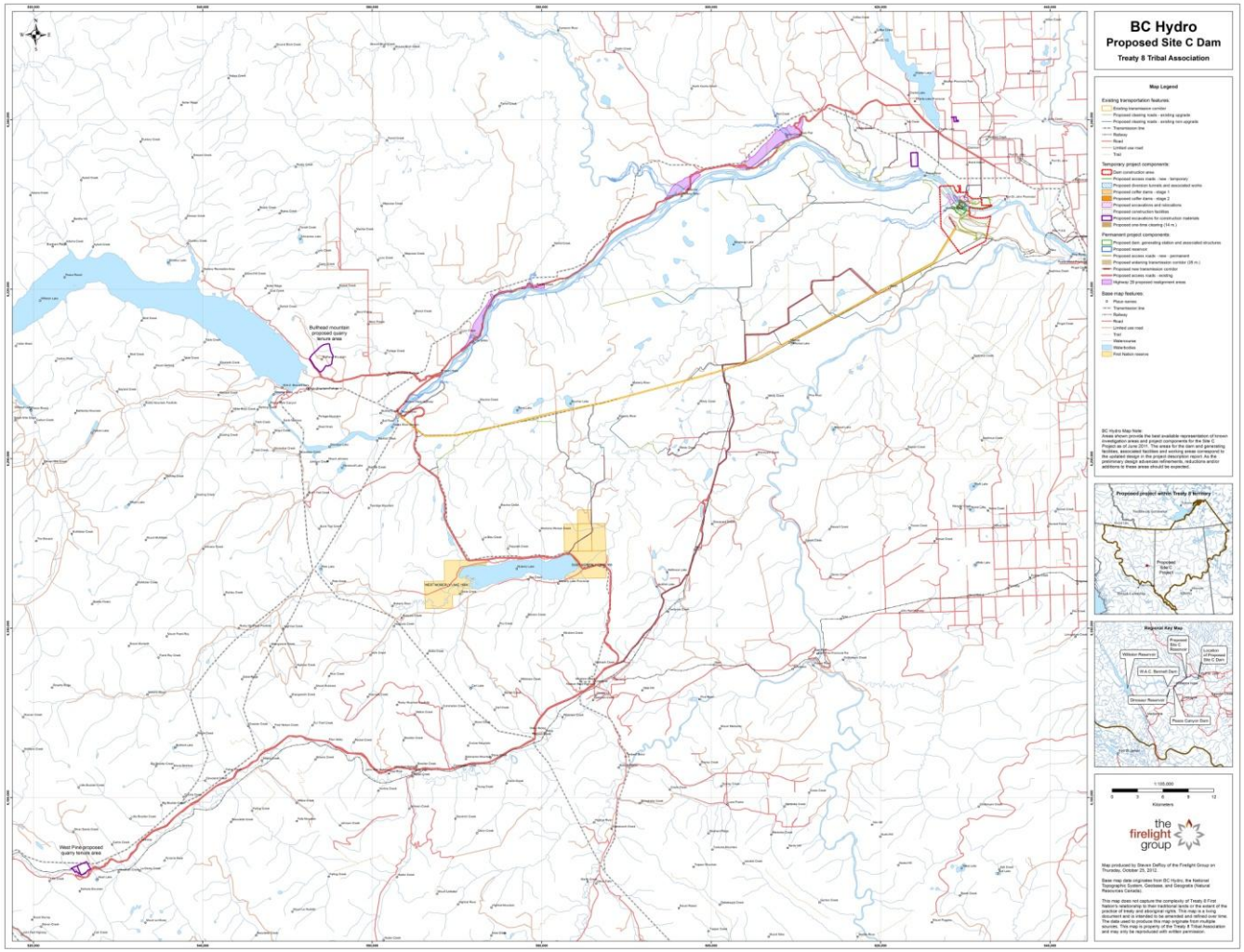


Figure 5: The Proposed Site C Project Area



1.4.2 Temporal Scope

Following good practice for socio-economic impact assessment, the temporal scope for the examination of change over time in the Peace River valley extended as far back as possible, using a pre-industrial – in particular a pre-W.A.C. Bennett Dam – baseline as a starting point for analysis of trends in Dane-zaa land use and social, economic and cultural change over time.

The temporal scope (the time length) of this Baseline Community Profile extends back to pre-contact times for the Dane-zaa residents and users of the Peace River valley who have since become known as the DRFN, HRFN, PRFN and WMFNs. The way of life and a historical chronology of change from the late 1700s onwards is part of the ethnographic and historical context that informs the amount of cumulative change that has occurred for these First Nations.

While the historic backdrop of change and its causes are important, the greater part of this Baseline Community Profile focuses on more recent change among the T8FNs, especially in the last 50 years. Current and, where available, trend statistics (e.g., census or other quantitative data) are provided across a series of valued components and indicators identified by T8FN members as important to their well-being and quality of life. Also provided are T8FN members' oral histories of change from primary data collection (interviews and focus groups) for this study as well as from previous studies.

As this is a baseline conditions assessment rather than an impact assessment, the Stage 2 Baseline Community Profile does not make predictions about likely future outcomes from the Site C Project (that is a function of later aspects of the required assessment of the Project, starting with Stage 3 of the T8FNs Community Assessment). However, information gathered about the T8FNs' individual and collective preferred vision for their future across a series of valued components is provided in Sections 6 and 7.2.

1.4.3 Issues Focus

The issues focus for the Baseline Community Profile was primarily determined based on the results of Stage 1, the Baseline Study Scoping and Training Stage (T8FNs Team 2012a), completed in June 2012. The Scoping Stage incorporated information from previous studies

(e.g. Hendriks 2011), scoping sessions in all four T8FNs communities, and review of existing documents.[19]

Two main themes emerged from Stage 1:

1. Concerns about current effects of industrial development and other human-caused activities (e.g., land alienation due to farming and ranching, non-Aboriginal in-migration and municipal growth, regional and industrial road building, oil and gas development, the trapline registration system, previous hydroelectric dams) on the ability of Dane-zaa to meaningfully practice their mode of life in and around the Peace River valley.

2. Concerns related to the equitable distribution of impacts and benefits arising from economic activity, including those of Site C, and the ability of Dane-zaa to take advantage of the proposed Project should it proceed.

Both of the above-noted big picture concerns relate directly to the potential interaction between the proposed Site C Project and the lived experience of the Dane-zaa. These project-specific impact assessment issues are revisited in Stage 3 – the Initial Impact Pathways Identification Stage, and are not the primary focus of this Baseline Community Profile. However, these priority issues required that the Baseline Community Profile tell a story of change over time in the Peace River valley and within the overall traditional territory of the Dane-zaa from their own perspective (see Sections 4 and 5) and to identify to the degree possible any constraints to maximizing of the Dane-zaa business and labour opportunities should Site C proceed (see sections 6.4 and 6.5).

In addition, T8FNs members clearly identified not only valued components to be studied during this Baseline Community Profile, but also their relative priority. Some valued components are both more important to the T8FNs, <u>and</u> more likely to be impacted by the proposed Site C Project. In order to properly narrow the focus of the Baseline Community Profile, Stage 1 invited community members to identify their priority issues. These priorities were amended as new or re-prioritized information emerged during Stage 2. Priority values were developed and ranked based on two key criteria:

1. Importance to Dane-zaa well-being and quality of life; and
2. Potential for impacts or benefits from the proposed Site C Project.

The final priorities that emerged have been stated here as valued components. Valued components are the attributes of the environment (e.g. biophysical, human, or a combination) that are determined to have scientific, social, cultural, ecological, economic

[19] The scoping inputs are described at pp. 7-8 of T8FNs Team (2012a).

and/or aesthetic value. Rather than being listed as benign statements, valued components are expressed here as community-defined goals in aspirational statements, so that the intended outcome – the end result sought for the status of each valued component – is clear. The valued components in order of Dane-zaa identified priority (bolded items were deemed the most important) are as follows:

1. **Meaningful practice of Treaty rights;**
2. **Protection and promotion of culture;**
3. **Meaningful governance and stewardship role for the T8FNs, including meaningful redress of past infringements;**
4. Equitable access to education and training opportunities;
5. Equity and engagement in the wage economy; and
6. Healthy communities, including community function and dysfunction, social services, physical infrastructure and housing.

Section 5 highlights issues specific to each T8FN across these categories. In addition, section 6 examines status and trends for each valued component from the broader, pan-T8FN perspective.

1.4.4 Focus on Dane-zaa Perspectives

Dane-zaa – the "Real People" – have long lived in a world defined by dreams that come true in their lived experience. Theirs is a world of observations of change and adaptation to these changes that fundamentally differs from the world non-Aboriginal people understand. Out of respect for the oral nature of the culture group, and because the human element is so central to any proper characterization of the lived experience, much of this Baseline Community Profile relies on the words of the Dane-zaa themselves. Their observations help others to understand their priorities, their values, and thereby what they want to protect and promote into the future. Personal experiences and observations are privileged here above the quantification of statistical data, which in the past has tended to be the focus of baseline community profiles in environmental impact assessment. The T8FNs feel strongly that in order to understand how the Site C Project would likely impact the Dane-zaa, **you first need to understand the Dane-zaa**.

1.5 Layout of the Report

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The Report (after the Preamble) is organized into eight sections, including this introduction:

Section 2 identifies the methods used to gather and analyze information.

Section 3 provides information related to the culture, values and worldview of the four T8FNs.

Section 4 provides a chronology of changes to the environmental conditions of the four T8FNs, with emphasis on the origins, nature and impact of cumulative social, economic and cultural change over time.

Section 5 provides four "community profiles" – current and trend information about social, economic and cultural conditions in each of the four communities.

Section 6 examines current status and trends over time at a broader regional level for indicators of each of the following valued components:

6.1 Meaningful practice of Treaty rights;

6.2 Protection and promotion of First Nations culture;

6.3 Meaningful T8FNs governance and stewardship;

6.4 Meaningful access to equitable education and training opportunities;

6.5 Equity and engagement in the wage economy; and

6.6 Healthy communities – including community function and dysfunction,social services, physical infrastructure and housing.

Section 7 provides conclusions to the Report, identifying vulnerabilities to future change among the Dane-zaa and sharing some of the goals and aspirations identified by the T8FNs for the future.

Section 8 provides closure to the Report.

The Report also includes a series of Appendices:

- Appendix A identifies interview and focus group topics and key questions.
- Appendix B identifies all members of the T8FNs Communities Assessment Team.
- Appendix C identifies the T8FNs Communities Assessment Community Advisors.
- Appendix D provides an indicator comparison table for the four T8FNs.

- Appendix E lists some of the social and physical infrastructure for each of the T8FNs.
- Appendix F is a Concordance Table to Baseline Topics Identified in the Workplan Agreement for the T8FNs Community Assessment.

1.6 Limitations of the Study

The following limitations of this T8FNs Community Assessment need to be recognized:

1. The study focuses on only four of the T8FNs and cannot be extended beyond those four First Nations.
2. The four T8FNs studied have shared histories and cultural similarities, but each is also distinct and autonomous. For the sake of expediency some of their concerns, experiences and priorities are grouped (especially in Section 6). However, each group may experience change slightly to significantly differently from the others.
3. The complexity of the lived experience is such that any baseline conditions profile is by necessity partial and selective. Wherever possible, and within the constraints of time, budget and availability of information, the T8FNs Team gathered as much information as possible on all of the baseline topics identified in Annex A to the Workplan Agreement (see Appendix A of T8FNs Team 2012a). However, for certain criteria and indicators, only qualitative observations were attainable. For others, qualitative observations were used to supplement limited quantitative information. For example, the absence of extensive harvest quantity or country food studies is a limitation. This type of research is very specialized, time consuming, expensive and differs greatly from socio-economic research, so was beyond the scope of this Baseline Community Profile.
4. It was beyond the scope and budget of this study to conduct new quantitative data collection on the human environmental conditions and changes over time in each of the four T8FNs. For example, polling and other survey techniques were not used. Where possible, quantitative data from existing published (or community-held) research is provided for additional context. It should be noted, however, that given the small populations of the T8FNs and lack of previous research effort to characterize their social, economic and cultural conditions, typical socio-economic indicators collected by Statistics Canada and other government organizations for larger communities (Census data) are often not available or severely limited for these small communities.

5. Access to certain demographic groups was limited. For example, the T8FNs Team had limited success reaching out to the T8FNs business community, including the Northeast Native Advancing Society (NENAS).
6. This was not a mapping exercise. Map and spatial data presented is limited, for descriptive purposes only, and not primary data. T8TA and the individual T8FNs reserve the right to provide additional mapped data during the Site C Project environmental assessment.

The T8FNs Team collected the best information available within the limits of these constraints.

Any errors of commission or omission are the responsibility of the T8FNs Team and not the T8TA Site C Environmental Assessment Team or any of the individual First Nations. In addition, this Baseline Community Profile is limited by the time and funds available to a snapshot of many issues faced by the T8FNs, and therefore does not constrain or limit the issues or concerns the T8FNs may raise in relation to the proposed Site C Project.

1.7 Authorship and acknowledgements

The T8FNs Team authored this Baseline Community Profile on behalf of the four T8FNs. The T8FNs Team was co-managed by Verena Hoffman of the Treaty 8 Tribal Association (T8TA) and Alistair MacDonald (Firelight). Oversight for this work was provided by the T8FN Site C Environmental Assessment Team. The primary author of this Baeline Community Profile was Alistair MacDonald of Firelight.

Support was provided by a large number of people within the four communities as well as from the T8TA offices in Fort St. John. Members of the T8FNs Team are identified in Appendix B. Mapping support was provided by Fern Terbasket of T8TA and Steven Deroy of Firelight.

The T8FNs Team would like to express its gratitude to all the people who took the time to engage in this study. Community members, support staff, leadership, and other key contacts greatly enriched the study with their insights and experiences. In particular, the T8FNs Team was fortunate to have the inputs during scoping, data collection and analysis of the Community Advisors, listed in Appendix C.

2 METHODOLOGY

2.1 Scoping

Valued components and indicators used in this Baseline Community Profile were developed during Stage 1 of the T8FNs Community Assessment, as described in the Stage 1 Report (T8FNs Team 2012a). A variety of community members, key contacts, and previous documents (e.g., Hendriks 2011), were canvassed to identify "what matters most" – those valued components of the lived experience that are essential to better understanding baseline conditions in the T8FNs.

2.2 Secondary Data Collection and Information Sources

Between April and August 2012, the T8FNs Community Assessment Team gathered information related to the communities and valued components. Several hundred relevant documents were identified and added to the T8FNs Team document management system. Key sources of information included:

- The TARR archives at the T8TA offices in Fort St. John, especially for Treaty 8 historical documentation and traditional land use/traditional knowledge data, and including prior interviews by T8FNs members;[20]
- Internet database searches, which uncovered additional secondary materials, including relevant studies, census and BC government data, relevant case studies on the effects of dams on Aboriginal people, and industry data;
- Content analysis of previous interviews from the 2011 Site C Project-specific TLUS completed by Firelight and the T8FNs (Candler et al. 2012);
- BC Hydro baseline data documents (e.g., Lions Gate Consulting 2009);
- Review of the T8FNs Issues Scoping Report (Hendriks 2011);[21] and

[20] Among previous interviews and testimony excerpted for this Report include T8FNs testimony at the 1979 Alaska Highway Pipeline Project hearings, Northern Pipeline Agency (1979), a TLUS interview from 1995 with two WMFNS elders, and T8FNs members comments from a Site C Open House held May 9, 2012.

- Individuals involved in focus groups and interviews, who provided a variety of community-based documentation, planning documents, research reports, academic articles, previous submissions to environmental assessment or regulatory processes, legal submissions, etc.

2.3 Primary Data Collection

In total, some 73 T8FNs members and other key contacts were canvassed for information during this study, between April and October 2012.

A broad cross-section of T8FNs was canvassed during this study. The 73 respondents included:

- 15 T8FNs staff (some of them T8FNs members);
- Four other key informants; and
- 54 T8FNs members, including:
    - 19 DRFN members
    - 9 HRFN members
    - 14 PRFN members
    - 12 WMFNs members

The T8FNs respondents included 32 male and 22 female participants, and 14 youth and 12 elders.

Primary data was collected through dozens of individual interviews and 11 focus groups.

2.3.1 Interviews

Most interviews were in person, but several took place over the phone. The T8FNs Team developed a semi-structured interview protocol with questions tailored as necessary to the specific knowledge and expertise of the individuals interviewed (see Appendix A). For

[21] Hendriks (2011) presents information collected from 41 interviews in 2011 (including 25 First Nation members) about issues related to the Site C Project and current and trend conditions in the four T8FNs communities. Wherever Hendriks (2011) is cited in this report, the information being referred to came directly from T8FNs members or key informants working for and with the four T8FNs communities.

example, the T8FNs Team had different questions for business people than they had for elders.

The primary purpose of the interviews was to gather information on the following themes:

1. What are the most important things for Dane-zaa well-being and quality of life?
2. What are the key social, economic and cultural issues facing the community, and what is being done about it?
3. What is life like for T8FNs today and how has that changed over time?
4. What does the Peace River valley mean to you, your family and your community?
5. What effects do you think Site C Project could have on you, your family and community?22

The interviews and focus groups were structured around broad, open-ended questions, allowing the study participants to share whatever perspectives they thought most important.

Individuals were also canvassed to identify additional people the T8FNs Team should talk to about baseline conditions and changes over time, and additional documents that could inform the Baseline Community Profile. The "snowball effect" created by these inquiries significantly strengthened the data collection process.

Interviews were conducted by several trained interviewers on the T8FNs team.[23] There were two separate key groups identified for interviews:

6. Front-line service providers, key informants and T8FNs staff, anticipated to have knowledge of community priorities, concerns, and programs; and
7. Opinion leaders from each of the T8FNs – this included leadership, elders, business people, and youth, among the primary target groups.

In most instances, audio recordings were made of the interviews. If an individual did not want to be recorded, handwritten notes were taken of the session and placed in the document management system.

After an interview was completed, the interviewer filled out an interview form either by hand or digitally and saved it to the T8FNs Communities Assessment document management system, contained on a server at the T8TA offices in Fort St. John that houses

[22] Information from this topic was collected for use during the development of the Stage 3 Report on Initial Impact Pathways Identification (T8FNs Team 2012b). It is not the subject of this Baseline Community Profile.
[23] Training methods are described in the Stage 1 Report (T8FNs Team 2012a).

all the information collected during this Community Assessment. These interview forms, called Rapid Appraisal Record Forms, were designed to highlight the information collected and any follow-up action items for the T8FNs Team. In certain cases, interviews were prioritized for transcription and were transcribed verbatim by T8TA staff.

All information collected is the property of the T8FNs and is subject to confidentiality restrictions, and none of the names of respondents are used in this Report. Respondents were given code numbers, which are used in this Report as identifiers.

2.3.2 Focus groups

In total, some 46 individuals were involved in the 11 focus groups held for this study.[24] Semi-structured focus group protocols were developed for the three main audiences – Community Advisors, individual community focus groups, and youth. The following focus groups were held (in chronological order):

- April 19, 2012: Data was collected from T8TA staff, leadership and T8FNs Community Advisors at an introductory Socio-economic and Cultural Impact Assessment workshop held at the T8TA offices in Fort St. John.

- April 26, 2012: The T8FNs Team and its community advisors conducted a "What Matters Most" session at the T8TA offices in Fort St. John. The day-long workshop reviewed proposed valued components for consideration in the T8FN Community Assessment and allowed community advisors to identify additional relevant valued components, criteria and indicators.

- May, 2012: The T8FN Team conducted initial site visits in all four communities, meeting with leadership and key Nation staff in each community to introduce the project and gather additional "What Matters Most" information. Focus groups occurred on the following dates:

    - May 16, 2012: Halfway River (meeting with leadership, community advisors, and key department staff)

    - May 17, 2012: Prophet River (community meeting, with leadership, community advisors, and key department staff present)

[24] Several individuals were involved both in interviews and focus groups.

  - May 18, 2012: West Moberly (community meeting, with leadership, community advisors, and key staff present)
  - May 22, 2012: Doig River (meeting with leadership)

- Youth focus groups were held in each of the four communities, as there was strong direction from leadership and Community Advisors to have youth's voices and opinions at the forefront of the Baseline Community Profile. These sessions included:
  - July 4, 2012: Focus Group with three HRFN youth
  - July 5, 2012: Focus Group with seven DRFN youth
  - July 10, 2012: Focus Group with one PRFN youth
  - July 11, 2012: Focus Group with three WMFNs youth
- October 10, 2012: A Verification focus group was held with Community Advisors, wherein draft portions of this Baseline Community Profile were ground truthed.

All focus groups were either subject to dedicated note taking, audio recording, or both. Notes and audio were filed in the project data management system.

2.3.3 Other Forms of Primary Data Collection

There were three instances where the T8FNs Team attended camps or community events, where additional primary data was collected in audio, visual, or written form:

1. The 4th Annual Youth and Elders Gathering, July 12-17, 2012, organized by Nenan Dane zaa Deh Zona Child and Family Services (NENAN) held at Pink Mountain Ranch. Each day of the gathering was organized into various workshops, cultural activities, bush skills and horsemanship training and entertainment. The T8FNs Team targeted specific workshops to document teachings or knowledge that related to the study's valued components. A T8FNs Team member attended this gathering and audio-recorded two workshops:
   a. Dreamers Workshop – Dane-zaa Elders; and

b. Dr. Robin Ridington and Elders Cultural Teachings.[25]

2. A T8FNs Youth Camp held at Attachie, lands adjacent to the confluence of the Halfway and Peace Rivers, from August 7-12, 2012. This camp was led by a Dane-zaa youth movement called Save *Saaghii Naachii* (meaning "Big River" in Dane-zaa).[26] The camp's purpose was described by the organizers as: "to honour the land and use it like those that came before us" (Knott 2012). T8FNs Team members videotaped various group discussions where the youth reflected on their motives behind initiating the camp and their experiences at the camp. The T8FNs Team also audio recorded a DRFN Elder and Councilor as he shared aspects of the Dane-zaa history in the Peace River valley with the youth.

3. On July 14, 2012 members of the T8FNs Team attended the Paddle for the Peace event and took notes from speeches at that event.

2.4 Data Collation and Analysis

All documents and audio and video recordings were filed in digital and (as applicable) paper format. Digital data is stored in the document management system and backed up on hard drive.

Secondary data was subject to content analysis, with key concepts, facts and other information culled for use in the development of this Baseline Community Profile, with information organized under the valued components identified in Stage 1. Some of the "secondary data" actually consisted of oral history from previous projects (e.g., Candler et al. 2012). As with the study-specific primary data, each individual was given a signifying number and linked to a citation (e.g., DRFN member 03, Site C Open House, May 9, 2012) in order to protect individual anonymity. All excerpted material from project-specific or other historic interviews (some 498 coded segments) were placed in an Excel database, organized by topics and sub-topics for easy retrieval.

A workshop on coding was held in June, 2012, where Firelight provided an introduction to the process of coding interview transcriptions for the purposes of identifying themes.[27]

[25] Content analysis was later conducted on the audio recordings from the Elders Cultural Teachings workshop.
[26] The Save *Saaghii Naachii* movement started in July 2012. They describe themselves as, "a group of young Indigenous people that want to honour our waterways. We believe that they should be preserved and protected for future generations" (Knott 2012).
[27] Individuals subsequently involved in coding the interview and focus group data included Alistair MacDonald, Verena Hoffman, and Ginger Gibson (Firelight).

2.5 Analytical Framework

The Baseline Community Profile focuses on those elements of well-being and quality of life that matter most to the T8FNs. Previous documentation (e.g. WMFNs Land Use Department 2006) as well as what the T8FNs Team heard from Dane-zaa made it abundantly clear that the protection and promotion of well-being and quality of life **as defined by the T8FNs** is of particular importance to the T8FNs in the assessment of the Site C Project.

The valued components prioritized by the T8FNs defined in Section 1.4.3 are elements of the lived experience that contribute to Dane-zaa individual and communal well-being and quality of life. The T8FNs have previously raised concerns that environmental assessment has not properly represented or incorporated their values. As noted in WMFNs Land Use Department (2006):

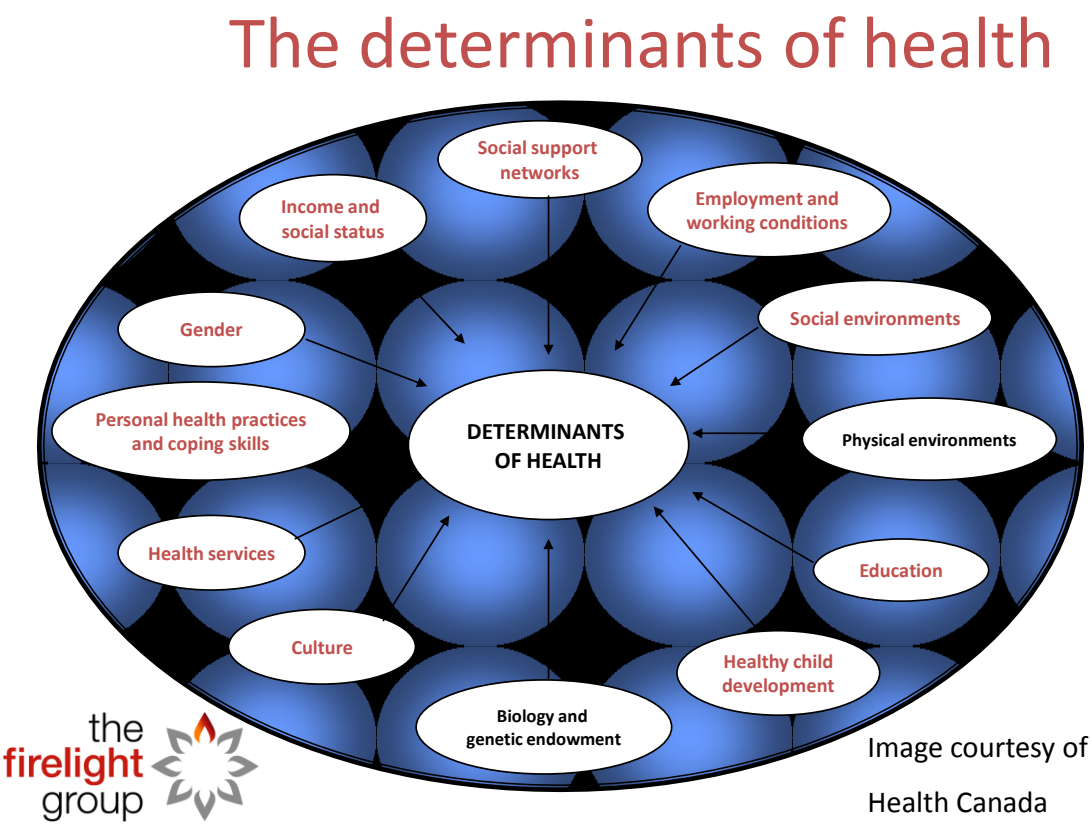
> The Royal Commission on Aboriginal Peoples [RCAP 1996] distinguishes two very different "schools of thought" for impact assessment, namely the "modernist" and "culturalist" approaches. The proponents of industrial projects tend to utilize a "modernist approach" which, at its core, assumes that the expansion of wage opportunities is an unquestionable benefit. Modernists highlight the benefits of a particular development based on variables such as the number of jobs created, the spinoff activities that will accrue, the revenues that the project will generate, and royalties that will be paid to government. Therefore, the negative impacts of a project are either downplayed, are seen as necessary sacrifices for the greater good of society, or are virtually ignored.
>
> A different way of viewing development is from a "culturalist" perspective. This approach recognizes that there are different types of economies that are not solely capitalistic but are viable, healthy, and mixed. For example, First Nations economies rely on wage labour, entrepreneurship, and products from the land. For culturalists, choice of lifestyle is key. Therefore, culturalists assess impacts partly based on cultural intangibles that include the values and the customs of the group.

The T8FNs provided a clear indication from the outset of this study that they wanted to see a focus on a more balanced "culturalist" perspective reflective of – and describing – the Dane-zaa worldview, while still evaluating the ability for the T8FNs and their members to take advantage of jobs and other "modern" benefits. The perceptions, beliefs, priorities and values of the T8FNs and their members, it was suggested, are the foundation against which change and its effects on the human environment must be considered.

The culturalist approach adopted herein also recognizes that a multi-faceted approach needs to be taken when considering individual and population health. Figure 6 identifies some key elements of the Public Health Agency of Canada's *Social Determinants of Health*`

model (PHAC 2006). This model holds that substantial contributions to overall health and well-being come not only from biological and genetic endowment and physical environmental surroundings, but also from the ways in which people interact, one's access to services, and ability to practice one's culture, among a variety of other factors.

FIGURE 6: SOCIAL DETERMINANTS OF HEALTH MODEL (PHAC 2006)



As noted by The Center for the Cross-Cultural Study of Health and Healing (2000), "First Nations' perspectives on health are often described as being grounded in a web of relationships that link individuals and communities to their bio-physical, cultural and social environments." The valued components identified by the T8FNs and explored in this Baseline Community Profile reflect this complex multiplicity of values.

T8FNs perspectives on wellness prove to be grounded in, among other factors:

- A strong sense of community;
- A sense of self linked to a spiritual and cultural relationship to the land;
- Knowledge of traditions and traditional harvesting skills;
- Intergenerational knowledge transfer to ensure cultural continuity;
- Ability to access traditional lands in a meaningful way; and
- A sense of control, as epitomized through self-government, stewardship and nation building.

3 WAY OF LIFE, VALUES AND WORLDVIEW OF THE T8FNS[28]

A culturalist approach to environmental impact assessment starts with the identification of values and valued components of the environment that guide the cultural groups potentially affected by a proposed development. Using a mixture of previously published literature (e.g., the work of Robin Ridington 1981; 1988), documentary evidence from the T8FNs, and the words of T8FNs members themselves, this section identifies elements of the Dane-zaa way of life and worldview, some important T8FNs values, and some of the elements of everyday life that define well-being and quality of life for Dane-zaa.

3.1 The Dane-zaa Way of Life

> Dane-zaa people, we're part of the land, we should protect the land. When you talk to Dane-zaa people, we're people and the land, that's the first two, there's nothing else (H10, Site C TLUS, May 26, 2011).
>
> You live off the land; you take what the land gives you and that's just how you live (H16, Site C TLUS, June 10, 2011).

The four T8FNs contain both Beaver and Cree language speakers, but all groups tend to think of themselves as Dane-zaa in some form or another. And when Dane-zaa speak of their way of life, they are inevitably referring to their way of life on the land rather than life in their more recent, centralized communities.

Since time immemorial, the Dane-zaa have been a nomadic people, moving for hunting, gathering and fishing for subsistence, a pattern that persisted long after the fur trade was introduced (Ridington 1981). Their ties to the land, meaning all of their traditional lands as well as the water, air, wildlife and natural systems, are inexorably tied to who they are, how they live, and how they think.

Until recently, the Dane-zaa were hunter-gatherers, with social groups consisting of family units tied to a larger nomadic tribe or band, which in turn was tied to all the Beaver Indians

[28] Note: While current day T8FNs include people of Beaver, Cree, Siccanie/Sekani and other backgrounds, they tend to all share the historic way of life and values identified in this section. Indeed, Diamond Jenness (1937) suggests that "it is impossible to draw a sharp line between Sekani and the Beaver Indians, and the Indians of Hudson [sic] Hope, who are usually classified as Beaver, might be included with almost equal justice among the Sekani".

(and other Bands of the Peace River area) who met in large gatherings each summer. In many cases, these gatherings occurred in the Montney, Fort St. John, Taylor or Attachie areas in and around the Peace River valley.

Prior to contact with non-Aboriginal people in the late 1700s, effectively all of the Dane-zaa's needs were met by living from the land, not taking more than they needed, using limited tools and technology and relying primarily on knowledge passed down from generation to generation. Life on the land was their education.

The Dane-zaa depended almost entirely on animals for food (Ridington 1981). Fortunately, their land was rich. The mountains held caribou, sheep, goat, bear, furbearers and other small game. The lakes and rivers held trout, whitefish, and jackfish, among other species. The plains, valleys and muskeg held plentiful moose, deer, elk, beaver and chickens (grouse). As noted by Heritage North Consulting Limited (no date), moose played a primary role:

> Of the mammals, the moose was one of the largest and most generally distributed over the Beaver territory. This species was the most significant source of food (after the demise of the bison), and the skin of the animal was used for clothing and the manufacturing of shelters.

Berries, food plants, and medicinal plants supported the T8FNs nutrition and health. Their profound connection to the animals that sustained them is marked in Dane-zaa stories, songs, and dances, and in the highly respectful relationship that Dana-zaa have with the animals.

The traditional Dane-zaa economy had a clearly-defined division of labour along gender lines. Men hunted game and trapped. Women picked berries and were responsible for the processing and distribution of food, furs, and hides at the base camp. Prior to the fur trade, the entire family typically travelled and moved camp with the hunting group. According to SFN and WMFNs (no date):

> In the spring gardens were planted, in the summer berries were gathered, dried and stored for the winter, and in the fall they went to their hunting camps for the winter months. There was also a huge Feast in the fall that both communities would gather for.

There were five main seasons related to different harvesting activities:

1. the dry meat and grease hunt [in the fall];
2. early winter hunting and trapping;

3. late winter hunting and trapping;
4. the spring beaver hunt; and
5. the summer slack.

The ability to gather on the land with other First Nations was (and remains) a central aspect of well-being and quality of life for the T8FNs. Communal relations have been reinforced and family ties extended through summer gatherings for hundreds of years. As previously noted, many of these gatherings traditionally occurred in the Peace River valley. These gatherings have always been, and remain, critical to living a full life as "Real People":

> People came together to meet one another, to sing, to dance, and to listen to the words of their "prophet" [the last to date being Charlie Yahey]… They came to resolve differences or create them, to flirt, to visit relatives, and to pass from the pace of ordinary existence into a ceremonial space (Ridington 1988).

Seasonal rounds shifted each year according to the location of game and active stewardship, allowing areas that had seen extensive harvesting to "rest" for one or more years before the Dane-zaa harvested there again.[29] Tracking and harvesting animals on foot and via horseback was noted by one T8FNs member as a way to "manage the animals properly", being less stressful on animals and harmful to the environment than modern hunting using roads, trucks and all terrain vehicles (WM01 April 26, 2012). There is a long history of reports of Dane-zaa also practicing selective burning as a means of managing their lands (Faries 1823; Ridington 1988).

A DRFN elder shared his thoughts on the typical seasonal round during his lifetime:

> One camp for two weeks and then they moved, they're gone all summer. There was no school at that time, we used to leave the cabin in Doig as soon as the snow was gone, April, when the ice breaks, the snows still on the ground, everybody moved out, cabin fever, and then they go trapping, all the men go trapping, come back right around in May, and then from there they start camping... In the spring time they go to Charlie Lake and they make fish dry meat, they get fish from Peace River here too, and then that's how it is, that's how they survive, from the fish from Charlie Lake and the Peace River. And then after they're fishing in the spring time they make a lot of fish dry meat, they go out and camp, before my time, and they kill a lot of moose,

[29]They don't kill off all the animals. They will be camping in this area one summer, next year they camp in a different area; they rest this area for two years (DR03 June 28, 2012).

> they make a lot of dry meat, then in July they come back to the Peace River here in the Cecil Lake, Beatton River and Peace River they come down and make berries. They pick a lot of berries and they dry it and then that's for the winter, when they pick a whole bunch of berries, you go to Bear Flats, like from here to Hudson's Hope, there's all Indian names over there, there's a lot of Indian names, Bear Flat, passed there somewhere, Cache Creek, when they pick a lot of berries and kill a lot of bear, they make bear dry meat too, then they cache it in the place, past Bear Flats, Cache Creek, they call it Cache Creek. They make big caches, historical spot, everywhere they go, they don't have a car and they don't have a vehicle just pack horses (DR03 June 28, 2012).

Hunting patterns changed after contact with Europeans, the introduction of guns and horses, the commercial fur trade, and other factors.[30] However, even by the late 1950s, and in the face of overwhelming externally-imposed change (see section 4), the Dane-zaa mode of life was still widely practiced, as noted by Ridington (2007):

> The Dane-zaa still lived a seminomadic way of life then [1959], using horses and wagons to set up summer hunting camps. Children attended day schools in the newly established reserve villages, but many adults continued to spend time on their traplines in small trapping cabins. The hunting and trapping economy was their primary source of food and income.

Much more has changed in the intervening years, making the way of life practiced by the Dane-zaa less familiar to a new generation of youth:

> Photographs of Dane-zaa communities in the 1960s show a way of life that is unfamiliar to children growing up today. Cars and trucks have replaced horses and wagons. Electricity, indoor plumbing, cell phones, and computers are part of their everyday lives in the way that loading a packhorse or setting up a tipi was an everyday experience to their grandparents (Ridington/Dane-zaa Archive Catalogue; Royal BC Museum no date).

The central relationship to the land has altered as well, and not in ways the majority of T8FNs members are happy with. For reasons largely beyond their control, as further described in section 4.2, T8FNs members are spending less and less time on the land pursuing their traditional mode of life. For example, most occupancy in recent years has

[30] The fur trade increased reliance on the central location of the fur trading post, shrinking the Dane-zaa's rounds. It also reduced the variety of game and increased individual or small group hunts, instead of previously larger, communal hunts (Ridington 1979).

been overnight or weekend camping; historically, there were longer-term seasonal camps throughout the area for different Dane-zaa groups (Hendriks 2011).

3.2 Being Dane-zaa – Worldview

Anthropologists like Robin Ridington and Hugh Brody (1981), as well as Dane-zaa elders and opinion leaders, describe a distinct Dane-zaa personality, identity and culture. There are several key elements that help define what being Dane-zaa – being "Real People" - means. They include:

1. Dreams, dreamers and spiritual beliefs;
2. Oral history and mythology;
3. Knowledge of the land as the primary form of power;
4. Experience as the primary teaching tools; elders as teachers; and
5. Being part of, rather than separate from, nature.

3.2.1 Dreams, Dreamers and Spirituality

> Our past, our future, are all tied to our spirituality (Willson 2010).

Dreams are a central feature of Dane-zaa life. For the Dane-zaa, events "can take place only after people have known and experienced them in myths, dreams, and visions" (Ridington 1988). Through the experience of vision quests (see section 3.2.4) and in dreams, each individual is able to gain some medicine powers. These powers are held by each person, and derived from the experience of the story that they heard in their dreaming. Everyone dreams, and uses these dreams to make contact with events in their lives (Ridington 1981).

However, there are special people with powers who follow "their own trail ahead of them past the point of their own death" (Ridington 1981), and bring back songs that are sung for the benefit of all. These special dreamers are Dreamers, Prophets or "Naachin". Dreamers are Dane-zaa cultural heroes whose prophecies predicted the future and whose knowledge "directed truly the communal hunt" (Ridington 1979). Their dreaming and stories about the land, trails to heaven (Ridington 1988), and prophecies for the future are central to Dane-Zaa values, worldview and planning for the future. Many of their prophecies have

come true, especially in relation to industrial development and its effects on the land. According to Oker (2002):

> The Dreamers predicted many changes for the Dane-zaa people. They warned us about the loss of land, the destruction of animal habitat, the earthquakes, the giant snakes (pipelines) and the burning matchsticks (flare stacks). Our storied land is now being industrialized; these things are becoming our reality.

One Prophet spoke of the dams and told people what to expect from them:

> Charlie Yahey was the last dreamer/prophet. He said that dam is not going to hold. He already dreamed that there was a hole underneath there that was a sink hole. They fixed that, but he said that dam will go. A lot of dreamers, as well as Charlie Yahey, said if you fool around with nature, nature will fight back (D03 June 28, 2012).

Dreamer Charlie Yahey (photo courtesy T8TA TARR archives; original taken by R. Ridington)

This notion of the earth "fighting back" against harm from things like industrial development is a common belief of Dane-zaa members: "it's [Site C] going to damage a lot of earth, we might pay for it, we get punished. You fool around with nature, you get it" (DR19 August 8, 2012).

Dancing, which occurs often after a Prophet dreams, is akin to praying. Dancing is done to the songs that dreamers brought back from heaven, and the songs animals sing in hard times. Dancing "was symbolically walking to heaven…" (Ridington 1981). The songs that are sung, brought back by the Prophets, and dances are said to lead the soul to heaven.

Drumming too is important. One WMFNs member reminisced that his grandfather's drum, used in ceremonies, could be heard from the West Moberly reserve over to the east end of Moberly Lake, eight km away (WM01 April 26, 2012). Today, drumming, singing and dancing are recovering after being suppressed for several generations by colonial policies (see section 4). This recovery is important for cultural maintenance as well as community cohesion, as noted by this WMFNs youth: "The dancing its not just dancing, the movements and the music. It's telling a story about or culture" (WM08 July 11, 2012).

Overall, the Dane-zaa worldview and spirituality has persisted, albeit in sometimes reduced and altered forms, despite intrusions by western religious perspectives.[31]

> Spiritually the churches took care of that. They separated us from the way that we were shown, which was our way to pray. Our sacred ceremonies were taken away from us, and in some places they were lost. They <u>are</u>, not <u>were,</u> lost. So spiritually we are unhealthy because we're following a spiritual path that doesn't belong to us, it came from Europe (WM01 May 26, 2012).

Notwithstanding the effects of foreign spirituality on Dane-zaa culture, many T8FNs members across generations, report that a strong spiritual connection to the land and ancestors remains. The adherence to rituals such as hunters sleeping with their heads to the east, carrying of medicine bundles, drumming and songs, among others, have been maintained through time despite the effects of, residential school, land alienation, and government assimilationist policies. For example, DRFN (2012) embraced this spirituality:

> We had [a] Prophet he slept for nine days and his spirit went to heaven and came back to tell the people that he dreamt about the Beaver and told people about a better place. They would go there if they chose the right path. We believe in good spirits and bad spirits that if you wear red to a funeral something bad will happen. Nowadays people still believe in the Prophet. The peoples' stories will be here

[31] Religion arrived in two waves, with Christianity followed by Pentecostal conversion (Mills 1986).

> forever. People pray more openly now than when they were young, they hid it. The old days people drummed, sang, danced and everyone came together.

One member spoke of recent impromptu dancing and drumming, just like in the old days, creating "a sacred space where we can be; if we are troubled we can dance our trouble away" (DR04 July 23, 2012). Smudging, paying the land, thanking harvested animals, and other ceremonial activities are still respected by members (WM01 May 18, 2012; PR05 May 17, 2012). Dreaming too remains important, whether Dane-zaa members are conscious of it on an everyday basis or not, according to this member:

> They don't see it now because that dream is still evolving and it will be seen in the future that people are still dreaming today. All we got to do is recognize it and say, yeah we are dreaming today, like for example, a good example, fighting for those claims injustice. That's a dreaming tradition, setting up these trusts for community, building these community centers, developing these cultural programs, recording elders, language and songs, and all those things are the act of dreaming for the future but people haven't seen it. Yeah, our dreamers brought these spiritual songs to us traditionally, but today we're actually implementing those dreams for future generations. Even today what we're doing, digitally documenting these interviews are an act of dreaming so that the next generation will have some content (DR04 July 23, 2012).

3.2.2 Oral history and mythology

> Our traditional stories are about 10,000 years old, maybe more, that's not written in a book, that's written in our heart, in your head. From your head to your heart, is 18 inches apart and the story is still there, stories that are still passed on today (DR03 June 28, 2012).

Ridington (2007) speaks of his amazement at the ability of Dane-zaa to recount accurately events from the late 1700s from the passing down of oral history. However, even as the tools available to record that oral history improve, the ability to learn and share that history has reduced over time, threatening cultural continuity. As noted by a DRFN elder:

> You know when we look back we should have taped them [elders' stories] lots, more stories from them, when you lose an elder you lose the whole history, you can't bring it back. This traditional story we have, it's not written in a book, it's not in tape before Robin Ridington started but it's in your heart and your mind/brain and then they carry it from the ice age. The story when [of] god's creation, the world, all the

> big giant animal days, the old history, stories, it's carried up to us (DR03 April 26, 2012).

As is typical in an oral culture, stories are a central part of the knowledge base of the Dane-zaa. Ridington (2007) argues that "these 'wise stories' are passed on from generation to generation through oral tradition and are as much a part of the available 'tool kit' as the physical objects people use in their daily lives."

The foundation of Dane-zaa identity starts with the stories that are told about the creation of the earth and the people. Animals also play central roles in mythology, including muskrat, which was sent by the Creator down to the bottom of the water to bring up a speck of dirt to make the world, and swans, which like the Dreamers, can pass through heaven while still alive. Ridington (1979) chronicles a cycle of stories about the culture hero, Saya, "who first transformed mythic giant person-eating animals into the game animals whose deaths give life to the people. The culture hero is also associated with the daily, monthly and seasonal transformations of the sun and moon, and with the seasonal flight of migratory waterbirds, particularly swans."[32] These, and many other stories, form the consciousness of the Dane-zaa from the time they are first able to listen to and learn stories.

Dane-zaa oral history emphasizes the relationship of the Real People to the land and animals, the power of dreams and dreamers, and useful lessons for leading a good life. There are culture heroes real (the Dreamers like Charlie Yahey and Makenunatane) and mythical, like Saya. There are monsters like Wechuge and mythical creatures believed in and observed to this day like the Moberly Lake Monster and Sasquatch (WM01 April 26, 2012).

3.2.3 Knowledge (of Land) as the Primary Form of Power

> Similar to when you're writing a paper at a higher university level or context, you always make reference to an author, like "this author said this" that's why my argument is based on this idea. Well, the story telling of the Dane-zaa people is very similar, the context of, "okay we're going to talk about this area and it's about

[32] Ridington (2007) also relates the Dane-zaa explanation for how oil and gas deposits got under their lands: "The Dane-zaa tell about a time when giant animals roamed the earth and hunted people. The first hunter, Saya, consulted the wise stories of his grandmother and then applied this knowledge to overcoming them. He placed some of them beneath the earth, and it is from their buried bodies that the white people extract the energy that fuels their culture's increasingly precarious way of being in the world."

> Gaayea (dreamer) or Adishtl'ishe (dreamer) was here, he created this song at this location", so there you see a reference point similar to referencing someone and saying this person said that or this person composed that song in this area and here's, you know, information about that time. ... Intellectually it's a very interesting context that elders or the people that want the future generations to have a sense of reference to the land so that they can always go back in the future years to a particular place and say, "what time of person are you" and say "I'm this" or "I'm that" "my ancestors lived on that area, they hunted in there or we camped in that area when we were younger, all of those give you a sense of who you are, a guidance, so those are like guiding posts - songs, stories give you a sense of trail (DR04 July 23, 2012).

Having an oral and extremely mobile hunter-gatherer culture, the survival of the Dane-zaa has always relied not upon the creation of goods or tools, but on knowledge of harvesting techniques and the behaviour of the animals they hunt as the primary source of food. The best hunters have the most knowledge of the land and the animals, not the most money or most powerful weapons. Knowledge, as Ridington (1988) puts it, was the primary form of power for Dane-zaa: "The most effective technology for them is one that can be carried around in their minds".

Ridington (1979) notes that:

> The essence of [Dunne-Za] technology was the possession of knowledge, not the possession of artifacts. With knowledge, they could produce whatever artifacts were necessary… Dunne-za transformative knowledge was symbolized by their concept of medicine power. Their word for this power was "ma yine," literally his, her or its song. When the Dunne-za say that a person "knows something" they are referring to "mo yine" or medicine power. .. Among the Dunne-za, mo yine was acquired through childhood vision quest experiences. Preparation for these vision quests was very much a form of independence training. During this training, children learned to find their way around in the bush and to interpret the behaviour of animals through their tracks and other signs.

3.2.4 Education via Observation and Experience

The gathering of knowledge on how to survive is central to the Dane-zaa education process. There are two primary forms of teaching – through stories told by elders to youth (as noted above, often associated with specific places on the land which thereafter give the place meaning for the Dane-zaa when travelling through that area), and through observation and practice of skills associated with harvesting.

A special pride is taken in learning by watching and then replicating acts demonstrated by elders. Skills for learning include keen observation and quiet respect, rather than verbal inquisition. Youth are expected to listen to and respect their elders: "A long time ago the old people used to say 'don't talk, don't ask questions, because how can you hear what I'm telling you when you are busy talking'" (WM01 May 18, 2012).

Dane-zaa youth do not traditionally learn in a classroom. They learn on the land from their grandparents and parents (DR03 April 26, 2012). Education started early and was generally broken down along gender lines: boys as young as five were taught how to hunt by men, while girls were taught how to make dry meat, prepare hides, and gather berries and other food plants. All children were taught about the seasonal changes and how they affected the distribution of food and animals (T8TA Treaty Education Team 2003c).

Part of the elders' teaching was when to hunt and eat different animals. For example, for the Dane-zaa, caribou is important culturally and medicinally. They were hunted in spring because they still had some fat, which was very important to the First Nations, in part for its medicinal powers (Verification focus group, October 10, 2012).

A vision quest is an important part of this education. When children are old enough, at about the age of six, they are sent alone on a spirit quest in which they must make contact with an animal. Gone for days, each child returns with a deep spiritual connection to one animal, and has often received a song, instructions or guidance (Mills 1986). That animal is then the guardian spirit for the child, and imbued with the personality of that animal, and the child must avoid the kinds of things that might cause that animal to fret. Through this vision quest, the child has given himself to the animal, and when the child passes into adulthood and becomes a hunter, the animal will provide for the child through the animal's own body. This is the embodiment of the principle of sharing and reciprocity between nature and the Dane-zaa (see below).

Such vision quests and, with them, the knowledge they bring are at risk of being lost:

> When you go on a vision quest you got to have discipline, you got to have ritual, you have to follow certain protocols, those have been forgotten, well not forgotten, elders still know about them, but not practiced in a formal setting (DR04 July 23, 2012).

Elders were also responsible for teaching youth values and life skills through story telling. These stories provided practical guidance on how to hunt, fish and trap, but also moral guidance on avoidance of lying, cheating, the importance of caring and sharing, among other core Dane-zaa values (T8TA Treaty Education Team 2003c).

3.2.5 Relationship to Nature

Notions of land ownership, rather than relationship to land, were foreign to the Dane-zaa at the time of contact with Europeans. This put them at a distinct disadvantage in their negotiations with the Crown, which had a clearly defined sense of ownership and legal rights.

Dane-zaa are part of, rather than lords over, their environment. Ridington (1988) notes that the Dane-zaa concept of what a person is differs from the non-Aboriginal perspective: "In Dunne-za reality, animals, winds, rocks, and natural forces are 'people'. Human people are continually in contact with these nonhuman persons. Their way of thinking about themselves and their country are inseparable" (Ridington, 1988). T8FNs youth sometimes refer to elk, deer and moose as their "cousins" (e.g., at the Site C Open House in Fort St. John on May 9, 2012).

The relationship between human people and animal people is a complex one based on responsibility, respect and reciprocity:

> The Dane-zaa think of animals as persons. A hunter must make contact with the spirit of an animal in his dreams before the animal will give itself to him. The animals know whether or not a hunter is generous. They choose to give themselves to people who share the meat with their relatives. As skilled hunters and hide workers share their skills, they remind young people that their elders and ancestors shared a living landscape with the animal people (Royal BC Museum no date).

Nature needs to be respected. If it is, it will always replenish itself to meet Dane-zaa needs:

> We offered the tobacco for the eagle, we were asking the spirit of the eagle, because this is what I told everybody, ask the spirit of the eagle to watch over us, to give us good fortune, good health, a good way of life, to protect us from bad things and to just basically watch over the community and give us the strength that we will need to carry on as a people in our relationship to the land (WM01 May 18, 2012).

The relationship to nature is a reciprocal one then. It provides both utilitarian, physical needs, and cultural sustenance. Many T8FNs members share the following view: "Being in the bush is a healing thing for First Nations" (DR07 June 11, 2012).

On the other hand, if nature is not respected, there are consequences well-known to, and often raised by, T8FNs members. Nature is not benign, but alive and if necessary, will fight back:

> We have to respect nature. If we don't, we'll get punished. We can't kill everything – trees, water, fish (DRFN elder, in T8TA Treaty Education Team 2003b).
>
> We the Indian people, give our areas a rest, where[as] logging doesn't give the land any way to replenish itself. They keep taking and taking without thinking about Mother Earth. One day she will fight back and our land will be destroyed (HRFN member, in T8TA Treaty Education Team 2003g).

3.2.6 Summary of Key Dane-zaa Beliefs

Among the key underlying tenets of the Dane-zaa worldview are the following:

- The Dane-zaa have always been a part of their traditional territory.
- The Creator gave the traditional territory to the Dane-zaa to protect and steward.
- Dane-zaa are therefore responsible for the long-term stewardship of ancestral lands, now and into the future.
- The Dane-zaa are a part of the land, not above it; survival and success relies upon harmonious relationships with land, animals, water.
- Acces to and knowledge of the land are the most important tools for survival.
- Language, culture and spirituality – inseparable and mutually supporting – must be protected.

3.3 Dane-zaa Values

> Parents taught their children discipline, teaching no talking back, spankings if they didn't listen; explained why behaviour was wrong; safety was taught, shown as well as told (beaver dams if the ice is too thin will fall through, guns how to be safe); children were raised to listen; skills they need to learn or they would not survive or be able to look after themselves or their families; people were taught to help each other not for money but to learn or to share a meal; lots of sharing; everyone spoke Beaver (A list of items raised by DRFN elders in a discussion about respect and the values taught by their parents and grandparents in the past; DRFN 2012).

Dane-zaa Code of Honour

To live life as a Real Person requires following the values taught by your ancestors. The following is a copy of a "Dane-zaa code of honour" identified by the DRFN Lands Office (no date 2):

1. Pray to god to watch over you daily.
2. Always show respect for someone that does good things.
3. Help others by giving your time.
4. Offer something in return, if you take from mother earth.
5. Rise early to get things done.
6. Seek the truth in all things.
7. Provide your best food, shelter, clothes and blankets to visitors.
8. Work hard today and prepare for tomorrow.
9. Always keep useful things handy – matches, wood, food, axe and knife.
10. Know who you are through practicing your culture, history, stories and songs.
11. Develop good living skills by learning how to do things. Keep an open mind.
12. Don't talk behind peoples' backs or make fun of others' misfortune.
13. If you kill an animal, share with others.
14. Listen good when an elder is talking to you.
15. When out in nature always leave as is, take only what you need.
16. Have humour in life, don't take things too seriously, instead have fun and laugh!
17. Always be humble and let your actions speak for you.
18. Be grateful for what you have.
19. Don't think too much of yourselves, think of how you can contribute to your people.
20. Follow through with what you say.
21. Look after yourself by exercising, eating healthy, praying, and the most important – RESPECT YOUR ELDERS – this will help you become a true Dane-zaa [emphasis original].

The Dane-zaa identity and worldview is formed through listening to and learning the stories, the songs, the dances, and the way of life on the land, and through one's own dreams. The values that guide a person in their daily life are taught as the stories are heard, as the dreams are experienced, and as learning occurs on the land. Values of the Dane-zaa

universe are captured in the Dane-zaa code of honour, shared as rules and practices, and described by Dane-zaa below. These are the rules and norms that guide daily life.

3.3.1 Stewardship

> The not born ones, the kids that aren't born yet, he owns this land – (W02, Site C TLUS, June 28, 2011).

There is a fundamental responsibility passed down by the Creator to the Dane-zaa for protection and use of their traditional territory. There is a responsibility to care for the land for future and current generations, as suggested by the WMFNs elder above and this HRFN elder:

> The man is there and the land was given to him by the Creator. He has to take care of the land that has been given to him from the Creator so he can live off the land. If he doesn't take care of the land then he's dying… I guess it was given to us, like a garden for example if you don't weed it out and everything, you're going to eat weeds and you won't benefit from it. But if you take care of your garden you are going to have big spuds and good vegetation in there, everything will be growing in there, and your kids and your family will be happy (H10, Site C TLUS, May 26, 2011).

Stewardship is thus both an intergenerational responsibility and a continuous economic/survival priority for the Dane-zaa. To take too much one year was to starve the next. As noted by WMFNs members in their testimonies to the Northern Pipeline Agency (1979):

> Prior to the fur trade, Indians of this area maintained a fairly equal balance with the environment. Not making any demands on their resources, and not leaving any permanent damage as a result of their activities. The resources they depended on were based upon a yearly cycle of productivity and were not harvested before full maturity. By following a nomadic existence, they were able to exploit the resources of their environment selectively, matching the season's activities to the available resources. This cycle continued until the intervention of the European fur traders (Rosa Dokkie).

> They used to leave the game alone for a few years, just to let it rest or whatever. Let the land rest so the moose could stay there and then they used to make all kinds of dry meat in the summertime and stock up for winter (Molly Desjarlais).

Trapping and hunting locations were adjusted on a yearly basis based on observations of the prevalence of resources. Hunting practices were also self-managed to preserve food sources into the future, "such as not hunting for cow moose so they can have the calves in the spring" (T8TA Treaty Education Team 2003c).

These active stewardship practices remain strong today. Dane-zaa speak of not misusing animals, because "animals are a gift from god" (PR11 May 17, 2012). Special rules are in place to ensure that calving and other sensitive life stages are not interrupted by harvesting activities. And certain places are allowed to lie fallow if they are depleted one year,[33] suffer from environmental damage, or are central to life stages of several species, such as the islands in the Peace River that act as refugia for ungulates:

> I leave those areas alone to allow them to be undisturbed. They are there for a reason; to get away from predators, so they [moose, elk, deer] can go about and have their calves (W08 Site C TLUS, July 6, 2011).

Stewardship creates a responsibility to ensure that the use of the land for short-term benefit is balanced against future generations' right to access the same resources and need for – and right to – long-term economic self-sufficiency based on the renewable resources of the land. This leads to the extended decision-making values of precaution. When in doubt, long-term conservation of resources/protection of land is prioritized over short-term economic development. Also, a long-term planning horizon is incorporated into Dane-zaa decision-making.

3.3.2 Reciprocity

Reciprocity is the process of give and take. You cannot expect to receive a benefit unless you are willing to give something in return. For example, when a child seeks contact with

[33] WMFN members 01 and 02 from a July 11, 1995 interview by Wendy Aasen, spoke of changing harvesting locations every year, tracking how many moose they killed, and covering all their traditional territory over a four or five year harvesting span, rather than intensively harvesting from the same location every year (Aasen 1995).

an animal in their first vision quest, he or she is given a song, story or message. The child is given over to the animal in the vision quest. On return from the vision quest, the child has the identity of the animal, which is held for life. The animal constantly reciprocates to that child, who becomes a hunter when he matures. The adult hunter always recognizes this contribution through respectful ritual:

> That's what my dad taught everybody that [he] taught how to hunt. They all offer tobacco when they kill a moose or any kind of animal, they offer tobacco and thanks. Or even a cigarette, they all do that now (WM01 April 26, 2012).

Dane-zaa have trouble reconciling this reciprocal expectation to how capitalism, with its often zero-sum game (one winner and one loser), has played out on their traditional lands and in their lives since contact with Europeans (see section 4).

3.3.3 Sharing

> [If] someone killed a moose everyone had meat it wasn't just one family. Everybody shared. When it was time to get firewood everybody got together and got firewood. When it was time to cut the hay everyone got together and helped each other. When there was a house to be built everyone got together and built a house. We always camped together, ate together, played together (WM11 May 24, 2012).

Sharing is closely linked to the idea of reciprocity and is one of the strongest Dane-zaa values. Evidence from archaeological digs at fur trading posts clearly indicates that the Dane-zaa were the primary source of sustenance, bringing meat to white traders who otherwise would likely have starved (Ridington 1988). Such sharing is typical of Dane-zaa culture. When an animal is harvested, it is shared with everyone. Each family would send a representative to the site where an animal was killed, and pack food home. There was equal sharing, so that no one would go hungry.

Sharing is not merely a moral necessity or a means by which to ensure all people have enough food. As noted by Ridington (1988), it is a responsibility of the Dane-zaa which, if not adhered to, may have significant adverse effects on all people:

> Even today in Dunne-za philosophy, the animals will give themselves to people only when people are generous in giving to one another…. The animals will not give

> themselves to people unless people are equally willing to accept that human life depends on people giving to one another.

Communal celebration and grieving are also a big part of sharing; an emotional sharing of joy and sorrow by a close knit community of individuals with a common cultural identity. "Community supported the family when there was a death in any of the families" (T8TA Treaty Education Team 2003c). Communal child rearing was also identified as common up to a generation ago, but less so today:

> We are raised by a village. The whole family, the whole reserve raises you. Whatever you did you helped each other, and that's the way they have always been. If someone is in need they helped each other and that's the way I want my family; that's the way I want to raise them (H16, Site C TLUS, June 10, 2011).

If a parent or both parents died or became unable to care for the children, community members would adopt the children through custom adoption (T8TA Treaty Education Team 2003c).

3.3.4 Respect

The Dane-zaa code is to respect all people, especially elders and guests, as well as nature:

> As we were growing up they told us to respect nature, everything of life (DR19 August 8, 2012).
>
> Thanks is given for harvesting of animals by hanging a piece of the animal on a tree branch (PR05 May 17, 2012).

This respect for others has been adhered to, sometimes to a fault. Dane-zaa are sometimes torn between their cultural predilection toward respect for others and their desire to meaningfully access their lands. This has been a source of friction in the Peace River valley in particular. As noted by one Doig River elder, respect for the new rights of land ownership – a concept quite foreign to the Dane-zaa – given by the Crown to white farmers, was respected by First Nations even as it alienated them from the Peace River valley during the 20th century:

> Farmers moved in and fenced off the Peace. That is what stopped us from going to use the river [not lack of use or value]. We respect the landowners and don't use the land unless we ask them first. But if they said no, I would use it anyway. IT IS OUR LAND [emphatic in original]. Only we were here in the 1850s before everyone else.

> Charlie Lake cave shows we have been here, living off the land, for 10,500 years, without white people's food (DR02 June 29, 2012).

Elders merit the utmost respect. Particular emphasis has traditionally been placed on getting the input of elders into decision-making at the community level. However, in recent years the role of elders in governance and decision-making has declined due to a couple of factors, including the fact that elders have greater experience with traditional land use and traditional ways of living, but may have less acumen in dealing with the kinds of information required to make decisions in the "modern" wage economy and polity (Krueger no date).

Dane-zaa were always taught to respect all others and accept them for who they were. This meant that there was little in the way of racism or other forms of ostracism for outsiders or those who were different. Disabled people were looked after with respect and love (T8TA Treaty Education Team 2003c).

3.3.5 Discipline, Hard Work and Self-Sufficiency

Hunting and other harvesting – making a living for the T8FNs - is hard work. The Dane-zaa code requires early rising, careful attention to tools, and attention to order and hard work. The Dane-zaa have always had to work hard, in all sorts of conditions, to survive and live well: "People were not used to 'free money'; people had to work" (DR07 June 11, 2012).

> When I was fourteen years old I killed my first moose, I skinned it. Throw all of the meat together and then cover it with the hide and then carry it home. That night I didn't sleep I was so proud of myself. How many young people would lift that today? They're so weak (WM01 April 26, 2012).

Recent years have seen negative effects on these combined traits, with increased reliance on social assistance and the expectation by some members that the First Nation will provide funds to individuals whether they work hard and contribute or not. There is a strong desire among the T8FNs to get back to the time of hard work:

> When people get money for free it's very, very destructive… We need to make our own money as indigenous people. The old people say "You've got your own hands" [for working]; we need to shift to that thinking (DR04 July 23, 2012).

3.3.6 Truthfulness

Described in an 1872 monograph about the region, a fur trader observed the Beavers were a "peaceable and quiet People and perhaps the most honest of any on the face of the earth" (as reported in Dempsey 1974). Truthfulness is highly regarded, as is following through on your word and doing what you say you will do.

3.3.7 Humour and lightness

Dane-zaa possess a lightness and a love of laughter. Even when speaking about sad and difficult topics, the Dane-zaa attempt to find a way to laugh and be positive. As one member noted:

> Before, basically, they were happy go lucky people, more or less, you know rarely, I mean sure they displayed anger but they also displayed humor and laughter for the most part (WM01 May 18, 2012).

The same WMFN member went on to note that people have changed, becoming more angry, frustrated and bitter over the years. Reasons for these changes are discussed in section 4, while the implications for community health and well-being are discussed in section 6.6.

3.3.8 Adaptability

> I think [one of] the strengths the communities have, and I don't even know if they realize they have it, is just the ability to survive and adapt and because it seems like no matter what gets thrown at us we always seem to adapt to the situation. Sometimes maybe in a good way and sometimes in a not so good way but I think that would definitely be a strength (WM11 May 24, 2012).

In the past, the Dane-zaa needed to adapt quickly to changes in the elements, the distribution of animals, and other environmental conditions. Given their reliance on mobile wildlife resources, this adaptability was central to physical sustenance and survival.

This same characteristic of adaptability has served the Dane-zaa well in dealing with the multitude of environmental, social, economic and cultural changes they have faced over the

past two centuries. As one community member put it: "Don't give up, keep going is what I learned from my elders" (in Hendriks 2011).

However, as noted by WM11, adaptability is not all good. It can also come with a cost. The need to constantly adapt to externally imposed change has seen the Dane-zaa way of life altered in fundamental ways. Sometimes, they have adapted by gaining unity and strength, such as efforts to protect their lands through governance and stewardship. Other times, people have adapted through personal coping strategies such as increased use of drugs and alcohol, which have extracted major costs on individuals, their families and their communities.

3.3.9 Summary of Key Dane-zaa Values

Adaptability is one thing - a cultural trait that the Dane-zaa appreciate – while assimilation is something completely different. Efforts by the non-Aboriginal culture and governments to change the core of what Dane-zaa people believe, and how they see the world, have been rebuffed by the T8FNs since first contact. The T8FNs have and continue to have the capacity to adapt their society, economy and culture to survive in a changing world, but refuse to have that changing world define who and what they are. The values they hold (see Figure 7 below)[34] have bent but not broken during recent history.

Of particular note is the retention of the primacy of the T8FNs relationship to the land. The connection to land for T8FNs is sacred and essential for economic vitaility, social connectivity, and cultural transmission. Many members argue it cannot be replaced by money or economic opportunities. Without the land, life ceases to have meaning under traditional culture of the T8FNs.

[34] Please note that this list, while it consists of values identified by individuals from the four T8FNs and was ground truthed by Community Advisors, has not been adopted by leadership. It is merely descriptive for the purposes of identifying the cultural context of the T8FNs.

Figure 7: Some Key Dane-zaa Values Identified by T8FNs Members

Such values are not merely a list of desired characteristics; they are used to guide the way Dane-zaa make decisions and live in the world.

3.4 Key Indicators of Well-being – what is the good life for Dane-zaa?

> We need a cultural shift, we need a new thinking; a new way of looking at things and one of the ways that's going to work and has always worked is to practice and develop the dreaming tradition. Let's dream together, let's dream of the future, what do we really want, what are we really capable of doing? (DR04 July 23, 2012).

Interviews and focus groups for the Baseline Community Profile, as well as examination of previous documents (e.g., T8TA Treaty Education Team 2003c)[35], indicates the following key indicators of well-being and quality of life for T8FNs members.

[35] At this 2003 T8FNs Elder's Gathering at Pink Mountain Ranch, 58 examples of past positive practices – indicators of well-being and quality of life – were identified. The vast majority of them were related to activities and

Table 2: Measures of the Good Life – What Dane-zaa Seek to Protect and Avoid

Protect	**Avoid**
Traditional values, knowledge and skills ("learning our culture")	Assimilation; loss of sense of self
Individual safety, health and sense of security	Drug and alcohol abuse and other negative coping strategies
Traditional diet and other forms of self-sufficiency through harvesting: -berry picking -making tools from animal parts -making hides and other crafts	Ill-health through poor nutrition and lack of exercise
Family strength and amount of time spent together (preferably on the land)	Family breakdown
Community and inter-community unity and financial security	
Community cohesion through ceremony (e.g., prayer with smudge) and pan-T8FNs nation building	Dis-unity within and between communities
Access to adequate quantity and quality of land and water to meaningfully practice Treaty rights	Loss of sense of control over the future – lack of governance capacity and stewardship role
Economic self-sufficiency – sustainable, balanced and non-destructive where possible	Over-reliance on the wage economy at the expense of the traditional economy
Reciprocity and sharing of benefits – "visitors were always fed when they came to visit"	Futures foregone[36]
"Learning our language"	
Respecting Mother Earth and practice of stewardship values on the land	

interactions on the land, again solidifying the role of a healthy relationship to the land for T8FNs. Items in quotations marks in Table 2 are from T8TA Treaty Education Team (2003c).

[36] This concept refers to the analysis of what options would be have to be given up irrevocably as a result of a plan or project (Burdge 1994 - e.g. sport fishing tourism in a case where there is widespread perception of contamination).

The remainder of this report examines some of these key themes in more detail, including:

1. *Overall Human Health*

The effects of colonization, land alienation, cultural and social change, and economical marginalization have all contributed to adverse health effects on generations of First Nations people in the Peace River region. In addition to morbidity (disease such as diabetes, sexually transmitted infections - STIs), psycho-social effects have led to high levels of abuse, self-harm, and despair. A current process of Nation rebuilding and healing is attempting to overcome these challenges, but hurdles remain. Issues related to population health are discussed in further detail in section 6.6.

2. *Overall Health of the Land – including Land, Air and Water*

> What my elders told me about water is that "water is mother earth's blood", just like the blood that runs through our veins, it's the same thing so it's very important to keep that water healthy and clean because if you don't mother earth is going to get sick and we as a people are going to get sick and we won't become healthy people. As a matter of fact the way it is now we are not healthy people the way we used to be. All this activity that's happening, industrial activity, the dams that are happening, it's contaminating the water on a massive scale (WM01 April 26, 2012).

Access to clean water is just one part of a balanced relationship to a giving land. No process of T8FNs rebuilding and healing is even possible without a healthy and abundant land base; enough room to quietly enjoy the land and gain both spiritual and physical sustenance from it. Factors influencing the health of the lands and waters are discussed in general in section 4 and in particular for each T8FNs in section 5.

3. *Relationship to Land and Ability to Practice Treaty Rights*

> The elders have always said, the bush is good for the Dane-zaa people, the bush is a good counselor, so in that context, we always have to go back to our ancestral ways… The tradition of living off the land and going off and having time for quietness and stillness and peace of mind is what they find and they talk about going to a good place and a good place is where you can have that sense of knowing who you are and what you really believe. So we need to make sure a lot of this is happening (DR04 July 23, 2012).

Being on the land makes Dane-zaa people happy and promotes wellness. Even when they are not on the land, they are often thinking about it, as noted by one staff member:

> What makes people happy? Spring and Winter, people are talking about hunting, Spring, the activity of talking, all of the communities talk about hunting, fishing and camping, as well as the planning for it (T8FNs staff 04, July 9, 2012).

People are happiest and strongest when out on the land and rivers – "That's who we are; we are river people" (DR02 April 26, 2012). The ability to practice Treaty rights is central to T8FNs well-being and quality of life. As described above, the land is central to the identity and survival of the "Real People". Current challenges to a meaningful relationship to their ancestral lands and meaningful practice of Treaty rights are discussed in section 6.1, while land alienation issues for each T8FNs are examined in sections 5.1.4, 5.2.4, 5.3.4, and 5.4.4.

4. *Cultural Protection and Promotion*

T8FNs members of all ages expressed a clear desire to protect and promote culture. This may mean simplifying life and getting back in closer connection with the land and way of life of prior generations:

> People enjoy the comforts of modernism but many people speak of removing themselves from these comforts. Life is easier without the technologies. Material things, different comforts we enjoy come with a lot of ache and forgetting where we come from and where we should be (T8FNs staff 04 July 9, 2012).

Promotion of language, ceremony, and inter-generational knowledge transfer are all central to passing on the Dane-zaa culture. Spending time learning from elders was particularly important for youth (PR12 July 10, 2012).

Section 6.2 examines efforts to promote culture and hurdles to success facing all the T8FNs, and sections 5.1.6, 5.2.6, 5.3.6, and 5.4.6 examine local cultural issues.

5. *Community Cohesion*

Both intra-community (inside) and inter-community (between the T8FNs) unity and cohesion is widely desired by T8FNs members. Several people noted that currently, the sharing and reciprocity so ingrained in Dane-zaa culture has come under threat from the individualistic and consumerist nature of the Western wage economy. Section 6.6 examines in more detail some of the factors that contribute to or take away from the desired strong and healthy communities sought by Dane-zaa.

6. *Sustainable Economic Development and Optimism for the Future*

Dane-zaa do not seek to ignore or withdraw from the wage economy. At the same time, they don't want the wage economy and their reliance on it to drain cultural resources, social values, and the economic self-sufficiency and sustainability they have drawn from the land for thousands of years.

Sections 6.4 and 6.5 look at current hurdles and opportunities to greater engagement by T8FNs in the wage economy through enhanced education, training, employment and business opportunities, while sections 5.1.5, 5.2.5, 5.3.5, and 5.4.5 examine econbomic issues at the local level.

7. *Stewardship and Governance – a Sense of Control*

Section 6.3 examines ways in which the Dane-zaa have lost, and seek to regain, a sense of control over the management of their ancestral lands.

4 HISTORY AND CHANGE FOR THE T8FNS

> It has been remarked by those that first settled in the [Peace River] district, that the Indians are rapidly decreasing in numbers since their arrival – a fact which does not admit of a doubt: I myself have seen many villages and encampments without an inhabitant. But what can be the cause of it?... Has the fiat, then, gone forth, that the aboriginal inhabitants of America shall make way for another race of men? To my mind, at least, the question presents not a shadow of a doubt. The existence of the present race of Indians at some future, and by no means distant period, will only be known through the historical records of their successors McLean (1968).

Historical and socio-cultural context are essential to effective baseline conditions profiling and subsequent environmental impact assessment. Recent history, over the past two hundreds plus years, has seen a remarkable amount of change in the lives of the First Nations of northeastern BC. This section begins with a chronological sampling of that change, and then examines some of the forces that have significantly altered the lives and way of life of the T8FNs. This context of the "weight of recent history" is essential to understanding current trends and conditions in the T8FNs communities, and to characterizing the goals, aspirations, and challenges for the T8FNs into the future.

4.1 A Chronology of Change for the T8FNs

This chronology was developed from a variety of sources, including the T8TA's *Chronology* (T8TA, no date).

4.1.1 Pre-contact Existence

11,000 years ago: Good record of continuous occupation in the Treaty 8 area by Aboriginal people over 11,000 years, including evidence in Charlie Lake Cave near Fort St. John (Fladmark 1996)[37]. Undisturbed artifacts of game (such as bison and snowshoe hare) and tools, found together, represent firm evidence of a series of temporary occupations over thousands of years. A site near Pink Mountain also shows evidence of Paleo-indian occupation at a similar time.

[37] The Charlie Lake Cave is a significant cultural landmark for the T8FNs. In 2012, three of the T8FNs purchased the residential property upon which the cave rests. The Nations have plans to protect the site and promote cultural gatherings and cultural tourism at this location (pers. Comm., Diane Abel, September 28, 2012).

10,000 – 3,000 years ago: Emergence of agriculture and a trend towards a more settled existence in the south and plains. In the north, First Nations tend to remain as small, nomadic, family groups, although there is evidence of domesticated local plant species.

4.1.2 Initial Contact and the Early Colonial Era

The early contact and fur trade era was characterized by a series of changes that fundamentally altered the lives of the Dane-zaa, including increased reliance on the fur trade and trade goods for well-being; concomitant reductions in animal resources and increased incidents of starvation among the Dane-zaa (Heritage North Consulting Limited no date); increased traffic of non-Aboriginal people through the region; and the establishment of centralized residences around fur trading forts. It also included the introduction of government colonization and assimilation policies that were to plague First Nations until late into the 20th Century.

The period includes a complex relationship between the First Nations and Europeans of trade, support, resistance and conflict, culminating finally with the signing of Treaty 8 by many area First Nations with the Crown.

Early 1700s: the Cree make incursions into Dane-zaa territory and because they have firearms they push the Dane-zaa westward. The Cree may have been attracted to the area based on knowledge of planned trading post routes.

1782: Alexander Mackenzie reports in his journal that the Beaver first acquire firearms.

1782 to 1786: Conflict continues between the Cree and the Beaver, culminating in a peace agreement. A truce between the Beaver and the Cree is reached at the Tsadu (Beaver) River, after which the location became known as Peace Point and the water body became known as the Peace River (T8TA no date).

1787: Smallpox decimates the Western Cree.

1792: Alexander Mackenzie uses First Nations guides to find his way through the Rocky Mountains by Peace River pass. The expansion of the fur trade was the natural sequence of such explorations (Kitto 1930).

1794-1797: Beaver River, or Rocky Mountain, Fort built where the Moberly River enters the Peace River to act as a base for further explorations. First Trading Post of BC, established by the Northwest Company at the confluence of the Moberly and Peace

Rivers – it is "the most westerly English (and French) speaking outpost on the continent of North America" (Fladmark 1985).

1805: Northwest Company fort established in Hudson's Hope. The Rocky Mountain Portage House, built by James MacDougall, operates on the south side of the Peace River and across from the present town of Hudson's Hope (Fladmark 1985). According to archaeological study and oral history, these traders depended heavily on bison brought in by Dane-zaa hunters: "They got Indian people to hunt for them, to hunt moose for them, Hudson's Bay Company, so if the Indian people didn't hunt for them at that time, they would starve to death" (DRO3 June 28, 2012).

1806: The Hudson's Bay Company (HBC) constructs Fort d'Epinette on the north bank of the Peace River just downstream of its confluence with the Beatton River. HBC becomes the Northwest Company's competitor (Wallace 1929).

1813: Northwest Company establishes Fort St. John.

1821: The Hudson's Bay Company takes control of the Northwest Company's assets (Fladmark 1985).

1822: The first horse arrives in northern British Columbia from Dunvegan and is stabled at Fort St. John (Faries 1823). Beaver Indians later extensively incorporated horses as pack animals into their social economy of seasonal rounds.

1823: The 'Massacre' of St. John's. The closing of the Hudson's Bay Company Post at St. John's, along with depletion of game and resources led to unrest and a conflict in which the St. John's Clerk, Guy Hughes, was shot. The following day, four more HBC employees who had just arrived were also killed. The HBC withdraw trade from the area (T8TA no date), causing widespread hardship for the Beaver Indians. Ridington (1988) also notes that by this time, the Dane-zaa had already shifted their entire economy from a communal hunt for subsistence to one geared to providing trade goods to the fur traders. This transition rapidly altered the means of production, the social economy, and the degree to which the Dane-zaa relied on non-Aboriginal people for their well-being.[38]

1828: The HBC fort at Dunvegan (Alberta) is finally re-opened when the Beaver and Sekani[39] Bands petition the HBC and apologize. As noted by T8TA (no date):

[38] Ridington (1979) suggests that by 1821 considerable conflict had developed over the impact of the fur trade on the cycle of native subsistence activities. At the root of the conflict was a perceived lack of reciprocity by Europeans in their relations with the Dane-zaa.

[39] Also known as Siccanie, the Sekani are an intermingling of HRFN and PRFN members (Heritage North Consulting Services no date).

"HBC Governor, George Simpson, is forced to recognize that game depletion in the area was caused by the fur trade and was in good part responsible for the so-called massacre. He implements the first conservation measures as a result, but refuses to open another post between Dunvegan and MacLeod Lake [Dane-zaa territory] during his 26 year tenure".

1830: The bison, a staple food for the Dane-zaa, are reported as being scarce and moose were increasingly turned to as a staple (Broomfield no date).

1862: A smallpox epidemic, which began in Victoria, spreads throughout the province and the population of First Nations in BC drops drastically as a result.

1868: The Hudson Bay Company strikes a deal with the 'Dominion' and surrenders Rupert's Land to Her Majesty in return for land and monetary compensation.

1865-1868: Henry Moberly, a Hudson's Bay Company fur trader, resides at Moberly Lake, which is named after him.

1866: The Rocky Mountain Portage House is moved to the north side of the Peace River at the present town of Hudson's Hope and used as a supply center for the gold rush (Finlay 1976).

1871: BC joins confederation. Indian policies had been formulated separately in the BC colonies from those in the Dominion, and following confederation they come into conflict. For many years, BC continues a policy to "ignore or deny the existence of any native title or rights, or any need for treaties" (T8TA no date).

Hudson Bay Company withdraws the credit system from indigenous customers, leaving many trappers and their families unable to buy the ammunition and supplies needed to make a living the following season (T8TA no date).

1885: *Indian Act* revised to prohibit cultural ('religious') ceremonies such as potlaches and dances.

1886: Bishop Faraud, the first missionary in Fort St. John, reported on the epidemic of scarlet fever on the Beaver Indians (Bowes 1963).

1888-1908: Saulteau (Cree from the Red River area of Manitoba) arrive at Moberly Lake.

1892: The Residential School system is launched through a federal Order in Council. This was the beginning of the use of education for cultural assimilation.

1896: Klondike gold rush begins with the discovery of gold at Rabbit Creek (Bonanza Creek), near Dawson City, Yukon. A flood of prospectors comes to pass through the Peace region via Edmonton.

1898: Approximately 500 Indians prevent miners and others heading to the Klondike as well as North West Mounted Police from passing through the Fort St. John area until a Treaty of Peace has been signed. Klondike trekkers had been accused of stealing the Beaver's horses and shooting their dogs (T8TA no date). The government assures the Indians in Fort St. John that such a Treaty would be negotiated the following year (Metes, 1994)[40].

1899: Treaty No. 8 is signed June 21 at Lesser Slave Lake. The Treaty Commissioners travel to meet the Beaver at Fort St John, but are too late. The Beaver had already left for their summer hunting grounds.

1900: A second Treaty Commission, under James A. Macrae, returns to Fort St. John to meet with some members of the Beaver Band present at the time. Muckithay, Aginaa, Dislisici, Tachea, Appan, Attachie, Allallie and Yatsoose sign Treaty No. 8 on May 30 (Attachie no date).

1901: Neil Gething discovers coal in the Rocky Mountain Canyon.

1905: The BC *Game Amendment Act* imposes game restrictions and a six-year ban on the taking of beaver pelts. This causes much hardship, strife and confusion among First Nations, who are fined and imprisoned for trying to carry on their normal hunting, fishing and trapping activities (as promised during treaty talks). White trappers increase, often taking over traditional traplines that had been a family's main source of livelihood (T8TA no date).

[40] A DRFN elder recalled: "Yeah, [that happened] down at the Old Fort. The people wanted to go through here, to go up in the mountains to look for gold, if you could sign something for them to go through the Great White Father will be coming through later, to sign something. You can sign but you can go anywhere you want, this is your land they told them and you can hunt, trap all you want, and you're not going to be disturbed or your religion or what you believe, you will be free, they told them, so that's how they signed the Treaty" (DR19 August 10, 2012).

4.1.3 Non-Aboriginal Settlement Era

Opening-up of the Peace River Block led to settlement pressures including, in particular, uptake and clearing of large amounts of land by white farmers. Increased incursion by white trappers escaping the Great Depression of the 1930s contributes to the establishment of a Provincial trapline registration system negatively impacted both the subsistence and trade economies of the Dane-zaa, who previously did the large majority of hunting, trapping and fishing in the region.

The imposition of a registered trapline system is recalled as a particularly harsh imposition on area First Nations. T8FNs members recalled that it was not that they took First Nations traplines, but that the First Nations did not have specific traplines, they had traditional areas that they used and shared amongst the families and used for their seasonal rounds. It was more that the trapline registration imposed traplines where they traditionally hunted and trapped. From the 1930s to the 1960s there was regular conflict around traplines and cabins where outsiders burned down First Nations cabins and took over. Also, traplines were traded at huge disadvantages with members – often in desperation or with a lack of knowledge of their value value - selling them for a pittance (Verification focus group, October 10, 2012).[41]

Increased high-speed transportation links opened up the territory, especially in the early to mid-1940s with the rapid completion of the Alaska Highway. This stimulated increases in the non-Aboriginal population, growth in agriculture, and First Nations land alienation through privatization of Crown lands, and centralization of First Nations people into smaller and smaller areas.

Industrial development began with provincially funded mega-projects, which included the extension of transportation and utility infrastructure, as well as the construction of the first and largest BC Hydro dam west of Hudson's Hope, the W.A.C. Bennett Dam.

Even by the late 1950s, the effects of industrial development were being noted. As Ridington (1988) reminisced:

> I had expected to find an empty and pristine wilderness in a country named for peace. Instead, the wilderness was both occupied by people indigenous to it and savaged by massive industrial intrusion.

These already significant changes to the way of life of the Dane-zaa were to increase rapidly as a new, increasingly industrial, era began in the Peace River region in the 1970s.

[41] T8FNs members also noted Greenpeace and the anti-fur lobby in general as a serious adverse impact on the economics of trapping later, in the 1970s (Verification focus group, October 10, 2012).

Nonetheless, many things remained the same in the remote Dane-zaa communities. As noted by DRFN (2012):

> We had no money so we lived off the land; there were no drugs and no welfare; we trapped and worked for farmers; women taught their daughters how to use the whole moose (hide, meat, bones); stayed in school till 15 or 16 then helped family.

1907: The Peace River Block is transferred to the Dominion Government.

Steamboat "The St. Charles" begins its regular run between Fort Vermillion and Hudson's Hope.

1910: The Slavey of Fort Nelson adhere to Treaty 8 after meeting with the Commissioner but the Sekani leave. Regardless, the following year, in 1911, the Sekani of Prophet River are included, for the first time, on the Annuity Paylists, although they refused to take Treaty in 1910 (Heritage North Consulting Limited no date).

1911: The Dominion government selects lands in the Peace River Block to be targeted for release in the first wave of settlement. The population was reported as 2000 and the goal was to reach 20,000. "A steady stream of settlers moved northerly and quickly took possession of the choicest prairie lands." (UBCIC 1980)

The Government of British Columbia requires the registration of traplines, requiring payment for which many Dane-zaa were not immediately prepared. Most of the traditional territories of the Dane-zaa families were taken over by white men (Metes 1994; Government of British Columbia, SFN and WMFN 2006).

1912: Montney and forty-three members of his Beaver band take Treaty for the first time, and are combined with the existing Beaver Band of Fort St. John.

1914: Hudson's Hope with the Cree Beaver (Halfway River Indian Band, West Moberly Lake Band) and Saulteau (East Moberly Lake Band) join Treaty No. 8 (Government of British Columbia, SFN and WMFNs 2006).

1914-1915: The West Moberly First Nations reserve, which was once a summer camp for Dane-zaa, was surveyed in 1914. In March 1915, West Moberly had 41 First Nations people including the Brown, Desjarlais, Cryingman, Mykoose, and Dokkie families (Government of British Columbia, SFN and WMFNs 2006).

1916: Reserve #172 (Montney) of 18,000 acres (approximately 7285 ha – DR19. August 10, 2012) is created formally for the Fort St. John band by an Order in Council, West Moberly Lake Reserve is also created (168A) setting aside 5025 acres (2034 hectares) for the Hudson Hope Band (Metes, 1994).

1917-19: Spanish Flu epidemics wipe out entire Indian communities and approximately half of the population in the Fort St. John area (Heritage North Consulting Limited no date). Frank Beatton buries hundreds of bodies in the Old Fort area of Fort St John. Only 11 of nearly 100 PRFN members living at Fish Lake survived the winter of 1918-19, leaving the country "almost empty of people" (Ridington 1988).

1918: Band reserve lands are allotted to the West Moberly and Saulteau First Nations.

1920s and 30s: A large number of white people seek to escape the Great Depression by becoming trappers. Increased farming in the Peace River valley and throughout the Peace River region increasingly alienates Dane-zaa from their traditional seasonal rounds.

1923: Peace River no longer considered to have a profitable beaver market (Government of British Columbia, SFN and WMFNs: 2006).

1925: Halfway River Indian Reserve No. 168 is created by Order in Council.

1927: The *Indian Act* is amended to ban First Nations from raising funds for land claims. Later, the Federal Government changes the Indian Act to make it a criminal offence for First Nations to hire lawyers for land claim settlements.

1930: Peace River Block is re-transferred by the Dominion Government to the province of British Columbia.

1934: A second major influenza epidemic "wiped out many of the Indians" (Ventress et al. 1973).

1930s to Mid 1940s: Recognizing widespread poverty related to the imposition of the registered trapline system, Indian Affairs negotiates and purchases trap lines for the First Nations (Government of British Columbia, SFN and WMFNs, 2006).

1939: Missionary Father Jungbluth from the Provincial Oblate House builds a mission church at Moberly Lake (Matheson 1991).

1942: Construction of the Alaska Highway by former servicemen begins, and is completed in just over eight months. The same year, many die from a flu epidemic in the Upper Peace. Some surmise that the workers on the Alaska Highway brought the flu. The Alaska Highway construction also led to centralization of communities like Prophet River into reserve locations close to the highway. Ridington (1988) notes "The flu had reduced their numbers and the Alaska Highway had concentrated the few that remained".

1945: The Fort St. John Beaver Band surrenders the land of the Montney Reserve to the Crown to sell or lease for its benefits (BRFN and DRFN 1998). Halfway Indian Reserve also surrendered.

1947: Aboriginal people allowed to vote in provincial election for the first time.

1947-48: The Department of Indian Affairs transfers the Montney Reserve, including "inadvertently" the minerals, to the Director of the Veteran Land Act (BRFN and DRFN 1998) for transfer as farmland for returning war veterans. People are forbidden to return to this area, including the important summer gathering place called Suu Na chii K'chi ge - "Where Happiness Dwells" (Montney – Ridington 2007). Many Doig River people were forced to squat at Peterson's crossing where a small day school had been established (Metes 1994).[42]

1950: Three small replacement reserves are established (#204, 205 and 206). The Beaver of Fort St. John split and move to two of the reserves (Blueberry River Reserve and the Doig River Reserve). The reserves are about 40 km apart and no area was set up for summer gathering. As noted by T8TA (no date):

The Government does not tell the Bands that oil and gas exploration is a possibility in the hunting and trapping areas around these new reserves. Wells, pipelines and accompanying support systems soon criss-cross the land, disturbing graves and making a traditional lifestyle increasingly difficult.

1951: Only one resident at Peterson's Crossing (DRFN) can speak English (Broomfield no date).

1952:Families settle more permanently at the surveyed Prophet River Reserve along the Alaska Highway (Broderick 1955).

An Order in Council is issued setting aside the Halfway Indian Reserve for the use and benefit of the Hudson's Hope Band.

Parsnip River is bridged and Hart Highway from Prince George to Chetwynd is opened.

[42] Ridington (1988) suggests that a lack of knowledge of how the government worked was behind this surrender of lands, subsequently successfully challenged in court in the 1980s with a large settlement from the Crown for Blueberry and Doig River: "At the time they lost the land, the Dunne-za and Cree of the Fort St. John band were unable to protect their resource because they lacked knowledge of the new white culture that was bringing industrial expansion and white settlement to their country. Without knowing a language of discourse that would give them entry to the white man's world of law and politics, they lacked the power to defend themselves against the vested interests of outsiders who wanted their land". This is a common theme in the relationship between the Crown and the T8FNs over the years.

Hudson Hope Band surrenders Reserve #168 in whole a second time.

1954: First hydrocarbon discovery well is drilled in the Fort St. John area.

1957: Fort St. John Lumber Company commences operations. The Company later became known as Canadian Forest Products or Canfor (T8TA no date).

1957-59: PGE Railway reaches the Peace River. Travel is possible from Prince George to Chetwynd to Dawson Creek, and from Chetwynd to Fort St. John.

1960: First Nations are allowed to vote in federal elections.

Fort St. John natural gas fields are connected through pipelines to the southern markets and the natural gas industry is developing on a major scale.

1961: W.A.C. Bennett, Premier of British Columbia, creates the British Columbia Hydro and Power Authority (BC Hydro).

1960s: Most members of the T8FNs move into permanent housing. The traditional round was modified with travel more from a base camp. (UBCIC 1980).

1962-1967: W.A.C. Bennett Dam is constructed.

1964: DRFN members see television for the first time at Petersen's store (Broomfield no date).

1965: Last year of summer hunting trips by horse and wagon by DRFN (Broomfield no date).

1968: W.A.C. Bennett Dam is completed. Williston Reservoir is created by flooding the territories of the Dane-zaa, Ingenika and Mesilinka in the former Parsnip and Finlay River valleys north of where they meet the Peace River. "In addition to flooding 350,000 acres of forested land and drowning countless animals, the reservoir blocked the east-west migration of the now endangered mountain caribou across the Rocky Mountain Trench" (Loo 2007). (See section 4.3 for further discussion of cumulative effects of BC Hydro projects on T8FNs rights and interests).

4.1.4 The Industrial Era

> In British Columbia, governments and industrialists have long dreamed of a permanent boom based on the export of energy. The proponents of the energy frontier are single minded in their determination to exploit energy resources wherever they might be found. Many feel that this single mindedness will have effects on the Indians that are unlike any they have experienced so far (Brody 1981).

An oil and gas industry developed and helped Fort St. John's population increase from 3,619 people in 1961 to 13,891 in 1981 surpassing Dawson Creek as the largest city in the Peace River Regional District (PRRD). The launching of the coal industry led to the construction of an instant community at Tumbler Ridge in 1981 to service the mines. The region experienced little growth in the late-1980s with a relatively stable population. More recently the oil and gas industry has caused an economic boom.

Overall, this has been an era of rapid change in the amount and types of activities on the land, with the T8FNs using all means at their disposal to try and gain some meaningful voice and expressing their opposition to many of the developments impacting their lands and way of life.

1970:The first television appears at Doig River reserve. Radio-telephone installed at Doig as a first aid measure by Medical Services (Broomfield no date).

1976: Oil and gas discovered on the former Montney Reserve (BRFN and DRFN 1998).

Families of the Fort St. John Beaver Band were formally split into two separate Bands, becoming Blueberry River First Nation and Doig River First Nation (BRFN and DRFN 1998).

1977:Families of the Hudson's Hope Band split into two separate Bands, becoming Halfway River First Nation and West Moberly First Nations.

1978: BRFN and DRFN sue Department of Indian Affairs over lost oil and gas revenues in Montney area. The case is to last 20 years (see 1998).

1979:Sour gas well erupts at Blueberry creating a state of emergency. Some people come to live at Doig River or Doig hunting camps (Broomfield no date).

1979: *Forgotten Land, Forgotten People,* the report of the Alaska Highway Gas Pipeline Project (Mair 1979) is released. While the pipeline is allowed to proceed, it has never been built. A DRFN member recalls raising issues about this proposed mega-project that remain relevant today:

> The big Alcan Pipeline they called it. People were against it in Fort St. John, Charlie Lake, Pine Mountain, they had a hearing all the way through… In those days they will talk about impacts, what will happen if there's a big camp and strange people coming to Fort St. John, then drugs, and that's what the people talked about… The young ladies will be left here. Their babies will not have fathers, drugs and alcohol, they'll be lots here… Everybody opposed it (DR19 August 10, 2012).

1979: Active opposition to Site C by T8FNs begins (DR19 August 10, 2012).

> Site C became the focus of a major debate about the future of hydroelectricity in British Columbia. BC hydro, the provincial utility, wished to fulfill the logic of the Peace River projects and develop the next dam at Site C. Local interests reacted negatively. Earlier projects had caused considerable dislocation and hardship in the Peace River valley, particularly for First Nations, and another dam seemed too much to bear (Evenden 2009).

Later 1970s: A number of lucrative coal deposits are identified in the Tumbler Ridge area. (District of Tumbler Ridge, unknown date).

> Union of British Columbia Indian Chiefs (UBCIC) becomes an important political player, supporting T8FNs in their submissions on both the Alaska Highway Pipeline and Site C Projects.

1981: Representatives of Denison Mines, Teck Corporation, the Government of BC and the Japanese steel industry signed an agreement that allowed the Northeast Coal Development to proceed, and in the space of three years, the town, infrastructure, and two mines were built from scratch in Tumbler Ridge (District of Tumbler Ridge, no date).

> The BC Utilities Commission holds public hearings on the proposed Site C Dam in affected First Nations communities. The T8FNs urged the Commission to look at Site C from their point of view, which was a context of already great pressure that caused them deep concern as to whether they have a future on the land at all.

1982: The Treaty 8 Tribal Association (T8TA) is incorporated under the B.C. *Societies Act.*

> *Constitution Act, 1982,* is passed and comes into law, recognizing and reaffirming Aboriginal and Treaty rights.

1985: Bill C31 is passed, amending the *Indian Act* and ending some of the discriminatory provisions in it; especially those which discriminated against women, like the 'double mother clause'. It allows limited reinstatement for many who were denied or lost

status in the past and allows bands to define their own membership rules (T8TA no date).

1992: AMOCO's proposed gas exploration activity in the alpine area around Twin Sisters, the T8FNs spiritual site between the Upper Moberly and Carbon River watersheds south of the Williston Reservoir, is openly opposed by WMFNs and other area First Nations (Chetwynd Echo, 1992). The project was first delayed and later abandoned by AMOCO in the face of continuing protests and an unsuccessful well drilled in the shadow of the Twin Sisters in the late 1990s after First Nations court challenges of Ministry of Energy and Mines exploration permits failed (Carpenter and Feldberg 2006).

1995: HRFN files a Treaty Land Entitlement claim over an area of land known as *Tusdzuh*, an area immediately adjacent to the Halfway Reserve. Halfway claimed *Tusdzuh* was integral to their culture in that it was used for hunting and other traditional purposes.

In the *Apsassin* case, the Supreme Court of Canada finds the Crown breached its fiduciary obligation by selling the Fort St. John Beaver band's mineral rights and making no effort to correct its error when it should have in 1949 (BRFN and DRFN 1998).

1996: Report of Royal Commission on Aboriginal Peoples (RCAP 1996), which made some 440 recommendations to improve the huge disparities in well-being and quality of life between Aboriginal and non-Aboriginal people in Canada.

The British Columbia Ministry of Forests issued cutting permit 212 (CP212) to Canadian Forests Limited (Canfor). CP212 is located within the Tusdzuh area. In December, 1996, Canfor attempted to begin harvesting but Halfway erected a roadblock and started legal proceedings (see 1999 below).

1998: Federal government settles out of court with BRFN and DRFN for $147 million over Montney oil and gas (BRFN and DRFN 1998).

1999: *Halfway River First Nations v BC*. Also known as the Metecheah case. The B.C. Supreme Court decides in favour of the HRFN, ruling that the decision by the Ministry of Forests to give the permit to Canfor was done without meaningful consultation and thereby quashed (T8TA no date).

2000: Pipeline that carries oil from Taylor to Kamloops breaks on the Pine River, which flows into the Peace River, 110 km upstream from Chetwynd. Approximately 6,200 barrels of oil are spilled and becomes one of the most expensive inland oil spill clean-ups in Canadian history (Ministry of Environment 2012). According to the

Government of British Columbia, SFN and WMFNs (2006), environmental impacts include mortality to fish, insects and some wildlife.

2000: The Quintette Coal Mine at Tumbler Ridge, open since the mid 1980's, closes. Bullmoose Mine follows in April, 2003.

2004: *Relentless Energy Corporation vs. Davis et al.* An oil and gas company brought an interim injunction application against members of Blueberry River Indian Band, a beneficiary under Treaty No. 8. The application was rejected by the court, which stated it is unreasonable for the Crown to always tell the First Nations to "go elsewhere" and never take into consideration whether there was somewhere to actually go with respect to exercising their hunting and trapping rights (as reported in WMFNs Land Use Department 2006):

The defendants, too, will suffer irreparable harm if the injunction were to be granted. The evidence discloses that the deprivation of the band's hunting and trapping land through development has been steadily growing over the years, as has the deprivation of traditional lands of other bands covered by Treaty #8. It is no longer realistic to simply tell the defendants to go elsewhere under Treaty #8 to exercise their rights.[43]

2005: Western Coal's Wolverine Mine opens in Tumbler Ridge in 2005, followed by Peace River Coal's Trend mine.

BC Hydro, with the support of Energy Minister, Richard Neufeld, resurrects discussions on Site C as a possible new dam site, despite public outcry dating back to the 1970s.

2006: Consultation Process Agreements (CPAs) established in December between the Government of British Columbia and selected Treaty 8 First Nations. The CPAs establish a consultation framework between the Government of British Columbia and individual Treaty 8 First Nations related to industry applications submitted to the Oil and Gas Commission for the approval of oil and gas activities (Dovetail Consulting Inc. 2010).

2008: Economic Benefits Agreement signed in March between the provincial government and four T8FNs - DRFN, PRFN, WMFN and Fort Nelson First Nation. The agreement provides for an initial equity payment of $13.3 million and revenue-sharing payments between $3.4 and $13.4 million per year for 15 years. Revenue-sharing payments are linked to the level of activity from oil and gas, mining, and forestry development in

[43] *Relentless Energy Corporation vs. Davis et al.*; accessed at http://www.courts.gov.bc.ca/jdb-txt/sc/04/14/2004bcsc1492.htm.

the northeast region (Ministry of Aboriginal Relations and Reconciliation and Council of Western Treaty 8 Chiefs 2008).

2009: Ministry of Energy, Mines and Petroleum Resources approved the exploration permit and associated clearing permits for First Coal Corporation's mining exploration.

2010: On April 19, the provincial government announced plans to move ahead with the Site C Project and advance it into the regulatory review phase.

In March, the BC Supreme Court rules in favour of the WMFNs in its case against the Minister of Energy, Mines and Petroleum Resources over First Coal Corporation's mining exploration impacts on the Burnt Pine Caribou Herd. This ruling was upheld in May 2011, suspending exploration pending consultation with the WMFNs on how to protect the herd.

4.2 The Weight of Recent History: Cumulative Effects on the T8FNs

For thousands of years, ancestors of the T8FNs survived and thrived in and around the Peace River valley and in their wide seasonal round territories in northeastern BC and northwestern Alberta. The past two hundred years have seen fundamental alterations in their way of life, geographic distribution and mobility, health and wellness, across a wide variety of determinants of health. Some changes have been positive, such as increased health care and opportunities to make money in the wage economy. Others have been negative, such as rapidly progressing alienation from ancestral lands, cultural assimilation policies that have eroded centuries of tradition, and exposure to new health ailments like influenza, tuberculosis, sexually transmitted infections (STIs), and diabetes.

This section provides an overview of major historical developments and cumulative effects causing agents that have impacted on the people of the T8FNs. This is by no means a comprehensive analysis the cumulative effects causes and outcomes on the First Nations peoples of the Upper Peace region. It is merely an introduction. This submission does not reflect the full scope and magnitude of cumulative effects on the T8FNs. However, T8FNs members have strong feelings and vibrant memories of what they consider past infringements on their rights and interests, and shared them without reservations with the T8FNs Team, so they are faithfully recorded here.

4.2.1 Cumulative Effects by Era

> Since the arrival of the Europeans, Canada's Aboriginal peoples have suffered from the 'three pronged attack' of colonization: the application of assimilationist policies (mind), the introduction of new diseases (body), and the dispossession of ancestral domain (place) - (Elliott and Foster 1995; in the Centre for Cross-Cultural Study of Health and Healing 2000).

This section will explore the the major changes experienced over the three main eras of development in the Peace River region and how they impacted area First Nations.

4.2.1.1 Early contact era (1790 to 1900)

The early contact period began with explorers in the late 1700s and ended with the signing of Treaty 8 in the late 1800s. The main historical change drivers that book-ended this period were the fur trade altering the Dane-zaa social economy starting at the turn of the 19th century, and the Treaty 8 process with the Crown, which was assumed by Dane-zaa to protect their rights to their traditional life "as long as the rivers flow and the grass grows". Differing interpretations of Treaty 8 have impacted on relations between the Dane-zaa and the Canadian and provincial government to this day.

Cumulative effects of changes on First Nations were substantial during the 19th century. Increased contact with white traders led to epidemics of sickness while the fur trade led to a well-documented reduction in animal populations. This combination of epidemics and depletion of animal populations caused First Nations to suffer disease and famine. As noted by T8TA (no date) in its *Chronology:* "Sickness, hardship, harsh winters and famine plagued the people in the Peace River region in the early and mid 1800s".

4.2.1.2 Non-Aboriginal Settlement and First Nation Centralization Era (1900 to the 1960s)

The main historical change drivers of this period included: establishment of reserves and the residential school system in north-eastern BC, settlement and land uptake by non-Aboriginal people, continued cycles of disease, and regulation of First Nation land use and access.

The settlement of the Peace River valley by non-Aboriginals was done in a deliberate and concerted manner, beginning in 1910. The land was seen as prime agricultural land. A Senate review concluded that:

> There is in the Peace River section of this country as much good agricultural land fit for settlement and yet unsettled as there is settled in Manitoba, Saskatchewan and Alberta today…(UBCIC 1980).

The area was formally targeted for settlement by the federal government in the early 1900s. First Nations quickly saw much of the best land including the prime agricultural and wildlife habitat in the immediate Peace River valley being taken up by white settlers (Brody 1981). Members of what are now HRFN, WMFNs and DRFN were most affected by agricultural developments in the Peace Lowlands and Halfway Plateau areas (Ridington 1993).

Meanwhile, disease brought by the white traders and settlers continued to decimate the T8FNs. The influenza of 1917-18 was particularly savage, with T8FNs members recounting oral history of frozen bodies being thrown into mass graves (DR03 May 26, 2012).[44]

Another key facet of this era was the conflict around traplines and the forced registration of traplines. As a means to survive the Great Depression of the 1930s, many white men turned to trapping. As a result, there were increased pressures and conflicts between whites and First Nations over traplines. This in part led to the mandatory registration of traplines. This had two major impacts on First Nations. First, many of the traditional trapping areas of the Dane-zaa families were taken over by white men (Metes, 1994; Government of British Columbia, SFN and WMFNs 2006). Second, it led to a decline in the fur-bearing population because traplines could easily be bought and sold. This meant there was little incentive to steward animal populations, as Dane-zaa had done previously through leaving areas "fallow" when they observed depletion of wildlife stocks. The consequence was more intense poverty for the First Nations, who relied heavily on fur sales for provisions and meat and other materials from harvested animals for sustenance:

> BC issued all of the trapping licenses to whites and all of [sic] their hunting and trapping areas were lost to them [Dane –zaa]. And from 1926 through at least the 1960's, these communities existed in a virtual state of poverty and their members were prosecuted for breaking a range of provincial game laws which were thought to not have been applied to them. So consequently there was never a reliable model for protection of the economic rights of these bands from white competition, and that's an essential promise of the Treaty 8 (Key informant 04 June 27, 2012).

[44] Dempsey (1974) suggests that the Beaver Indian population fell from about 1000 in 1790 to 600 in 1924, and didn't surpass those numbers again until the 1960s.

Residential schools and other cultural assimilation policies were major causes of cumulative effects on First Nations society and culture in the Peace River region and indeed across the country during this era.

> Colonization, which brought epidemics, displacement from lands, depleted food supply, suppression of ceremonies and languages, and the loss of children to residential schools and child welfare agencies, has had lasting effects that have been transmitted from one generation to the next (Taylor, Friedel and Edge 2009).

The effects of government controls and policies on the T8FNs multiplied rapidly and sped up during the 20th century. Residential schools caused multiple harms to young people, including mental health issues, loss of language and cultural values and skills, exposure to racism and abuse, and changes in the relations between parents and children.

The residential school system scarred a generation and alienated it from its cultural foundations. As reported by T8FNs members, some children who were sent to residential schools[45] were beaten for talking their language, were not provided (nor, importantly, did they learn how to provide) love or caring, and some even died in residential schools (WMFNs 1992). Those who survived the experience were often left feeling ashamed of their "Indianness", without parenting skills, without traditional "on the land" skills, and without their language: "Language deteriorated; I think it was because people were ashamed" (PR11 May 17, 2012).

The long-term and devastating psycho-social effects of the residential school system are well acknowledged and have recently been apologized for by the Canadian Government. In 2003, T8FNs elders identified the following lasting negative effects of the residential school system on their culture and well-being (T8TA Treaty Education Team 2003c):

- Cultural disruption through loss of language, loss of cultural education, efforts at assimilation;
- "Killing our spirits";
- Outlawing – and loss of knowledge of – ceremonies such as smudging, drumming and prayer songs; and
- Loss of confidence and self-worth – T8FNs youth were led to "believe that we were pagan, savages and bad people".

[45] WMFNs members identified being shipped off to residential school in Grouard, Alberta (WMFNs 1992). Some T8FN's members remembering their families refusing to give them up for residential schools, which led to local schools getting started up for First Nations: "They were trying to take kids away to residential school but adults spoke up (Jumbie); the reason why I did not go to residential school" (PR11 May 17, 2012).

Many community members are still struggling with the psychological effects of residential schools, which saw them uprooted from their families on the land, forbidden to speak their birth language, and discouraged from practicing their traditional way of life in favour of being "assimilated" into Western culture. The trauma of residential school is considered a contributing factor to alcohol abuse and other dysfunction in T8FNs communities.

This period was also marked by large transportation infrastructure projects such as the Alaska Highway[46] and extensions of transportation (railway) and utility infrastructure, which in turn stimulated increased settlement and agriculture in the Peace River region, and began the more dedicated push for forestry, mining and energy generation development that became the hallmarks of the next increasingly industrial, era.

4.2.1.3 The Industrial Era (1968 to present)

The main historical change drivers of this current period included:

- Increasing linear development on the land, which
  - increased habitat fragmentation, and
  - allowed increased access for non-Aboriginal harvesters, as well as roads increasing linkages between First Nations and the outside world;
- A major shift to primary reliance on the wage economy;
- Rapid population growth and associated land pressures by non-Aboriginal people; and
- Increasing land uptake and contamination by industry.

On the positive side for the T8FNs, this era has also been a time of Nation re-building, increased wage economic opportunity, and assertion of First Nations rights to protect their traditional lands and resources.

Testimony from some thirty plus years ago, at hearings for the Alaska Highway Gas Pipeline at West Moberly in November, 1979 (Northern Pipeline Agency 1979), shows strong existing concerns even at that time about loss of the way of life of Dane-Zaa,

[46] T8FNs Community Advisors (October 10, 2012) noted that effects of the Alaska Highway included exposure to new cultures and foods and supplies. The work camps also meant partying, inter-mixing and social effects (e.g., unwed mothers). Similar effects were noted during the construction of the W.A. C. Bennett Dam.

contamination of country food and declining wildlife numbers, and the inability to practice treaty rights:

> That is our living, he said what is going to happen to our children and grandchildren if they - that is the only living we have known. So what is going to happen to our kids if all that game and whatever is gone? All the game is gone like that, I guess we will all starve (Charlie Cryingman (through a translator)).
>
> I am speaking for my grandchildren and great-grandchildren, because there will be more to come. She also said our way of life is the original way, the traditional way. An Indian life is eating meat and living off the land; and to give you an example... there is ahardly any moose being killed because of the fact that the white people have come up and shot most of the game away (Madeline Davis (through a translator)).

Forestry expansion emerged relatively early in the industrial era and in parallel, with rapidly increasing settlement especially in urban areas like Fort St. John. It was the opening of the Alaska Highway in 1941 and extension of the railway to Fort St. John in the 1950s and further to Fort Nelson by 1971 that stimulated much of the resource sector development in the area, including forestry, oil and gas and a renewed interest in coal mining. Forestry expanded very rapidly after road and rail access opened up the region and new technologies for high production sawmills were developed from the 1960s through the 1980s, and the rise of Canfor and very large cut blocks, as described by Ridington (1993):

> In addition to the immediate impact of clear-cut logging practices, herbicides are being used to suppress the natural floral succession in an effort to establish a monoculture regime. First Nations people told me that these logging and herbicide application[s] are already having a serious impact on populations of moose, fur-bearing animals, and birds. They expressed a fear that a total collapse of their subsistence base is inevitable if the remaining intact habitat is not immediately protected.

By 1960, the Fort St John oil and gas fields were connected to southern markets. Oil and gas expansion stimulated growth of Fort St John as a service centre in the 1970's – "The Land of New Totems" as it was called for a period referring to drill rigs visible across the landscape. In a few short years in the late 1970s and early 1980s, coal mining created from scratch a new town at Tumbler Ridge. Conventional oil and gas was assessed to have reached its peak in the 1980s, and by the early 1990s, Ridington (1993) reported that "both the Halfway Plateau and Peace Lowlands eco-sections have been extensively penetrated by

seismic lines, exploration roads, oil and gas rigs and wells, and pipelines and compressor stations."

Conventional oil and gas development has been largely replaced in the past decade by hydraulic fracturing for shale gas deposits:

> The shale gas development in the last four years has been unprecedented and really quite unanticipated in terms of the scale of developments in Dane-zaa territory. It's overwhelmed most of them, a huge economic boom for those who have companies and contracts and stuff like that because there's just a tonne of work but it's still not well understood (Key informant 02 July 26, 2012).

The industrial era changes experienced by the First Nations were broad reaching, from economic opportunity to contamination of water and bio-accumulation (real and perceived) of contaminants in wildlife; from loss of wildlife habitat and reduced wildlife numbers, to loss of access to traditional lands and an overall decline in the ability to meaningfully practice traditional livelihoods.

By the mid-1990s, the following drainage areas within Treaty 8 territory in BC were recognized as being subject to "intensive and immediate development pressures" requiring study and protections of cultural/heritage resources and for "critical community use" (Whiten no date):

- Chowade River (primarily HRFN);
- Upper Graham River (primarily HRFN);
- Upper Moberly River (primarily WMFNs);
- Carbon River (primarily WMFNs);
- Upper Pine River (primarily DRFN);
- Murray River (primarily DRFN);
- Sikanni Chief River;
- Prophet River (primarily PRFN);
- Upper Minnaker River (primarily PRFN);
- Upper Beatton River (primarily DRFN);
- Upper Doig River (primarily DRFN); and

- Osborne River (primarily DRFN).

One of the more thoughtful examinations of the effect of the early part of the industrial era was the release of *Forgotten Land, Forgotten People*, W. Winston Mair's report on the Alaska Highway Gas Pipeline Project hearings held in the late 1970s. Mair (1979) found the T8FNs full of misapprehension about the nature and speed of industrial change surrounding them, and that they were being driven "inexorably nearer the brink of social and economic catastrophe":

> ...the expansion of forest industries and agriculture is the prime architect of their plight, as they are pressed back upon their core holdings with diminishing access to the extensive surrounding areas essential to their mixed economy and way of life...[and gas and oil exploration that] open the country to industrial, recreational and other uses inconsistent with the basic Indian mixed economy.

Mair (1979) also noted that the gas pipeline could substantially impact on socio-economic conditions for the T8FNs:

> Even minor erosion of land base, income or socio-cultural position could be serious for a people already feeling hard pressed... [As one UBCIC representative noted during the hearings] 'It is one thing to push a person who stands in the middle of a field. It is a very different matter to push a person who stands on a cliff face'.

The cumulative effects of the sum of these changes are discussed in more detail on a valued component by valued component basis below. These effects must be understood because they create part of the underlying context against which current conditions and the T8FN's vulnerability and resilience to further change must be considered.

4.2.2 Cumulative Effects on Meaningful Practice of Treaty Rights

Wildlife numbers and health and wildlife habitat have noticeably reduced in Dane-zaa traditional territory over the past 200 years. Concerns about rising contamination, especially in water, reduced access to preferred harvesting areas, increased competition for resources with non-Aboriginal harvesters, and an overall reduced enjoyment of the land have been cited by T8FNs as cumulative effects on their meaningful practice of Treaty rights. *NOTE: This subject is examined in additional detail in section 6.1.*

4.2.2.1 Effects on wildlife and wildlife habitat

As noted in section 3.1, animals and the land are key elements of Dane-zaa culture. Their traditional hunting practices are their heritage. One member said, "Since time immemorial our people have not only managed the land but they managed the animals and all the natural resources that we required to survive as a people" (WM01 April 26, 2012).

A common theme in the interviews, literature and previous regulatory submissions is that cumulative anthropogenic (human-caused) changes are depleting animal populations and First Nation resources and impacting negatively on T8FNs rights to hunt and fish and practice their traditional livelihoods.

For example, T8FNs members report they rarely see moose anymore near their communities and that they have declined in number in general (Verification focus group, October 10, 2012). Moose has supplanted first buffalo and then caribou as the most culturally preferred species, as those two species have been effectively extirpated in large portions of Peace River country. Community Advisors at an October 10, 2012 Verification focus group noted that moose are so depleted that some members only hunt elk now, "but you can't make moccasins out of elk, it is too thin. The moose was important for everything – would use it all – the hide, the dried meat."

Cumulative impacts on Treaty rights and traditional livelihoods have happened in multiple ways. One of the pathways is the change to migration routes and sensory disturbance of the animals. As one member put it, these rights are being taken from the First Nations slowly because the animals are being chased out of the area due to all the activity (DR17 June 11, 2012). Previous hydro-electric dams (see section 4.3) and oil and gas and other developments have been consistently raised as impacting on animals' migratory patterns. One HRFN member noted "Impacts of other projects like logging and oil are killing moose", and that moose are harder to find (HRFN member 01, Site C Open House, May 9, 2012).

For example, caribou have been a big part of the Dane-zaa culture and diet for countless generations.[47] However, the T8FNs are so seriously concerned about the rate at which the population is declining that they are effectively off limits to hunting now (H10, Site C TLUS, May 26, 2011). Coal extraction, both existing and potential future mines, has also been specifically raised as impacting on wildlife and migratory patterns of the caribou (WM01, April 26, 2012). These concerns were the basis for the WMFNs Burnt Pine Caribou court case against the BC Minister of Mines in 2010.

[47] Consider that the title of WMFNs report to the Crown regarding the proposed First Coal development was *I Want To Eat Caribou Before I Die* (pers. comm., Chief Roland Willson, May 18, 2012).

4.2.2.2 Contamination

Another cumulative effects pathway for wildlife and traditional livelihoods is contamination of the water, environment and wildlife. Dane-zaa expressed strong concerns about existing potential degradation of water quality and quantity. As one member said: "Key elements of culture for Dunne Za that need protection include animals and the land, which are getting poisoned" (D17, Site C TLUS, June 11, 2011).

Agricultural contamination from intensive farming practices was a concern heard often. One example consequence is that the members in Halfway River cannot drink the water from their taps and must truck water in, which is expensive: "We can't drink the water from our reserve. The ranches and pig farm up the river have contaminated the water. Farmers and industry up the river" (HR03 June 18, 2012).

Booth (2010) spoke to a variety of T8FNs members about cumulative effects. One of the key complaints by a number of people was the use of herbicides and pesticides in mining and forestry. As one elder noted:

> They spoil it, They spoil the berries, and they spoil our water there. They spoil our fishing. They kill our fish too. You spoil everything, You really kill the moose. I said [to industry], "You get the hell out of here, because I don't want you here. You come on and want to spray everything, I said; get the hell out of here" (Elder 2; Booth 2010).

T8FNs members also expressed concerns about spraying. Invasive plants and industrial development (land clearing, spraying of herbicides) impact on availability and quality of food and medicine plants. Some medicine plants may be lost for ever (T8FNs Team 2012a).

A specific concern raised by youth was that the moose licks and drinking water for the animals were getting contaminated and poisoning the animals (DRFN youth focus group, July 5, 2012). DRFN and PRFN (2011), as well as work done by SFN and WMFNs (no date) with Health Canada support, suggests these concerns may be valid.

Oil and gas spills have also caused concern, especially as more pipelines are being built. There were repeated concerns of contaminants poisoning the animals; these concerns are shared by the Nations in calls for cumulative effects assessment and greater monitoring and management of oil and gas development (SFN and WMFNs no date; DRFN and PRFN 2011). Some members have suggested that previous spills have not been cleaned up (DR17 June 11, 2012).

Fracking also raises specific concerns regarding the quality of the water as members "see all that poisoned water going back into the ground" (DR17 June 11, 2012). In addition, the high amounts of water used for fracking raise water quantity issues (Parfitt 2011).

Oil and gas development was also connected with perceived and observed poorer drinking water quality and, indeed, reduced ready access to drinkable water. Elders described drinking directly from the Doig River less than a generation ago. With growth of oil and gas, they reported that they can't drink out of the river any more (DR02 June 29, 2012). Similar concerns were raised by every T8FNs community: "It's not even safe to drink the water any more" (W03, Site C TLUS, June 28, 2011). T8TA (2010a) complained to the provincial government that:

> Our Elders and members are forced to carry water out onto our lands because the drinking water our ancestors relied on for thousands of years has been contaminated. Many of our water sources in our Territory smell bad, look bad or have been sampled and found to be unsafe to drink. We have also witnessed numerous areas where the oil and gas industry have contaminated waters and left them unfenced and unremediated, allowing fish and wildlife to be contaminated by them.

Residential growth associated with increased population is also a factor in increased contamination. T8FNs report that Charlie Lake near Fort St. John, once an important fish lake for T8FNs, is now so polluted that it contaminated the fish:

> We were fishing and there was, again, a lot of contamination in the fish, I do remember suckers and jackfish, but all their skin was all bubbly and melted and it looked like some of the pieces of the skin was coming off. The lake had been quite highly polluted and contaminated at that time (P05, Site C TLUS, June 11, 2011).

It was noted that, in conjunction with the Ministry of Environment, the WMFNs has restricted pulling gill nets on Moberly Lake because lake trout are nearly extirpated (WM01 April 26, 2012; Willson 2010), die in part to changing water quality and associated aquatic habitat effects associated with population, recreational boating, and sewage issues (unrelated to WMFNs reserve).

Moberly and Charlie Lakes and Doig River are just a few examples of the many waterways in the Peace River area where observed change and perceived risk have effectively rendered the resource "off limits" to use by T8FNs members.

Contamination concerns were not only raised in conjunction with lost access to land, wildlife, and traditional livelihoods, but also in relation to health of the community

members and the animals. One member summed it up by saying that oil and gas had greatly impacted the community through observed and/or perceived:

- Higher cancer rates;
- Hydrogen sulphide (H2S)in the atmosphere[48];
- Sick and infected wildlife; and
- Declining wildlife populations close to communities (DR07 June 11, 2012).

In Booth (2010) several T8FNs elders commented on a decline in community members' health as indentured development moved in to the area. Others cited concerns about the contamination of the animals they hunted or the other foods that were gathered:

> It just becomes like an industrial zone, the area that they operate. Plus none of our people will eat the meat from those areas... everybody knows about the H_2S. Everybody just worries that it is contaminated. So, it has a huge impact on them. Psychological impacts more ... and we heard lots of health problems associated with H_2S (Chief and Council 2, Booth 2010).

The link between health concerns and contaminants was also clear in concerns raised about water safety and fish contamination from hydro developments, discussed in section 4.3.

4.2.2.3 Access to Land and Competition for Resources

> Not much we can do. [We are] losing land ever day. I don't trap anymore; whole trap line devastated by oil and gas development (DR08 August 7, 2012).

> Well, what I don't like is this [...] logging and spraying and cat skinners, all them working in that place and they're logging and all that stuff and they wreck our land, I don't like that because my dad used to, when he was young, he trapped in all that area in that place when we were young... All of the sudden I heard someone was talking. Two people were walking in there. I was standing in there. "What are you doing here?" he said. "I'm trapping" I said. "And what are you doing here?" I told him, "You got no business to go through here" I told him, "You better get out of here" I told him off right there... "There's no way in the world this is your land" (W02, Site C TLUS, June 28, 2011).

[48] Noted independently by T8FNs members from Doig River, Halfway River and Prophet River.

The agricultural, residential and industrial development of the Upper Peace has long limited access to the land by the T8FNs. An extensive study of cumulative effects in 1980 by the Union of BC Indian Chiefs concluded that throughout the 20th century, from the settlement period through the Bennett Dam, the region had been characterized by restriction of the First Nations land base (UBCIC, 1980).

Members identified multiple losses of access to land through both settlement and development. Agricultural activities in the Peace River valley reduced the potential of First Nations to carry out traditional activities, including hunting, fishing and gathering. One member said, "Land owners stopped people from using the river" (HR01 May 16, 2012). Another said, "where we used to go hunting around Farrell Creek, it is all oil and gas and logging now. Used to hunt there with my dad as a little guy, but can't go back there now" (HR03 June 18, 2012). Other members noted Farrell Creek as a previously preferred harvest area now effectively alienated:

> I kind of quit hunting in this area the reason being Hudson's Hope Gas they came and started putting up all their roads in there and signs you know. I just didn't like it; they started putting infrastructure right in there (W17, Site C TLUS, July 13, 2011).[49]

A number of community members reported that there are now widely recognized "avoidance zones"; areas they no longer use. One DRFN member noted that places their family camped when she was young, they no longer frequent due to sour gas (hydrogen sulphide or H_2S), including within the newly declared *K'ih tsaa?dze* Tribal Park (DR17 June 11, 2012).

Many traditional hunting grounds can no longer be used because they have been "taken over." For example, one respondent indicated there is no effective hunting near Doig any more and that members have to go west to the mountains because "the whole area is saturated with shale gas tenures, including [an] enormous amount of activity in the Farrell Creek area." As a result, large areas that used to supply Halfway River, West Moberly, and Doig River with plentiful game have been taken over by natural gas exploration and production (Key informant 02 July 26, 2011). Among the issues related to gas exploration in Hendriks (2011) was the high number of large and noisy vehicles on the road servicing the oil and gas industry in vicinity of DRFN and HRFN: "there is a lot more traffic on the roads due to oil and gas activity".

[49] Parfitt (2011), in a statement of concern related to increased shale gas development in T8FNs territory, notes that already "As a Nation of hunters, we can attest to the unsafe travel conditions, noise, and dust which shale gas operations have created in the Farrell Creek area. These impacts have resulted ni a lack of game in what we used to consider a prime hunting area".

Other areas, though more remote, are also subject to increasing access via road by non-Aboriginal recreationists who have different values and respect for the land:

> At Fish Lake [Klua Lake] people come in and make a big mess on the ice and just leave it behind. The communities ask for help from the Conservation Officers but they have not got the money to fly out to the remote places (PR05; PR06 Verification focus group, October 10, 2012).

At the same time as First Nations' access to land has been constricted, competition for the resources available on the remaining land base from non-Aboriginal people has grown rapidly. Access roads created for oil and gas and logging development as well as seismic lines and other linear developments have, for over 30 years, been opening areas up to further penetration by non-Aboriginal populations (UBCIC 1980). Access roads are destroying hunting and travel routes, a fact noted by several T8FNs members:

> You know, historically how we hunted was on foot or horseback. Today now there are just roads everywhere that create access, not only for 4x4's but now for quads and skidoos and motorcycles … They're very hard on the environment and very stressful to animals (WM01 April 26, 2012).

According to a study by the Union of BC Indian Chiefs, in 1980 there were in excess of 1000 sports hunters in the region (UBCIC 1980). Those numbers are likely higher now, given that the region's rapid population increase. First Nations members tend to try to avoid sports hunters due to safety concerns and a desire to enjoy the land in solitude (among other factors), limiting their access to traditional lands.

> People that are concerned about hunting, trapping and fishing as a subsistence activity complain that there's too much sport hunting and too much pressure on wildlife stock and too much habitation degradation for them to be able to harvest enough wildlife to sustain their communities or their families (Key informant 04 June 27, 2012).

With a declining available land base, such avoidance of outsiders (whether harvesters or resource industry workers), is not always possible. Large oil and gas vehicles and equipment moving along access roads and at lease sited near Doig River and Halfway River were noted as causing loud noises and concerns about public safety, especially around vehicle collisions. In addition, some T8FNs members stated they do not feel welcome or safe on the land anymore and are concerned about increased risks, such as vehicle collisions and accidental shootings (Hendriks 2011). In many cases, T8FNs harvesters reported making the difficult choice not to even bother trying to harvest in the face of these disturbances, and to enjoying the act of harvesting less than in the past.

T8FNs members also expressed concerns that they sometimes don't know what lands they can even harvest from; whether they are Crown lands or not and what restrictions there are on the use of the lands. This has become worse as members are forced to travel further into less familiar areas in order to harvest food, given wildlife population reductions and contamination and other concerns closer to home:

> If we are forced to practice our traditional livelihood outside of our traditional territory, how do we know if we are on private land? We don't know where to fish (Verification focus group, October 10, 2012).

Members also report increasing cost of travelling further and further to harvest as one of the constraining factors on their meaningful practice of Treaty rights (Verification focus group, October 10, 2012). This is supported by findings by UNBC et al. (2010a), that lack of equipment and transportation and cost of equipment or gasoline are the top two factors noted by DRFN members that prevent them from using more traditional food.

4.2.2.4 Summary of Effects on Treaty Rights

> It makes me mad when I think way back when our grandfathers, signed the treaty with the understanding that it was a peace treaty and that it was a sharing treaty and it's not like that they come and take over. They put us on little blocks of land called reserves and they changed our whole mode of life and they are still changing it today (WM11 May 24, 2012).

The means by which this land alienation occurs varies from being prevented from accessing the land or river directly by landowners/developers, to having access limited by contamination, observed or perceived.

T8FNs members noted one of the primary issues facing their communities and culture today is that the land base has become so taken up and fragmented that virtually everywhere they go there is industry – a gas well or road or other infrastructure. As a result, it is getting harder and harder to exercise treaty rights and the cultural values that can only be practiced and passed on through harvesting are eroding (Verification focus group, October 10, 2012).

Unimpeded communal access to and stewardship of the land ownership and traditional livelihoods are core to Dane-zaa culture. They are also core to their interpretation of their Treaty rights. The cumulative effects described in this section (land uptake, contamination, increased competition for resources, sensory disturbance) means that it is increasingly

difficult for the First Nations to meaningfully practice their traditional livelihoods and Treaty 8 rights. As one key informant summarized:

> At some point so much of a resource will have been taken up that taking up more will mean that exercise of the right becomes practically impossible (Key informant 04 June 27, 2012).

Parfitt (2011) suggests that "the net effect of these successive waves of industrial development is that there is virtually nowhere left within our vast Treaty territory for the quiet enjoyment of our 'way of life' which Canada committed to safeguard and protect".

Cumulative effects on the T8FNs are not merely felt in the past or today, they impact upon the future. WMFNs Chief Roland Willson (2008) provided the following statement that gets to the heart of a series of issues including past infringements of Treaty 8 rights and concerns for the future should present impacts remain the same or increase:

> It is about the effects on the next seven generations. It is not only the right to hunt; there are incidental rights, like the right to make a hunting camp and also to teach the next generation about hunting. This is a part of the general effect. It is about the exercise of rights into the future, not just about today.

4.2.3 Cultural Protection and Promotion

> It is not safe to go into the bush anymore. Water no good, trapping no good, what is going to be left for our children and grandchildren? Our grandchildren will lose all of our culture by the time the while man is done with our lands. They will be lost and lose everything, culture, language and land (HRFN member in T8TA Treaty Education Team 2003g).

Priority elements of T8FNs cultural protection and promotion include heritage resources, language, way of life on the land, and intergenerational knowledge transfer. Adverse cumulative effects on these values have reportedly caused substantial impacts to T8FNs culture, which have contributed to both loss of enjoyment of the Dane-zaa traditional way of life, as well as psycho-social effects that have contributed to social dysfunction and reduced T8FNs well-being and quality of life.[50]

[50] See also section 6.2.

4.2.3.1 Effects on Heritage Resources

Damage to the Dunne-za graveyard at Hudson's Hope is an example of the effects of non-Aboriginal settlement on physical heritage resources. A mixed burial site at Old Fort was also reported to have been impacted by residential development (PO5, Site C TLUS, May 26, 2011).

Members also raised concern about the impacts of land uptake on and the protection of heritage trails such as Hudson's Hope Trail. Another example is the "Police Trail", where mapping has been difficult because of private landowners destroying the trail, and community members can now only use bits and pieces of this important land route (HR01 May 16, 2012).

4.2.3.2 Effects on Cultural Continuity and Self-Determination

> We cannot even teach our own young people to, you know, they do not know nothing about trapping or anything, hunting. Not very much because the … land has been disturbed so much that they could not even teach the young ones, you know, the young people go hunting or anything like that (Joe Mykoose statement to the Northern Pipeline Agency 1979).

The strength and resilience of a First Nations community is tied to the level of cultural continuity, their ability to retain their values, way of life and sense of control over their lives. To lose those tools (or, more likely, to have them forcibly removed) is to risk socio-cultural catastrophe. The link between land alienation, cultural loss and social dysfunction has long been known (including among the T8FNs, as reported in Brody 1981) and their correlation to adverse outcomes such as increased suicide risk established quantitatively (e.g., Chandler and Lalonde 2007). The Royal Commission on Aboriginal People (RCAP 1995) stated that suicide can be regarded as a symptom of culture stress which occurs when a culture undergoes radical changes including the loss of land or control over land.

Waves of development have impacted on the culture and cultural practices of the Dane-zaa. The effects on culture are driven by both impacts on the land as well as impacts on life in the communities. The land-based impacts have been described above in terms of changes in wildlife and access to the land, both of which are core to the culture of the Dane-zaa. Booth (2010) heard the following key themes from T8FNs member about the impacts of development on culture:

- No land means no culture. Damage to the land base is direct damage to the First Nations people.[51]
- To be a proud First Nations person, you have to be connected to your culture. You have to know where you came from.
- The whole tone of government is economics and jobs, and training and forcing people into this economy, and there is not an appropriate amount of attention placed on maintaining [our way of life and land base].
- Once the land is lost due to development, there is no recovery.

At the community level, the increased centralization of the previously semi-nomadic people into small chunks of lands – reserves – which was largely accomplished by the 1960's, exacerbated cultural loss. For any land-based culture like the Dane-zaa, being in any way removed from one's traditional lands directly adversely impacts on culture. Community Advisors noted that the reserve system took away a large part of the T8FNs culture, which was to be on the land and do the seasonal round – "forcing them to stay in one place was taking away their culture" (Verification focus group, October 10, 2012).

Colonial and assimilation policies, the residential school system and Western religion also systematically eroded traditional Dane-zaa practices, cultural heritage and social systems. The residential school system left a lasting legacy of social dysfunction (see section 4.2.1.2). The reservation system and integration into the market economy has undermined traditional practices and increased the reliance on a system of social supports that was not created by Dane-zaa..

One key cumulative effect on Dane-zaa culture is the alteration of their spiritual lives. This has been caused by a couple of different, linked factors. First of all, Christianity came to be the dominant religion through direct and aggressive intervention during the 19th and 20th centuries. T8FNs Community Advisors noted:

> The ways of the Dreaming People were devastated by European religion (PR05, Verification focus group, October 10, 2012).
>
> First Nations had a religion before the Christians came. However, the Church was an important vehicle of change – Father [name removed] was in Moberly and he made First Nations feel intimidated and fearful of practicing traditional culture and religion (WM06 Verification focus group, October 10, 2012).

[51] "It is not safe to go into the bush anymore. Water no good, trapping no good, what is going to be left for our children and grandchildren? Our grandchildren will lose all of our culture by the time the while man is done with our lands. They will be lost and lose everything, culture, language and land" (HRFN member in T8TA Treaty Education Team 2003g).

> The churches, when they first tried to "civilize" First Nations people they couldn't do it because First Nations people had their own beliefs on how to pray; they had their own ceremony. So what they did was started to ridicule and started telling the people that this was not the right way, that their way was the right way and this was basically devil worshipping… If you tell a group enough times and in enough generations, they're going to start believing you and that's what happened. But the final nail in the coffin is when they took the First Nations kids away from the parents and sent them off to residential school. That's where it really changed everything, and these people came back believing the way of the churches is the right way and that left the old people with nobody to pass on their teachings (WMO1 May 18, 2012).

These cultural effects on the T8FNs have been exacerbated by feelings of lack of control and lack of respect in relations with industry and government in the context of resource development (see also section 6.3). Members repeatedly reported being ignored, leadership not being heard and concerns not being taken seriously. Feelings of lack of control and lack of respect permeate much of the feedback from T8FNs members. A common theme was the sense that the First Nations don't matter because they are far up in the north of the province, and have small populations. As one member succinctly said, "our voice doesn't count for anything, it seems."(WM11 May 24, 2012).

There is also a serious lack of trust. Lack of trust also comes from a failure to fulfill promises. T8FNs members overwhelmingly suggest that the promises of Treaty 8 have not been met. One elder identified a few of these broken promises:

> They took the bison away without consultation. They promised to look after the bison, but they didn't. People don't know how to hunt the buffalo anymore. There was an oil spill in 2002 and there are still problems today with it, the government says they will fix it but still they do nothing (DRFN member 03, Site C Open House, May 9, 2012).

T8FNs Team Community Advisors raised strong concerns that their Nations are being in large part ignored by government and industry, despite the continual raising of concerns. In addition, they noted that the T8FNs are not seeing anything being done to right past wrongs; in other words little if any recognition or compensation for impacts of the past from projects like the W.A.C Bennett Dam (Verification focus group, October 10, 2012). These concerns about lack of agency to deal with wrongs of the past, manage lands properly in the present, and protect the future, are echoed in Booth (2010) and Booth and

Skelton (2011), who found a high degree of frustration and psycho-social impact on Dane-zaa from these cumulative effects.

4.2.3.3 Psycho-social impacts

> I feel physical pain when I see a change in the land, a rip (WM06 Verification focus group, October 10, 2012).
>
> A lot of our people have lost faith. Elders are losing faith and our youth are also losing faith. We are losing faith because of spiritual loss, loss of land base and loss of traditional territory. (HRFN member, in T8TA Treaty Education Team 2003g).

In addition to physical health outcomes associated with the reduced consumption of country foods, increased consumption of store-bought foods, and exposure to unknown amounts of country food-related airborne and waterborne contaminants, T8FNs members have expressed strong concerns about mental, spiritual and emotional health outcomes associated with changes to their lands and waters from a century of development.

Psycho-social impacts are effects that cause adverse mental health issue, including anger, shame, fear, despair, among other negative emotions. Health Canada has reported that social and cultural change associated with industrial development can create psycho-social impact outcomes such as uncertainty, loss of control and deterioration of quality of life and population health in small Aboriginal communities. All of these outcomes are readily recognizable among T8FNs members today. Where they are prevalent, their damage can be significant and may last multiple generations. These psycho-social effects have been recognized by the Government of Canada, which has provided advice to the managers of contaminated sites on the variety of impact outcomes they must be prepared to deal with from local people whose lands, rights and interests have been subject to real or perceived contamination. Among the psycho-social outcomes Health Canada (2005) recognizes are fear, feelings of vulnerability and powerlessness, anger, distrust, grief, guilt, a sense of depersonalization and loss of connection to the land, frustration, isolation and depression.

Psycho-social impacts of many different types have scarred generations of T8FNs members. At both a communal and individual level, the psycho-social impacts of cultural losses suffered through changes to the land include a general sense of alienation from traditional land,[52] a loss of hope for the sustenance of traditional culture over time, and a

[52] Alienation includes aderse effects on the ability of First Nations people to relate to a changing, sometimes unrecognizable, land base that has been altered by industrial development. One T8FNs members noted that “the land has changed so dramatically that people can no longer relate to it" (Hendriks 2011). This inability to relate to

sense of despair around the disruption of traditional family and community structures. They also include loss of solitude, inability to quietly enjoy and receive solace from the land, and a sense of lack of choice or control in relation to new developments. Drivers or pathways by which these psycho-social impacts have been encountered by the T8FNs include:[53]

- Discrimination;
- Residential schools and other assimilationist policies;
- Land alienation and changes in the Dane-zaa way of life;
- Increased perceived risk associated with contamination of water, land and wildlife/country foods; and
- A sense of being ignored by government and industry, of having little voice and limited - if any – control over the pace of change and decision-making, and therefore, little control over one's own future.

Alberta Health (1995) noted that First Nations peoples' health statuses are often impacted by "experiences of racism and discrimination, high rates of unemployment, inadequate and crowded housing contribute to illness and disease". Mental as well as physical health impacts have been encountered by Dane-zaa through discrimination. As noted by Community Advisors, T8FNs people were heavily discriminated against from the time that white settlers came into the Peace River region: "There was effectively apartheid in some communities – members report being not allowed to go into bars and restaurants and hotels, being seen as lower class" (Verification focus group, October 10, 2012).

According to T8FNs members, this cumulative pressure on culture and loss of connection to traditional lands, along with discrimination against First Nations people, has led to low self-esteem which is part of the high rates of substance abuse (Verification focus group, October 10, 2012). A mixture of greater access to alcohol via transportation ties to major centres, and persistent psycho-social effects of "the weight of recent history" – the combined effects of many and rapid changes to Dane-zaa way of life – were identified as some of the "outside influences" that saw alcohol starting to "kill people in the 1970s" (DR02 June 29, 2012).

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the land base that sustains the culture base may be linked to psycho-social impacts such as despair and negative copy strategies such as substance abuse.

[53] Deeper examination of cumulative effects pathways, and, especially, potential Site C Project-specific effects pathways, can be found in the T8FNs Team's Stage 3 Report (2012b).

Booth (2010) noted that Dane-zaa thoughts return often to concerns for the future and what will be left behind for future generations. The impact on children and the future was raised repeatedly in her interviews:

> The places I have been to so far are getting freakin ' dug up! and trees then cut down, and [the children will] never ever see what I have seen when they're my age, there's probably going to be hardly anything about where we went hunting and stuff (Community Member 1).
>
> They gotta leave some of that alone. you know. The future generations got to have something to have. We just can' t take it all now and then there will be nothing left ... The younger generation they are coming up and that is our future and so, there is going to be nothing left for them (Elder 2).
>
> The level of development… our children are seeing it, and they are scared. And they are upset, they are scared, they don't like what they see, and they understand, I mean they do not fully maybe understand the industry of course, but they understand what it is doing to the land and it scares them (Chief and Council 5).

Youth respondents in this Baseline Community Profile shared their concerns about water quality, lower numbers of moose, and a strong desire to have the land preserved for their children. This "bequest value" – the aspiration of passing down to future generations the same or better opportunities and lands as you had - is an important consideration in the Dane-zaa worldview.

4.3 Existing BC Hydro Impacts on Dane-zaa

> The Williston Reservoir was an environmental nightmare. First Nations still suffer the effects of dislocation, loss of Territory, harvesting areas, and cultural sites, disruptions in travel routes, increased methyl mercury contamination, etc. (T8TA 2010a).

In a 2009 T8TA survey of over 700 members, hydro-electric development was ranked first in terms of the types of developments T8FNs members want to see stopped in the future (First Light Initiatives 2009).[54] To understand why requires knowledge not only of the likely impacts of the Site C Project (the subject of Stage 3 of this T8FNs Community Assessment T8FNs Team (2012b), but also the history of cumulative effects of previous

[54] Hydro was followed by oil and gas (#2), coal bed methane (#3), and forestry (#4).

hydro-electric developments on the Dane-zaa. Such information was readily shared by respondents during this Baseline Community Profile, as well as in previous studies such as Hendriks (2011) and Candler et al. (2012).

Effects of previous hydro-electric projects identified by T8FNs members included:

- People being flooded out with little notice, buildings and traplines and harvesting areas gone;
- Heritage resources such as burial grounds and graves buried under the W.A.C. Bennett dam reservoir;
- Increased fish and game mortality, including at the beginning, reports of moose and other animals drowning en masse;
- Changed animal migration patterns, with reduced numbers of certain animal species (e.g. porcupine) on one side of the Reservoir, and especially damaging effects on caribou and fur bearers;[55]
- Loss of key harvesting and wildlife habitat in the new reservoir areas;
- Public safety issues associated with trees in the Williston Reservoir, constraining use (Willson 2008);[56]
- Increased dust storms;[57]
- Increased mercury in water, changes in fish health and distribution, loss of faith in area fish for harvesting;
- Loss of connection between people (e.g. Sekani people with Dunne za);
- Loss of revenue for guides/outfitters as game hunting dried up;
- Lost travel patterns in the inundated zone of Williston Reservoir;

[55]"Now when you go camping you won't see one caribou. There used to be a thousand. It is the WAC Bennett Dam that did this. When the dam came in there was no more fur" (T8FNs member in Hendriks 2011).

[56] One WMFNs member (WMFNs 04 May 18, 2012) stated: "When we go fishing, we have to dodge wood debris [in the Williston Reservoir]. It is not just about killing a fish, it is about teaching our youth. To teach why fish like this, why this hole is good and that one not. It is hard to do this when you get blanketed with debris".

[5757] Loo (2007) states: "On average, the winter draw-down on Williston Lake is seventeen metres, but it can be as much as thirty-two metres. The retreating water had detrimental effects on the beaver population, leaving dams high and dry and the confused animals at the mercy of the winter elements. It also exposed a large muddy foreshore, full of dead snags and debris. When exposed to the high winds that blasted through the area, it dried out and became the source of dust storms that could last hours or even days."

- Loss of a natural seasonal flow regime for the Peace River;
- The river no longer freezing up, so people and animals couldn't cross river in winter; and
- Changes in weather. The weather has had a notable change since the building of the W.A.C. Bennett Dam. The weather has become much dryer. T8FNs members believe this has impacted the growth of many of their traditional foods like berries and plants (Verification focus group, October 10, 2012)58, and that dust has impacted on those people using – or seeking to use – the Williston Reservoir area (Loo 2007).

4.3.1 Environmental and Traditional Use Impacts

> If you look at what W.A.C. Bennett and Site One [Peace Canyon Dam and Dinosaur Lake] represent ecologically and culturally, the river valley can be thought of as a valued ecological feature. It is a unique ecology, in a plateau and mountain dominated ecosystem. Large river valleys are relatively scarce, there where the best soils are, there where the richest ecosystems are, there where the roots of a lot of the biodiversity that exists in the entire system is nurtured, they play this function and a lot of the animals that first nations rely on treat these river valleys... They're the places where they go to in cold, cold winters and there the places that they go to when they're calving and their young need protection. 70 per cent of the Peace River was flooded, so when they built Williston and Site One, particularly when they built Williston, 70 per cent of this unique ecosystem component, it got buried underneath 300 feet of water (Key informant 04 June 27, 2012).

The W.A.C. Bennett Dam stands out as having had a significant adverse impact on access to the land and traditional practices. As one key informant said, "When W.A.C. Bennett and Site One were flooded, the Indians lost, in addition to the commercial interest, they lost valuable resources that were related to their subsistence activities" (Key informant 04 June 27, 2012). A clear legacy from the first two dams is the loss of the inundated zones for traditional activities, a complete loss of transportation corridors, a severing of ties of communities to their cultural practices in the valley (Key informant 02 July 26, 2012).

[58] Community Advisors report the weather has had a notable change since the building of the W.A.C. Bennett dam, believing this has impacted the growth of many of their traditional foods like berries and plants. The weather has become much dryer (Verification focus group, October 10, 2012).

> People used to travel in area that became flooded by the original dams. We used to follow the game but we can't anymore because of the flooding. [I] heard that the caribou decline was related to the reservoir(s) (DR17 June 11, 2012).

The W.A.C. Bennett Dam is perceived by many community members interviewed as having impacted on migratory patterns of the caribou, goats and sheep south across Peace Reach of what is now the Williston Reservoir. The Williston Reservoir is reported by T8FNs members as destroying critical habitat, migration paths and trapping areas. Floating debris and loss of vital winter habitat were also concerns for ungulate population health. Hundreds of animals were reportedly found floating dead as flood waters rose. As one member summarized:

> From the past, when the first dam was built, a lot of the animal corridors were cut off, even for people as far north as Prophet River, the traditional corridors. You can talk to various community members and even find that some species are extinct [regionally extirpated]. (P05, Site C TLUS, June 11, 2011)

Members report that fishing has been directly affected by the W.A.C. Bennett Dam by contamination of the water from the dam[59]. Impacts mentioned included both depletion of fishing stocks and reduced size of the fish.

The effects of W.A.C. Bennett Dam were both immediate and long-lasting. Impacts like bio-accumulation of mercury in fish are perceived to have grown over time:

> They found out that these fish were mercury contaminated, therefore enhancing their growth. And so they then started to post signs and stuff that if anybody was going to be eating fish out of the reservoir they need to limit the amount they eat to at most one serving a week and to this day there's not that much [fishing] activity that we can see on the reservoir (WM01 April 26, 2012) .

Loo (2007) notes that "by 2000 levels [of mercury] were high enough for British Columbia to issue a Fish Consumption Advisory for bull trout and dolly varden [in Williston Reservoir]".

An HRFN member (in T8TA Treaty Education Team 2003g) noted substantial effects of W.A.C. Bennett Dam on the food chain HRFN members have relied upon since time immemorial:

[59] Loo (2007) notes that the lake environment rather than river environment shifted the type of fish the area supported – from arctic grayling, mountain whitefish and rainbow trout, to lake whitefish, dolly varden, kokanee, lake trout, among others.

> We hardly see any more caribou in our areas anymore. The elk are also impacted on, our moose, we used to have lots of moose and elk near our communities. Our river we used to fish on is now the dam; even the fish we can eat [from the reservoir] we can only eat one fish a week because they have mercury in them. Now we have to go out for miles to get our food.

4.3.2 Socio-cultural Effects

The connection between previous hydro-electric project impacts and Dane-Zaa cultural decline is evident in the following quote: "…our cultural values are all at the bottom of the Williston Reservoir" (WM11 May 24, 2012). The submerging and occasional re-emergence of grave sites was considered an unacceptable desecration by First Nations members. One member relayed the story from a relative who was there during the dam building and flooding period:

> What he seen was graves, half of the graves sticking out of the ground after the water goes down [during the Williston Reservoir early years]. He seen that, and he said, "I made a lot of money but there was so much devastation with W.A.C. Bennett Dam" that he quit, he was working with a survey company (H10, Site C TLUS, May 26, 2011).

The W.A.C. Bennett Dam also suddenly and quite effectively cut off socio-cultural and economic relations between related First Nations peoples:

> The Peace River going into the Findlay and the Parsnip, that was a major transportation corridor, an east/west corridor, for them. Linguistically and ethnically the Deneza on the eastern Coastal Mountains are the same people as the people who style themselves as the Sekani in the Trench. When the old people get together they speak the same language and they would go back and forth. I know that Halfway, Saulteau, West Moberley, Prophet River even have strong family ties with the communities that are currently in the Trench... They [the T8FNs] feel that they lost vast amounts of traditional territory, hunting grounds, fishing grounds and graves, people died in the bush when they were out and they were doing their traditional seasonal rounds and I've heard some people say that they have relatives that are buried and they're now under water in the Williston so there's a strong sense of grievance (Key informant 02 July 26, 2012).

As noted in Attachie (no date), "there are still bad feelings, mistrust and deep hurt from the past experiences where the dams on the Peace River flooded First Nation graves."

From a social perspective, T8FNs elders have noted the the original W.A.C. Bennett Dam left children with unknown fathers, and caused psychological damage to First Nations (T8TA Treaty Education Team 2003c).

4.3.3 Economic Effects

> These guys [the T8FNs] got nothing when the Bennett Dam and the Peace Canyon Dam were built, they got absolutely nothing. A few trap lines were bought out and that was it (Key informant 02 July 26, 2012).

Members raised lack of compensatory benefits as another effect from previous BC Hydro developments. Elders noted that job opportunities were limited from previous dams (T8TA Treaty Education Team 2003c). As noted by a WMFNs elder who lived through the effects of the first two dams: "Profits from dams don't help the poor; those affected pay ever-higher prices for fuel" (W02, Site C TLUS, June 28, 2011). Several members reported that there were few jobs or benefits from the first two dams (DR02 June 29, 2012; DR04 July 23, 2012; PR02 June 6, 2012). Members also recounted promises that power would be free for area First Nations but it isn't and in fact, is an ongoing cost concerns for T8FNs members (DR02 June 29, 2012).[60]

Another economic impact is the lost commercial fishing opportunities. Because of the way the Williston Reservoir flooding was done, the failure to clear the timber first meant that the possibility of a commercial fishery was lost. The reservoir has high levels of mercury and consequently there is a fish consumption advisory. According to a couple of respondents, what might have been a potential resource available to the Dane-zaa - participation in a domestic fishery or a commercial fishery - was therefore lost to them. (Key informant 04 June 27, 2012; WM04 May 18, 2012).

Loo (2007) suggests also that the loss of traplines and harvesting areas and animal abundance from W.A.C. Bennett Dam affected the economic self-sufficiency of area First Nations people, including the T8FNs. This environmental change meant, for a minority of people, primarily the First Nations, "dependence, isolation, alienation, and illness" rather than the economic opportunities that primarily went to non-Aboriginal people, often in far distant regions like the Lower Mainland and United States.

[60] This sense of a fundamental lack of reciprocity and sharing of benefits from hydro-electric development and other resource development activities on T8FNs traditional territory is a common one among the T8FNs: "We are just getting the peanuts with all this resource extraction" (PR05 Verificiation focus group, October 10, 2012).

WMFNs and other T8FNs have raised concerns with BC Hydro about the need for compensation for past infringements for many years.

> When West Moberly consulted with BC Hydro, in 1994 I think it was, under the Water Use Planning Process, we made a presentation to BC Hydro about the loss of some economic activity associated with the flooding of Williston and it had to do with the participation of some families at Moberly in guide and outfitting, notably, the Garbitt's, who were in the business of guiding people up into the mountains on the West of the Moberly Lake to hunt caribou which is a practice that they abandoned, an economic practice that they abandoned in the 1960's as the dam was constructed (Key informant 04 June 27, 2012).

Overall, little if any compensation was ever received by the Dane-zaa from BC Hydro for loss of access to land in the existing inundated zones of Dinosaur Lake and Williston Reservoir. There is also a common Dane-Zaa perception that there is no amount of compensation in financial or other terms that can make up for the loss of land.

4.3.4 Legacies of the First Two Dams

> The only legacy they have from those first two dams is the complete loss of the inundated zones for traditional activities, a complete loss of transportation corridors, a severing of ties of communities to their cultural practices in the [Peace River] valley (Key informant 02 July 26, 2012).

The W.A.C. Bennett Dam also created a long-standing distrust by the Dane-zaa of BC Hydro. The first dam on the Peace River laid the groundwork in that the Dane-zaa did not feel they were consulted, nor were they properly informed of the scale of the development. The communication around the initial W.A.C. Bennett Dam left people feeling the government and BC Hydro had not been honest about the impacts or the scale:

> There was no consultation. Up until 1997 there was not even consultation with the First Nations about development. Some people did not even know their land was going to be lost with the reservoir until it started flooding (Verification focus group, October 10, 2012).

A DRFN elder asserted that there was no consultation with Doig River people when the first dam was built. People heard about the dam and thought it would be very small: “If Dane-zaa had known how big the dam would be, they would have opposed it. The elders would have fought it” (DR02 June 29, 2012).

Lack of engagement and consultation, and a sense of distrust, were still clearly evident when Site C was first proposed in the late 1970s, as noted by a WMFNs member at the 1979 Northern Pipeline Agency hearings:

> I hope that it is not a repeat of Site C because I was involved in that... For Site C, we had one meeting with them and that was it. In the book itself it said, you know, we are just going to displace three moose; you know, on 11,000 acres? Who are you trying to kid? (Dean Dokkie in Northern Pipeline Agency 1979).

This legacy of distrust and lack of reciprocity has taken deep root among the T8FNs. As noted by one key informant:

> There is a deeply rooted sense of injustice associated with W.A.C. Bennett and Site One, so ever since those two dams were built these communities have been opposed to building more dams like that and through the 1970's and the 1980's they fought hard and they've spent a lot of their energy and their cultural and spiritual power in opposition to the previous Site C and now this Site C" (Key informant 04 June 27, 2012).

Another key informant talked of a sense of "extreme injustice":

> When BC was planning and developing W.A.C. Bennett and Site One, neither the federal crown or the provincial crown of BC Hydro bothered to talk to them at all, they talked to McLeod Lake, they brought McLeod Lake all the way up to Chetwynd to participate in the hearings, they talked to the communities in the valley to some extents and Northern Affairs spoke on their behalf of those Indians. The people who were living within 70 kilometers of the dam and who used these lands weekly if not daily, and for God's sake it entered into a Treaty relationship with the Crown in Hudson's Hope, were not considered. So there's been a tremendous affront to their community to their culture to their spiritual attachment to the land and BC Hydro has done nothing to undertake to reconcile themselves with these communities (Key informant 04 June 27, 2012).

The T8FNs expressed strong resistance to the original Site C proposal in the late 1970s and early 1980s, in part due to lack of recognition of the T8FNs' rights in the area, lack of consultation and the potential for unguided sports hunting to expand in the inundated zone, increasing pressures on area wildlife. The T8FNs also suggested at that time that Hydro:

- Ignored the existence of Treaty 8;
- Did not consider the nature of T8FN's reliance on the land;

- Excluded cultural impact as a consideration; and
- Showed no evidence of follow up or mitigation/compensation for past wrongs associated with W.A.C. Bennett Dam.

4.4 Cumulative Effects Summary

> We are the original people. We were given this land to live in our traditional way. Seeing that we are the traditional people... white man has no business in our land. No matter where you look there is explorations, where you cannot even go into the bush to get what you wanted. She also said she was very fortunate to live in a time when, before the explorations came that they lived happy original way" (Madeline Davis, through a translator, from Northern Pipeline Agency 1979).

The following factors are reported by T8FNs members to have constrained their ability to live their traditional way of life and maintain and improve their well-being and quality of life over the past two hundred years:

- Commodification of their way of life through the fur trade and associated reduced animal abundance;
- The pervasive and persistent effects of colonization efforts by the Crown (the Indian Act, residential schools, the registered trapline system, centralization into reserve lands, among others);
- Privatization of lands, especially for farming and later for other resource developments, which caused widespread land alienation and reduction in the areas available for meaningful practice of Treaty 8 rights;
- Increasing non-Aboriginal populations in (what is now) the PRRD affecting the amount of land available for harvesting as well as increasing harvesting pressures on fish and game;
- Increasing access into the region through linear developments like roads and cut lines;
- Increasing contamination (real and perceived) of lands, waters and wild foods in traditional use areas;

- Alterations in the landscape, including widespread inundation of lands by Williston Reservoir and Dinosaur Lake;
- Alterations in river flow and characteristics downstream of W.A.C. Bennett and Peace Canyon Dams, affecting navigability, public safety, and (removing) winter ice conditions;
- Increased pressure to engage in the wage economy versus the bush economy; and
- Declining availability of certain country foods such as bison and caribou.

These cumulative effects causing agents have combined to have significant impact outcomes on the Dane-zaa in the following ways:

- Reduced reliance on country foods and associated increased sedentary lifestyles, obesity, poor diet, reduced food security and new vulnerability to disease;[61]
- Reduced inter-generational knowledge transfer;
- Reduced access to and knowledge of traditional lands, and reduced enjoyment of time on the land in the face of competition;[62]
- Reduced hunting, trapping and fishing success and overall inability to meaningfully practice Treaty 8 rights (see section 6.1);
- Increased psycho-social angst, fear, anger and frustration, especially in relation to the future for Dane-zaa and their ability to pass on their culture and lands to future generations as they were passed down to them – cultural continuity; and
- Reduced physical, mental, spiritual, and emotional health (WM01 April 26, 2012).

For further discussion of how cumulative effects, especially on the traditional land base, have altered the well-being and quality of life of the individual T8FNs, see each "Land Alienation" sub-section in section 5.

In a 2009 survey of over 700 T8FNs members (First Light Initiatives 2009), the activities which have had the greatest impact on T8FNs members included oil and gas, forestry, coal mining, sport hunting, agriculture and hydro-electric power development. Table 3

[61] "In the old days, nobody had heard of cancer or diabetes" (DR02 June 29, 2012).
[62] Parfitt (2011) notes that "The net effect of these successive waves of industrial development is that there is virtually nowhere left within our vast Treaty territory for the quiet enjoyment of our "way of life" which Canada committed to safeguard and protect".

identifies how some of these (and other) factors have created cumulative effects on the Dane-zaa, including observed effects outcomes over the years, and areas in the Peace River Valley where these effects have been particularly extensive.

Table 3: Summary of Cumulative Effects Causes and Outcomes on the T8FNs

Cumulative Effects Causing Factors	Observed Effects Outcomes	Locations of Highest Concern
-Residential and population growth -development of cities, towns and regional districts -sport hunting	-Increased competition for resources by non-Aboriginal recreational users -Contamination of lands and waters by new residents and recreational users -reduced land for seasonal rounds -higher access to drugs and alcohol and other negative influences -lower wildlife numbers and health -racism and economic marginalization for T8FNs -reduced public safety when out harvesting -reduced "quiet enjoyment of the land" -reduced role for First Nations in governance and decision making	-Fort St. John -Taylor -Chetwynd -Dawson Creek -Charlie Lake -Moberly Lake -Del Rio, Crying Girl Prairie and Chowade, and around Doig River in Management Unit 45 (all adversely affected by large influxes of sports hunters)
Farming	-Reduced access to land; some farmers will not let you access their land, and large scale land clearing for agriculture -increase in invasive plants -reduced water quality near live animal facilities -cutting off of traditional trails -reduced wildlife distribution	-Especially around DRFN and HRFN reserves -in the eastern part of WMFNs Area of Critical Community Interest -Farrell Creek and Beryl Prairie areas
Forestry	-reduced habitat -spraying contaminants -water quality and aquatic habitat effects,	-throughout the Upper Moberly watershed -Chowade River area near HRFN reserve

Cumulative Effects Causing Factors	Observed Effects Outcomes	Locations of Highest Concern
	especially riparian habitat -land alienation	-surrounding Doig River
Oil and gas -conventional -shale gas (fracking)	-water and air contamination -public health risk (especially H_2S) -loss of quiet enjoyment of the land due to noise, activity, smell and other disturbance effects -reduced wildlife distribution and health -increased linear access for non-Aboriginal harvesters -reduced trapping practice and success -concerns about groundwater and water quantity issues (fracking) -human health contamination concerns (perceived risks also lead to reduced harvesting)	-throughout Dane-zaa territory, but especially: -Montney -Farrell Creek -Del Rio area -Pine River oil spill (2000) -around Prophet River
Mining, especially coal (not yet occurring close to Peace River but proposed and therefore reasonably foreseeable)	Potential effects include: -concerns about effects on caribou -increased linear disturbance -water and aquatic habitat contamination concerns -increased sensory disturbance -fundamental alternation to landscape	-Tumbler Ridge -Hart Highway -Strong desired of industry to mine from Williston Reservoir and WMFNs traditional territory
Government	-feeling harassed on the land[63]	All First Nations affected

[63] "There are so many regulations – get harassed for practicing our rights – have to show our status cards and have the right paperwork and fees, and often they are not very nice about asking and treat us poorly. Sometimes it is just too much and you do not go out [hunting]" (Verification focus group, October 10, 2012).

Cumulative Effects Causing Factors	Observed Effects Outcomes	Locations of Highest Concern
policies -Residential schools -registered traplines -Reserves system -Regulations	-loss of language for entire generations -loss of parenting skills and "love and care" capacity -loss of cultural knowledge through time on land and oral history -abuse leading to social dysfunction	
Hydro-electric developments	-loss of traditional transportation routes -loss of connection between different First Nations groups (e.g., Kwedacha) -safety concerns on Williston Reservoir -permanent loss of traditional lands -desecration (flooding) of grave sites -mercury accumulation in fish; loss of food source -changed weather patterns -altered water flows in Peace River -reduced animal numbers and population health with some species losing their migration pathways -increased non-Aboriginal recreational access on reservoirs impacting enjoyment of the land -loss of oral history and knowledge of landscape	-The Peace River valley, including areas upstream and downstream of existing hydro-electric facilities

Even in 1980, the Union of BC Indian Chiefs concluded that, due to cumulative effects on their traditional land base:

> [T8FNs]…people are no longer in a position to move and adapt. Their backs are in a sense to the wall, if the was is regarded as the Rocky Mountains on the one hand, alienation of their land on the other and industrial development on the last. There

> isn't the possibility of moving, dodging and avoiding impacts. People now are going to be impacted in a way that they have never been impacted before" (UBCIC 1980).

By 2001, cumulative effects concerns for the T8FNs had expanded further still:

> ...the rate and extent of development in a number of sectors are major concerns in the area. Examples included ongoing oil and gas, timber and hydro development, government support for increased development, and increases in non-industrial impacts from trapping, guiding, recreation, pesticides, hunting, and expanding rural and urban populations. These activities and others decrease the land base available to First Nations to sustain their culture and exercise their treaty and Aboriginal rights and mode of life (Korber 2001).

Increased oil and gas development and other activities in the past decade have only added to these cumulative adverse effects on the T8FNs. Given that some sites outside of the immediate Peace River valley area are considered contaminated or have been completely alienated from traditional use by urban or industrial development (e.g., Charlie Lake, Fort St. John, increasingly large portions of the area north of Moberly Lake, and large portions of the traditional lands around Doig River, as extensively identified in both the 2011 Site C TLUS and interviews and focus groups for this study), according to T8FNs members the relatively unindustrialized Peace River valley plays an increasingly critical role as both a use area for First Nations and a refuge for wildlife.

5 BASELINE AND TREND PROFILES FOR THE T8FNS

This section provides profiles of the four T8FNs across a series of indicators. Comparison data across the four communities are provided in Appendix D. A table of infrastructure and services available per community is provided in Appendix E.

Primary sources for these baseline and trend profiles include:

- Interview and focus group data from this study;
- Interview data from the Hendriks (2011) scoping study;
- Census data;[64] and
- Documents from the T8TA TARR archives or from the four T8FNs.

Preliminary findings of these community profiles were vetted with Community Advisors from Halfway River, Prophet River and West Moberly on October 10, 2012, and with a Community Advisor from Doig River on October 17, 2012. The information provided is the best available at this time, but is constrained by the small size of the communities and related Statistics Canada census data gaps, as well as limited local data collection capacity over time.

[64] NOTE: Given the small populations of the four T8FNs, there are substantial limitations to available Census data. Much of the Statistics Canada data is rounded to the nearest 10 to protect privacy or is unavailable, as shown in Appendix D.

5.1 Doig River First Nations

5.1.1 LOCATION

Doig River First Nations is located approximately 60 km northeast of Fort St. John, a 45 minute drive on mostly paved roads. Its total current reserve lands are 1358.1 hectares spanning over two reserves (DRFN, no date). DRFN occupies a larger reserve (No. 206) with the main residential population, located on the Doig River where it meets the Osborne River, and a smaller 257 hectare reserve located on the Beaton River south of the mouth of Blueberry River. There are also a few DRFN families that have strong connections to Peterson's Crossing, a small parcel of Crown land on the Beatton River near the crossing of the Beatton River and the Rose Prairie Road (UBCIC 1981).

Due to its relatively close proximity, virtually all health and social services, shopping, and recreational activities not available in Doig River are accessed from Fort St. John.

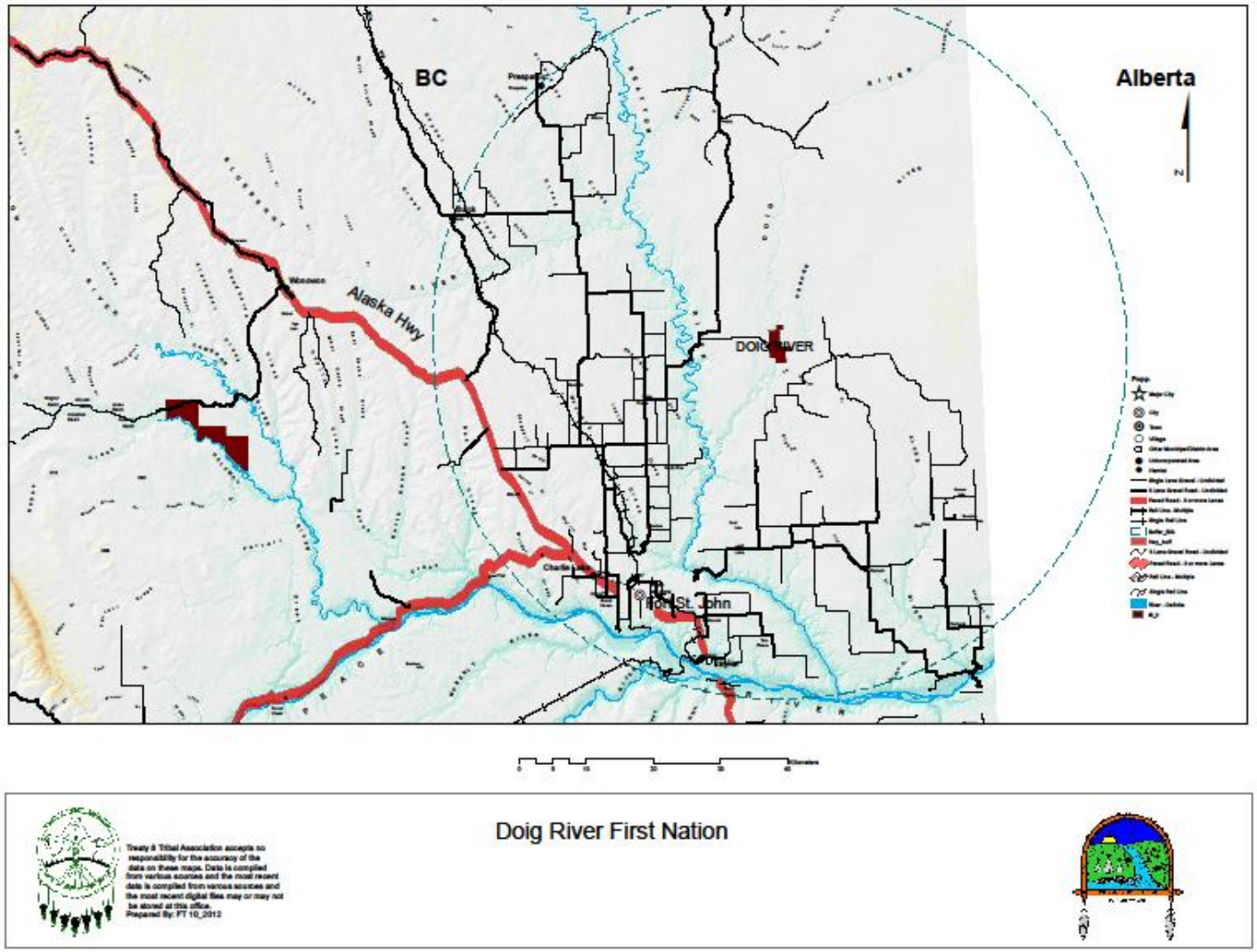


Figure 8: Doig River Location

5.1.2 POPULATION

In 2011, the total registered population of DRFN was 284 people (145 male and 141 female – Statistics Canada 2012a), up from 239 in 2006 (DRFN 2006). The 2011 population saw 128 people living on the reserve (70 male, 58 female), 15 people living on other reserves (10 male, 5 female) and 141 living off reserve (63 male, 78 female).[65] According to Statistics Canada (2007; 2011) the on-reserve population has dropped from 139 in 2001.

Overall, DRFN population has stagnated on reserve while it has continued to grow off-reserve. The on-reserve population grew by only 4.3 per cent between 1996 and 2011, the lowest growth rate of any of the four T8FNs. During the same 15 years, the total member population has grown from 201 to 284 and off-reserve population has grown from 110 to 155[66]. 2011 data indicates that less than 45 per cent of the DRFN population now lives on their home reserve and an out-migration shift is occurring.

Data from the 2006 Census indicates that the DRFN had a young population with a median age of 29.5, compared to the provincial median of 40.5 (Statistics Canada 2007a). In 2004, 38 per cent of DRFN members were youth under the age of 18 (Koehn et al. 2004). However, as young people are moving away to look for education and work, the on-reserve population at Doig River is aging. According to Statistics Canada (2011), the median age had grown to 34.3 by 2011.

Factors leading to outmigration from Doig River include the lack of education and training prospects in this small community, as well as limited housing. DRFN members do tend to report keeping strong connections to their home community even if they do move to larger centres like Fort St. John or Dawson's Creek.

5.1.3 TRADITIONAL LAND USE AREA

> [Traditionally], we would hunt all over the place in the Treaty 8 area, right up to Saskatchewan. We had no boundaries, the elders remembered. We camped

[65] For DRFN and all of the T8FNs, population data should be treated with some caution due to rounding margins used by Statistics Canada. In addition, Bill C3 which came into force January 31, 2011 and which provides Indian registration to grandchildren of women who lost status as a result of marrying a non-Indian is likely to rapidly increase the number of members for each First Nation (WM06, Verification focus group, October 10, 2012).

[66] 1996 population data for all T8FNs in section 5 is from T8TA (1997).

> wherever we wanted and moved all over the place by pack horses – (DRFN member in T8TA Treaty Education Team 2003f).

Historically, DRFN members, as with all Dane-Zaa, primarily lived on the land in seasonal camps rather than in a centralized community. Camping and harvesting from the land remains a very important year-round activity for many families. Among the seasonal highlights are the spring beaver hunt, fall moose hunt, winter trapping season and late summer berry picking seasons.

While DRFN and all four T8FNs claim harvesting rights throughout Treaty 8 (see Figure 4), their most common land use areas are described herein.

DRFN's traditional land use area includes large portions of the Peace Country to the Rocky Mountains, and across into northwestern Alberta as far as Dunvegan and Grande Prairie (known as "Big Flat" to DRFN elders) (DR03 April 26, 2012). [67]

The seasonal round often began with an over-winter stay in and around Doig River, with families moving out onto their trap lines in the spring, either to the east or west. Summer would see large, multi-community gatherings in the Montney, Taylor and Fort St. John area for trade, ceremonies, peace keeping, matchmaking, and other essential social, economic and cultural activities. Montney, just north of present day Fort St. John, was called Suu Na Chii K'Chi Ge, "The Place Where Happiness Dwells", and was the most important summer gathering place for DRFN members, and later, reserve lands, lost after 1945 (see section 4.11). Trade, largely of furs, also occurred at Old Fort on the banks of the Peace River. As one elder noted: "Before 1950, people were nomads... People don't all hunt in one area, they moved all over the place" (DR18 May 22, 2012).

UBCIC (1980) noted that in the late 1970s, that the DRFN had "one of the strongest hunting and trapping economies in the [northeast BC] area". However, members' seasonal rounds have become increasingly constrained over the past century. UBCIC (1981) suggested that an additional land use change occurred around 1976, when increased engagement in wage economic activity and education for young people in formal schools saw a reduction in the number of families that would travel into the Clear Hills area of Alberta to hunt moose (often by wagon) up until the mid-1960s (Broomfield no date).

[67] UBCIC (1981) suggests the following primary land use area for DRFN: "The traditional hunting territory of the Doig people… is bounded on the west by the Beatton River. It extends south to about Cecil Lake and east into the Clear Hills area of Alberta, which until about 1976 was an important summer hunting area. The territory extends north into the Milligan Hills area".

At present, Doig River people tend to use the area north (all the way to Fontas River and village), near Doig and Beatton rivers, and toward and across the Alberta border (Boundary Lake and Ole Lake areas, for example) more so than the Peace River. Land alienation is the primary factor in this loss of use of the Peace River area, as noted in section 5.1.4 below.

Although no quantitative survey on the per cent of people harvesting is collected, it is widely acknowledged that many DRFN members still hunt and trap. Members will hunt opportunistically any time of the year, but the preferred months for harvesting to prepare for the winter are August and September. Youth noted that some of the strengths of the community are in the lessons about self-sufficiency they learn from their elders, many of whom speak Beaver, know the land, make things out of birch trees, etc. (DRFN youth focus group, July 5, 2012).

Fishing is of less importance to DRFN than hunting and trapping. In the past, Charlie Lake and Beatton River were important fishing areas, but Charlie Lake – previously an important fishing site - has been completely alienated due to contamination concerns.

The only recent harvest study for DRFN is the First Nations Food, Nutrition and Environment Study (FNFNE Study) conducted by UNBC et al. (2010a). This study found that the top four traditional foods eaten by 29 DRFN households in 2008-9 were: moose (seven times more than any other species), elk, fish and deer. Notably, 97 per cent of DRFN respondents in the FNFNE Study indicated they would like to eat more traditional food.

5.1.4 LAND ALIENATION

> They take away our beautiful land, and only give us river side reservations. Too many fields on our places, no place to snare rabbits, no porcupine or nothing anymore (DRFN elder, T8TA Treaty Education Team 2003b).

DRFN's useable (and accessible) traditional land use area has eroded significantly since the turn of the 20th century. Agriculture and oil and gas activities, in particular, have been raised as important causes of cumulative effects within DRFN's traditional land use area. The first major reduction to the DRFN's freedom on the land was the growth in agricultural settlement in the Peace River valley starting after 1910. One Doig elder told the story of how Grandpa Davis was alienated when land along his trail from Rose Prairie to Fort St. John was sold by the government to a white farmer. When Grandpa Davis cut through the fence to follow his trail, he was tracked down by the police and shown the jail cell in Fort St. John where they said they would put him the next time he "trespassed", a new concept for Dane-zaa (DR02 June 29, 2012).

Ridington (1988) tells of the loss of the "Where Happiness Dwells"(Montney) area after World War II, when the government sold lands to returning war veterans at the expense of the Fort St. John band (today's Blueberry and Doig River First Nations), after which DRFN members were forced to gather in and around Fort St. John during its annual Stampede rather than on their preferred ancestral meeting grounds.

Agriculture has also impacted on the health of the lands and waters. Higher fecal coliforms from livestock runoff were reported in the Doig and Beatton Rivers in the mid-2000s, according to DRFN members (InterraPlan Inc. 2004).

In recent years, DRFN traditional land use has also been impacted to a significant extent by industrial activities, especially oil and gas development, which began in the mid-to-late 1970s and expanded rapidly in the 1990s. A mid-2000s report by the DRFN Lands Office (no date1) indicated a variety of disturbances and contaminants caused by oil and gas development were impacting wildlife, water and traditional use. In particular, opening of the Montney shale gas play has contributed to the continued reduction in available Crown lands for harvesting purposes. Community members have also raised concerns that the ability to walk directly out of the community and into the surrounding bush with their children has been undermined due to traffic and noise from industrial activities, and reduced local air quality. In addition, members have reported that heightened suspended solids and heavy metals from hydrocarbon development has reduced drinking water quality, and DRFN faith in using water from local sources (Interraplan Inc. 2004). One key informant with strong ties to Doig River stated that "so much has happened near Doig it is gross. It has really changed the landscape, [and the] way of life has changed" (Key informant 03 August 8, 2012).

5.1.5 ECONOMIC ACTIVITY

As noted in DRFN (2006), "[t]he community has made great strides in the past few years to break from government dependence by creating various businesses and economic development opportunities". Nonetheless, as pointed out by Koehn et al. (2004), despite the fact the reserve "is surrounded by oil and gas activity, members struggle to find and hold steady employment", often having to settle for seasonal employment.

Interraplan Inc. (2004) reported that the DRFN had undertaken strategic economic development planning and community members were expressing interest in:

- Eco-tourism and cultural tourism (including hunting/guiding, heritage site attraction in Fort St, John);
- Oil & gas development;
- Forestry development; and
- Industrial park development on reserve lands.

Main economic activities in the community of Doig River include community administration, oil and gas work (seismic, facility construction, maintenance, first aid and safety, and reclamation), forestry, general labour, and agriculture. On-reserve labour also staffs the on-again, off-again convenience store, learning centre and daycare centre. The main professions are employment in agriculture and resource extraction support businesses, construction, and education. Some 17 per cent of the land at Doig River I.R. No. 206 is devoted to agriculture, primarily haying and cattle ranching (DRFN 2006).

On-reserve DRFN employment statistics and prospects remain poor. In Doig River in 2006, there was an overall recorded unemployment rate of 33.3 per cent, and 40 per cent for men living on reserve (Statistics Canada, 2007a). Employment rates the same year in DRFN were 44.4 per cent for men, and 42.9 per cent for women, with a combined participation rate of 53.3 per cent.

Koehn et al. (2004) reported that in Doig River in 2004, among the working age on-reserve population:

- Fifty-nine per cent were unemployed or worked casually (typically in winter industry labour jobs) and only 20 per cent reported working full time;
- Very few individuals above the age of 55 were active in the wage economy;
- Nearly 50 per cent of those Nation members who worked full-time, worked for the DRFN or a DRFN-owned company; and
- Most jobs were located off reserve, making transportation difficult and often disinclining people living on the reserve from accepting the work.[68]

Koehn et al. (2004) noted a lack of employment counselling and financial management skills as factors contributing to career development and money management issues. Lack of local training and poor educational attainment are also issues.

[68] Hurdles related to transportation and long-distance commuting for T8FNs job seekers are taken up in more detail in section 6.5.

Koehn et al. (2004) also exposed a wide gulf between DRFN unemployment and that of the Northeast region of BC:

> Considering the first quarter of the year [2004], the unemployment rate in the region was 3.4%. Northeastern BC maintains a strong economy and has been able to maintain an unemployment rate less than half that of Canada's for most of the past decade. The regional employment rate is also higher than the national average at 69.9%. These trends, however, are not reflected at the Band level where unemployment is 59% and full time employment is at 18%.

This gulf between the economic success of the Peace River region as a whole and the persistent poverty of the T8FNs is taken up in more detail at the pan-T8FNs level in section 6.5.

While data is not collected by government on income differential between individual Nations' on- and off-reserve populations, there is evidence in Koehn et al. (2004) to suggest that:

- A disproportionately large number of unemployed members live on reserve versus off-reserve;
- A higher percentage of off-reserve members were self-employed compared to on-reserve members; and
- DRFN members who live on reserve likely make median incomes substantially lower than those living off-reserve, with the differences most striking between male on- and off-reserve populations.

Doig River produces an annual list of DRFN member-owned businesses. In 2011, this list included 13 companies (DRFN 2011b), with the following areas of service:

- Safety and first aid services;
- Slashing, clearing, mulching for seismic and other linear developments;
- Road, lease and pipeline right of way building;
- Heavy equipment operations;
- General labour;
- Silviculture and other forestry related practices (especially the Nation-owned Doig River Timber – D.R.T. Ltd);

- Reclamation;
- Water hauling and other trucking;
- Pressure testing and other oil and gas field maintenance and technical services; and
- Environmental monitoring.

There are several Nation-owned businesses including a successful forestry firm, a cattle company, and the Two River Development Corporation.

One key element of the economics status of DRFN is the large financial settlement the community and Blueberry First Nation received from the federal government over the Apsassin case. The monies from that 1998 settlement provided funds for the Doig Permanent Fund[69] for cultural programs and other initiatives. Monies from the settlement have also been used for payments to individual members, which while improving the standard of living in the community has also heightened concerns about money mis-management and raised questions about the contribution of increased money to social dysfunction in the community (Key informant 02 July 26, 2012).

In 2006, the DRFN reported approximately 18 members owning and operating contracting companies that work in the oilfield business but oil and gas activities have reportedly slowed down recently. As one DRFN business owner put it: "It [the First Nations business sector] was great 10 years ago, but after 2008, a lot of oil and gas pulled back their work. And First Nations companies are the first ones to get pushed out" (DR08 August 7, 2012).

DRFN has in recent years made efforts to join cultural programming and economic development activity. For example, the DRFN has expressed a desire to use tourism development to fuel the following spin-off effects (DRFN 2004):

- Community economic diversification;
- Stabilizing the traditionally seasonal employment in the community;
- Revive and maintain Dane-zaa language;
- Promote intercultural understanding in the Fort St. John area; and
- Promote the preservation and revival of traditions and customs, including songs, dances and stories, as well as the production and sale of arts and crafts.

[69] Approximately $135 million initially shared between BRFN and DRFN (BRFN and DRFN 1998).

All in all, there was a stated desire to "communicate that Doig River First Nations are an ancient dreaming people but also a modern living people who live in the past, present and future at the same time" (DRFN 2004).

Current economic issues facing the community include a lack of housing, lack of employment opportunities in the community and lack of transportation to access out-of-community work,[70] and continued reliance by many members on social assistance and settlement money (DR07 June 11, 2012).

5.1.6 LANGUAGE AND CULTURE

> We are very proud of our culture and heritage! We strive to preserve and encourage our culture, language, traditional knowledge, stories and songs through our cultural programs, language programs and teachings of our elder[s]. We practice a traditional lifestyle so that we can pass our culture along to future generations… It is our vision at the Doig River First Nations to share our Dane-zaa culture with the whole world (Henderson 2005)

The DRFN is a member of the Hazááge? Nááwatsat, or the Dane-zaa Language Authority. The Dane-zaa Language Authority promotes, preserves and enhances the use of the Dane-zaa language within Treaty 8 territory (T8TA 2012a). The Dane-zaa Language Authority has been instrumental in developing a Beaver language program now available at the Upper Pine Elementary School, with basic Beaver lessons from kindergarten through Grade 4. Doig River has also created a CD with language lessons for teaching youth (DR17, June 11, 2012).

The community of Doig River takes a great deal of pride in its retention of the Beaver language, but members have noted declines as English becomes the primary language in most homes. In 2006, 32 per cent of the DRFN population reported speaking their Aboriginal language at home, 32 per cent reported it as their first learned language (Statistics Canada 2012a) and 76 per cent reported knowledge of their aboriginal language (First People's Language Map of British Columbia 2012).

The people at Doig River still practice many of their traditional ways including hunting, trapping, camping, drumming and singing their dreamers songs. DRFN holds cultural

[70] In DRFN, 65 people are on the list to work, but only 28 have a licence and access to a vehicle (Hendriks 2011).

events throughout the year, such as the April Beaver Camp, the annual July Rodeo, "Doig Days", an August Elder's Hunt Camp, and an annual cultural day in which Grade 4 students from School District #60 visit the DRFN's main reserve and participate in cultural activities such as bannock making, moose hide fleshing and scraping and a fun archaeological dig.

As noted by one DRFN member, the Nation overall has taken a multimedia approach to cultural retention:

> Everything from historical timeline and all the different books that we have, we have the Dreamers Mythology, the Language Stories, Cultural Artifacts, Archival Photographs, Beaver Language Dictionaries, the culture days and rodeos that we have, the kinship system and knowledge that is dated back to 1760. We have a museum, art, music, and a lot of youth training, we do a lot of that, and also we're getting into the digital media training program (DR04 July 23, 2012).

Internet bandwidth was substantially upgraded in summer 2011, allowing DRFN members living on reserve access to high-speed wireless Internet (Pathways to Technology 2011). This allows greater connectivity for many members. There have also been concerns raised about over-reliance, especially by youth, on computer gaming and social networking, making them less physically and face-to-face socially active (Hendriks 2011).

5.1.7 GOVERNANCE SYSTEM

After being removed from the Montney area after World War II (see section 4.1), the DRFN's current reserve lands were first surveyed in 1947, and the group was recognized as the St. John Beaver Band in 1950. This name was changed to the Fort St. John Band in 1962, and in 1977, the Fort St. John Band split into the Blueberry First Nations and the Doig River First Nations (DRFN 2006).

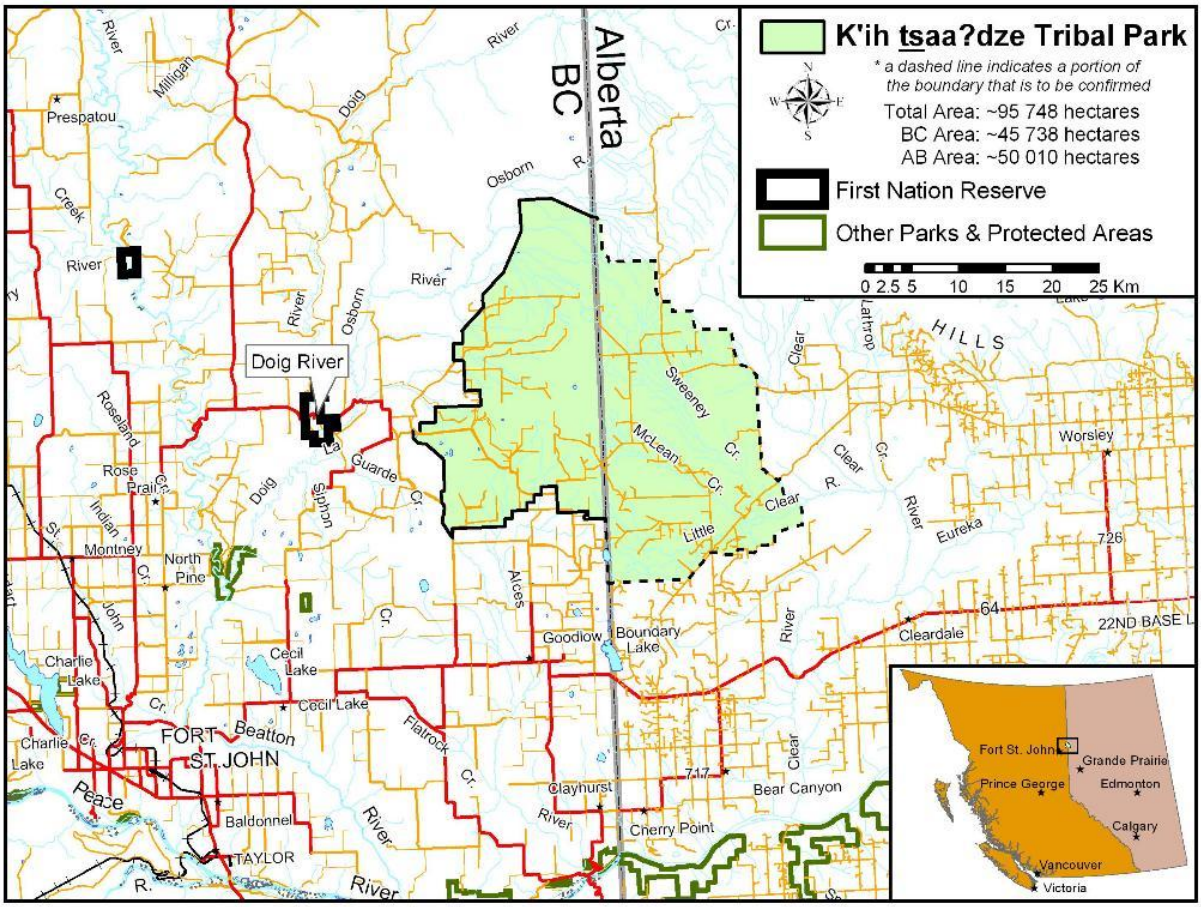
DRFN has an electoral system consisting of one chief and two councillors. Elections are held every two years.[71] Elders play an important role in decision making through an Elders Council and regular community meetings. Koehn et al. (2004) reported that the majority of DRFN staff were Nation members or associated by marriage and that in the mid-2000s, the Nation employed 19 staff as well as 36 casual workers (landscaping, environmental monitors, elders assisting in on the land activities).

[71] Some DRFN members consider this too short a governance period (reported in Hendriks 2011)

Recently, DRFN has sought to re-establish its traditional stewardship on the land and set controls on the amount of land alienated by industrial activity. On September 27, 2011, DRFN issued a press release stating:

> Doig River First Nation announced today that it has declared 90,000 hectares of land within its traditional territory in northeastern British Columbia and northwestern Alberta as a Tribal Park. The area, known to Doig River as K'ih tsaa?dze, is one of the few remaining areas where Doig River members can continue to exercise their Treaty and Aboriginal rights. The declaration of the Tribal Park was made necessary by the impacts of ongoing resource development on the First Nation's traditional territory... Doig River plans to monitor how the Park is used by its members and others (DRFN 2011a).

Figure 9: K'ih tsaa?dze Tribal Park {DRFN 2011a)



The DRFN later noted its reasons for creating the Tribal Park:

> Calls on the provincial government to protect the environment and to slow development to allow for ecological recovery and sustainability have failed to alter the pace of development. Areas considered safe to hunt by the community are rapidly disappearing. For DRFN, K'ih tsaa?dze remains one of the few important areas that community members believe has been less impacted by industry, and they are determined to make it safer by managing it more effectively than the provincial government has done to date (DRFN and PRFN 2011).

Even this preferred remaining harvesting area is by no means untouched by industrial development. As noted in DRFN and PRFN (2011), in the BC portion of K'ih tsaa?dze alone, there are at least 22 and as many as 40 provincial contaminated sites, 225 approved well sites, and 129 PNG [petroleum and natural gas] facilities.

It remains uncertain how other levels of government and industry will react to this action by DRFN to re-establish its stewardship over the land.

5.1.8 HEALTH AND SOCIAL SERVICES

Interviews with DRFN members indicate that although health services have started to improve, there remain substantial gaps in local health care and community support services. Doig River, like other small and relatively remote communities, experiences challenges recruiting and retaining qualified staff to provide health and social services and programs in the community. Currently, a doctor comes to DRFN twice a month, there is a half-time community health representative, and no health director in DRFN. Members report that within the last couple of years nurse visits to the DRFN reserve have been cut down to only twice a month (Hendriks 2011).

The remote nature of the community also impacts on emergency care. Ambulance service can take up to one hour and 15 minutes to get to DRFN's main reserve (InterraPlan Inc. 2004) from Fort St. John, where virtually all DRFN on-reserve members (and a large number of off-reserve residents) receive their heath care and social services. There are also concerns that population growth in Fort St. John has and will continue to put pressures on health and social services available in that community, which DRFN rely on. Both on-reserve DRFN members travelling there for care and off-reserve DRFN members living in Fort St. John have found it more difficult to access timely medical care. For example, there are reportedly "very long wait times for specialists" (Hendriks 2011).

Road access into Doig, which started in the early 1970s, has increased access to this once remote community. According to one DRFN elder, previous industrial developments, including the building of the W.A.C. Bennett Dam, saw many outsiders venturing into Doig,

causing an increasing influx of drugs and alcohol: "Before the 1970s there were no roads into Doig. Everyone lived peacefully... didn't know about drugs" (DR02, June 29, 2012). The 1970's saw increased alcohol abuse in the community, with many people affected by addictions, which remain an issue in the community and among the off-reserve population. Getting away from substance abuse is pointed to by some members as a contributing factor in people moving off reserve (DR07, June 11, 2012).

Health and wellness concerns related to industrial development have also increased in recent years. Concerns were raised in 2003 that community members were suffering from oil and gas related contamination in the form of "sore eyes, smells and respiratory problems like increased asthma" (InterraPlan Inc. 2004), as well as increased allergies.

5.1.9 EDUCATIONAL SERVICES

DRFN on-reserve children attend public elementary school at the Upper Pine Elementary School. They are transported there daily by school bus. For high school, on-reserve students are bussed daily to Fort St. John, a minimum 90-minute return trip.

Educational attainment levels among DRFN members remain low. In 2006, only 15 per cent of the population between 25 and 64 had completed some post-secondary training and 69 per cent of that age group had not completed high school. However, there are some signs of improvement. For example, while in 1996 there were no statistically recorded DRFN on-reserve members who had post-secondary qualifications, by 2006 this was reported to have increased to 15 per cent (Statistics Canada 2007a).

There remain a substantial number of DRFN members who would like to access Adult Basic Education, with emphasis on upgrading to high school equivalency, with the main topical deficits being in math and English (Koehn et al. 2004). The community currently has a half-time educational coordinator (Hendriks 2011).

5.1.10 INFRASTRUCTURE AND UTILITIES

The modern conveniences of life are relatively new to Doig River. Most homes in Doig River first received running water and central heating in the 1980s (Ridington 1988).

DRFN's main reserve has the following infrastructure as of 2012: a large, state-of-the-art Administrative and Cultural Centre, a new subdivision, a learning center, and a new day

care (although as of October 2012 this facility still has irregular hours). There is no grocery store.

The community is equipped with heat, hydro and water utilities, and is also equipped with garbage collection and sewer services (Lions Gate Consulting, 2009). As of 2003, the community's sewage system, a double lagoon/wetland treatment facility, was described as working very well (InterraPlan Inc. 2004).

In 2006, there were 45 occupied private dwellings on the DRFN reserves. 44 per cent were in good condition while 56 per cent needed minor repair (Statistics Canada 2007a).Plans have been developed by DRFN to increase the number of houses to over 80 (Interraplan Inc. 2004).

5.1.11 FROM THEN TO NOW: CHANGE OVER TIME

DRFN members have seen rapid changes over time. Among the prophecies of the Dane-zaa Dreamers that have come true are roads being built throughout the territory, fires in the north (associated by many Dane-zaa with gas flares) and the loss of dreamers on the land (DRFN no date).

Industrial activities, agriculture and municipal development have alienated large areas that used to provide for much of DRFN economic survival. The DRFN reserves are now surrounded by more than 8500 oil and gas wells, hundreds of kilometres of access roads, pipelines, and seismic programs, agricultural lands, ranches, and forestry cut blocks (DRFN and PRFN 2011). According to DRFN members, the Doig hunting management unit, MU45, was one of the first to be opened up as a public hunting area by the provincial government. Now non-Aboriginal people access the area on a regular basis, causing both competition for resources and public safety risks. Thus, concerns about safety in addition to land alienation and increased non-Aboriginal access have reduced Doig hunting efforts and success in recent years.

Elders have lived through substantial change. As reported in Bruce Thompson and Associates Inc. (2006), in the mid-2000s, DRFN elders were asked about the health and trends of various environmental components, and what overall changes they have seen over the past generation or so. Comments included:

> We use to drink out of the lakes, rivers, and muskeg. We would dig a hole into the muskeg and get fresh/cold water.

> I smell the gas when I wake up coming from the west wind. At our homes and when you go north and down the river you can smell the gas.
>
> We cover the animals that have been spoiled or you have to burn the carcass because it will attract bears.
>
> The moose lungs have cysts. Dick Davis was at Peterson's Crossing with a dead moose and the infection came right out of his lungs. Glen Apsassin and Sammy Acko killed a moose and took it to Fish and Wildlife and they did not do anything."

Some members have more recently reported that the Internet and cell phones, among other new technology, have made people lazy (as reported in Hendriks 2011).

Limited education, training and employment opportunities put DRFN members (especially those living on their home reserve) at a fundamental disadvantage versus their non-Aboriginal counterparts.

5.1.12 LOOKING AHEAD

DRFN has adapted in the face of these environmental and socio-cultural changes, with members re-focussing on making their primary living from the wage economy. However, limited education, training and local labour market opportunities remain constraining disadvantages to economic development and curtail the DRFN's ability to take full advantage of new economic opportunities (see sections 6.4 and 6.5).

DRFN has a strong desire to balance economic growth with traditional activities on the land, as seen in their efforts to protect some of their diminishing traditional land base which still has some valuable habitat that can support meaningful Treaty right practice.

DRFN has also focused in recent years on cultural promotion and protection. An essential part of the DRFN's current business plan is to create more programs targeted to youth to promote culture, education, employment and knowledge of members' Treaty 8 rights.

DRFN (2005) identified the following among its goals for "building the kind of future people want":

- Youth and cross-cultural initiatives, including tourism ventures;
- Commercial and residential developments through increased non-reserve land holdings and investment in affordable housing solutions with local input in construction;

- Engagement in environmental/reclamation and land resource management activities; and
- Support of existing DRFN business ventures.

Table 4 identifies some of the current strengths and hurdles facing DRFN as it moves forward. Many of these issues were raised by DRFN youth in a focus group on July 5, 2012.

Table 4: Doig River First Nation – Current Strengths and Hurdles

Strengths	Hurdles
Desire to keep culture and language alive	Drug and alcohol abuse
Strong business sector and entrepreneurial desire	Beaver language slowly fading away
Relative proximity to jobs and business opportunities in Fort St. John	Not spending as much time on the land, due in part to increased costs
Ceremonies and celebrations still being held	Elders and youth do not interact to pass on knowledge
Multi-media efforts to protect and promote culture	Not as many cultural events like tea dances anymore
Stewardship efforts like Tribal Park	Lack of funds for cultural programs
Some people still self-sufficient and can hunt, make clothes, make crafts	Reduced traditional lands available
Arts, songs, stories and drumming strong	Continued trend toward outmigration
DRFN Permanent Trust a tool for future economic development and cultural promotion/protection	Continued high on-reserve unemployment and low educational attainment

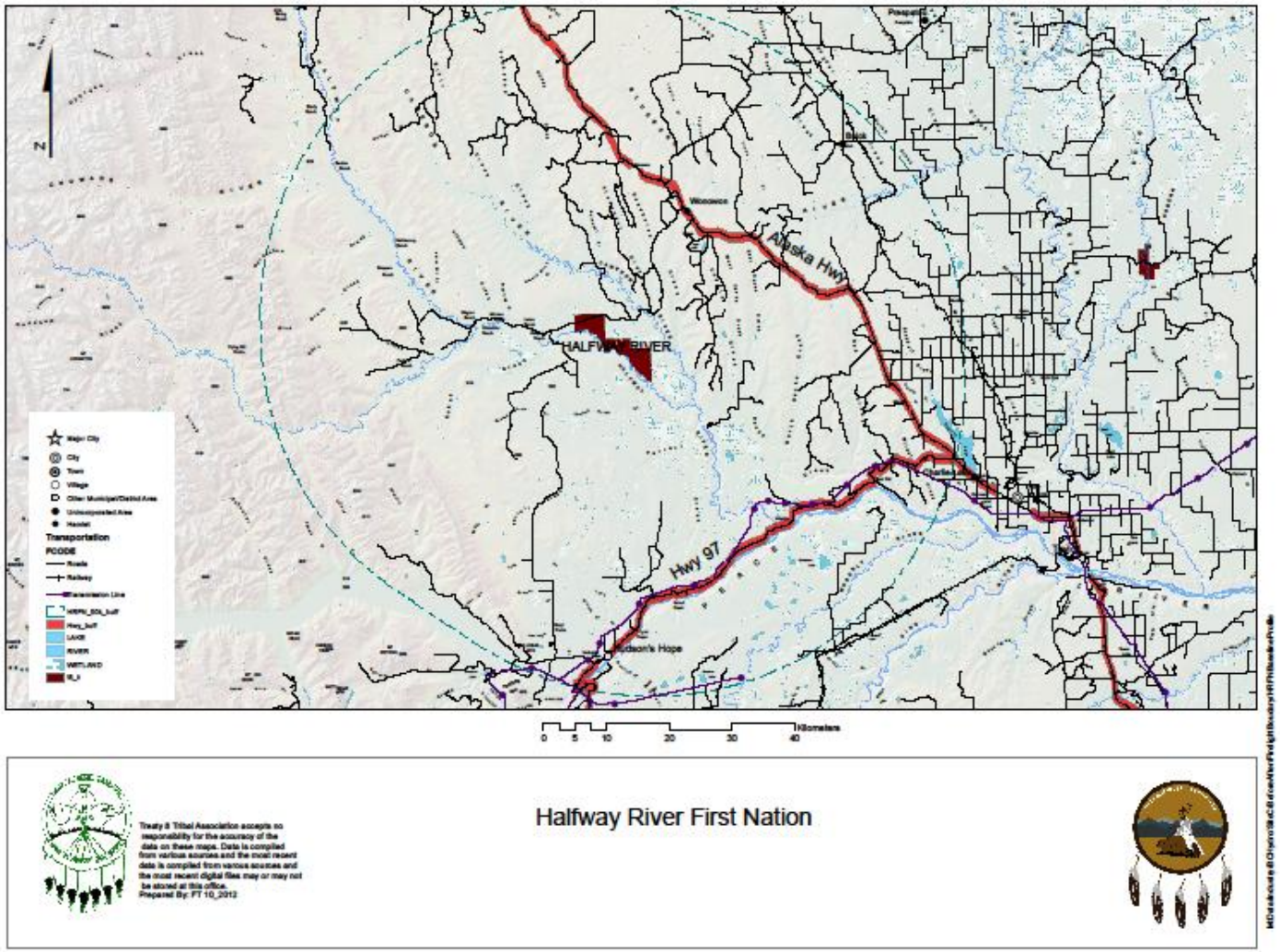
5.2 Halfway River First Nation

5.2.1 LOCATION

HRFN is a small, remote Dane-zaa community located approximately 35 km west of Wonowon, and approximately 115 km northwest of Fort St. John. It is accessible year round by a newly paved road off Mile 95 of the Alaska Highway. A one and half hour drive from the nearest urban centre, it is arguably the most remote T8FNs community. Virtually all health and social services, shopping, and recreational activities are accessed from Fort St. John. Halfway River's main reserve is 3988.8 hectares.

Originally from Chowade (Stony River), HRFN only relocated to its new location along the Halfway River in the early 1960s (Ghanada Management Group 2011). HRFN separated from the Hudson's Hope Beaver Band in 1977 (HRFN 2012; Metes 1994).

Figure 10: Halfway River Location



5.2.2 POPULATION

The total registered population for HRFN in 2012 was 255, with 145 members living on the reserve (AANDC, 2012b). Eighty registered males and sixty-five registered females were living on reserve. Halfway River's on-reserve population has grown over time, but only slowly,[72] and with recent reductions in the proportion of members living on reserve (down to 57 per cent in 2012). In 2004, the total population was listed as 225, with 160 individuals (71 per cent) living on reserve (HRFN 2004). In 1996, 139 out of 190 registered members (73 per cent) lived on their home reserve (T8TA 1997). Overall, HRFN's on-reserve population has grown by only 4 per cent between 1996 and 2011, while the total member population has grown by 34 per cent. The bulk of growth has thus been in the off-reserve population, which has grown from 51 in 1996 to 110 in 2011, a 116 per cent increase. This population shift reflects the need by many members to move into places like Fort St. John to access education, training and employment.

Based on 2006 mobility statistics, HRFN on-reserve members show strong ties to their home community, with some 70 per cent indicating they had lived in the same community for five or more years (the same percentage as Doig River and much higher than the 50 per cent for PRFN and 25 per cent for WMFNs – Statistics Canada 2007b).

The population of Halfway River is relatively young by provincial standards. In 2011, 29.2 per cent of the population was 14 or younger, compared to 27.1 per cent (BC Aboriginal on-reserve average) and 18.1 per cent (BC total population average), according to Statistics Canada (2012b). The population pyramid appears to be aging, however, with 2006 data indicating 32.1 per cent of HRFN on-reserve members were 14 or younger (Statistics Canada 2007b), and data from the mid-1980s indicating that some 57.9 per cent of HRFN members were 25 years or younger at that time (Krueger no date).

5.2.3 TRADITIONAL LAND USE AREA

According to HRFN members, the people of Halfway River, along with other Dane-zaa, have occupied the basin of the Peace River, as well as the mountains to the west, since time immemorial. Traditional seasonal rounds typically extended up toward and overlapping with the PRFN territory (Brody 1981) around Pink Mountain and the Sikanni Chief River.

[72] In 1984, the Nation reported 132 members living on reserve (Halfway Indian Band 1984). Thus, the growth in the on-reserve population over the past 27-28 years has only been 13 members, or a 10 per cent cumulative growth rate. In that same interim, the population of B.C. has grown by 57 per cent (http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx).

To the south, the Farrell Creek area north of Hudson's Hope was until recently an important harvesting area, and the north shore of the Peace River typically was a boundary marker for the HRFN's seasonal rounds to the south.

From the Alaska Highway to the east (an artificial boundary created in the 1940s) up into the Rocky Mountains to the west, the HRFN travelled via horse, on foot, or with dogs, on their harvesting rounds. Areas of highest current HRFN use and value include Crying Girl Prairie, Chowade (sometimes spelled Chowadi) River, and especially the area around Halfway River itself, extending down to where it meets the Peace River at Attachie (HR03, June 18, 2012). Other key areas noted by HRFN members include (Ridington 1993):

- Farrell Creek area between Hudson's Hope and the Upper Halfway River;
- Christina Falls; and
- The Graham River watershed.

> We use Halfway River for canoeing, recreation, food. It's our way of life, we are so close to it. It affects our lives in so many ways and when we were children, there were these back channels and stuff we would use as our swimming area, as our recreation, and then the children would all get together and form a party and fish right beside and get the food out of it and swim in the river and it was our teaching ground (H16, Site C TLUS, June 10, 2011).

The area traditionally occupied by HRFN is an area of abundant natural resources, including moose licks, animal corridors, feeding and calving areas (Tera Environmental Consultants et al. 1995). Resources in the area that Dane-zaa historically survived off and continue to harvest in relatively large numbers include moose, caribou, bear, marmot and lynx, along with a variety of fish and berry species.

While no quantitative data on harvesting is available, HRFN members report that one of the strengths of their community is its continued high degree of hunting, fishing and trapping. As one HRFN member put it: "Youth are on the land a lot still. Boys are into hunting" (HR03 June 18, 2012). Where the Cameron River and the Halfway River meet, and the Chowadie area, are two of the main current HRFN harvesting areas. In addition, HRFN members continue to trap, holding some provincial traplines. The Nation has supported these harvesting activities, encouraging members to continue to hunt, trap and fish by, among other actions, constructing trapline cabins for members (Hendriks 2011).

5.2.4 LAND ALIENATION

While the HRFN reserve lands are remote from urban areas, the Nation has nonetheless faced substantial non-traditional land use pressures, growing over the years since the current community location was established in the 1960s. There have been observed declines in small game and fish populations, associated by community members with agricultural and industrial activities (InterraPlan Inc. 2004).

In 2003, HRFN raised concerns with the PRRD about access by recreational and industry users to areas containing HRFN graves and heritage sites. Other concerns raised at that time included:

- Continuing use of herbicide spraying by industry;
- Degradation of grave sites and heritage areas such as the sacred site near the confluence of the Chowade and Halfway Rivers;
- Increased public access to traditional use areas along with gating and reduced access along some roads First Nations used to get to harvesting areas (e.g., Graham River Road);
- Over-harvesting by non-Aboriginal recreational users of fish from the Chowade River;
- Lack of wildlife regulations enforcement in the area; and
- Encroachment and lack of benefit from logging in areas like Farrell Creek (InterraPlan Inc. 2004).

Overall, HRFN has expressed strong reservations and has pursued legal and other means to stop development from encroaching on their traditional lands. The best known example was the road block and legal action against the Ministry of Forests over Canfor's Cut Block 212 in the *Halfway River First Nation vs. B.C.* (the Metecheah case).

Despite this pushback, pressures from oil and gas, logging, agriculture and recreation continue to affect the HRFN's traditional way of life. For example, the same strong habitat characteristics that provide opportunities for HRFN members to harvest from the land have attracted a large number of outsiders, as noted by an HRFN member in Hendriks (2011):

> We are at a perfect location for recreationists. We have seen approximately 80 people quadding at Crying Girl Prairie – they are shooting guns and roaring up and down the roads with their quads. We want to protect our community.

Large and important harvesting areas have been recently alienated due to oil and gas and other industrial activities, including both close to the community and further south toward the Peace River and Williston Reservoir:

> We used to go hunting around Farrell Creek. It is all oil and gas and logging now. Used to hunt there with my dad as a little guy, but can't go back there now (HR03, June 18, 2012).
>
> Our trap lines are surrounded by farmers, grazing leases, flare pits, wells, seismic lines, and logging blocks (HRFN member in T8TA Treaty Education Team 2003g).
>
> We couldn't stay in camp this summer because the farmers were putting their cows to pasture where we camped... It seems to me that cows are more important and we are second on the land. Are we not the first peoples of this land and the cows are taking over our land base? Something wrong there (HRFN member in T8TA Treaty Education Team 2003g).
>
> We used to be able to go out our back door and shoot a moose and now with all the activity there are no moose that come close to our communities (HRFN member, in T8TA Treaty Education Team 2003g; the same member indicated small game declines – rabbits – near the community as well).

Some HRFN members report having to go into the mountains in order to harvest, as a direct result of industrial and recreational pressures closer to home. There are strong concerns and a sense of injustice associated with the mixture of land alienation and minimal economic benefits from resource development for the HRFN community:

> Out there now there are more white people in the bush with their trucks working than Indians. We need to make money to feed our families too. Us Indians we are poor when we should be rich in land and food, now we have to go to grocery store, medicine store. Our grocery and medicine store [the bush] is really damaged and we will have nothing to feed families or give them any medicine. The industry is really destroying our areas and killing off our animals with it. When this is over and the white man leave, our heritage will die with it because what will be left, nothing but damage. How will we survive? No trap line, no Indian, no wildlife, no clean water, no clean air. Think about the children" (HRFN member in T8TA Treaty Education Team 2003g).

HRFN members have expressed concerns that, given costs of harvesting (gas, bullets, bottled water, etc.), some members can no longer afford to harvest their own food, especially as distances to successfully harvest increase. As one HRFN member (in T8TA Treaty Education Team 2003g) put it, "poor people have no means of gathering food way out in the bush".

5.2.5 ECONOMIC ACTIVITY

Unemployment and underemployment are major issues in Halfway River, as they have been since the inception of the small, remote community. In 2001, Halfway River had an employment rate of 37.5 per cent amongst females and 18.2 per cent amongst males living on-reserve. Unemployment rates for the same year in Halfway River were an astonishingly high 83.3 per cent for males and 66.7 per cent for females (Statistics Canada 2001b)

Employment conditions on reserve have improved only slightly over time. 2006 Census data indicates that HRFN's unemployment rate had only fallen to 50 per cent (Statistics Canada 2007b). One community member indicated that many if not most people in the community are on social assistance, and that most people who do work are limited to seasonal work (HR03, June 18, 2012). Ghanada Management Group (2011) estimated that there are currently 25 to 30 members based in Halfway River who are both healthy and ready to work No income data is available for HRFN but, given the prevalence of seasonal work and high unemployment, it is reasonable to expect that average incomes are much lower than the regional average, putting HRFN members at a distinct purchasing power disadvantage for goods and services versus higher income communities like Fort St. John (see section 6.5).

HRFN's Chief and Council and administration attempts to find work for members through activities like working at the HRFN-owned ranch, but these jobs are limited in number and often seasonal in the community. An HRFN member noted that while there are some industry jobs available for people, many members are reluctant to commute long distances from the community for rotational "camp" jobs because they don't want to leave their families, or because they would have to drive long distances every day (HR03 October 10, 2012).[73]

Of particular interest to many members are jobs in oil and gas, but these require safety tickets and typically driver's licenses, which are often not easily accessible to community members due to economic, transportation and educational deficits.[74] Access to training is limited unless people leave the community, an issue brought up in more detail in sections 6.4 and 6.5.

There is only a minimal business sector in the community. As of 2011, there were five on-reserve HRFN members who operated their own businesses. Interraplan Inc. (2004) identified guiding/outfitting, trail rides, gravel pits, and the HRFN cattle operation as

[73] Typical camp jobs identified by HRFN members include basic laboring jobs such as cook helpers, camp cleaning, catering for women, and equipment operators for men (Hendriks 2011).
[74] About 15 to 20 HRFN members have licenses but only five or six of these members have he skills or capacity to fill available jobs (Hendriks 2011).

economic development opportunities for HRFN as of 2003. The success of the Nation-owned ranch has been limited by factors such as lack of capital to purchase farming equipment, weak prices for beef in the 2000s, among other issues (T8TA Treaty Education Team 2003g), and has been marginal at best and a money loser at worst.

HRFN members have a long history of commercial guiding for non-resident hunters in the Halfway Plateau area (Ridington 1993). Protection of greater portions of their traditional territory from non-Aboriginal recreational hunting, and the active promotion of commercial guiding, was identified as a desireable future economic growth sector in the mid-1990s, along with opportunities for whitewater river travel (Ridington 1993). Little development of these ideas has apparently occurred in the interim.

Key current economic sectors in the community include gravel excavation and sales (Lions Gate Consulting, 2009), cattle ranching, oil and gas labouring, and working for the First Nation in administration, education, health, maintenance/labouring, or cattle ranching.

5.2.6 LANGUAGE AND CULTURE

According to AANDC (2012b) there are 55 fluent speakers of the Beaver language in HRFN. There are also an additional 75 people who speak or somewhat know the language, with 66 per cent of the population having Beaver as the first language learned. According to T8TA (2011a), of the 250 HRFN members, there were 53 fluent speakers, 187 who understood or speak somewhat, and 10 who were considered “learning speakers”.

The above-noted statistics belie the critical concern about language held by community members. In reality, while many of the older generation can speak Beaver fluently, community members report that only a limited number of youth know the language, and fewer still actually use it in conversation (HR03 October 10, 2012). As a result, language retention appears to be reducing over time, as noted by one member (HR03 June 18, 2012):

> Language retention is kinda low. I know my language. [We are t]rying to get younger generation to learn their languages. It is easier to learn when young. Everyone should sit around with elders at culture camp; it is a better place to learn than in the community.

In a planning study for HRFN, Ghanada Management Group (2011) interviewed many members of the community and found:

> Respondents emphasized the need to ensure subsequent generations of HRFN members are fluent in their traditional (Dane-zaa) language. The extinction of First

> Nations languages has become an increasing concern in recent years, with more and more elders passing away and fewer subsequent generations learning the language. In terms of language retention, it is currently estimated that half of the HRFN membership can speak their traditional language, with members aged 23 and under not readily capable of speaking the language.

T8TA (2011a) confirms that none of the 53 HRFN members who speak Beaver fluently are under the age of 45. Ten members between ages five and 14 are reported as currently learning the language.

HRFN holds a couple of annual cultural events (for example, a Pow-Wow in July and a rodeo in August) as well as engaging in pan-T8FNs events (see section 6.2 for more discussion on cultural promotion and protection efforts).

HRFN members also have strong cultural ties to the land, including to the Chowadie River area, Halfway River area down to the Peace, and the lands between the HRFN reserve and Hudson's Hope.[75]

5.2.7 GOVERNANCE SYSTEM

The HRFN's elected leadership is comprised of two councillors and one chief. Elections are held every three years, in accordance with a custom electoral system and section 74 of the *Indian Act* (Krueger no date). Monthly community meetings keep members engaged in governance. Interviews with Hendriks (2011) indicated that dealing with substance abuse and employment issues have been cited as major stresses on HRFN's administrative capacity.

Krueger (no date) noted in the mid-1980s that HRFNs membership "appear to have retained a higher level of understanding of traditional ways than is the case elsewhere" and at that time governed themselves according to more traditional ways than other Treaty 8 Nations, with conduct of elections and reporting under the *Indian Act* less a true form of governance and more as an administrative necessity. Three main methods of political communication were identified by Krueger (no date) among the HRFN – informal family communication, dissemination of information by Nation staff through informal social networks, and referral of issues of major importance to Nation elders. In recent years, elders' roles have reportedly reduced somewhat (HR03 June 18, 2012).

[75] One area that HRFN has a strong association with is the Butler Ridge area, 80 km southwest of the reserve. As noted in Corpuz (2012), Butler Ridge is considered part of HRFN's "backyard", for traditional use and cultural practices, and houses two culturally modified and spiritually significant rocks.

One of the primary hurdles facing HRFN is extremely limited governance and administration capacity. Despite this, the Nation has shown itself willing to use much of the limited capacity to protect its Treaty Rights in cases like *Metecheah vs. Ministry of Forests* and recently in dispute with the BC Oil and Gas Commission over inadequate consultation regarding seismic work near Butler Ridge (Corpuz 2012).

5.2.8 HEALTH AND SOCIAL SERVICES

Health and social services available in Halfway River are limited. The vast majority of services need to be accessed from Fort St. John, which is at minimum a 90-minute drive away from the community. HRFN members report the following services deficits (Hendriks 2011):

- A full-time youth and elders coordinator;
- Members need to travel off-reserve to access all but the most limited medical services and all specialty (hearing, eyesight, dentistry) services; and
- A counsellor comes only once a week to HRFN - there is a need for a full-time counselor.

Halfway River does have a health center that has helped improve the overall quality of health in the community. However, there are still limited health services available to community members, as well as people to staff them. Nurses are needed with more specialty training.

Main threats to health among HRFN members include diabetes, substance abuse, poor nutrition, mental and physical abuse, and water quality. Drugs and alcohol, in particular, were noted as driving social problems and the need for social and health services: “Too many people do drugs and alcohol. It is hard for our people and children” (HRFN member, in T8TA Treaty Education Team 2003g).

Among the health and social services sought to reduce these concerns (referred to in Ghanada Management Group 2011) are:

- An elders care centre to take care of increasing numbers of aged in the community;
- Counselling services;

- Mental Health Services;
- Youth Cultural Camp;
- An Emergency Evacuation Plan;
- Alcohol Prevention Program;
- Volunteer Fire Dept;
- Focus on traditional preventative healing and living a healthy lifestyle;
- Reduce incidence of diabetes and other chronic diseases.
- Promotion of physical exercise and recreation opportunities by supporting recreation initiatives, especially the Youth Centre; and
- Promotion of programs to strengthen families.

Diet is a large concern for people's health, with less country foods available and many people unable to access or afford to eat healthy store-bought foods. Introduction of European foods, smoking and alcohol have reportedly contributed to a lower health quality in many people in the community. The lack of social services mean people have to travel to access these services, including food (the nearest full-service grocery store being 90 minutes drive away in Fort St John), and it is difficult when people don't have the money (or transportation) to do so (T8FNs staff 04 July 9, 2012).

There are also concerns that the remoteness of the community, lack of nearby emergency services, and increased industrial pressures may cause problems in an emergency response scenario, such as a sour gas blowout. Natural gas extraction and transportation activities are occurring within two km of the community (InterraPlan Inc. 2004). Currently, ambulance and RCMP are one and a half to two hours away in the event of an emergency:

> The police are too far away and when we call they don't get here fast enough to help anyway. We need them here 24-7 (HRFN member, in T8TA Treaty Education Team 2003g).

5.2.9 EDUCATIONAL SERVICES

HRFN has a preschool and most students go to an elementary school in Upper Halfway (a nearby small community) up to Grade 6. In 1984 it was reported that there were 34 HRFN members in the local school from preschool to Grade 8 (Halfway Indian Band 1984), but this facility is no longer open. HRFN members have also expressed concern that the Upper Halfway School may also close due to a lack of teachers (Hendriks 2011).

Students in Grades 7 to 12 are required to go to Fort St. John. Some make a daily commute, but given that this is a three to three and a half hour round trip most students are put up at the Nation's expense in boarding homes in Fort St. John. HRFN (2004) reported that finding responsible boarding care has proved challenging. This reality, as well as the difficult transition to an urban school,[76] has resulted in low high school graduation rates for HRFN members. Available 2006 education statistics for band members living on reserve, ages 24 to 64, shows 13 per cent of them had earned a high school diploma. Other estimates are slightly more optimistic, with Lions Gate Consulting (2009) reporting Census data showing ten per cent of HRFN members have training in a trade or apprenticeship, 11 per cent have college level education, and 4 per cent have university education.

There is reportedly slightly more educational attainment success among the growing off-reserve population:

> We usually have one maybe from the community that will go to post-secondary and then the rest of our post-secondary, they're band members only they have never actually lived here, they live all over but we've got all sorts of trained band members that have never come to the community (HR02 May 16, 2012).

The lack of educational attainment has led to a strong push for resources for Adult Basic Education, which a couple of dozen HRFN members reported seeking access to in 2004 (HRFN 2004). There was also a stated desire among HRFN members to develop options for delivering secondary curriculum in a venue that is closer to the HRFN reserve – either in one of the local communities on a shared basis (e.g. Wonowon, Upper Halfway) or else via online webconference in the local elementary school building (Ghanada Management Group 2011).

Access to training has also been limited in Halfway River, due in large part to its small population and remote location. Concerns have been raised in the past that sending local people out of the community for training can lead to alcohol problems, family issues, and prohibitively expensive accommodations (Halfway Indian Band 1984). Instead of going on to post-secondary education, young people from the community are more likely to "go to the oil fields; get their tickets and head off" (HR03 June 18, 2012). Given current employment data, it appears many of these oil and gas jobs are short lived, or cause/contribute to permanent moves to off-reserve locations.

Overall, there has been difficulty both getting HRFN youth to finish high school (see section 6.4) and getting them the training they need to engage fully in the wage economy (see section 6.5). This contributes to the current cycle of under-employment and poverty on the HRFN reserve.

[76] "When the kids get through the grade school, they are not at the same level as the other kids and get discouraged and quit" (Halfway Indian Band 1984).

5.2.10 INFRASTRUCTURE AND UTILITIES

Ghanada Management Group (2011) described HRFN community infrastructure assets as including:

- A Health Centre (built in 1997);
- Administration/lands buildings;
- A School building (1995) – no longer used for educational purposes (planned for renovation into a multi-use community/administration building);
- A playground adjacent to the school building;
- A Community hall (1997);
- An outdoor ice rink (1996) in poor condition;
- Rodeo grounds, opened in 2001; and
- Pow-Wow grounds.

The community has come a long way from 1984, when it was reported that the band had only just received electricity (Halfway Indian Band 1984). Halfway River now has high-speed Internet. The community is also equipped with garbage collection and centralized sewer services (Lions Gate Consulting Inc. 2009).

Nonetheless, there remain substantial limitations to the infrastructure and services available to this remote community, including minimal road maintenance in winter, no store, no firehall, and an unstaffed police station (Hendriks 2011; HR03 June 18, 2012).

The community water supply is via a pump house which pumps water directly from the river, which is then gravity-fed to houses. The water is not treated, as funds are not available to install a proper treatment facility. Water contamination concerns, linked primarily to nearby agriculture, have led to the community ordering weekly shipments of bottled water from Fort St. John. As a result, the community reports spending $30-40,000 a month on bottled water (Ghanada Management Group 2011).[77]

[77] Concerns remain about the quality of the water supply due to potential contamination from a nearby pig farm through groundwater seepage (HR03, June 18, 2012), despite the fact this issue was first reported in 2003 (Interraplan Inc. 2004).

Housing is limited on reserve. According to Ghanada Management Group (2011), there is a perpetual waiting list for housing units, with families and individuals doubled up in residences. There are currently 39 houses, seven Greensmart buildings, two triplexes, and one duplex owned and operated by the Nation, including the newer Sapaa housing subdivision.

5.2.11 FROM THEN TO NOW: CHANGE OVER TIME

Halfway River people relied primarily on pack horses for travel for well over a century. The development of the regional road network has resulted in a shift to reliance on vehicles for transportation, and to increasing access by outsiders (primarily industry and non-Aboriginal harvesters). Use of trapping areas has continually declined due to a variety of factors including industrial encroachment, agricultural clearing, and competition from non-Aboriginal recreational users. The increase in outsider access to HRFN hunting areas has caused an observed decrease in the populations of animals they were once dependant on, like moose and caribou.

Increased outsider access into the community has also reportedly brought challenges, including contributing to social dysfunction through the introduction of more alcohol and now drugs.

5.2.12 LOOKING AHEAD

Table 5 identifies some of the current strengths and hurdles facing HRFN as it moves forward.

Table 5: Halfway River First Nation – Current Strengths and Hurdles

Strengths	Hurdles
Desire to keep culture and language alive	Drug and alcohol abuse
All ages still spend a lot of time on the land harvesting	Beaver language fading away
Strong habitat values in Chowade and Halfway River valley	Land alienation, especially to south in Farrell Creek area but also through oil and gas and agriculture near reserve and non-Aboriginal recreational use
Strong relations to other T8FNs, especially PRFN.	Trend toward outmigration for education and employment opportunities
	Continued extremely high on-reserve unemployment and low educational attainment
	Lack of services available
	Weak business sector
	Remoteness of community
	Limited administration/governance capacity

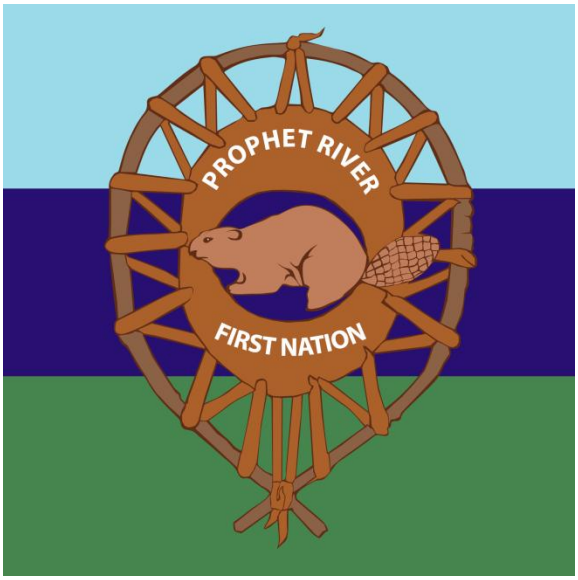
The community has a long way to go to reach its economic and socio-cultural goals. From an economic standpoint the HRFN recently developed a *5-Year Economic Development Strategy* (Ghanada Management Group 2011). Specific economic development objectives mentioned by the various HRFN representatives at that time included:

- Meaningful consultation for all economic activities in the traditional territory so that HRFN's Aboriginal rights are fully accommodated;
- A fair share of benefits from resources removed from HRFN traditional territory;
- A diverse economy consistent with HRFN environmental, cultural and economic values;
- An economy that supports increased levels of family and community well-being;
- Reduced barriers to business success by HFRN members;
- Employment and career opportunities for the members of HRFN;

- Reduced economic dependency by HRFN on outsiders; and
- Increased standard of living within the community.

Currently, the on-reserve HRFN population, in particular, faces significant location, land alienation, infrastructure, services access, education, economic, and social constraints preventing maximization of community health and well-being at the present time.

5.3 Prophet River First Nation



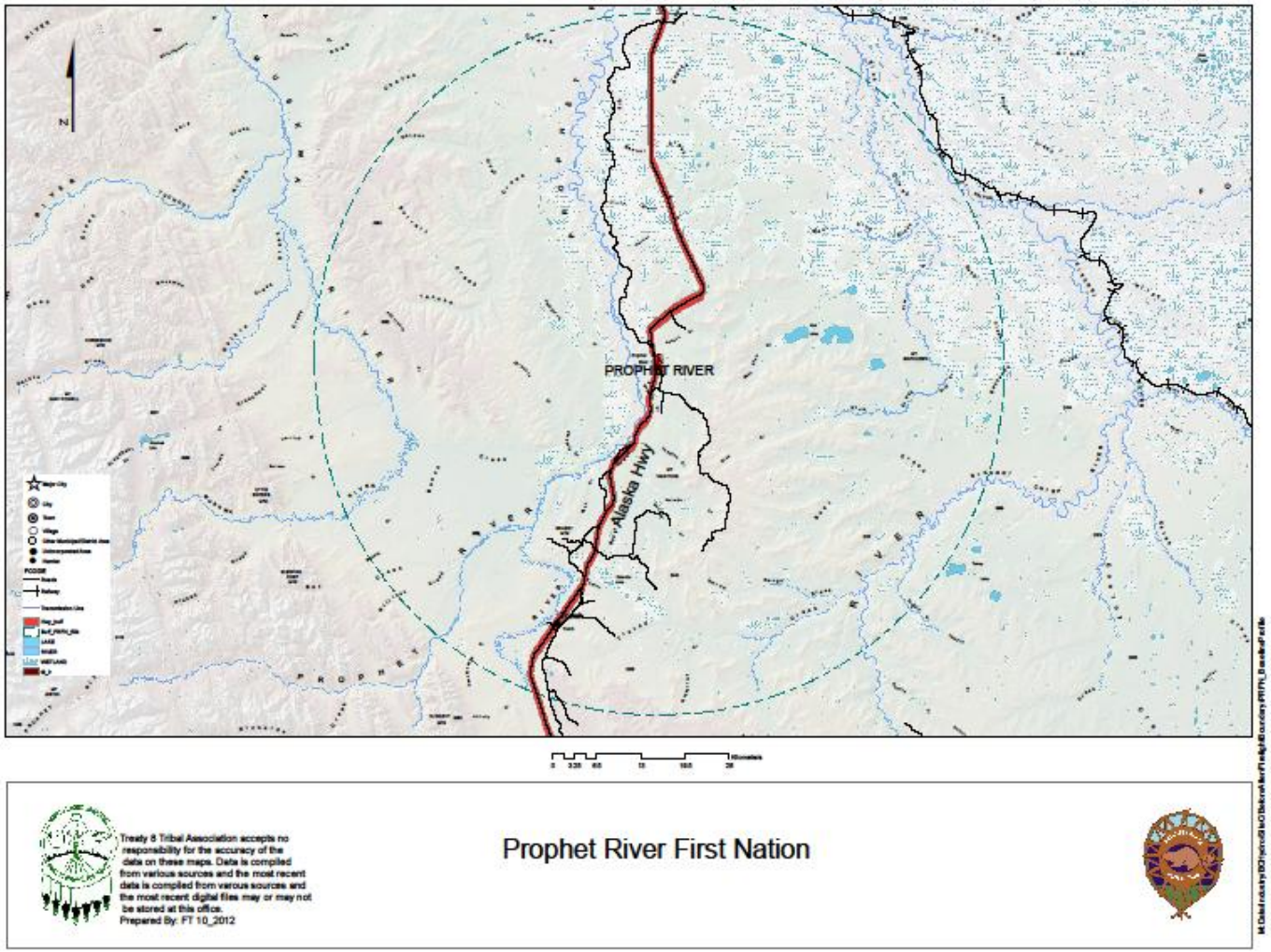
5.3.1 LOCATION

Prophet River First Nation (PRFN), also known as Dunne Tsaa Tse K'Nai First Nation, is a small First Nation community located 91 km south of Fort Nelson and 350 km north of Fort St. John. Located just off Mile 233 of the Alaska Highway, it has year-round road access. The majority of health care, recreation, and social service needs of PRFN are dealt with out of Fort Nelson. However, Fort St. John tends to be another destination for major shopping trips or more extensive health care needs.

The PRFN has one of the smaller reserves in northeast BC, consisting of 374 hectares of mostly muskeg terrain in the lower foothills of the eastern slopes of the Rocky Mountains.

The area was relatively isolated until the Alaska Highway came through in 1942. Before that, "the Prophet River people continued to practice a traditional lifestyle and with the exception of fur trading activities were subjected to little outside white influence" (Heritage North Consulting Limited no date).

Figure 11: Prophet River Location



5.3.2 POPULATION

As of summer 2012, PRFN had a total registered population of 260 (AANDC 2012c), up from 195 in 2003 and 138 in the mid-1980s (Krueger no date) and 112 members in 1978 (Brody 1981). The recorded PRFN population has been highly variable over time, potentially indicating issues in data collection or changing out-migration patterns. The 2012 population includes 105 registered members living on reserve (55 males and 50 females - AANDC 2012c) in approximately 50 households. Sixty per cent of the population now lives off reserve, a reversal from the mid-1980s, when two-thirds of PRFN members lived on reserve (Krueger no date).

Overall, PRFN population has grown by only 11 per cent between 1996 and 2011 on reserve (from 95 to 105), while the total member population has grown during the same time period by 60 per cent (162 to 260). Most of the growth has been in the "off home reserve" population, which has grown by 131 per cent between 1996 and 2011, the highest growth rate in off-reserve population of any of the four T8FNs.

Census data shows that 74.2 per cent of the population on the reserve were over the age of 15 in 2011, down only slightly from 75 per cent in 2006. The median age on reserve (27.6) in 2011 was young compared to both B.C. (38.4) and B.C. on-reserve Aboriginal (29.9) averages.[78] Nonetheless, concern has been expressed by community members about the aging population on reserve and the tendency for young people to leave the community (PR02 June 6, 2012).

Mobility statistics show that PRFN members tend to remain in their region, but more often are moving off reserve. In 2006, 50 per cent of PRFN members indicated they lived in the same community as five years ago. This is lower mobility than Doig River and West Moberly, but higher than Halfway River.

Lack of housing, lack of employment opportunities, and substance abuse are reasons cited by members for people leaving the community (Hendriks 2011).

5.3.3 TRADITIONAL LAND USE AREA

Figure 3 identifies the administrative boundary of traditional lands established by the PRFN. The actual area used by PRFN members, historically and to date, is much larger. As

[78] In the mid-1980s, Krueger (no date) noted that an astounding 74.5 per cent of PRFN members were 25 years old or younger.

noted in Webster (1997), the PRFN's traditional territory encompasses over 25,000 km^2 of northeast British Columbia, primarily in the Sikanni, Prophet and Muskwa river drainages.[79]

As described by two PRFN members, the PRFN traditional rounds covered the ground from the BC/Alberta border to the east to the height of the Rockies to the west, and from Fort Nelson in the north to the confluence of the Beatton and Peace Rivers in the south. PRFN members used to come down to gathering spots in Bear Flats and Montney, and to visit people from Doig. Family members who lived in different communities due to inter-marriage between groups were able to see one another on these visits (PR05; PR06 October 10, 2012). The PRFN have particularly strong ties to the HRFN, who also have Sekani ancestry (Heritage North Consulting Limited no date) and overlapping land use in the northern part of HRFN traditional territory and southern part of PRFN territory.

There was typically plentiful game to be found in the muskeg and mountain terrain frequented by PRFN members. As Webster (1997) notes, the Prophet River area has supported:

> high numbers of large ungulates, including moose, elk, boreal caribou, mule and white-tailed deer, mountain goat and Stone's sheep. There are high numbers of large carnivores, such as grizzly bears, black bear and wolves, and high numbers of smaller carnivores and other furbearers, such as lynx, coyote, fox, marten, weasels, beaver and muskrat.[80]

Trade routes both north to Fort Nelson and south toward Montney and Fort St. John were typically via horse trails, but people also travelled on foot, snowshoe, via canoe and using dog teams and sleds in the winter. While Prophet River's primary traditional use area is north of the Sikanni Chief River and Pink Mountain, they have close connections to the people of Halfway River and would travel (traditionally by horse and wagon) to the annual gatherings held in the Peace River valley (as noted in Ridington 1988)[81]. This connection is maintained to this day for both harvesting[82] and attending annual gatherings at Bear Flats and Attachie.

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[79] UBCIC (1980) identifies a much larger traditional harvesting area of 62,500 km2, with the Prophet River valley and the Minnaker River area near Trutch being of particular traditional importance.

[80] In recent years, cougars have also been encountered in this area, a potential indicator that climate change is shifting certain species further north (PR05 October 10, 2012).

[81] Ridington (1988) also notes that after the flu of 1918-19, some of the Beaver and Sekani people who lived closer to the Peace River came up to Prophet River area, recently emptied out by sickness, due to pressures from "white people [who] were beginning to settle the country closer to the Peace River". This is an additional indication of the close ties between PRFN members and the Peace River valley.

[82] PR05 (April 26, 2012) as well as interviews from the 2011 Site C TLUS (Candler et al. 2012) confirm that PRFN members have current traditional use activities in the area that would be flooded should Site C proceed.

Many PRFN members still maintain many aspects of a traditional lifestyle, with hunting, trapping and fishing as major sources of sustenance.[83] According to the FNFNE Study (UNBC et al. 2010b), 100 per cent of PRFN respondents harvest and eat moose meat. 59 per cent of respondents eat elk meat, and 59 per cent eat deer meat. Seventy-six per cent of people surveyed eat wild berries while 94 per cent of those surveyed eat wild fish. However, the average consumption by weight was below the BC Aboriginal average. Seventy-one per cent of PRFN adults reported fishing, 41 per cent reported hunting activities, and 29 per cent indicated they collected wild food plants. The PRFN rate of consumption of land mammals and wild birds was above the BC Aboriginal average. Moose meat, blue huckleberry and elk meat were reportedly the most popular country foods, but moose is consumed at least four times as often by PRFN members as any other fish, game or wild plants.[84]

Klua (or Fish) Lake has been and remains the primary fishing lake for PRFN members.

PRFN members indicated that the most important benefits of traditional food are that it is natural and safe to eat, indicating a relatively high level of continued faith in the quality of harvested country food, supported by the findings of UNBC et al. (2010b) on accumulation of contaminants in specific samples of country food and human hair. Market food benefits, in contrast, are convenience and ready availability, not nutritional value.

A respectful relationship with the land and animals is maintained, with hunts carefully planned and rituals of reciprocity respected (PR05 April 26, 2012).

5.3.4 LAND ALIENATION

In recent years, concerns have been raised by PRFN members about food security. UNBC et al. (2010b) reports that "53 per cent of Prophet River households worried that their food would run out before they could buy more" and 29 per cent of participants indicated they couldn't afford to eat balanced meals. Food security issues are linked to both wage economic poverty issues and to reduced availability of country food:

> Over the last few decades the DRFN and PRFN communities have seen their traditional treaty territory decimated with oil and gas, forestry, farming, ranching,

[83] PRFN members also strongly value the use of traditional medicinal plants. Between 2009 and 2011, a traditional plant study was conducted with funding provided by Encana Corporation and in collaboration with the University of Northern British Columbia. The award-winning plant study identified important areas where the people of PRFN gather medicinal plants, how the plants were used medicinally and also passed on that knowledge to the younger generation of PRFN members (PR05 Verification focus group, October 10, 2012).

[84] The FNFNE Study relied on a sample size of 17 out of 50 PRFN on–reserve member households.

> and other impacts to the land that have diminished the members' ability to hunt and fish for traditional sustenance foods. Petroleum contamination of water sources throughout the region means that community members now carry bottled water when they go onto the land to hunt, trap, fish, gather, camp, work, or engage in other traditional cultural activities. The communities have become alarmed as game animals drink from contaminated sumps and flare pits, are exposed to air-borne pollutants such as hydrogen sulphide, and eat plants with potential heavy metal contaminants from industrial development (DRFN and PRFN 2011).

In the FNFNE Study, 100 per cent of PRFN respondents reported they would like to eat more traditional foods. Lack of equipment and transportation (38 per cent of respondents), government/firearms restrictions, and difficulty of access were the top barriers keeping households from accessing more country food (UNBC et al. 2010b).

The last few years have seen a large number of referrals for development in the area. According to Bruce Thompson and Associates Inc. (2006), these include:

- Oil and gas;
- Forestry;
- Mining;
- Commercial hunting (e.g., sheep);
- Recreation (e.g., boats on rivers); and
- Other activities (e.g., roads, other infrastructure).

Starting in the 1990s, PRFN's traditional land use area has been adversely affected by additional forestry and oil and gas activities. Canadian Forest Products and Slocan Forest Products have logged in the vicinity, and oil and gas exploration increased the amount of land clearing and linear disturbance in the area. This caused some concerns among community members who rely on the forest for subsistence economic activity, as reported by PRFN members to the T8TA Treaty Education Team (2003e):

> Our trap lines – they are not alive anymore with trappers. Too many people working out there.
>
> Too many people and roads. Long time ago I can go to bush and trap [and] not see anybody for months. Now I go out and see trucks driving by trap line and lots of disturbance. Animals won't stay where there [is] lots of logging or seismic activity.
>
> I like to hunt but it is scary out there. Too many people; you might get shot.

By the mid-1990s, PRFN members were raising concerns about timber removal limiting their traditional way of life, and some 493 oil and gas wells had been drilled within the traditional lands of the PRFN (Webster 1997). Among those concerns raised by PRFN members about land use in their traditional territory in the 1990s included (Mass and Armstrong 2001):

- Oil and gas companies destroying elk and moose habitat;
- Logging on registered traplines; and
- More pollution and hydrogen sulphide releases.

At the time, a PRFN community leader stated that "they are wrecking our futures; our cultures... they don't listen to us, they just give us the maps" (as reported in Mass and Armstrong 2001).

Today, PRFN's traditional lands remain "surrounded by oil and gas developments, including fracking for the shallow shale deposits" (DRFN and PRFN 2011).

Oil and gas (65 per cent of respondents), forestry (59 per cent), hydro-electric projects (41 per cent) and farming (18 per cent) were identified as industrial activities limiting PRFN members' access to specific preferred country food harvesting areas. Eighty-two per cent of PRFN respondents indicated that moose was less available as a result of these industrial land alienation factors, followed by deer (35 per cent), fur bearing mammals and fish (29 per cent each). PRFN members have also reported increased problems with country food availability and health status, as reported in T8TA Treaty Education Team (2003e):

> Moose have been sick. There have been a lot of little cysts found in the meat. This is probably from oil and gas.
>
> I remember hunting and we found a big cyst on the hide of the moose, size of an orange. We left the hide.
>
> Lots of the fur bearing animals are gone, we see them once in a while, but hardly.
>
> We used to have lots of rabbits; now we don't hardly see them anymore; rabbit soup would be good.

5.3.5 ECONOMIC ACTIVITY

Primary economic activities in Prophet River have changed over time. As noted by Webster (1997), local hunting and guiding revenue historically brought "significant amounts" of

money into the communities along the Alaska Highway each year. By 1984, seasonal slashing and fire fighting were identified along with trapping as the main occupations (Prophet River Indian Band 1984).

In 2012, although similar seasonal labouring on the land is still common, main economic activities in the community include a restaurant and commercial services, work camp establishment and management, and catering (T8TA 2012c). The community wage economy lacks diversification: "Prophet is very dependent on oil and gas – [I] worry if that goes there is nothing" (PR06, Verification focus group, October 10, 2012). Members noted a strong need for skilled trades training (PR02, June 6, 2012).

The community still suffers from widespread unemployment, due primarily to its remoteness[85] but also related to education and training gaps. In 2001 Prophet River had an unemployment rate of 66.7 per cent amongst females and 60 per cent amongst males. Employment rates for the same year in Prophet River were 37.5 per cent for males and 66.7 per cent for females (Statistics Canada 2001c). By 2006, the official unemployment rate had declined to 33.3 per cent but this number is likely under-reported (Statistics Canada 2007c).

Prophet River settled a massive law suit with the government in the 2000s (Key informant 02, August 8, 2012). Monies from the large settlement are being managed, invested and distributed through a Trust Fund. For a portion of the on-reserve population, those monies have become their main source of income (upwards of 31 per cent of PRFN members reported "other" sources of income than wages, pensions, self-employment, workers compensation or social assistance as their primary source of income in the FNFNE Study – UNBC et al. 2010b).

UNBC et al. (2010b) suggests the main sources of income in Prophet River are wages, followed by Trust Fund ("other") payments, disability benefits, and social assistance. Social assistance levels are relatively low at approximately six per cent, compared to upwards of 22 per cent on average for BC First Nations in the FNFNE Study.

Business development, both by the Nation and by individual members, has been limited to date. PRFN currently (fall 2012) lists the following seven Band Contractors:

[85] Hendriks (2011) identified that "about 25" PRFN members have licenses. The lack of driver's licenses may severely constrain acces to work in Fort Nelson or points south.

Table 6: PRFN Businesses (PRFN no date)

Name	Type of Business	Ownership
Prophet River Operations Ltd.	N/A	100 per cent Band owned
MOU with EOS Pipeline and Facilities Inc.	PRFN has 50 per cent interest when working in PRFN traditional territory	100% Band;50 per cent Joint Venture partner
Klua Ventures	N/A	100 per cent Member owned
EK Water Services	Water	100 per cent Member owned
JBand S.T.A.R. First Aid Services	First Aid	50 per cent Member owned
Little Beaver Contracting Enterprise	N/A	50 per cent Member owned
Prophet River Contracting Ltd.	N/A	100 per cent Band Members owned

The Nation does not own any forestry tenures, but through an agreement with Canfor is provided with some wood for local uses on a regular basis. One PRFN member holds down a seasonal position as a guide in the Williston Reservoir area for a non-Aboriginal guiding/outfitting operation (pers. comm., Brian Wolf, November 20, 2012).

5.3.6 LANGUAGE AND CULTURE

PRFN members - who know themselves as Dunne Tsaa - traditionally spoke Beaver. The PRFN is among the T8FNs trying to preserve and promote this language, which has experienced a steady decline in use and transmission to younger people, in part as a result of residential schools.

According to 2001 Census information, 45 per cent of respondents spoke their Aboriginal language at home, 60 per cent of respondents had knowledge of the Aboriginal language, and 50 per cent of respondent's identified their Aboriginal language as their first learned language. This appears to have reduced over time. In 2011 there were 27 PRFN members (11 per cent[86]) who were fluent speakers of the Beaver language, 11 members (4.5 per cent) who speak or somewhat know the language, and 120 "learning speakers" (49 per cent – PRFN 2012).

[86] This was based on 2011 Nation total membership data at the time of 244 (PRFN 2012).

5.3.7 GOVERNANCE SYSTEM

Mekenetcha, who later became known as Bigfoot, and Deculta (the Prophet for which Prophet River is named) attended a 1910 Treaty conference, but refused to sign at that time.[87] Nonetheless, in 1911, 98 Sekani people who resided in and around Prophet River were added to the annuity rolls (Metes 1994). While current-day PRFN members settled in the vicinity of Prophet River during the 1930s and 1940s due to its proximity to their traplines, no formal reserve was set up until the early 1960s (Metes 1994). PRFN was part of the Fort Nelson Band until 1973 (UBCIC 1981).

PRFN's currently elected leadership is comprised of two councillors and one chief. Elections are held three years, in accordance with the custom electoral system. Krueger (no date) noted that much of the informal decision-making in this small community occurs based on "close, inter-family communication in [a] social setting".

PRFN has been affiliated with the Treaty 8 Tribal Association since it was formed in 1982. Heightened levels of industrial activity on the land has caused substantial concerns among PRFN members about their decreasing role in stewardship and management of the land, as well as limited benefits to go along with adverse effects of industry, as reported by the T8TA Treaty Education Team (2003e):

> It's important for the Native people to have a say [about] what goes on with the land.
>
> How come government is getting all the money from our lands when we still own the land?

5.3.8 HEALTH AND SOCIAL SERVICES

Health, wellness and social services available to the people of PRFN on reserve are limited. A nurse from the Northern Health Authority visits the community about once a month. This is inadequate, according to a T8TA health care provider (T8FNs staff 04 July 9, 2012). To receive specialized health care or visit a doctor, PRFN people must travel to Fort Nelson or Fort St. John.

[87] It was written at the time (as relayed in Heritage North Consulting Limited no date) that one of the headmen at the 1910 Treaty negotiation stated to the commissioners that "God made the game and fur bearing animals for the Indians, and money for the white people: my forefathers made their living in the country without white men's money and I and my people can do the same"; refusing to take Treaty and leaving.

Interviews with PRFN members and staff indicate a need for improved local health care and community support services by way of a visiting doctor, a community wellness coordinator, a family support worker, access to Alcoholics Anonymous and a drug and alcohol counsellor, enhanced elder services, youth and/or recreation programming and a recreational centre (Hendriks 2011; PR12 July 9, 2012). There are also no licensed daycare facilities on reserve, although there is a pre-school program through the school.

Although a small community with severely limited service provision capacity, PRFN offers some programs, such as a meal program, home care support, a Native Alcohol and Drug Abuse Program (NAADAP) and is intending to provide a Head Start program (PR12 July 9, 2012). PRFN, however, experiences the same challenge as other remote communities in recruiting and retaining qualified staff to provide services and programs to the community.

PRFN ostensibly has an on-reserve police program with an RCMP office at the Health Centre. However, according to respondents, the RCMP has a limited presence in the community (PR12 July 9, 2012). This is partly attributable to the fact that policing services are provided by the RCMP detachment based an hour's drive away in Fort Nelson.

In terms of health status, UNBC et al. (2010b) reports the following characteristics (among a sample of 17 out of 50 households):

- Higher than average obesity rates;
- A much higher rate of smoking;
- Higher activity levels than the BC Aboriginal average for women; and
- 47 per cent ate vegetables from their garden or a community garden, slightly lower than average (potatoes, carrots and tomatoes were the primary crops).

5.3.9 EDUCATIONAL SERVICES AND STATUS

PRFN has a preschool and an elementary school to Grade 6. Students in grades 7 to 12 are bussed to Fort Nelson. Community members have long expressed concerns that attending school in Fort Nelson keeps children away from their community too long during the regular school session (Prophet River Indian Band 1984). There is interest in adult basic education amongst the membership as well.

Educational attainment has traditionally been and remains poor among PRFN members.[88] 2001 data indicates that 60 per cent of PRFN members (on reserve) aged 20-34 had less than a high school graduation certificate and 40 per cent of the same population had a high school graduation certificate. At that time, no respondents of this age group had a college or university certificate, diploma, or degree (Statistics Canada 2001c).

5.3.10 INFRASTRUCTURE AND UTILITIES

PRFN has the following, very limited, infrastructure: A band administration office, health centre, a school, and a recreation centre.

Infrastructure improvements are occurring. In October 2012, a new multiplex facility opened in the community that includes a new band administration building and an elders' centre, among other amenities (PR05, Verification focus group, October 10, 2012).

PRFN operates a volunteer fire department and all houses on the PRFN reserve are equipped with sprinkler systems. Water for the community is supplied by one reservoir and there are two community wells tapped into a groundwater aquifer. There is no water treatment plant located on the reserve. The only recent survey data on PRFN water (UNBC et al. 2010b) indicated that the majority of members have tap water, 77 per cent drink it, and 94 per cent use it for cooking. Half of the households also reported purchasing bottled water from Fort Nelson, however.

Interviews in 2003 indicated that PRFN community members were generally satisfied with the quality and maintenance of the existing 32 housing units on reserve (Statistics Canada 2003). However, even with a higher number of houses (49 by 2006 – Statistics Canada, 2007c), some members still express a desire for more housing in the community (PR02 June 6, 2012). One constraint is that available reserve land for more housing is limited. This is a barrier for those PRFN members who live off reserve, and wish to return to their community.

5.3.11 FROM THEN TO NOW: CHANGE OVER TIME

A significant driver for change in the PRFN community has been land and resource development on traditional lands, such as oil and gas, forestry, mining, commercial and recreational hunting by non-Aboriginal people (Bruce Thompson and Associates Inc.

[88] See Section 6.4 for a broader discussion of factors contributing to this common issue among the T8FNs.

2006). These physical works (especially linear developments like seismic lines, pipelines rights-of-way and roads) have increasingly alienated PRFN members from their traditional lands.

In the mid-1980s, Krueger (no date) noted that there were a variety of serious social issues facing the community, many of which still face the community to this day:

> Social dysfunction... characterized in many single parent families, dependence on welfare, transient sexual relationships, and low general income levels.

Economic development in Prophet River has been limited due to the remoteness of the community, limited access to markets, poor educational attainment, and substance abuse issues. The community struggles on an ongoing basis to deal with addiction and abuse issues, and has been struck by more than its share of tragedies related to social dysfunction (PR02 June 6, 2012). The over $100 million in settlement money received from government in the late 2000s has yet to bring much in the way of substantive change, for better or worse, to the community, although the opening of the new multi-purpose facility in October 2012 is an exciting change for the community. There has also been a trend in recent years toward young people leaving the community to access jobs and educational prospects that simply are not available in Prophet River at this time (PR02 June 8, 2012). This raises concerns about long-term community sustainability and "brain drain".[89]

5.3.12 LOOKING AHEAD

As a small community, PRFN has had substantial capacity constraints on governance, in part related to out-migration of job-seekers. This has led to limited long-term planning capacity. As such, at the present time, there is no strategic plan for PRFN. Nonetheless, based on feedback from community members, Table 6 identifies some of the current strengths and hurdles facing PRFN as it moves forward.

[89] The concept of brain drain applies when those people in a small, remote, or economically troubled community who have the highest capacity to work in the wage economy are drawn away to live and work places where economic activity is more vibrant. This can create substantial strain on community administration and cohesion.

Table 7: Prophet River First Nation – Current Strengths and Hurdles

Strengths	Hurdles
Fiscal Position (Settlement from government)	Drug and alcohol abuse
Some people still self-sufficient and can hunt, fish and trap	Land alienation reducing harvesting and time on the land
Housing generally in good repair	Trend toward outmigration of young working age people
New administration and cultural centre	Continued high on-reserve unemployment and low educational attainment
Reduced reliance on social assistance in recent years	Remoteness limiting access to economic and educational opportunities

5.4 West Moberly First Nations

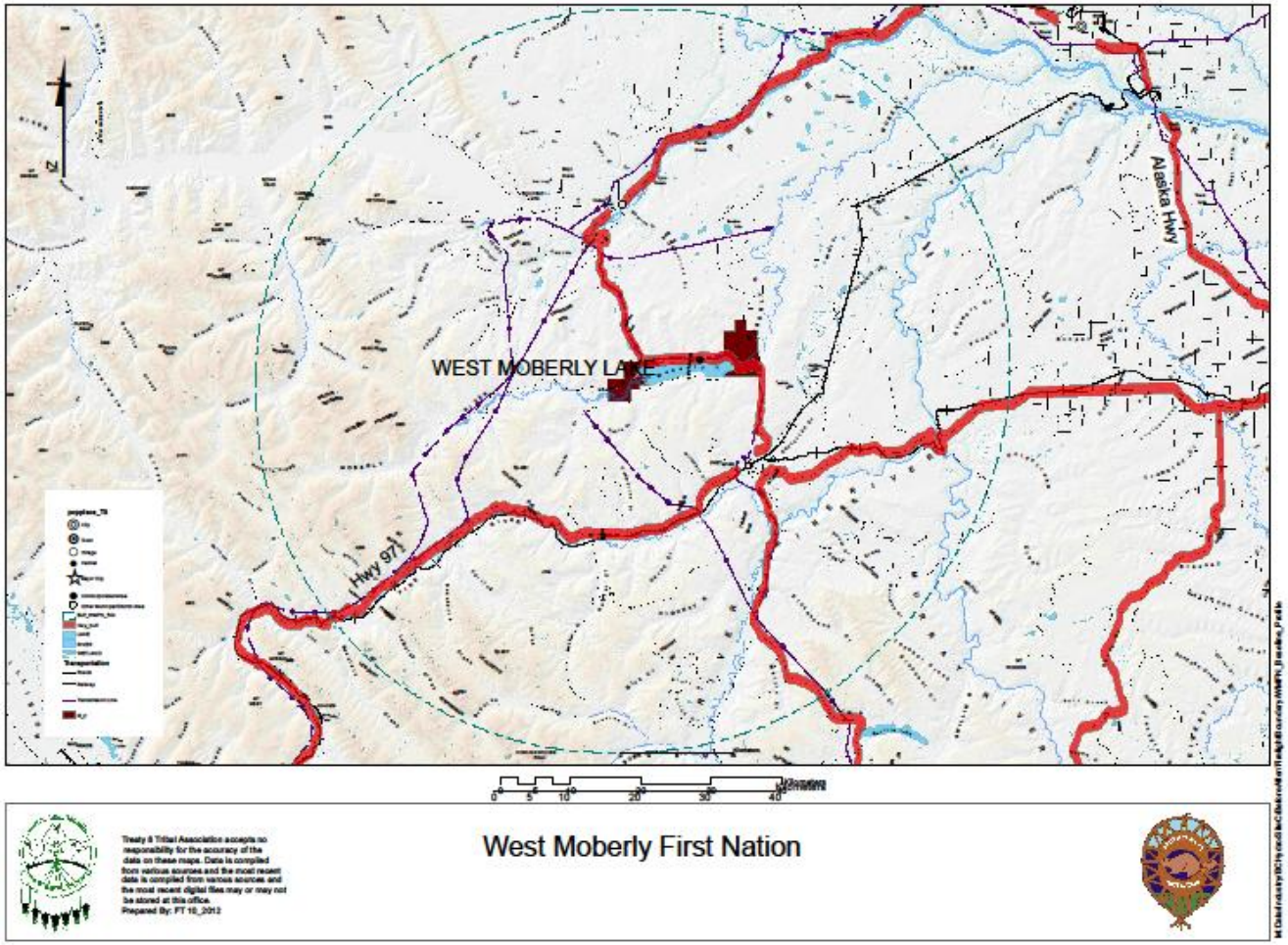
5.4.1 LOCATION

West Moberly First Nations' (WMFNs) reserve is located on the northwest side of Moberly Lake, approximately 90 km southwest of Fort St. John and 350 km north of Prince George. The community is located approximately mid-way between Hudson's Hope (30 km to the north) and Chetwynd (30 km to the southeast) on Highway 29. Day-to-day needs such as shopping, education and recreation are primarily accessed by the on-reserve population out of Chetwynd, which is a larger community than Hudson's Hope. More dedicated shopping, recreation, health care and social services needs are sourced from Fort St. John and, to a lesser degree, Dawson Creek, which is located 127 km east on Highway 97.

The reserve is 2033.6 hectares, but as of 2012 WMFNs is in active Treaty Land Entitlement talks with the federal and provincial governments to expand its reserve lands(pers. comm, Chief Roland Willson, May 18, 2012).

WMFN's residential reserve, the Saulteau First Nation (SFN) reserve on the east side of the lake, and the unincorporated community of Moberly Lake, are all located on the shores of the lake.

Figure 12: West Moberly First Nations Location



5.4.2 POPULATION

Unlike the other T8FNs, WMFNs has a substantial portion of its population with Cree (some with ties to Summit Lake south toward Prince George), Saulteau (through inter-marriage with the nearby Saulteau First Nation), Danne-zaa, or a mixture, in their ancestry.

WMFNs' on- and off-reserve population increased 10 per cent between 2001 and 2006 (Statistics Canada 2007d), and more recent data shows the population is still growing by 75 per cent between 1996 and 2011 (from 135 to 237). Overall, WMFNs' population has grown by 20 per cent between 1996 and 2011 on reserve. The off-reserve population has grown much more rapidly than the on-reserve one, with 140 per cent growth between 1996 and 2011. Sixty-three per cent of WMFNs population now lives off their home reserve, the highest percentage of any of the four T8FNs. As with Prophet River, there has been a population shift toward living off-reserve since the mid-1980s, when some 65 per cent of WMFNs members lived on reserve (Krueger no date).

Like all four T8FNs, WMFNs has a small population. In the mid-1980s, there were only 66 registered band members (Krueger no date). As of 2012, WMFNs has a total registered population of 237 members, with an on reserve population of 85 members (41 males/44 females), 3 members living on other reserves, and an off-reserve population of 149 members (68 males/81 females) (AANDC 2012d). Currently, there are approximately five elders living on reserve and another 10 living off reserve, mostly in Prince George (WM06, Verification focus group, October 10, 2012). A substantial but unknown number of WMFNs members live in the nearby communities of Moberly Lake, Saulteau First Nation, Chetwynd, Hudson's Hope and Fort St. John. Many of these members keep strong ties to their home community and traditional lands.

The median age of the on-reserve population in 2011 was 22.5 and 30 per cent of the population was over the age of 15 (Statistics Canada 2012d). This is indicative of a very young demographic profile.

WMFNs members have been the most mobile of the four T8FNs in recent years. In 2006, only 25 per cent indicated they had lived in the same community for at least five years (Statistics Canada 2007d). This was likely related to both the education and employment opportunities available in other PRRD communities that are not available at Moberly Lake, as well as issues with lack of housing on WMFNs reserve lands.

5.4.3 TRADITIONAL LAND USE AREA

WMFNs members regard themselves as Dane-zaa, more specifically Mountain Dunne Za, the people that have used the Rocky Mountain Foothills to the west of the community since time immemorial, including large portions of the area now flooded by the Williston Reservoir (WMFNs Land Use Department 2006). Theirs is a semi-nomadic heritage. They traveled to their hunting camps every season, and daily life was committed to providing food and shelter for themselves and their families.

Historically, Mountain Dane-zaa members gathered natural materials for food, heat, shelter, tools, trade items and crafts, during a seasonal round that extended from Summit Lake in the south up to the boundaries of the Kwadacha Nation, in what used to be the valleys of the Parsnip and Finlay Rivers prior to the creation of the Williston Reservoir. WMFNs members used lands up towards Halfway River all the way to near the Alberta border along the Peace River (WM06 October 10, 2012). As noted in SFN and WMFNs (no date):

> In the past, seasonal movement of First Nation people was driven by animal migration and habits, as well as time of year. This spread the people over large areas. When the fur trade came to the area, core resource use centred around Moberly Lake and adjacent lands. Today the Pine River, Moberly River, Cameron Lakes and Boucher Lake remain as critical areas for hunting and gathering activities. First Nation people also continue to pick medicines within the Peace Moberly Tract.

The Dane-zaa first encountered Europeans between 1789 and 1793. At that time, these First Nations people were established in the Peace River valley and all over the northeast slopes of the Rocky Mountains. Change occurred rapidly thereafter. By the end of the 18th century the Northwest Company's forts were established and First Nation movements began to stabilize around them. During the fur trade era, trapping became an important aspect of life but has declined in economic importance in the past half-century with declining fur prices.

The presence of large amounts of fish, game and berries was a primary reason why WMFNs members settled into primary residence on the north shore of Moberly Lake.[90]

[90] "Dane-zaa people knew that [Moberly] lake by a different name and it translates into English as 'The Lake of Plenty' because that was the lake they used to go to when their food caches ran out in the late winter and my grandmother used to tell me that. I guess her grandfather said they used to take a squirrel and just pluck all of that hair off and tie a string to it and throw it in the water to use as bait and then when a trout grabbed the squirrel and swallowed it they dragged it out of the ice and they said there were massive fish and that's what fed them through the winter. So the people were dependent on the fish that were in that lake" (WM01 April 26, 2012).

Many members of the WMFNs still maintain a traditional lifestyle with hunting, trapping and fishing as major sources of sustenance. The land is rich in moose, deer, elk and up until recent years, caribou in the uplands. In the headwaters of the Upper Moberly River, the Rocky Mountain foothills have historically held sheep and goat. Fish were plentiful in the streams, rivers and lakes, with lake trout historically plentiful in Moberly Lake along with northern pike, walleye, burbot and bull trout (and to a lesser extent arctic grayling and mountain and lake white fish). The Upper Moberly River and Cameron Lakes still support large populations of whitefish (WM06, Verification focus group, October 10, 2012).

Many WMFNs members continue to supplement their incomes through traditional fishing, hunting and trapping (WMFNs 2007). Six WMFNs members are known to actively continue trapping and three of them own provincial traplines.

There are important communal aspects to harvesting. The Nation maintains a communal trap line that any member who wants to can use, and there is also a system whereby those unable to harvest (due to lack of mobility or lack of funds, for example) can still access country foods:

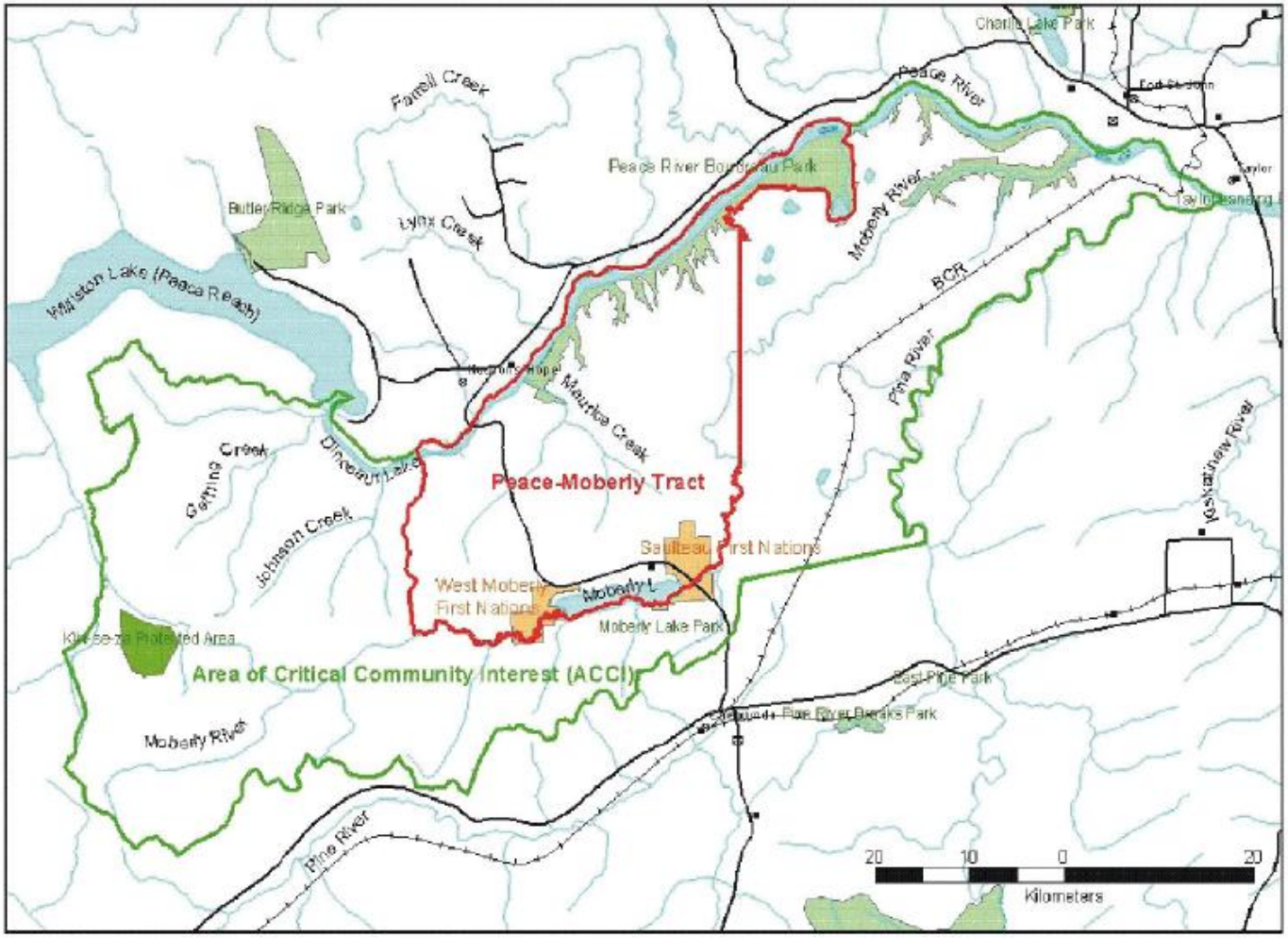
> What we do at home is we appoint a community hunter and what the community hunter does is hunt for those single parents, you know the women, that don't have anybody to hunt for them, elders, or anybody that just needs meat and they get paid to do that, that's basically their job (WM01 April 26, 2012).

WMFNs members preferentially harvest west of Moberly Lake, up Johnson Creek Road and South Moberly road, west of Moberly Lake. There is also a community trapline in the Upper Moberly Watershed.

WMFNs has defined an Area of Critical Community Interest for its members, as shown in Figure 13 on the next page.

The WMFNs Area of Critical Community Interest includes the entirety of the Upper Moberly River watershed, which drains into the west side of Moberly Lake, all of the Peace Moberly Tract north of the community right up to the south shore of the Peace River, and all the lands on the south side of the Peace River up to the Pine River confluence. It also includes the Carbon River watershed draining into the Williston Reservoir. The headwaters of the Upper Moberly Watershed reach up into sacred ground, draining the southern slopes of one of the Twin Sisters, mountain peaks that are central to the T8FNs' cultural and spiritual identity (identified as Klin-se-za Protected Area in Figure 13).

Figure 13: WMFNs Area of Critical Community Interest (Government of British Columbia, SFN and WMFNs 2006)



5.4.4 LAND ALIENATION

> If you go in anywhere this side of Johnson Creek and Williston [Reservoir] in the hunting season, you cannot find a place to camp or hunt moose because of the amount of activity; WMFNs selected Moberly Lake for their reserve due to the wildlife and now that wildlife is being affected by development; concern that now that caribou is gone, next most important species to WMFNs, namely moose, will be next - priority species are caribou, moose, elk, deer in that order; WMFNs members must now hunt elk but this is not a preferred species (scoping results from meetings with WMFNs members and staff – Hendriks 2011).

In recent years, WMFNs members have expressed strong concerns about industrial activities impacting on key areas within their traditional territory. WMFNs has identified a number of adverse effects of development, including reduction in wildlife and plants, urbanization encroachment, and poor management of forestry and oil and gas exploration, extraction and transport (WMFNs 2007). Many traditional activities have reportedly been constrained, including but not limited to:

- Hunting in the Del Rio area northeast of the community and south of the Peace River;
- Fishing in the Pine River, which has largely been avoided by WMFNs members since the oil spill of 2000 (Willson: 2010); and[91]
- Fishing in what used to be the Finlay and Parsnip rivers. As noted by WMFNs Land Use Department (2006):

> Predatory fish such as Bull Trout, Lake Trout, and Rainbow Trout in the Williston Reservoir are contaminated with mercury. As such, there is a health advisory in place that bans the consumption of fish in the manner that the Mountain Dane-zaa have done since time immemorial. Further, the lake trout in Moberly Lake are nearly extirpated because the Crown has mismanaged the population for some time now.

Lake trout becoming increasingly rare in recent years has caused biophysical, economic (traditional harvesting), and cultural impacts on WMFNs members, for whom lake trout

[91] WMFNs Land Use Department (2006) notes: "There was a significant oil spill on the Pine River that destroyed the riparian ecosystem for many years – a traditional law has been passed for the lands surrounding the river, more specifically, the area is classified as "at rest" and is therefore subject to protection".

was previously an important supplement to their diet (pers. Comm.., Councillor Clarence Willson, May 18, 2012).

WMFNs' leadership, members and Land Use Department have actively attempted to minimize industrial activities within the Area of Critical Community Interest in recent years. Nonetheless, WMFNs has remaining concerns about potential impacts from potential future industrial activities:

- Oil and gas exploration and transportation (pipelines);
- Hydroelectric power lines travelling through the territory from the BC Hydro power grid established on the Peace River northwest of Moberly Lake;
- Potential coal developments within or surrounding the Upper Moberly watershed;
- Increased traffic and non-Aboriginal camping at the Cameron Lakes area;
- Forest harvesting activities, which have already accelerated in recent years through what is widely perceived in the community to be uncontrolled and weakly regulated harvesting of pine beetle infested timber; and
- Increased access and population growth at Moberly Lake, which has already created significant concerns in the community regarding higher levels of raw sewage in Moberly Lake, and increased boat traffic (InterraPlan Inc. 2004).

Among the cumulative effects on traditional land use practices and cultural activities in the WMFNs Area of Critical Community Interest are the following (partially drawn from Willson 2012):

- Increased flood risk, exemplified by flooding at Moberly Lake in June and July 2011;
- Reduced confidence in fish and water. WMFNs members will not "dip a cup" into streams any more due to contamination concerns;
- Contamination of water, deer and moose from oil and gas activity in the Del Rio area, with particular concerns about open sumps and flare pits (SFN and WMFNs no date);
- Near extirpation of the Burnt Pine caribou, WMFNs preferred cultural species;
- Reduced moose habitat but increased elk habitat in Upper Moberly and Johnson Creek Watersheds. Moose has become the default preferred cultural species for harvesting with so few caribou still alive;

- Increased non-Aboriginal residential and recreational pressures on both water availability and contamination levels (boating, sewage treatment, and introduction of invasive species into Moberly Lake); increased hunting pressures via roads;
- An unknown quantity of wildlife killed by industrial activities; and
- Loss of cultural practices (making clothing, arts, tools), and associated loss of inter-generational knowledge transfer.

Overall, environmental degradation, adverse impacts on wildlife distribution and numbers, especially through non-Aboriginal hunting pressures, and reduced "quiet enjoyment of the land" by Aboriginal people (Key informant 04 June 27, 2012), have combined to cumulatively reduce the ability of WMFNs to meaningfully practice their Treaty rights. WMFNs concerns about these cumulative effects have led the Nation to consistently call for proper regional cumulative effects assessment throughout the 2000's, which led to the Burnt Pine Caribou legal case.

In 2010, the WMFNs initiated legal action against the Crown for issuing two exploration permits to First Coal Corporation and a license to cut 41 hectares of timber in an area that was subject to WMFNs Treaty rights to hunt caribou. WMFNs claimed that the province failed to consult and accommodate their treaty rights to hunt caribou. The court found that the province did not adequately consult, nor did it reasonably accommodate the WMFNs on those decisions and therefore put a stay on the issuing of further exploration permits and suspended the license to cut in order to allow for consultation and proper accommodation of WMFNs rights (*West* Moberly *First Nations v. British Columbia (Chief Inspector of Mines) 2010 BCSC 359*).[92] The province appealed this decision, but in 2011, the BC Court of Appeal upheld the original decision to quash the permit.

Despite recent victories by the community in blocking tenure and development activities in the Upper Moberly watershed and nearby areas, pressures remain. WMFNs' concerns with the effects of oil and gas on ecosystem health were confirmed in the mid-2000s when independent scientific work supported by the WMFNs and Health Canada found that the majority of gas sumps and flare pits tested in the Del Rio and Peace Moberly Tract areas were contaminated by salts, metals and hydro-carbons (SFN and WMFNs no date). Animals such as moose (actually observed drinking sum water), deer, elk and bear are likely to ingest chemicals out of these contaminated standing water locations, contributing to cumulative effects on wildlife population health in Dane-zaa territory (as reported in Willson 2010).

[92] More information on this case is available at http://www.millerthomson.com/en/publications/newsletters/environotes/2010-archives/september-2010/west-moberly-first-nations-v-british.

PRRD consultations in the mid-2000s found that WMFNs members had strong concerns about continued oil and gas development, coal bed methane prospects in their Area of Critical Community Interest, existing cumulative effects of industry, and proposed logging in the LeBleu Creek (George Weekzhie) area (InterraPlan Inc. 2004).

5.4.5 ECONOMIC ACTIVITY

> At West Moberly I can say unequivocally that everybody that wants to work is working and almost all of them have good jobs. Most of the people who want higher education or training have access to it and are getting into it and a significant percentage of them are completing it (Key informant 04 June 27, 2012).

WMFNs has perhaps the strongest per capita economic activity of the four T8FNs at this time. WMFNs workforce participation rate in 2006 was 71.4 per cent, while the employment rate was 57.1 per cent. Unemployment data for WMFNs for 2006 is unavailable, but at the time, employment rates were only 33.3 per cent.[93]

The proximity of its reserve to populated areas (less than thirty minutes commute from either Chetwynd or Hudson's Hope, as well as a fairly large rural population around Moberly Lake itself) puts WMFNs in a less remote location than the other three T8FNs. Chetwynd, a community of about 3000 located twenty-five minutes from WMFNs home reserve, has a strong (though cyclical) forestry sector (Scarfe 2006). Hudson's Hope, a smaller community, nonetheless supports substantial employment in the hydro-electric production sector at the two dam sites and power facilities. However, there is no evidence that WMFNs has received extensive benefits from the employment or business opportunities in the hydro sector at this time or historically. Indeed, WMFNs members and T8FNs in general note limited engagement with BC Hydro across employment or business opportunities, or for consultation about compensation for past infringements (as noted in section 4.3.3).

Gravel extraction and public administration (e.g., of the Nation, education and health) have been among the main economic activities in West Moberly. Agriculture is limited largely to ranching and farming owned by WMFNs in the "Hay Camp" and Misty Meadows Tsah-Keh-Ne-Cheleh Ranch area that straddles the main branch of the Upper Moberly River just west of Moberly Lake.

While the primary resource extraction activity in the Upper Moberly watershed has been forestry in recent years, especially given the rush to remove dead trees caused by the

[93] Given the extremely small size of the community, great caution is required when examining this Census data.

mountain pine beetle epidemic, WMFNs have reportedly not been heavily involved in this sector (WM06, Verification focus group, October 10, 2012). With the expansion of the coal mining sector in the Pine Pass and Tumbler Ridge, however, new employment opportunities have arisen for WMFNs members. According to a WFMNs leaDer, three to four members are currently (fall 2012) working at the Willow Creek Coal Mine, and this has reduced from approximately 11 with a reduction in the mine's sub-contractor workforce. There are training programs and employment opportunities at other area coal mines as well (WM06, Verification focus group, October 10, 2012).

Since the relocation of the community to its present reserve lands in 1977, community economic development initiatives have included:

- The incorporation of WMFNs Dunneza Ventures LP, which provides contractual services for the minerals and forestry sectors;
- WIIS Broadband;
- A joint Venture and partnership in Six Nation Ventures;
- A joint Venture and partnership in Three Nations Ventures, Dokkie Windfarm project;
- Fee simple land acquisitions such as Tsay-Keh-Ne-Cheleh Ranch (a cattle and hay operation west of the community) and Summit Lake; and
- Partnerships in two Tree Farm Licenses and forestry management.

The Dunne-Za Lodge is another community-owned venture with cabins and a meeting room on the shores of Moberly Lake.

Individual WMFNs members own contracting companies to serve the oil and gas industry and forestry industry (WMFNs 2007) and other economic activities include logging, backhoe contracting, and trapping. Currently, an estimated 16 to 18 WMFNs members are self-employed in whole or in part, with seven member-operated businesses (WM06 Verification focus group, October 10, 2012).

WMFNs has expressed a strong commitment to sustainable economic development, including promoting a community garden, planning for a commercial greenhouse for indigenous plants, and expressing a vision for a green energy community. Another of the community's goals is to get more young people involved in skilled trades. All in all, there is an emphasis for the community to move from a reactive, labour-oriented resource extraction economy involved at the front end of development (e.g., cutting seismic lines) toward value-added, higher skill and long-term revenue-generating opportunities (e.g.,

equity shares in resource development companies (WM06 Verification focus group, October 10, 2012).

There is also a desire to balance social and cultural values alongside economic development. WMFNs (2007) identified the following elements of a WFMNs Economic Development Vision:

- Elders/youth are important;
- Maintain and create new infrastructure;
- Preserve and sustain Culture and language;
- Create and promote Human Resource development;
- Promote independence/ self sufficiency for WMFNs;
- Maintain positive community profile; and
- Create a path and plan for the elimination of lateral violence.

5.4.6 LANGUAGE AND CULTURE

> [Our] way of life is dying (WMFNs member in T8TA Treaty Education Team 2003d).

According to WMFNs (2007), WFMNs is a Beaver and Cree speaking community that promotes holistic, traditional, and modern healing practices within the community. There is also support from WMFNs Culture Program for maintaining the traditions and culture of the Beaver and Cree peoples.

Language maintenance is an ongoing struggle in the community. In 2006, 20 per cent of the WMFNs population reported that their Aboriginal language was their first learned, 20 per cent of the population speaks their aboriginal language at home, and 30 per cent of the population have knowledge of their aboriginal language (Statistics Canada 2007d). However, more recent data (T8TA 2011b) indicates that only 18 per cent of the WFMNs members had any knowledge of Dane-zaa, with only one fluent speaker. It is worth noting that there is no comparable data on Cree dialect speakers, so the total numbers of WMFNs First Nations language speakers will be higher. T8TA (2011b) also indicated that in addition to the one fluent Dane-zaa speaker, there were 26 WMFNs members who understood or speak somewhat, and 10 “learning speakers”.

WMFNs has Beaver and Cree courses for young children. Some community members still speak Cree, but there is "almost no one left who can speak Beaver" (WM06 Verification focus group, October 10, 2012). The effects of residential school have been implicated in the loss of language in West Moberly (T8TA Treaty Education Team 2003a).

WMFNs hosts several cultural events and activities throughout the year, such as the West Moberly Days, an annual event that offers members and visitors opportunities to learn about the WMFNs' culture and traditions (WMFNs 2007), seasonal hunting and camping trips, a Dream Catcher conference, and winter traditional language and skills program (WMFNs no date). Many events are of the everyday variety, also reinforce the need for daily ceremony and cultural celebration: "They always have a dance and their drumming and things like that, it's always good for the younger kids to see that so they can grow up with it" (WM07 July 11, 2012). The same WMFNs youth noted that there always seems to be a good excuse for a community feast that many local residents, including a large youth contingent, take advantage of.

WMFNs members are especially proud of the skills they have passed on to the next generation of harvesters:

> In the 1990's we started with our younger ones... We started taking them out to the bush and we started teaching them how to hunt, how to trap, how to do everything. Today those young people at West Moberly now hunt on foot. They'll drive to where they want to go and then from there they will hunt on foot. They don't go drive through the bush with a quad and go hunting. My granddaughter can skin a moose, can make drymeat, can make moccasins, can bead, the only thing she really wants to learn how to do now is how to make moose hide (WM01 April 26, 2012).

Like all T8FNs, WMFNs has expressed a strong commitment to cultural maintenance. Among the priorites for continued cultural vitality identified by the community are the following initiatives (WMFNs 2007):

- Cross-cultural awareness training for employers hiring WMFNs members and/or working on its traditional lands;
- Greater incorporation of elders into schools, work and governance;
- Promotion and sales of cultural crafts at tradeshows;
- More cultural activities with daycare, schools, WMFNs staff, Elders, and community;
- Extra curricular activities - drumming teachings (drum songs);
- Promote increased language in community (reading, writing, and oral)
- Courses on traditional herbal medicines and self healing; and

- Documentation of elders' stories.

As noted in the Preamble to this Baseline Community Profile, WMFNs also hold strong attachment to cultural and spiritual places, harvesting and ecological values, and gathering places of the Peace River valley.

5.4.7 GOVERNANCE SYSTEM

While the ancestors of current WMFNs became signatories to Treaty 8 in 1899, WMFNs only became a discrete Indian Band, as defined in the *Indian Act,* in 1977. WMFNs was originally part of the Hudson's Hope Band, which split into West Moberly and Halfway River Bands in 1977 (T8TA 2012b), after which the WMFNs successfully lobbied the federal government to establish the WMFNs Moberly Lake site Reserve.

WMFN's Chief and Council system was noted as being stable and inclusive due to its customary structure:

> … their custom election process is based on a family system where each, essentially a council of assigned people, four councillors and a chief and each of the four councillors represents one of the main family groups in the community and that person is elected from within that family group and only that family group so the result is that every major family group that representation at the council table. And the chief is elected by everybody in the community but has no vote (Key informant 02 July 26, 2012).

There are four main families that share governance responsibilities in the community – the Brown, Desjarlais, Dokkie, and Miller families.

WMFNs members maintain stewardship of the land in traditional ways. This includes practicing ceremonies and observing protocols for travelling on the land and for harvesting – e.g., when you shoot a moose, when you catch a fish. This is part of respectful stewardship of ancestral lands (WM01 April 26, 2012; W08, Site C TLUS, July 6, 2011). For WMFNs, the inability to protect the land would represent a failure to pass on to future generations what was given the current one.

Recent years have seen WMFNs increasingly impose their stewardship values, challenging the B.C. Government and industry directly about perceived infringements on the Nation's Treaty 8 rights through land uptake for industrial activities. BC Hydro (with both Site C and the proposed Dawson Creek/Chetwynd Area Transmission Project - DCAT), and First Coal

Corporation in the Burnt Pine Caribou case, among others, have been directly challenged by WMFNs. In the instance of the DCAT, the WMFNs stated the following concerns:

> Ever since the construction of the W.A.C. Bennett and Peace Canyon hydroelectric dams in our Treaty territory, we are seeing more and more of our lands being criss-crossed by BC Hydro's transmission lines and taken up by BC Hydro terminals and substations. Hectare by hectare, kilometre by kilometre, our lands are being impacted to the point that we can no longer meaningfully exercise our Treaty rights in many areas. It is unconstitutional to continue to tell us to "hunt elsewhere" where there are few (if any) places we can go to exercise various rights (WMFNs 2011).

In 2006, WMFNs, the neighbouring Saulteau First Nation, and the Government of British Columbia entered into a joint management plan for the Peace Moberly Tract area north of the community, including much of the south shore of the Peace River in the area that would be flooded by the proposed Site C Project (Government of British Columbia, SFN and WMFNs 2006).

5.4.8 HEALTH AND SOCIAL SERVICES

WMFNs accesses most of its health and social services, such as police protection, social and medical services from the nearby town of Chetwynd, approximately 30 km away. Services at the WMFNs reserve include an on-site health centre with a full time community health representative and social development coordinator. Nurses, doctors and health professionals also visit the WMFNs community on a regular basis. The Nation built, and operates the Dakki Center, an after school facility, and the WMFNs Health Center, a community health care center (WMFNs 2007).

During a planning exercise in 2007, the community identified the social impacts of existing development as serious issues for the community to address, including: gambling, substance abuse, an increasing socio-economic gap between youth and elders, and lack of activities for youth (including the lack of a recreational facility – WMFNs 2007). There also remains strong demand for a full-time day care centre. Hendriks (2011) reported that a day-care centre proposed to open in 2012 already had a 12-child waiting list.

Goals and Aspirations for Health and Social Programming (WMFNs 2007) include:

- Decreased dependence on social assistance, outside government;
- Increased youth involvement in community;

- Less alcohol and drug use;
- More family involvement with elders and youth;
- Increased member engagement in the community;
- Increased employment of WMFNs members in all positions;
- Improved health (physical) of WMFNs; and
- Improved communication in the community.

5.4.9 EDUCATIONAL SERVICES

WMFNs on-reserve children are bussed to public elementary schools at Moberly Lake or in Chetwynd. Some students choose instead to go to school in Hudson's Hope. The community reacted strongly to a recent plan put forward to close the nearby Moberly Lake school (T8FNs staff 13 June 7, 2012), and managed to keep this elementary school open.

High school students attend Chetwynd Secondary School. There has been a slight improvement in the high school graduation rate for WMFNs members over time, but the WMFNs graduation rate remains below average at the Chetwynd Secondary School (T8FNs staff 13 June 7, 2012) However, literacy among young people is estimated to be equal to that of the general population.

In terms of adult education, WMFNs members can attend adult education programs at Muskoti Learning Centre (Saulteau First Nation) and/or Northern Lights College branches in Chetwynd or Hudson's Hope. Large numbers of members apply for and receive post-secondary funding from the Nation each year (T8FNs staff 13 June 7, 2012).

5.4.10 INFRASTRUCTURE AND UTILITIES

The WMFNs reserve houses a band administration office, a health centre, a recreation centre, and is serviced with electric heat, electricity and water (see Appendix E).

Raw water is extracted from Moberly Lake at the pumphouse (close to the WMFNs band office) and pumped to the water treatment system for treatment through sand filtration and chlorination. Routine water quality testing is conducted for pathogens and turbidity. Since the floods of 2011, raw and treated water turbidity is well above drinking water

standards and appropriate treatment technologies for the removal of suspended solids was being pilot tested in 2012 (pers. comm., Darren Robertson, WMFNs Water Treatment Operator). As a result, the WMFNs reserve has trucked in potable water in 2011-2012.

Wastewater from the West Moberly reserve is treated in a lagoon system prior to discharge to natural wetland, which flows into Moberly Lake, and regulated under a permit. Concerns have long been raised about the lack of proper sewage systems in other communities and other buildings surrounding of Lake Moberly (WMFNs itself has an adequate local sewage treatment facility), causing problems for lakes ecology and public health (InterraPlan Inc. 2004).

Limited housing capacity in the community has been an issue for some time. As of 2006, there were only 25 households on the WMFNs reserve. 60 per cent were in good condition while 40 per cent needed minor repairs (Statistics Canada 2007d). Recognizing this gap and the slowness with which government programs were increasing the housing stock, the WMFNs have attempted to take over and expedite housing growth (WMFNs 2007).

5.4.11 FROM THEN TO NOW: CHANGE OVER TIME

Over time, land-based economic activity related to oil and gas, infrastructure, forestry, agriculture, non-Aboriginal sports hunting, and other developments have resulted in cumulative adverse impacts to the WMFNs traditional economy and Treaty rights. These pressures were noticeable even in the late 1970s and early 1980s (as reported in Brody 1981, and in WMFNs member's submissions to the hearings for the original Site C proposal and the Alaska Highway Gas Pipeline – see also section 4.2), and they have accelerated in the interim.

On the social, economic and cultural front, the WMFNs has lived through times of high social dysfunction, loss of traditional lands and resources and lack of economic opportunity, with alcohol a major contributor in the 1970's. However through strong governance, economically, socially and culturally, WMFNs have shown signs of Nation rebuilding. As noted by one respondent:

> West Moberly has the highest employment, the most stable government and frankly is one of the healthiest First Nation communities that I've worked with in the last, I've been doing this for fifteen, sixteen years now (Key informant 04 July 26, 2012).

5.4.12 LOOKING AHEAD

Despite this, hurdles remain for WMFNs. Looking ahead into the future WMFNs would like to see healthier lifestyles with:

- Decreased dependence on addictive substances;
- More family involvement with elders and youth;
- Increased focus on parenting and community involvement;
- Increased employment for WMFNs members; and
- Improved citizenship and communal responsibility for community development and wellness (WMFNs 2007).

WMFNs actively support these goals, and host a number of events and activities in the community throughout the year. These activities are organized around the six themes of: nutritional health, education, Canadian culture, family strengthening, recreation and traditional culture (WMFNs no date).

WMFNs (2007) also identified current concerns for WMFNs related to economic development, including:

- Lack of money and resources;
- Addiction levels in the community limited peoples' ability to take advantage of economic development;
- Dependency on government funding; and
- Lack of life skills programs and other support programs for health and recreation.

WMFNs (2007) also indicated that the Nation has a strong desire to increase support for training, post-secondary education and to harness the entrepreneurial spirit of WMFNs members, through mentorships, professional business advisory services, and other capacity building programs. In terms of its future economic health and vitality, WMFNs has expressed a strong interest in diversifying its local economy, including increased focus on tourism, reclamation services and products, and agriculture (Hendriks 2011).

For its traditional land base, the WMFNs envisions productive eco-systems, healthy fish and wildlife populations, continued opportunity to exercise treaty rights and cultures, and are seeking additional reserve lands through the Treaty Lands Entitlement process with

the federal and provincial governments (Government of British Columbia, SFN and WMFNs 2006).

In terms of industrial development, WMFNs is being extremely cautious about lending its support. As one community leader noted:

> A developer who wants to mine coal in Moberly's traditional territory wants to talk to the community about where we do not want them to go. We do not want them to go anywhere, because there is nowhere left [for us to enjoy our traditional way of life] (WM06, Verification focus group, October 10, 2012).

Table 8 identifies some of the current strengths and hurdles facing WMFNs as it moves forward.

Table 8: West Moberly First Nation – Current Strengths and Hurdles

Strengths	**Hurdles**
Desire to keep culture alive	Reduced traditional lands available
Strong business sector and entrepreneurial desire	Contamination and other concerns surrounding community
Relative proximity to jobs and business opportunities in Chetwynd and Hudson's Hope	Development pressures by non-Aboriginal communities surrounding WMFNs
Communal celebrations still held often	Extremely limited on-site infrastructure at WMFNs reserve, including limited housing; limited growth possible within existing reserve lands
All the families involved in governance	Declining language, especially Beaver
Stewardship efforts like Peace Moberly Tract, the Burnt Pine Caribou case, and active interventions in regulatory processes slowing development pressures	
Relatively good employment and business status	

5.5 Summary of Current Social, Economic and Cultural Conditions for the T8FNs

While each of the T8FNs has a distinct (but linked) history with the others, and different current conditions and capacities, the following trends can be drawn in relation to their current social, economic and cultural conditions:

- They have younger populations than the regional and non-Aboriginal averages, with a disproportionately large number of youth likely to enter the workforce in coming years.

- They have very small populations, with increasing percentages of members living off-reserve (and this percentage will likely grown even higher with Bill C3).

- There is a trend in at least three of the First Nations to out-migration, especially of young people, for jobs and educational opportunities elsewhere, which may be causing a "brain drain".

- The communities are generally remote, have limited infrastructure, and rely on goods and services from regional centres, rather than being economically self-sufficient.

- All communities have seen a shift toward the wage economy as the primary form of making a living over the past 25 to 50 years, a relatively short period of time and a difficult transition.

- Each community except arguably West Moberly suffers from high to very high unemployment, especially in relation to the PRRD average and akin to issues facing many BC rural Aboriginal reserves. Improvement over time in three out of the four communities in employment has been limited.

- Educational attainment levels have been extremely poor for each community and have improved only slightly, if at all, over time. This puts each community and its members at a disadvantage when seeking to enter into and stay engaged in the wage economy.

- Health and social services are limited in each community, and travel is required to access many basic services.

- Each community has strong ties to its traditional territory, and many members who continue to practice their Treaty rights on the land, although the nature and degree of activity have changed over time.

- Each community has increased its efforts to improve its stewardship and protection of its traditional territory, especially since the 1970s.

- Despite those efforts, much of each community's traditional territory has been alienated, largely within the last two generations, and primarily due to agricultural and other industrial activities.

- Cultural practices and language have both been in decline in each T8FNs community over the past half-century. While there are strong and ongoing efforts to promote culture, language in particular is at risk.

- All four T8FNs have made strong efforts to overcome social dysfunction, cultural loss, and economic marginalization in recent years. Results have been mixed. There remain significant issues related to social dysfunction, most often as a result of substance abuse, in each community.

- The T8FNs' well-being and quality of life, by several measures, remains well below that of the PRRD's non-Aboriginal average.

Additional reasons behind current well-being and quality of life deficits, and efforts to overcome them, are discussed in section 6 at the pan-T8FNs level.

6 BASELINE CONDITIONS FOR T8FNS VALUED COMPONENTS

This section of the Baseline Community Profile considers issues that face all four T8FNs. The following valued components are examined in turn:

- Meaningful practice of Treaty rights;
- Protection and promotion of culture;
- Meaningful engagement of T8FNs in governance and stewardship;
- Access to equitable education and training opportunities;
- Equity and engagement in the wage economy (especially employment and business opportunities); and
- Healthy T8FNs communities.

These valued components often overlap. For example, it would be virtually impossible to protect and promote Dane-zaa culture without a remaining land base adequate enough to allow meaningful practice of Treaty 8 rights by T8FNs members.

Each sub-section in section 6 describes the valued component from the Dane-zaa perspective, identifies appropriate indicators with which to measure the status of the valued component, identifies current and where possible trend status for those indicators, and identifies remaining hurdles to meeting underlying T8FNs goals, and in some cases potential ways to overcome these hurdles.

The examination is primarily from a pan-T8FNs perspective. Where other sections of this Report are relevant, they are noted.

6.1 Meaningful Practice of Treaty Rights[94]

> Treaty 8 means to the Indian people a lot more than words can ever describe (T8FNs member, in Hendriks 2011).

Of all valued components identified by the T8FNs, meaningful practice of Treaty 8 rights is consistently identified as the most important and vital to T8FNs well-being and quality of life (Hendriks 2011; T8FNs Team 2012a). Treaty Rights are held up as a key to sustenance and survival:

> It sustained me. It was my fridge. It was my store. It didn't cost anything, just my time and effort…I am amazed how when I was a child the land supported us to have food every day for us not to starve. The caribou started going away quite a while back and now it's less and less (H16, Site C TLUS, June 10, 2011).

Treaty Rights practices such as wildlife harvesting also strengthen relationships between communities and generations, and serve as the core of social and cultural well-being. They serve an invaluable role in cultural knowledge transmission as well (see section 6.2).

At the same time, Treaty Rights are recognized as one of the very few available tools of empowerment for a largely disempowered people. As one respondent noted:

> Very few people in Canada hold the same kind of substantial legal rights, constitutional rights as they do and so they have some advantage but because they have nothing really except these rights, because they're so disadvantaged economically, socially and politically, they're so disenfranchised by just about every other metric, there's a real difficulty in figuring out what to do with these rights. And in the past what the rights were designed to do is to allow them to go out and hunt and fish and trap and support their families and engage in their traditional lifestyle (Key informant 02, July 2, 2012).

At the same time as it is of the utmost importance, meaningful practice of Treaty 8 Rights has proved one of the most elusive of valued components for the T8FNs, and one that has become increasingly difficult to satisfy over time.

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[94] *Note: This section should be read in close combination with the cumulative effects discussion in section 4 and the "traditional land use areas" and "land alienation" sections for each T8FNs in section 5 (e.g., 5.1.3 and 5.1.4 for DRFN).*

6.1.1 Introduction

Treaty 8 has since 1899 guided the relationships between all of the T8FNs and the Crown. It is beyond the scope of the T8FNs Community Assessment to delve deeply into the complex, long-standing issues related to the interpretation and implementation of Treaty 8. Other sources such as Webb (2010) provide a useful examination of differences of opinion in this regard. Only a brief introduction to T8FN's understanding of what constitutes Treaty 8 Rights is provided herein.

There have long been differing interpretations by the Crown and T8FNs of what the spirit, intent and specific promises of Treaty 8 entail. The Crown has long focused on the written words of Treaty 8, which allow for land to be taken up by the Crown for industrial or other purposes. This perspective holds that the Indians surrendered their territory and were assured harvesting rights only over lands that were not required for settlement, mining, lumbering, trading and other purposes.

In contrast, T8FNs members have a completely different recollection of the spirit and intent of Treaty 8. When elders speak of the treaty (as they do often), they state confidently that the government promised the Indian people that "so long as the sun rises and sets and rivers flow", they would be allowed to practice their traditional, cultural and spiritual ways.

T8FNs feel like they "never gave up the land". Indeed, as one WMFNs member put it, such a concept was entirely foreign to the T8FNs:

> I've talked to elders from all four language groups [in Treaty 8] and not one of them could actually say 'I surrendered the land'. The closest they said was 'I gave up the land' but give up meaning, like you were being beat up and you said 'okay, okay I give up'. You see, that didn't make any sense to the people so how in the hell did the negotiators explain to the people that they were going to surrender the land, give it to them. You know if they were to say, 'Will you give me the land?' they would have said, 'No, we can't give it to you, we don't own it' (WM01 April 26, 2012).

T8FNs' interpretations have instead focused on the oral promises made to the T8FNs at the time of Treaty by the representatives of the Crown, as recalled in a report by the Treaty Commissioners themselves:

> Our chief difficulty was the apprehension that the hunting and fishing privileges were to be curtailed. The provision in the treaty under which ammunition and twine is to be furnished went far in the direction of quieting the fears of the Indians, for they admitted that it would be unreasonable to furnish the means of the hunting and fishing if laws were to be enacted which would make hunting and fishing so restricted as to render it impossible to make a livelihood by such pursuits. But over

> and above the provision, we had to solemnly assure them that only such laws as to hunting and fishing as were in the interest of the Indians and were found necessary in order to protect the fish and the fur-bearing animals would be made, and that they would be as free to hunt and fish after the treaty as they would be if they never entered into it. We assured them that the treaty would not lead to any forced interference with their mode of life (Laird, Ross and McKenna 1899).

T8FNs and legal jurisprudence both increasingly disagree with the sole focus on the written interpretation of the Treaty. As noted by the WMFNs Land Use Department (2006), "Historic treaties in Canada must be interpreted within their context and purpose. Of particular importance with respect to Treaty No. 8 is the oral promises made by the Crown, as the agreement was reached orally." From a T8FN oral history perspective, what was promised was clear. At the time and to this day, T8FNs understood those promises to include, but not be limited to, the following (from Willson 2010):

- No curtailing of hunting and fishing privileges/livelihoods;
- No forced interference in Aboriginal mode of life; and
- Protection of fish and fur-bearing animals.

As noted by Bruce Thompson and Associates Inc. (1999), the Treaty Commissioners assured that "Indians would be free to hunt and fish after the treaty as they would be if they had never signed the Treaty", and that only such laws on hunting and fishing as were in the interest of the Indians would be enacted (i.e., to protect the wildlife).

6.1.2 Key Issues Related to Meaningful Practice of Treaty Rights

A series of community consultations by the T8TA Treaty Education Team (2003a through 2003g) identified the following concerns of T8FNs with failures by the Crown to live up to its original Treaty 8 promises:

- Increasing constraints on T8FNs ability to hunt, fish, trap or otherwise harvest resources on their traditional territory;[95]

[95] It is worth noting that Treaty 8 Rights are universally acknowledged among T8FNs members as being communally held and related not merely to an artificially mapped "traditional territory" for each of the T8FNs:

> The Treaty rights you have up there [in Prophet River] are the same Treaty rights we have down here and because of history and how we're all related to one another, you have the right to defend those rights here in the Peace River just as much as I do, and also because the Treaty covers 840,000 km^2 which is the

- Lack of medical and dental care and free prescription drugs;
- Annual Treaty payments not being tied to inflation rates;
- Land on Aboriginal traplines being owned or leased to non-Aboriginal people;
- Land allotments per person not being increased with Aboriginal population growth;
- Lack of free housing; and
- Lack of free education.

Additional Treaty 8 Rights identified by T8FNs members and staff during this Community Assessment include:

- Reasonable access to land for practice of mode of life;
- Clean drinking water;
- Ceremonial use of country food, water and other natural resources;
- Guiding and other commercial activities;
- Trapping for personal and sales use;
- Use of meat as food;
- Use of materials for crafts, clothing and shelter (e.g. moose hide crafts); and
- Medicines.

Treaty Rights are thus understood by the T8FNs to include, but are by no means limited to,[96] hunting, fishing, trapping and gathering for sustenance and livelihood purposes. The focus herein is on this aspect of Treaty 8 Rights.

> whole north-eastern BC, south central Northwest Territories, north western Saskatchewan and the whole northern half of Alberta. Every square inch of that land is our treaty right, even if we don't live there we still have the right to protect those rights, no matter where we are as long as it's on Treaty 8 territory (WM01 April 26, 2012).

This is one of the reasons T8FNs hesitate to put on maps a definitive "traditional territory", often pointing instead to maps of Treaty 8 territory.

[96] Exactly what Treaty 8 Rights are remains a point of contention. Webb (2010) and the following WMFNs member present the T8FNs perspective that Treaty 8 Rights include commercial and other rights beyond mere harvesting:

6.1.2.1 Minimum Requirements for Meaningful Treaty Rights Practices

Scoping for this study (Hendriks 2011; T8FNs Team 2012a) found the following key issues related to meaningful practice of Treaty Rights on the land:

- Concern about increased non-Aboriginal use of the land reducing Aboriginal quiet enjoyment of the land;
- Ability to access land for traditional economic activities;
- Change of migration patterns/health of wildlife populations/barriers to their movements;
- Reduced access to land; and
- Reduced confidence in wild foods.

As noted by another Treaty 8 First Nation (the Athabasca Chipewyan First Nation – ACFN 2010), the full practice of Treaty rights reasonably includes access to sufficient lands and resources in which the rights can be exercised. "Sufficient" refers not only to quantity but quality, and is evaluated from the perspective of what is required to fulfill not only subsistence requirements, but also cultural needs, of the First Nation now and into the future. Determining what is "sufficient" encompasses a suite of interconnected tangible and intangible resources that underlie the meaningful practice of rights. From the T8FNs perspective, these "resources" include (following ACFN (2010):

- Routes of access and transportation;
- Water quality and quantity;
- Healthy populations of game in preferred harvesting areas;
- Cultural and spiritual relationships with the land;
- Abundant berry crops in preferred harvesting areas;

> It's actually referred to in the Treaty as the right to pursue the mode of life... which means everything that we used to do traditionally for the purpose of survival on the land with no boundaries. That's what a Treaty Right is. But it's not just restricted to hunting, fishing, trapping or gathering. There's other things that were agreed to, the right to education, the right to economic development, cows and ploughs… I think what we need to do also is to find out how this project (Site C) will impact that right. Commercial right is, for the time being, directly related to trapping, but it's more than that because we have a Treaty Right as First Nations people to actually hunt and kill wild game and sell it to make a living of it because that was part of our trade with the other groups coming from south, they used to trade us salmon for moose meat (WM01, April 26, 2012).

- Traditional medicines in preferred harvesting areas;
- The experience of remoteness and solitude on the land;
- Feelings of safety and security;
- Lands and resources accessible within constraints of time and cost;
- Socio-cultural institutions for sharing and reciprocity; and
- Healthy connection to and adequate protection of and respect for spiritual sites.

Many of these "sufficiency resources" have declined or otherwise suffered in recent years. These declines have been observed by T8FNs members both generally across their traditional territories and specifically in the Peace River valley.

6.1.3 Baseline Conditions – Meaningful Practice of Treaty Rights

6.1.3.1 Land Alienation Due to Non-Traditional Land Use

The effects of non-traditional land use are described by T8FNs members in almost entirely adverse terms.[97] They include land alienation, contamination (real and perceived) of lands, water and wildlife, reduced aesthetic and other qualities of the T8FNs cultural landscape, among other considerations.

Section 4.1 and Table 3 identify in detail some of the key non-traditional land uses that have impacted on the T8FNs over time, and are not reiterated here. Pressures on traditional lands are described on a community-by-community basis in sections 5.1.4, 5.2.4, 5.3.4, and 5.4.4.

6.1.3.2 Historic Traditional Resource Harvesting by T8FNs

There is very little recent quantitative data available on country food and other Treaty Rights-protected resource harvesting activities by the T8FNs. Harvesting data has not been

[97] While non-traditional land use can theoretically have some marginal beneficial impacts, such as in cases where the initiative is one where lands are protected by government (e.g., protected areas within the Muskwa-Kechika Management Area), in almost all instances there are costs the First Nations find unacceptable to bear. For example, while new roads and cut lines may increase ease of access for First Nations into preferred harvesting areas, they also increase the ease with which non-Aboriginal harvesters can enter an area, often increasing competition and reducing available wildlife, public safety, and First Nations enjoyment of the quiet solace of the land, as described in section 4.2.

collected in a comprehensive, consistent and replicable (or replicated) fashion by or for the T8FNs. For example, both Scarfe (2006) and WMFNs Land Use Department (2006) indicate that there is no credible country food production or replacement value data available for the WMFNs,. As a result, while it is universally recognized that fish, game, and wild plant harvesting has declined since first contact between the Dane-zaa and non-Aboriginal people (see section 4) and people acknowledge that this has had adverse effects on the T8FNs, the extent of this decline has not been well quantified.

The T8FNs Team has uncovered only late 1970s research by the Union of BC Indian Chiefs (UBCIC 1980; 1981) as potentially credible country food harvesting and consumption data. The over 30 year time gap in data is a substantial limiting factor in any current estimates of country food harvesting and consumption. This makes it difficult to determine with precision either the current status or trends over time in country food harvesting and consumption. This section relies on the few statistical studies available as well as qualitative testimony by T8FNs members about changes over time in Treaty Rights practice (in this study as well as in the 2011 T8TA Site C TLUS (Candler et al. 2012).

Some limited data on country food production and consumption has been gathered in recent years, specifically in Doig River and Prophet River through the First Nations Food, Nutrition and Environment Study (FNFNE Study – UNBC et al. 2010a; 2010b). However, there is a need for additional, more consistent and continuous research effort on country food harvesting and consumption among the T8FNs.

Available information on the quantitative importance of country food harvesting to the T8FNs, from both subsistence and wage economic replacement value perspectives, primarily comes from a study completed by the UBCIC (1980)[98]. It found the following:

- In 1979, the equivalent economic value of moose and beaver harvesting (alone) was $350 per month per household, or $4200 per annum. This equates to over $12,000 per annum per household in 2012 dollars.[99]

- In 1979, for every dollar earned in wage employment and transfer payments in Doig River, the dollar value of harvested resources was $1.41, making the subsistence and mixed economy a substantially larger contributor to making a living than the wage economy. For DRFN members in the late 1970s, harvested meat represented

[98] This study was also linked to Hugh Brody's (1981) book on T8FNs land use and occupancy, *Maps and Dreams.*
[99] Information from BC Stats' historic Consumer Price Index charts – accessed at http://www.bcstats.gov.bc.ca/StatisticsBySubject/Economy/ConsumerPriceIndex.aspx - indicates that the Consumer Price Index more than doubled between 1979 and 1992, and has likely grown by at least 50% again in the interim, leading to the estimate of an approximately three-fold increase in the dollar value between 1979 and 2012.

36 per cent of annual household income (traditional harvesting of all types represented 58 per cent of annual household income).

- Moose was the overwhelming harvested meat, at about 70 per cent to Doig River First Nation harvesting. It was estimated that the average DRFN household harvested 48 kilograms (kg – dressed meat weight only) of bear, 763kg of moose, 44 kg of deer, 130 kg of beaver, and 109 kg of small game, for a total of 1095 kg of meat.100
- Furs and handicrafts (estimated at a household average of $1850 per annum for DRFN), and guiding ($260 per household per annum for DRFN),[101] added to the economic role of harvested resources.

A linked follow-up to the UBCIC (1980) study, submitted for the public record of the Alaska Highway Gas Pipeline Project (UBCIC 1981), noted:

> It would be difficult to overstate the economic and social importance of traditional resource harvesting to the native people of northern B.C. They live in the midst of some of the most productive big game habitat in the Province, and at the same time few of the native people living on Reserves in the vicinitiy of the Alaska Highway Gas Pipeline are employed in wage earning jobs. Consequently, traditional food harvesting, and in particular moose hunting, represents an important economic activity.

UBCIC (1981) also suggested that "the importance of the sense of security provided by the ability to obtain abundant supplies of meat cannot be overstated". Brody (1981) notes that even after adjusting for wastage and non-use, in the late 1970s "East Moberly [and the T8FNs Team would suggest by comparison, West Moberly First Nations, had] available for consumption just under one pound of meat per capita per day; Doig Reserve, 1.1 pounds".

UBCIC (1981) went on to note that despite the rapid and relatively recent shift from a semi-nomadic lifestyle to permanent residence on Reserves in the 1960s, "native people in the area continue to follow a seasonal pattern of food harvesting that is little changed in nature if not in extent, from earlier times."

[100] The same study estimated 2037 pounds of meat worth a replacement value of $3719 was harvested by East Moberly (Saulteau First Nation) households on average. The T8FNs Team suggests these harvest levels, which include a larger focus on deer (about a six-fold increase over DRFN harvesting levels), can be used as a rough proxy of WMFNs harvesting practices, as the two communities are in close proximity around Moberly Lake.

[101] Furs and handicrafts were estimated to provide a household average of $860 per annum for East Moberly, and guiding $260 per household (UBCIC 1980).

6.1.3.3 Current Traditional Resource Harvesting by T8FNs

> We can't use our traditional territories any more for berry picking, hunting and trap lines because we are surrounded by farms, ranches, farmers, guiding outfitters, grazing leases and oil and gas pipelines. We have to go further and further away from our homes to practice our mode of life. Not so long ago we could just go out our back door and practice our way of life. Not anymore (T8FNs elder, in T8TA Treaty Education Team 2003c).

What is known about country food production and consumption, from interviews and focus groups for the T8FNs Community Assessment as well as secondary academic research such as the FNFNE Study includes the following:

1. Country food is still generally perceived as healthier than store bought food;
2. Faith in country food has reduced in recent years, primarily due to contamination concerns both observed and perceived from industrial changes to the land;
3. Access to country food has decreased among all four T8FNs;
4. It is becoming a more expensive and time consuming proposition to harvest country food;
5. The vast majority of T8FNs members would like to consume more country foods;[102]
6. Younger people are consuming less country food than elders, and men consume more than women;
7. Fewer community members are spending time on the land dedicated to country food gathering, for a variety of reasons; and
8. The T8FNs still exhibit strong cultural connections to the land and to harvesting – for many T8FNs members, hunting, trapping, fishing and gathering is still what they think of when they think of the terms "culture" and "way of life".

While the economic role of the bush economy has reduced over time, it remains an important component of the well-being and economic vitality of many T8FNs families and communities. The FNFNE Study (UNBC 2010a; 2010b) results described in sections 5.1 and 5.3 indicate the economic and dietary importance of country food harvesting. More recent studies such as Candler et al. (2012) and testimony from T8FNs members indicate that traditional harvesting remains important to all T8FNs. Typically, the fall moose hunt remains the most important harvest of the year; the time when food is gathered for the

[102] UNBC et al. (2010a; 2010b) found that across all BC Aboriginal groups, 91 per cent of participants indicated they would harvest more country food but lack equipment, time, and transportation to do so. The percentages for DRFN and PRFN were 97 and 100 respectively, and there is no reason to suspect the percentages would be much lower for HRFN or WMFNs.

long winter. Big game and little game species are at their most abundant/readily available, and in their best condition during this time period. Small game, including rabbits and "chickens" (grouse) are important species during late fall. Additional hunting occurs during winter trapping and spring beaver hunt, with less hunting during the summer season, when seasonal employment may be high (winter is also an important time for seasonal work, especially in the non-renewable resources sectors like oil and gas).

T8FNs members reported that although it is still important and desired, there is overall reduced practice of country food production, sharing and consumption. Such activity is critical to future retention of the social, economic and cultural way of life of T8FNs members. Country food harvesting is a practice that T8FNs report:

- Brings together multiple generations;
- Promotes activity on the land good for mental and spiritual health;
- Allows for the passing on of traditional teachings;
- Promotes use of traditional language;
- Promotes physical health through higher activity levels;
- Contributes to a diet that is healthier than store-bought foods;
- Creates a sense of pride and self-sufficiency among harvesters; and
- Promotes values retention and community relations through sharing of foods in the community after a successful hunt. Sharing of foods is a proud activity for harvesters, which serves to knit the community together.[103]

The FNFNE Study (UNBC 2010b) identified the top five benefits of traditional food observed by PRFN members. They included, in order of importance: country food is natural and safe; country food is important culturally and educationally; country food is cheap or free; country food is nutritious; and country food tastes good.[104]

[103] Self-esteem and self-sufficiency are beneficial spin-off effects for harvesters as well, as recounted by this DRFN elder: "When I was fourteen years old I killed my first moose, I skinned it and then threw all of the meat together and then covered it with the hide and then carried it home. That night I didn't sleep I was so proud of myself; I was only 13 or 14. How many young people would lift that today, they're so weak" (DR02, April 26, 2012).

[104] By comparison, only four per cent of PRFN members considered food safety of store bought food to be a benefit. Other than convenience and variety, there was little reported benefit for store bought foods over country foods (UNBC et al. 2010b).

However, when the cost, success and enjoyment of the harvesting trip comes into question, harvesters may choose to stay home and purchase potentially more expensive and less healthy store-bought foods. All of the noted beneficial effects can be lost.[105] The decreasing availability of – and/or decreasing faith in – country food, higher costs to travel further afield to harvest animals and fish, increasing reliance on high cost store-bought foods, among other factors, are leading to increased costs of procuring foods for one's family.

This raises the spectre of potential reduced food security. According to the Government of Canada, "food security exists when all people, at all times, have physical and economic access to food to meet their dietary needs and food preferences for an active and healthy life" (Agriculture and Agri-Food Canada 1998). Currently, PRFN food security is much higher than the average BC Aboriginal group in the FNFNE Study (UNBC et al. 2010b) – only 6 per cent of PRFN households (one household out of 17) indicated they had often worried about running out of country food in the past year (vs. 28 per cent in B.C.), and only one PRFN household out of 17 indicated they often actually ran out of country food in the past year (vs. 33 per cent in B.C.). This could change should current trends in land alienation continue. And already, by the Government of Canada's definition – "all people, at all times" – the desire by T8FNs members to access more country food than they currently can get is a food security issue.

The future is envisioned as likely to get worse. Members report increased signs of contamination and tainting in country foods, with people abandoning harvested moose in the bush and fish in the two reservoirs when they observe irregularities. Food security will likely remain an ongoing concern for the T8FNs into the future and a potentially increasing issue for well-being and quality of life.

6.1.4 Status and trends in specific Treaty Rights practices

The following are key aspects of current Treaty Rights practice from a subsistence and mixed economic perspective, with emphasis on T8FNs activities in and around the Peace River valley. Results are primarily primary data collected during the T8FNs Community Assessment.

[105] This argument is expanded upon at pages 27-29 of the Stage 3 Initial Impact Pathways Identification Report for the T8FNs Community Assessment (T8FNs Team 2012b).

6.1.4.1 Trends in Hunting

> No men in this land of hunters hunt better than the Beavers (Butler (1872), quoted in Dempsey 1974).

T8FNs members report changes over time in species harvested, abundance of wildlife available for traditional hunting, success rates, and access to hunting areas over time. Virtually all of these changes have been felt as negative changes by the T8FNs. Members report less hunting over the past 10-15 years, by fewer members. People also report having to travel further to hunt. There have been considerable reductions in wildlife habitat suitability due to agriculture, oil and gas development, mining, and forestry.

The geographic distribution and migration patterns, numbers, and health status of several key ungulates and smaller fur bearers in the Peace River valley have changed considerably over the past 50 years, and many T8FNs members see a role for the W.A.C. Bennett Dam in that change. According to T8FNs members:

- W.A.C. Bennett Dam adversely affected caribou such that herd numbers are now depleted;
- Elk have moved into where sheep used to be;
- The warmer winter climate resulting from the reservoir is resulting in higher populations of ticks, which are infesting the fur of moose and other animals and affecting their health status.

Moose are of particular concern because they have long constituted and remain the most numerous and important big game species harvested by all T8FNs.[106] Moose numbers are reportedly decreasing as a result of development, for example the Del Rio and Farrell Creak areas are now overwhelmed with oil & gas activities and habitat is being substantially altered so that it is no longer suitable for moose.

As noted in section 4.2, contaminated water is also a concern for moose health. The Peace Moberly Tract is one of the last remaining areas for moose, according to WMFNs members, and a T8FNs members indicated that the area between Groundbirch, Farrell Creek, Peace River and the Halfway Valley is of very great importance for the moose population. Moose calving preferentially occurs on islands in the Peace River.

[106] "Moose meat is a staple of the diet. Beaver is commonly eaten during trapping season… Every household I visited had fresh, frozen or dried moosemeat on hand. In addition to its material value, hunting and trapping is of critical cultural importance, since it assures a continued relationship to the land" (Ridington 1993).

Deer,[107] elk, caribou, stone sheep, mountain goats and black bears have also been opportunistically harvested (UBCIC 1981). As recounted by T8FNs members, the entire north side of the Peace River is plentiful with game, especially during the winter. Many animal species' distribution has changed over time however. For example, there used to be porcupines in the area, but now they are seen only infrequently. Rabbits, beavers, muskrats continue to be hunted, but animals like fisher and marten are not encountered in the Peace River valley as frequently as in the past. Despite this, 82 per cent of T8FNs respondents to a 2009 survey indicated they felt the potential Site C reservoir area is important for hunting (First Light Initiatives 2009).

Alienation comes in part from competition from non-Aboriginal harvesters, as noted in section 4.2. In some cases, industry workers are hunting in areas normally exclusively used by First Nation members. Some T8FNs members report wearing reflector vests even while they are in their camps and not just when they are hunting. In addition, the harvestable land base is reduced by industry posting "no hunting" signs around their work area. T8FNs "don't have the money, equipment and time like they [sport hunters] do to get into the back country. Also, trophy hunting has been taking the best animals, watering down the blood and weakening the animals" (Verification focus group, October 10, 2012).

Harvesting opportunities are reduced as a result of fewer and sicker animals. Many elders have noted substantial changes in the quality of moose meat, the country food T8FNs are most reliant upon:

> It used to be a long time ago, you would see moose any place. You would have good meat. Now today, you open up the moose, and there is a bunch of bubbles on the meat… you have to throw it away – you can't eat that kind of meat (T8FNs elder, T8TA Treaty Education Team 2003b).

Overall, availability of the large ungulate species that T8FNs have traditionally relied upon has declined over time. Bison have been gone for over a century. Moose and caribou have declined over time, caribou precipitously. Caribou, previously a preferred and important food species (Heritage North Consulting Limited no date), are effectively unavailable in the Peace River valley, in part due to the effects of the W.A.C. Bennett Dam and other industrial development on their distribution, migration patterns and population numbers.

Caribou declines started with the Williston Reservoir, but have also been exacerbated by habitat fragmentation. Logging and seismic lines make too many linear disturbances, allowing predators to see the caribou a long way off (Verification focus group, October 10, 2012).

[107] UBCIC (1981) noted that the availability of south facing slopes, usually along river valleys such as that of the Peace River, are of critical importance to mule deer as winter range.

Animals have always had multiple uses. One of the main values of T8FNs is to use "as much of the animal as possible", not only for food, but also for tools, crafts, clothing, trade goods, etc. This multiplicity of uses has lessened over the years as some of the craft skills and knowledge has become known to fewer and fewer of T8FNs members. This goes hand in hand with reduced availability of raw materials from reduced harvesting. A DRFN member indicated one of her concerns is that there will not be enough moose left to harvest, limiting her ability to pass down moose crafting to her daughter (DR17, June 11, 2012).

6.1.4.2 Trapping

> It is not uncommon for a single Indian to render from his winter trapping 200 marten skins, and not less than 20,000 beavers are annually killed by the [Beaver] tribe on the waters of the Peace River (Butler (1872), quoted in Dempsey 1974).

Trapping has been an important economic activity over the past couple of hundred years for T8FNs members. Members report trapping a wide variety of animal species, on traplines registered and unregistered.[108] At least one of the T8FNs supports a communal trapline and others have supported this critical cultural and socio-economic activity through construction of trapline cabins. There is a strong desire, as families are growing, for the T8FNs communities to add additional traplines (Verification focus group, October 10, 2012).

Nonetheless, trapping rates, success, and income are known to have precipitously declined since the 1960s, in particular, due to a variety of factors including low fur prices, reduced furbearer populations, greater engagement in the wage economy, and reduced available land for trapping. As it was put bleakly by an HRFN member in T8TA Treaty Education Team (2003g), "the trap lines are no longer a thing for our people because industry is destroying them. People have nowhere to trap anymore". T8FNs members reported reduced beaver, lynx, and other trapping activities (Hendriks 2011).

Sixty-nine per cent of T8FNs respondents in a 2009 survey indicated they feel the potential Site C reservoir areas is important for trapping (First Light Initiatives 2009).

[108] It is critical to keep in mind that Treaty 8 Rights are not limited to trapping in registered trap line areas, which govern specific commercial rights, but are held individually and communally among all T8FNs Nations and members.

6.1.4.3 Trends in Fishing

Fishing is generally of lower significance than other forms of subsistence harvesting among the T8FNs (UBCIC 1980; 1981), although it is likely fishing was probably more important in the past, especially during times when terrestrial animals were in short supply (Ridington 1981). At minimum, fish have always represented a subsistence "insurance policy" for T8FNs.

There are many different fish species and spawning runs in the Peace River and its tributaries, of which the most important is in the Halfway River. Trout (lake, dolly varden and rainbow), whitefish, and jackfish are most plentiful, but other species are present as well. Northern pike are reportedly present in the Moberly River, while UBCIC (1981) noted arctic grayling and suckers as food sources for area First Nations.

There is already a loss of river-based fishing on the Peace River for local First Nations due to non-native fishing pressures, and lack of access, in the areas upstream of the Peace Canyon Dam. Currently, the Peace River remains an important water route between Hudson's Hope and Taylor, with a lot of boat traffic. Many Dane-zaa reported fishing up and down this remaining stretch of the Peace River (Hendriks 2011). Of T8FNs respondents in a 2009 survey, 82.5 per cent indicated they feel the potential Site C reservoir areas is important for fishing (First Light Initiatives 2009).

Spill events from the W.A.C. Bennett Dam and Peace Canyon Dam have reportedly resulted in significant fish mortality (PR10, May 17, 2012). T8FNs members reported declining lack of faith in fish in the two existing reservoirs and in portions of upstream tributaries, due to mercury and other health concerns. Members noted that methylmercury levels increased following inundation related to W.A.C. Bennett Dam and Peace Canyon Dam. Levels are thought to still be elevated in some species, including bull trout. Some fish have reportedly shown signs of deformity and have not been consumed (catch and release). For these reasons (see also section 4.3), T8FNs members are not harvesting many fish in the reservoirs and are effectively alienated from the largest waterbodies in the region.

Adding to cumulative alienation concerns is the fact that other area waterbodies have also been effectively lost to T8FNs meaningful harvesting. For example, Charlie Lake is widely suspected to be contaminated and not harvested frequently for subsistence any longer and fish population have declined overall.

> Elders used to fish by the Peace River, we would take a little hook, potato, and bannock. Now, today, we would starve if we go down there and do not bring a piece of beef (T8FNs member in Hendriks 2011).

For example, fish are reportedly depleting in the lakes and streams HRFN members rely upon (T8TA Treaty Education Team 2003g). HRFN members reported now having to go

into the mountains in order to fish as a result of alienation due to industrial and non-Aboriginal recreational activities closer to their home reserve.

6.1.4.4 Trends in Vegetation Harvesting

Gathering of berries and medicines continues to be an important part of the Dane-zaa culture. However, T8FNs members reported berry picking sites have diminished over the years due to development:

> We used to berry pick wherever we wanted, lots of berries. Now we have to go far and wide to pick. A lot of our berry picking patches were destroyed by pesticide, industry, forestry (DRFN member in T8TA Treaty Education Team 2003f).

Of particular concern is the spraying of berry patches with herbicides in many areas, a practice almost universally opposed by T8FNs members:

> Forestry – they spray despite the First Nations asking them not to. [They] spray berry picking areas, berries are sticky. Industry says to wash them but the animals can't wash them. Can't eat them when [we] are picking (Verification focus group, October 10, 2012).

Plant and berry species harvested for food, medicine, or other cultural uses, and abundance of plants available for traditional harvesting, have reduced over time. Some T8FNs members expressed concern that key medicinal plants may be lost forever should current land alienation patterns continue, with both access to - and knowledge of how to use the plants – reduced (DR02, April 26, 2012). This is both a cultural continuity and public safety issue, as noted by a T8FNs member in Hendriks (2011):

> There are now so many invasive plants, plants that are not indigenous to this continent are growing out there in the wild and a lot of them look similar to our natural plants and if we pick the wrong ones, we can either die or get really sick.

The Peace River valley in particular, given climate, soil and other beneficial factors, is known to house many culturally and economically valuable Dane-zaa plant species. In a 2009 survey (First Light Initiatives 2009):

- 76 per cent of T8FNs respondents indicated they feel the potential Site C reservoir areas is important for gathering berries;
- 70 per cent see it as important for gathering medicines;
- 70 per cent see it as important for gathering wild herbs; and
- 48 per cent see it as important for gathering wild vegetables.

There are some medicinal and food plants that grow preferentially or solely in the Peace River valley. For example, wild onion, medicinal plants whose names people did not want to share (primarily on the sun-facing south slopes), and prickly pear cactus. Multiple berry species are plentiful in the Peace River valley, as are culturally important fiber sources such as diamond willow and birch.

6.1.4.5 Trends in Access to Clean and Abundant Water

> We used to drink the water, dip our cup into the water, and now we cannot just because of all the loggers (T8FNs members in Hendriks 2011).

Reduction in the availability of clean water is a prevailing concern among all T8FNs. As one T8FNs member noted (in Hendriks 2011) "We live on water; all of the creatures live on water. Yeah, it is very important to us."

There are concerns that all the industrial activity happening in T8FNs lands is contaminating the water on a massive scale. People simply don't feel safe and comfortable "dipping a cup" in water sources in their traditional territory anymore:

> Our water is always dirty now, not like it used to be. We could drink water anywhere and now we can not do that. This is hard on our food we take from the waters (HRFN member in T8TA Treaty Education Team 2003g).

This lowered faith in water quality has had an impact as well on the mobility of people on the land, and the cost and inconvenience of extended harvesting trips, as noted by this T8FNs elder (in T8TA Treaty Education Team 2003b): "You have to pay $2 for bottled water in the woods! You can't pack 100 gallons of water in your bag in the woods!"

In the immediate Peace River valley area, there are surface and groundwater sources that have historically been important clean drinking water sources. There are groundwater springs in the vicinity of the Bear Flats campground well known and used by the T8FNs as a current water source when out on the land.

6.1.5 Meaningful practice of Treaty Rights: concerns and priorities for the future

> Yeah my grandpa, they told him you're not going to be disturbed, your people. Here he's buried, [meanwhile] that Treaty, it's broken, not even 100 years. Forever they told them, as long as the sun comes up and the river runs, you will have your rights

> they told him. Already, those [Rights] are gone (DR19, speaking at Attachie, August 8, 2012).[109]

As noted in Bruce Thompson and Associates (1999):

> The view of Treaty 8 First Nations is that governments have allowed the environment to be exploited to the extent that Treaty 8 peoples cannot live by traditional means, and therefore have not lived up to their commitments under the Treaty. A major concern is the incremental damage to environmental resources stemming from a multiplicity of developments in the Treaty 8 area, including projects and activities in the oil and gas, forestry, municipal development, transportation, tourism and other industrial and commercial sectors. Such activities are anticipated to continue to expand significantly in the future.

And indeed they have. T8FNs already perceive that their Treaty 8 rights have long been significantly impacted by a variety of factors. Nonetheless, T8FNs members have shown a willingness to fight for those rights and have made efforts to increase activities on the land (see section 6.2 and 6.3). People are still getting out hunting and fishing and camping on the land, including in the Peace River valley. Several Dane-zaa families continue to use the Peace River valley as their "grocery store" for game, fish and plants, and survey results indicate more would like to do the same.

Two quotations from T8FNs members from Hendriks (2011) capture the promise and peril facing the T8FNs related to meaningful practice of Treaty Rights into the future:

> I am still out on the land, still walking, still praying.
>
> The majority of people still know how to hunt, but maybe there will be nothing left to hunt.

[109] This loss of faith and trust in the Crown due to prior infringements on Treaty Rights is taken up further in section 6.3.

6.2 Protection and Promotion of First Nations Culture

T8FNs culture has faced significant externally imposed changes over the past two hundred years, as described in section 4.[110] Dane-zaa language, culture and way of life have been threatened by these external forces. This has caused changes in First Nation travels, knowledge of and transmission of cultural skills, oral history and teachings between generations, spirituality and ceremonies (historic conditions for which are described in section 3).

Adaptability remains a cultural hallmark of the T8FNs, and the Dane-zaa culture has persisted despite the weight of recent history. There is renewal at play now. This section examines some of the challenges facing the protection and promotion of T8FNs culture, and means by which the T8FNs are attempting to overcome these challenges. Elders and youth both expressed a strong desire to protect and promote what is left of T8FNs culture. Both also noted hurdles:

> The younger generation now, it's all lost culture, they've lost the way, the culture and traditions, and everything's changed, people changed too (DR03 June 28, 2012).
>
> [It] bothers youth that they don't know their language, [and that they] can't learn to hunt or trap if there are no moose (DR17 June 6, 2012).

6.2.1 Key Issues and Indicators

The following challenges to Dane-zaa cultural promotion and protection have been identified (Hendriks 2011; T8FNs Team 2012a):

- Dane-zaa language use appears to be on the decline – "people are losing their language";
- Loss of self-reliance by the younger generation through lack of engagement in traditional economy;
- A loss of knowledge and practice of Dane-Zaa ceremony and spirituality; and
- Changing values related to greater engagement in the wage economy, less time on the land, and introduction of "Western" cultural mores.

[110] Sections 5.1.6, 5.2.6, 5.3.6, and 5.4.6 identify cultural attributes and changes at the individual T8FNs level.

The following indicators were identified as key to the protection and promotion of T8FNs culture:

- Access to land to practice traditional mode of life;
- Access to harvestable resources (e.g., fish, game, wild plants, drinking water);
- Language retention;
- Intergenerational knowledge transfer; and
- Gathering, ceremony and active spirituality.

Access to land and resources was discussed previously in section 6.1. This section focuses on language retention, inter-generational knowledge transfer, acculturation to ceremony, and T8FNs values and spiritual beliefs. Some of these indicators can be measured while others are described through stories or quotations.

There are a number of reasons to protect Dane-zaa culture. Many T8FNs members shared stories of how important their culture is to their health and well-being, such as this DRFN elder:

> When I quit drinking, I was out in the bush every day. Addiction, that's addiction…I'm out there every day doing something and then I'm doing the language too at the same time, to share with people, how the life used to be, language is good… I went to language workshops in Prince George, Vanderhoof, Vancouver, how many times, I hear that you know the people say, 'I used to be like that, the alcohol, but I went back to my culture I went back to how to hunt and you know how to live off the land, that's how I quit', 100% works that way (DR03 June 28, 2012).

Cultural identify gives the individual self-esteem, skills, and an inter-generational relationships. These are essential for youth to build resilience. B.C.-based research draws a correlation between youth suicide and the degree to which particular Indigenous communities find themselves bereft of meaningful connections to their culture (Chandler and Lalonde 2007). This research was reinforced in this T8FN study, as it was youth who were clearly identified as vulnerable to cultural loss.

6.2.2 Protection and Promotion of Beaver and Cree Language

> Everyone uses English as a first language now. Used to be first language was Beaver in the home (DR17 June 11, 2012).

Language retention is a serious concern for all the T8FNs. In the *Treaty 8 Accord* (T8TA 2004), T8TA membership committed to developing "traditional and modern material for the education of our children and youth. Our language will be preserved."

Close to a decade ago, T8FNs elders identified the following factors as contributing to language loss (T8TA Treaty Education Team 2003c):

- Long-lasting residual effects of outlawing Aboriginal language use in residential schools;
- The rise of English through technology, the wage economy, and non-Aboriginal population growth;
- Lack of an Aboriginal language curriculum in education systems;
- Lack of role models speaking Aboriginal languages; and
- Less time on the land and less time in general between youth and elders, the traditional educational/language learning conduit for T8FNs.

Among the Dane-zaa, there is no question that there is a decline in the proportion of T8FNs members who speak their Beaver or Cree language. (see sections 5.1.6, 5.2.6, 5.3.6 and 5.4.6). English has largely become the default official language.

Hurdles to language maintenance identified by Dane-zaa members included a lack of language teachers on reserves and residual effects of language shaming from the residential school era, among other factors. There is general consensus that fewer children are learning the language at home and there are only limited educational prospects for Beaver and Cree in schools.

There are some signs for hope in language retention. More children are showing interest in learning the language, younger parents are encouraging their children to understand the language even if they do not speak it, with some children learning from their grandparents.

Efforts by the ground-breaking Dane-zaa (or Beaver) Language Authority[111] to produce new (and new media) documentation and recordings to promote written, verbal and

[111] The Beaver Language Authority is a group of Beaver speaking First Nations that have consolidated their efforts at Treaty 8 to preserve and protect the Dane-zaa/Beaver language. It is funded by the First People's Heritage Language Culture Council. The Beaver Language Authority started in 2007. The purpose of the Beaver Language Authority is to certify Beaver language teachers so that they can go teach the language in schools. They conduct document translation and other activities related to preserving, protecting and promoting the Beaver language. A representative from each T8FNs community sits on the board of the Beaver Language Authority. Limited resources of late have hampered its capacity. Nonetheless, the Beaver Language Authority still hopes to certify more teachers. (T8FNs staff 06, May 7, 2012).

recognition literacy among the T8FNs are ongoing. Other examples of language promotion at the community level include the DRFN compact disc created to teach language to children, (DR03 April 26,2012) efforts to capture elders' stories, and the creation of the online Ridington/Dane-zaa Digital Archive (http://www.fishability.biz/Doig).

A fundamental element of language promotion and retention is the degree to which Aboriginal languages are used in the home during early childhood development and early schooling. In this category, and despite recent inroads, the T8FNs are struggling. According to Census data and work done by the T8TA (e.g., 2011a; 2011b), most of the fluent speakers are in their forties or fifties and up, which puts the Nations in a "C to C-"score according to a demographic distribution of speakers rating developed by Krauss (1997). This means the Beaver language is at risk of declining precipitously as elders pass on.

It is beyond the scope of this baseline conditions assessment to consider the much wider Cree language group (largely spoken only by WMFNs members among the four T8FNs). However, at this point in time, the more geographically constrained and smaller population Beaver language group most readily fits the category of "disappearing" as defined by Grenoble and Whaley (2006):

> A language is disappearing when there is an observable shift toward another language in the communities where it is spoken. With an overall decreasing proportion of intergenerational transfer, the speaker base shrinks because it is not being replenished. Disappearing languages are consequently used in a more restricted set of domains, and a language of wider communication begins to replace it in a greater percentage of homes.

English has certainly become the dominant language both around and within the four T8FNs, to different degrees. Despite efforts to promote the Beaver language, there are concerns that the language will no longer be transmitted to children, which creates risk of total loss – language extinction.

6.2.3 Inter-generational Knowledge and Values Transfer

> Where the cultural practice and understanding comes into place, people need to understand how to do things, like the skills, the competency, you got to have a competency to do something. Reading and writing is one thing, cultural things like skinning a moose and all those kinds of things that people can actually do is what makes a full life (DR04 July 23, 2012).

T8FNs members have expressed strong concerns that cultural change, largely imposed from outside, has reduced the transfer of traditional Dane-zaa knowledge and values, especially since the 1970s.

> There's a lot of people saying we have to restore our relationship to the land, to the animals, we got to remember who we are and where our forefathers came from, and those kinds of teachings we should be passing on, and to make sure that our youth know about them and that they have passed it on to their grandchildren. This community [West Moberly] I think is trying pretty hard (WM01 May 18, 2012).

The importance of having enough land and the right pieces of land available for inter-generational knowledge transfer cannot be overstated.

> How to keep that cultural continuity: it is hard. With all the well sites around, by the time she [the respondent's daughter] gets a little older, all the moose will be poisoned and gone. She won't be able to make moose hides, moccasins; she won't see how drums get made. Need moose for all these things (DR17 June 11, 2012).

T8FNs elders, working age people and youth all agree: it is vital to know the life skills of living off the land, not only to make life easier and more enjoyable today, but also to have the necessary insurance in place in case the wage economy falters.

> It always comes in handy, if you can get into your culture, like shooting a bow and arrow, learning to start a fire with rocks and things like that, it may come in handy in the future like if the world was going to end you need to hunt. So you need to learn that (WM07 July 11, 2012).

Reduced activity on the land was reporteds by all T8FNs and this holds repurcussions for cultural skills development:

> Our kids are almost losing out on a whole cultural component of who they are. In the summertime [in the past] it was all about gathering and preparing, making dry meat, and making hides because we needed those things in the winter time and it's not like that anymore (WM11 May 24, 2012).

T8FNs members, especially elders, have long raised concerns that the culture is changing among youth. As noted in T8TA Treaty Education Team 2003f: "The elders are slowly losing control of our young ones. Today the young don't want to learn about the culture." More recently, an HRFN member noted "As changes occur their values are being impacted, people are being forced to change their values" (HR01 May 16, 2012). Youth in particular

are perceived to have electronics distracting them away from traditional life: "Technology has taken over our children; i.e., Walkmans, computers, television, Nintendo games, etc. and they are all in English, none in our language" (T8FNs member, in T8TA Treaty Education Team 2003c).

There are concerns that parents are too busy working and too focused on money and consumer culture now to get their kids out on the land to learn traditional skills:

> When they were smaller, I took them out, made them skin a deer, made them pack 'em out. Made them snare rabbits. If people take their kids out like that, every now or then, they'll learn lots. But now, they don't even know how to cook bannock (T8FNs elder, T8TA Treaty Education Team 2003b).

There remains a strong desire by T8FNs to pass on their culture and way of life. In many cases, parents who no longer go out into the bush on a regular basis recognize the value of a bush education and want their children to learn traditional skills and values. And, despite consistent concerns raised by elders, young people expressed the desire to preserve their cultural heritage with a strong land base. In focus groups, youth indicated that their cultural priorities are similar to those of the older generation. They love to hunt and fish, teach their own children how to hunt and fish and get involved when animals are harvested and brought back to the community.

> When I was younger, I probably wouldn't have cared about something like this [a culture camp]. I was starting to learn who I was as a Dane-zaa woman and Cree woman that I realized things like this are really important to me, because I'm learning about my culture now and land is like connected to who I am, and I don't want to see more land loss, I don't want that to happen. I want to be able to speak about that with my children and pass on what I'm learning, because I'm learning things here that I didn't know yet, stories that I hadn't heard yet, and those things. They don't need to be lost. We've already lost so much and I remember sitting in one of the meetings that they were talking about dreamers and they said, we need to learn to salvage what we have, what we have left, and just that sentence of 'what we have left', just shows that we have lost so much already and it's about preserving it and keeping it alive and getting people to get back in it, it's just, I feel like stirring up something in their souls or in their memories, because I believe that our ancestors are always connected to us and stirring that up, so it's kind of awakened them to who they are (PR12 August 8, 2012).

Being on the land is critical to knowledge transmission. As noted in section 3, a Dane-zaa education has always been a bush education. As noted in Davis (2007), it is critical that the youth have the opportunity to get out on the land to learn from the Elders about:

- Important places on the landscape, learning the Dane-zaa place names and the stories (oral traditions) associated with them;
- Trapping heritage, learning how to set traps and snare rabbits and beaver;
- Traditional moose harvest, including butchering and the making of drymeat;
- Recognizing medicinal plant species;
- Learning about wildlife and the habitat critical to ensure their survival; and
- Basics of identifying and conserving archaeological resources.

WMFNs reported on its efforts to get youth and people of all ages back out on the land:

> Started teaching boys in the mid 1990's, taking them out camping but I also took elders with me to fill in those parts that I didn't know from my teaching of traditional knowledge. So at the same time, I was a student too, and that's what we started doing. We started taking them out camping. We now have an annual Culture Camp and it's at that camp we teach our youth and even adults that are interested about hunting, about skinning moose, making hide, making dry meat, how to cut up a moose, that's where my granddaughter learned how to do all that stuff (WM01 April 26, 2012).

Hurdles remain. Proposed cultural programs are not always implemented due to lack of funds, or get implemented with key activities or personnel excluded (Hendriks 2011).

6.2.4 Gatherings, Ceremony and Spirituality

> Well it's good to have West Moberly Days because a lot of kids are starting to lose their culture, starting to do their own thing, you know, not back in the day anymore. It's the future now; a lot of kids are starting to forget the culture and starting to do their own thing (WM09 July 11, 2012).

Each T8FNs community has its own annual cultural events, as described in sections 5.1.6, 5.2.6, 5.3.6, and 5.4.6. In addition, the Nations and the T8TA have supported various annual gatherings to promote and transmit T8FNs culture and to promote cross-cultural understanding, including:

- Spirit of the Peace Pow-wow in Taylor each June;
- Festivities on National Aboriginal Day each June in each community;
- The NENAN sponsored Youth and Elders Gathering, held each July;[112]
- A Treaty 8 Unity Gathering in July; and
- Paddle for the Peace, held in the Peace River valley each July.

Dane-zaa culture is a land-based culture and people need to learn and transmit it on the land:

> It's easier for the elders to show us how our culture was, but you know how they said they show spiritual places and stuff, it's easier for them to show us that stuff and teaching us more about the culture by taking us there (WM08 July 11, 2012).

Many of the important cultural and spiritual areas within the area that would be affected by the Site C Project are identified (See Preamble). The importance of these locations has increased over time as other areas of spiritual importance (e.g., Montney, Chowade, Crying Girl Prairie, Twin Sisters, among many others) are subjected to increasing development pressures.

Members expressed concerns that the communities no longer have spiritual leaders who can teach the traditional spiritual ways (Hendriks 2011). As one WMFNs member noted, "to some degree, the children seem kind of lost because there is no real visible and spiritual teachings or presence around" (WM01 May 18, 2012). Conflict with western religion is identified by many T8TA members as radically reducing the conduct and knowledge of traditional ceremonies, as people began to become church attendees:

> To help people get healthy again, we need to start teaching the new generations again about how we used to live, how we used to utilize land and how we looked at life in general. A lot of our sacred ceremonies have been eradicated or gotten rid of by the churches and were forgotten and died with a lot of the old people. That's

[112] Nenan Dane-zaa Deh Zona Child and Family Services Society (NENAN) is a cornerstone social services organization for the T8FNs. They not only provide critical child and family support services for First Nations in the PRRD, they also promote cultural activities such as the annual Youth and Elders Gathering held in the summer of each year since 2009. One of their annual events is at the Bear Flats campground in the heart of the Peace River valley. This area was chosen due to its "profound significance as Treaty 8 peoples have gathered, camped, hunted and practiced ceremony here since time immemorial" (Nenan Dane-zaa Deh Zona 2009). NENAN began in 2007. Its goal is to serve First Nations, Aboriginal and Metis children and families in the northeast of BC, using culturally based services that will replace traditional Western family and childrens services with an Aboriginal, lands and community-centred approach.

> what happened at West Moberly, we don't have no spsiritual leaders anymore from our old ways, the Dane-zaa way (WM01 April 26, 2012).

Among the ceremonies identified by T8FNs elders as contributing to cultural vitality are some original Dane-zaa activities, such as tea dances, along with other practices adopted over time from other Aboriginal cultures, such as sweats, sun dances, and pipe ceremonies (T8TA Treaty Education Team 2003c). While ceremony remains important, some members question the degree to which cultural knowledge of the reasons behind these ceremonies are known to members:

> If during a prayer ceremony, tobacco is offered and handed out to be offered they will all take the tobacco and offer it, those customs are still there, and it's still practiced by everybody, but what I'm wondering is do those kids know why they're doing this, what the purpose of why they're doing it, that I don't know (WM01, May 18, 2012).

In recent years, elders and leaders in some communities have attempted to revitalize the practice of day-to-day and opportunistic gatherings and ceremonies. For example, one DRFN member identified the use of music and dancing in impromptu gatherings as a potential way to improve cultural practice and community cohesion:

> If they're ready they'll come and we don't force people to do these things, it's not formal, it's an informal way of bringing people together, by using these cultural artifacts and cultural sound, music. When people hear it, immediately they'll come to it if they're ready, maybe they're busy pre-occupied, but when they're ready, they'll come. [One time we did this] within an hour and a half, we had maybe fifty people sitting around listening and dancing to this music (DR04 July 23, 2012).

6.2.5 Gaps in Progress toward Cultural Protection and Promotion Goals

> Our culture will slowly continue to be lost and sooner or later when she [daughter] has her babies, it's going to be like nothing, like our culture never existed. I just want to keep the culture going as long as I can (WM08 July 11, 2012).

In a 2010 study of 54 Aboriginal and non-Aboriginal North Peace participants, 20 expressed concern that an increase in energy development results in a loss of Aboriginal culture (Edwards and Davis Shuetz 2010). In addition, 12 of 54 study participants believed that the ongoing fracturing of and diminishing territorial lands due to oil and gas activities

has resulted in the loss of Aboriginal culture. This includes loss of traditional ways including hunting, Beaver camps for the children in the summer, living off the land, all resulting in elders losing their language, youth substance abuse issues, family breakdowns, and other indicators of dysfunction.

The continued loss of a clean and abundant environment and land base in which to teach their kids their land-based culture is an enormous hurdle to the Dane-za goal of protecting culture. Another is increased engagement in the wage economy, reducing the amount of time available for travel on the land and according to many, eroding the desire to spend time on the land. These two factors together are critical hurdles as reported by one West Moberly member: "The camping, the environment that you need to be able to talk to these children, to be able to pass on these teachings, it's not there anymore because of the way it is, and everybody's working" (WM01 May 18, 2012).

6.2.6 Strategies to Protect and Promote Dane-zaa Culture

The primary Dane-zaa strategy for managing the crisis is to place a moratorium on additional land use for industrial development, particularly in culturally important areas: "Priority for culture is to be able to stop development in our area" (DR17 June 11, 2012). Other strategies include:

- Parents being encouraged to teach their children Aboriginal language as their first language in the home – "make it their first language and then they never forget" (HRFN member, in T8TA Treaty Education Team 2003g);
- Promoting programs that get youth and elders out on the land together more often, including culture camps, including outdoor and winter indoor camps teaching youth hunting skills and cultural awareness;
- Building a Dane-zaa cultural curriculum into the education system;
- Promoting traditional harvesting practices by all generations, where necessary through financial support for those who cannot afford the increasingly expensive cost of cultural practices;
- Increased funding for language programs in schools extending deeper into the grade school system;
- Preferential protection for important gathering sites, habitation sites and teaching places, critical to the oral history and harvesting mode of life for the T8FNs; and

- "Just keeping lots of events out there so everyone is active and has things to do" (WMFN Youth Focus Group July 11, 2012).

Only through a combined protection of the land and promotion of specific cultural activities can Dane-zaa culture be promoted and protected into the future and only through protection and promotion of Aboriginal culture can the overall health and well-being of the T8FNs and their members be maintained. Such is the critical relationship between culture, the land, and human health and well-being:

> [It] seems so simple and pure to be in the bush (DR07 June 11, 2012).

6.3 Meaningful Engagement of T8FNs in Governance and Stewardship

> …For Indian people the project embodies all the wrongs, hurts, suspicions and misgivings engendered through several generations of government tutelage and wardship (Mair 1979).

The project W. Winston Mair was referring to was the proposed Alaska Highway Gas Pipeline Project of the late 1970s, a project that was permitted but has never come to fruition. Yet the sentiment he identified can be extended to the way the T8FNs feel about the proposed Site C Project, which should it proceed has the potential to resurface (and indeed through the mere proposal of it, already has resurfaced), concerns about prior infringements, lack of agency, government paternalism, and other psycho-social and political concerns among "the forgotten people" of the T8FNs.

In interviews and focus groups for this Community Assessment and in prior T8FNs documents and submissions, the T8FNs have consistently raised the need for their meaningful involvement in governance and stewardship of lands and resources in their traditional territory. As noted by T8TA (2004), the T8FNs have since the time of signing of Treaty 8 with the Crown made it clear that the true spirit and intent of the Treaty is one of peace, sharing and coexistence. The T8FNs have consistently expressed a longstanding concern that the Crown has not lived up to its side of the agreement. This includes not protecting Treaty Rights, as described in further detail from the T8FNs perspective in section 6.1. It also relates to a perception the Crown has not provided the T8FNs with:

1. Recognition as self-governing entities and creation of respectful government to government relationships;
2. A meaningful role in governance of traditional lands, including maintenance of the T8FNs traditional stewardship role;
3. Equitable access to revenues and opportunities from resource development when it does occur on T8FNs traditional territory; or
4. Compensation for ongoing past infringements on Treaty 8 Rights when they do occur.

6.3.1 Key Issues

Scoping exercises (T8FNs Team 2012a; Hendriks 2011) identified the following key issues related to governance and stewardship:

- Concerns about lack of a meaningful voice in planning for future change and current decision-making for lands and resources;
- Inability to see Dane-zaa goals and aspirations for the Peace River valley attained;
- Lack of faith and trust in government and industry – in part related to lack of recognition or compensation for prior infringements, for example from the W.A.C. Bennett Dam; and
- Enforced loss of Dane-zaa's traditional role as stewards of their ancestral lands through government and industry regulations and policies.

6.3.2 Key T8FNs Governance and Political Institutions

Section 3 identified some of the key stewardship values of the T8FNs. Sections 5.1.7, 5.2.7, 5.3.7, and 5.4.7 identified key aspects of individual T8FNs current governance structures. At the pan-T8FNs level, the Treaty 8 Tribal Association (T8TA) plays a key governance role. T8TA's mission is to protect, secure and manage the land and environment for economic and cultural use for all future generations in the enhancement and implementation of the true spirit and intent of Treaty 8 (www.treaty8.bc.ca/about/). One of the functions of T8TA is that a council of chiefs meet once a month to talk about territory wide issues in the communities (Key Informant 02 July 26, 2012). The T8TA also works with its members on lands protection, wildlife research, Treaty Rights protection, and economic development projects.

There are strengths and weaknesses inherent in all political systems. Among the common factors identified as strengths in the T8FNs political systems in the mid-1980s (Krueger no date) were:

- Evidence of natural leadership qualities among political actors;
- Residual cultural strength, especially from elders' guidance;
- Extensive family networking within communities and willingness to provide assistance to one another (social cohesion); and
- Strong residual cultural knowledge, including "relatively common retention of language".

In 2012, members report that some of these strengths have eroded over time due to a variety of factors, including continued industrial growth on ancestral lands, changing values as the wage economy has become more dominant, and reduced social cohesion as families adopt non-Dane-zaa nuclear family structures. For example, elders now often have a reduced political decision-making role in some communities, which can create divisions within the community.

Factors Krueger identified as weaknesses of the Dane-zaa political capacity in the mid-1980s have not improved much over time, including reliance on "external legitimizing forces" such as the *Indian Act* and AANDC for their political structures (Krueger no date). Levels of literacy, another factor affecting political effectiveness, anecdotally appears to have slightly improved over time, but remains a concern among some elders and mature working age people.

Despite these limitations, at least some T8FNs members feel there is strength to be found among the Dane-zaa Nations, provided they stay united:

> It's a very powerful nation when it comes down to it, you call these people together, they stand together like an iron pillar, and I kid you not (WM01 May 18, 2012, referring to the combined strength of the T8FNs).

6.3.3 Indicators of Meaningful Engagement in Governance and Stewardship

Among the specific indicators of meaningful T8FNs governance and stewardship examined herein are:

Incorporation of T8FNs stewardship values into land use management;

Pressures on T8FNs governance capacity arising from engagement in existing governance and stewardship processes;

Adoption and implementation of T8FNs protected areas and other planning initiatives;

Sense of control and agency of T8FNs in land and resource management and environmental assessment processes;

Respectful relationships with other forms of government, including compensation for prior infringements; and

Effective agreements with government and industry, including tangible benefits for T8FNs from acceptable resource development.

6.3.3.1 Incorporation of T8FNs Stewardship Values into Land Use Management

As noted by Ridington (1993), the notion of T8FNs traditional territory being an uncharted and unmanaged "wilderness" until the coming of Europeans is a fallacy:

> Athapaskan hunters have managed these lands for thousands of years through techniques such as selective burning and the adaptive strategies of resource scheduling and seasonality.

In the past, Chiefs and Headsmen also met and discussed how to protect certain sacred areas and manage the land (T8TA Treaty Education Team 2003c).

As discussed in Section 3, stewardship of the land to maximize the long-term, sustainable availability of harvestable resources has always been a central Dane-zaa cultural value. The T8FNs still see themselves as the rightful stewards of the land, and practice active stewardship strategies. For example, members still report going out to different areas at different times, even leaving areas "fallow" for several years if necessary, so as not to deplete the resources in any particular area.

In recent years, there has been an externally-enforced loss of Dane-zaa's role as stewards of traditional lands through government and industry regulation. One aspect of T8FNs stewardship values that has largely been lost in the past 30 plus years of rapid resource development is that of precaution, and the prioritization of protection of the land and renewable resources over any other values. As one T8FNs member noted in Hendriks (2011), "cooling down the economic hyper-growth in the region would foster a more rational approach to land use and conservation". To date, this has not been the case.

Another example of a T8FNs stewardship value or initiative that has not been effectively implemented into land use management is provided by Ridington (1993), who noted that that T8FNs wanted limits placed on the activities of non-Aboriginal resident hunters within expanded protected areas, including requirements in some areas for hunting only with licensed guides. This management provision to reduce non-Aboriginal hunting pressures has not been implemented.

6.3.3.2 Pressures on T8FNs Governance Capacity

T8FNs have identified high pressures on community and regional First Nation governance institutions from resource development – both proposals and ongoing projects. The following capacity constraints, which the Site C Project is already contributing to via the environmental assessment process, were largely identified in Hendriks (2011):

- Chief and Councils of all four T8FNs are often out of town due to demands of development. More meetings means more time away from the community and this often leads to community members' needs not being met and a sense that they are not prioritized. This can lead to intra-community political divisions, which are especially toxic in small, close knit communities.
- Administration staff often shoulders an outsized burden at the community level due to capacity constraints, including lack of adequate staffing and funding. Relationships between Chief and Council and their staff are sometimes negatively affected by the fact that Chief and Council are too busy or away, and staff end up having to address member issues that are sometimes best addressed by Chief and Council.
- Compensation in the form of agreements with proponents to cover costs do not really reflect the increased workload at the Nation level.
- Companies do not understand that they will have to wait in order to get a meeting with Chief and Council. Companies often arrive in a First Nation thinking that they can get access to Chief and Council at a moment's notice, when in fact they are often booked months in advance. This is an issue related to respect; relatively low-level company representatives should not automatically expect to meet with the Chief.
- As one T8FNs staff member noted - "Chief and Council typically receive 200 emails per day", and are frankly unprepared to deal with that mass of correspondence.

In the end, the workload from dealing with other levels of government and industry tend to leave T8FNs political leadership with limited time to properly address matters on the home front that they were elected to manage. This contributes to lower community-level well-being and quality of life, including but not limited to lack of planning for the future, and increased political divisions at the community level.

T8FNs members suggest that Site C has already affected the T8FNs by taking up time and resources when staff attend Project-related meetings.

6.3.3.3 Adoption and implementation of T8FNs protected areas and other planning initiatives

According to some T8FNs members, existing land use plans in the Peace River area are either not in place, not being implemented effectively, out of date, or do not reflect T8FNs

priorities when established (Hendriks 2011). Among the issues identified by T8FNs related to protected areas included the following:

- The Peace Moberly Tract and WMFNs Area of Critical Community Interest (see Figure 13) are important places for wildlife habitat continuity. The agreement between SFN, WMFNs and the Government of British Columbia for co-management of the Peace Moberly Tract in 2006 may be a positive sign for joint management systems (Government of B.C., SFN and WMFNs 2006), but implementation effectiveness is unknown at this time;
- There is a sense that industry and government desire to maximize oil and gas and other resource extraction development has led to a smaller amount of land being set aside in the region than in other, less resource abundant regions. For example, it was ntoed that there was a four per cent maximum protection ceiling in the Fort St. John Land and Resource Management Plan,[113] as opposed to nine per cent in other adjacent planning areas. This does not correspond with T8FNs priorities to maximize the amount of land available for meaningful practice of Treaty Rights;
- There is a need to determine thresholds for industrial development activities within the planning region, but none have yet to be created and there has been no meaningful cumulative effects assessment in the region despite calls by the T8FNs to develop such a program over the past decade; and
- T8FNs have also called for development reclamation planning and implementation of more aggressive progressive reclamation programs, including for the large number of contaminated sites in the region, with limited success to date.

In addition to concerns about land use planning initiatives that come from the outside, th T8FNs have raised concerns that they do not have a meaningful voice in planning future change, meaning that future goals and visions for the Peace River valley will not be attained. Among the visions put forward for future management of the Peace River valley by the T8FNs has been a desire to re-establish the natural flow regime on the Peace River that was altered by the construction and operation of the WAC Bennett Dam. Needless to say, such an initiative could not be accomplished should Site C proceed, creating a "futures foregone" scenario for future land and water management.

[113] Accessed at http://www.ilmb.gov.bc.ca/sites/default/files/resources/public/PDF/LRMP/Fort%20Stjohn_LRMP.pdf, October 9, 2012.

As noted in section 5.1.7, the DRFN in October, 2011, designated a key traditional land use area on the B.C./Alberta border the *K'ih tsaa?dze* Tribal Park. At the time of this Baseline Community Profile, the level of agreement reached for management of lands and resources between DRFN, government and industry is unknown.

On the positive side, some T8FNs members identified the Twin Sisters area and the proposed Peace-Beaudreau protected area in the Peace River region as two "low hanging fruits" that could help kick start a protected areas initiative (Hendriks 2011).

6.3.3.4 Sense of Control and Agency over Land and Resource Management Decisions

The T8FNs have consistently raised strong concerns that Crown Consultation and T8FNs engagement in environmental assessment processes have had limited results. Without effective systems for T8FNs inputs and meaningful redress for their concerns, there is a low opinion of the efficacy and fairness of current land and resource management decision-making systems. For example, Korber (2001) suggested "the Treaty 8 First Nations believe that consultation is often an exercise in futility and is indicative of a limited worldview held by the Attorney General's office."

More recently, Booth (2010) conducted a series of interviews with T8FNs members and leadership about the effectiveness of the environmental impact assessment process to meet the needs and Treaty Rights of T8FNs. The answer was a resounding "no". T8FNs identified several barriers they encountered in participating in federal and provincial processes (as well as other consultative processes). These included:

- Capacity issues (time, money, expertise and staff);
- A lack of community knowledge of environmental assessment processes;
- Failures in relations with the federal and provincial governments and their representatives in the respective assessment agencies;
- Failures in relationships with industry proponents;
- A concern that the environmental assessment process is not neutral;
- That consultation is meaningless due to its lack of impact on development;
- That culture is ignored in environmental assessment processes;
- That First Nations are included too late in the process;

- That loopholes in the assessment processes exist;
- That there are failures of procedural fairness;
- That the mandated time lines are inappropriate; and
- That the provincial government ignores the issue of cumulative impact assessment.

Chief Roland Willson of the WMFNs particularly echoed this final concern, suggesting that "Before even considering Site C, a comprehensive cumulative impact assessment must happen; [must make] amends for the destruction of our culture and environment that were adversely affected by the W.A.C. Bennett and the Peace Canyon dams" (Willson 2010).

Specifically, the Site C Project environmental assessment is creating significant stress and worry for T8FNs members due not only to its potential effects, (see T8FNs Team 2012b), but also due to concerns about process fairness. Several indicated concerns that "the fix is in" or "Site C is a done deal", with BC Hydro as a Crown Corporation unlikely to receive an adequate examination of potential adverse impacts on the human and biophysical environment during the Crown-controlled environmental assessment process.

The T8FNs have identified strong concerns with the consultation and engagement process for the currently proposed Site C Project. As noted in Lewis (2011):

> BC Hydro and Treaty 8 entered into a Consultation Agreement in December 2008. The agreement was designed to help guide the consultation process between parties. But First Nations groups say the consultation meetings have been nothing more than information sessions.

Lewis (2011) identified concerns by T8FNs leadership that the consultation process was in effect rigged toward an expected outcome of the Project proceeding, and represented a "tick the box" exercise more than a meaningful and reciprocal relationship between decision-makers. She went on to cite WMFNs Chief Roland Willson as stating about Site C: "The provincial government has determined that they want it. BC Hydro has determined they want it... It's rubber stamped" (Lewis 2011).

In addition, the T8FNs received no satisfaction to a request made to the Crown that it agree that the T8FNs be allowed "formal participation in the decision making process concerning the proposed Site C Dam and to agree that when no agreement can be reached on the proposed Site C Dam to agree to appoint together with First Nations an impartial decision maker" (T8TA 2010).

6.3.3.5 Respectful Relationships with Government and Industry

The T8FNs have expressed strong distrust of the Crown and industry, largely derived from a lack of reciprocity and living up to agreements, going back to the time of Treaty. For example, in discussions with the T8TA Treaty Education Team (2003e), PRFN members indicated that "Treaty says they would not interfere with our way of life, but everywhere you go out there, there's people and you can't find peace half the time", and a common perception that "Treaty promises were broken before they even got the paper work done and sent into the big boss".[114]

This lack of trust, faith and reciprocity over time has led to a strong sense among the T8FNs that "Government is against us" (T8TA Treaty Education Team 2003a). T8FNs members also suggested that "the BC Government watching industry is like the fox watching the henhouse" (T8FNs member in Hendriks 2011), implying that there are strong connections between government and industry.

Overall, there is a sense that respect and reciprocity is a one-sided game when the T8FNs are dealing with government and industry:

> Dane-zaa leadership feels it is not heard and its concerns are not taken seriously by the government in Victoria. In all experiences in negotiations, they end up settling holding their nose thinking "we have to take this". Once agreements are in place, experiences have tended not to be positive ones... Nobody in the south cares one bit about 40,000 peple in Northeast B.C. Not a large enough population base (Key informant 02 July 26, 2011).

T8FNs members also note that their trust in BC Hydro, in particular, has eroded due to the fact that the Crown Corporation has provided no compensation for past infringements on the T8FNs. Willson (2010) called for BC Hydro to "mak[e] amends for the destruction of our culture and environment that were adversely effected by the W.A.C. Bennett and the Peace Canyon dams."

[114] For example, key informant 04 (June 27, 2012) suggested that both Canada and British Columbia refuse to acknowledge, respect or implement protection over the Dane-zaa's commercial rights in lands and resources within northeast B.C.

6.3.3.6 Effective Agreements with Government and Industry, including Tangible Benefits

In recent years, several of the T8FNs have signed agreements, such as Consultation Protocol Agreements (CPAs) and Economic Benefits Agreements (EBA's), to define their relationships with the provincial government and generate resource-related revenues.

CPAs are intended to create a framework for consistent consultations between the Government of British Columbia and T8FNs related to oil and gas applications, and are meant to serve to clarify expectations for all parties involved. Unfortunately, to date CPAs have been identified as an excellent example of the skewing of the system to the benefit of industry and the province and away from the T8FNs. Dovetail Consulting Inc. (2010) noted "a consistent and worrying gap in levels of satisfaction related to the CPAs between the OGC [Oil and Gas Commission] as the regulator of oil and gas activity and First Nation communities that are affected by those activities":

> Much of the input received from First Nation respondents reflects a deep sense of dissatisfaction with the CPAs... including concerns over aggressive timelines for consultation, the lack of capacity available to ensure applications are assessed adequately by First Nations land offices, inadequate funding, and an overriding sense of skepticism that First Nations' interests will be given due consideration by the Oil and Gas Commission. The lack of effective mechanisms through which to address landscape level issues and First Nations' frustration over cumulative effects is also a consistent and substantive concern (Dovetail Consulting Inc. 2010).

EBAs (as noted in the chronology in section 4.1 – page 64) represent increased revenue sharing possibilities, a key T8FNs governance goal.

At the present time, the T8FNs have no revenue sharing agreement related to hydro-electric energy production from the Peace River dams. The inability to access much in the way of benefit, while shouldering the impact load of environmental and socio-cultural change has long been a concern of the T8FNs. Revenues are commonly believed to be in the billions of dollars annually from Peace River operations. As noted in further detail in section 4.3.3 and 4.3.4, T8FNs members identified extensive concerns about lack of accommodation or compensation for past infringements rom BC Hydro projects on the Peace River, and an overall inability to get a net benefit from BC Hydro operations on their traditional territory.

6.3.4 Psychosocial Impacts of the Lack of Meaningful T8FNs Governance and Stewardship

> They [the T8FNs] are always seen as irritants, 'oh gosh, we've got to go talk to the Indians'. The minimum amount is always put on the table and they have to fight and claw their way for anything that they do get. And so there's a disconnect for them between what they perceive and what they're told their Treaty Rights are and what they're actually able to get with their Treaty Rights and the actual implementation of those Treaty rights, they don't see that. And that I think causes further tension with them. 'We have all these rights, why do we keep getting screwed' (Key informant 02 July 26, 2012).

Booth (2010) raised the issue of psychological impacts both as inputs to the environmental assessment process (i.e., what effects will a project have on mental health), and as effects themselves of engaging in a process that doesn't seem to meet your needs, seemingly by design:

> Environmental assessments do not take into account the cost of endlessly participating in processes only to see the development happen. Yet, many First Nations raised the issue in different ways. One staff member reported being reduced to tears by the attitudes of the company officials they had to deal with. As an Elder commented:
>
> It's alright with me, because I am old, I might be gone tomorrow, might be today, but I am looking after my great grandchildren. I got 56 grandchildren. That's what I am thinking about. Not myself. He's good. It's good to talk like this, to bring it up, everything. A lot of times I could not sleep at night because thinking about this, a lot of things (Elder 1 in Booth 2010).

There is a potent mix of resignation and anger associated with the inability to actually have one's voice heard by government, often expressed by T8FNs members:

> [We] signed a treaty in the 1800s with the government, there are always promises. They took the bison away without consusltation. They promised to look after the bison, but they didn't. People don't know how to hunt the buffalo anymore. There was an oil spill in 2002 and there are still problems today with it, the government says they will fix it but still they do nothing (DRFN member 03, Site C Open House, May 9, 2012).

There is also a strong sense by T8FNs that their voice means little to most British Columbians; that they are at risk again of being "forgotten people", as Mair called them in 1979:

> I feel like we don't matter because [we are] really up in the north compared to the province. I think we are just a handful of First Nations people. Our territory covers a third of the province and our voice doesn't count for anything it seems. It makes me mad when I think way back when our grandfathers signed the Treaty with the understanding that it was a peace treaty and that it was a sharing treaty and they put us on little blocks of land called reserves and they changed our whole mode of life and they are still changing it today with this development and dams they are putting in and we are still suffering the effects of the Bennett Dam and they are going to it all over again (WM11 May 24, 2012).

6.3.5 Gaps in Progress toward Dane-zaa Governance and Stewardship Goals

Questions about lack of a meaningful role for T8FNs in governance, stewardship, and pre-development planning (the latter needed in order to maximize their ability to take advantage of new developments that do occur) are not new ones. In his report on the proposed Alaska Highway Gas Pipeline Project, W. Winston Mair posed the following questions:

> What job and business opportunities are realistically available to native peoples? What steps will be taken to ensure that they are not spun off or replaced as the fortunes of the economy ebb and flow? These questions cannot be adequately addressed as isolated and unrelated problems, without benefit of all-encompassing regional planning (Mair 1979).

Yet the 33 years in between these statements and the present day have not fundamentally answered some of these questions, nor has the "long range resource/land-use and socio-economic development plan for the region, a plan where native people occupy a place and role" (Mair 1979), come to fruition. The next couple of sections (6.4 and 6.5) look at these questions of hurdles to the T8FNs "ability to take advantage" of future development, including Site C should it proceed.

6.3.5 Overcoming Hurdles to Meaningful Governance and Stewardship

Among the tools by which the T8FNs are seeking or may in the future seek a more meaningful role in governance and stewardship are:

- Additional T8FN-specific protected areas initiatives similar to DRFN's 2011 Tribal Park;
- Proper cumulative effects assessment at the regional level, with an emphasis on maintaining "sufficiency resources" for meaningful practice of Treaty Rights (see section 6.1.2.1);
- A formal process with BC Hydro over compensation for past infringements in the Peace River valley;
- Development of thresholds of manageable/acceptable change for key valued components in their traditional territories;
- Increased Dane-zaa monitoring and adaptive management presence in industrial development on its traditional territory; and
- Promotion of a specific vision for the social, cultural and economic future of the Peace River valley.

6.3.5.1 Moving Forward: Dane-Zaa Land and Resource Management Principles

In September, 2003, all four T8FNs (and other member Nations of the T8TA), met to discuss and re-assert their ""Inherent Right" of Governance over the lands and its resources" (T8TA 2004). A subsequent task group developed the following principles to guide a unified Treaty 8 that will focus on building strong governance:[115]

"We the people of BC Treaty 8 Nations…

- Have the right to self-determination and establishment of our own inherent sacred laws.
- Shall no longer allow the prima facie infringement of our Aboriginal and Treaty Rights.
- Continue to recognize that we have the inherent right to the lands and its resources.

[115] Note: not all of the Principles identified in the *Treaty 8 Accord* (T8TA 2004) are included here (others included principles for strong healthy families and communities); only those related to governance and stewardship.

- Do not recognize the provincial position that our lands and its resources were surrendered and ceded.
- Shall no longer accept resources being extracted from our lands without having anything in shares back to the people. We shall engage in Revenue Sharing.
    - Are tired of the rate of ongoing large scale development on our lands.
    - Shall engage in developing Community-Based Land Use, co-management practices.
    - Shall focus on the need to develop alternative solutions to deal with the cumulative impact of development within our land [including our own enforcement and compliance program].
    - Will become more politically involved at the community level, regional level, provincial level and national level. Our voices shall be heard.

The degree to which these principles are integrated through cooperative relationships between T8FNs, other forms of government, and industry, will be key to future meaningful governance and stewardship in the region.

6.4 Access to Education and Training Opportunities

Greater access to education and training opportunities has the potential to increase employability, income, quality of life, self-esteem and social capital among T8FNs individuals and communities. Appropriate education and training opportunities are critical for T8FNs members to participate in and thus benefit from development in the region, and also to develop social capital to facilitate adaptation to change caused by development and rapid social, economic and cultural change in general. Having a suite of skills and training relevant to available economic opportunities is also a key way to help mitigate the extremely high cost of living in booming resource economies, and to promote social and cultural stability and resilience.[116]

The issue of low high school graduation rates is well known in Canada as a major factor in First Nations' continued relatively low engagement in the wage economy and socio-economic status. Hodgson (2010) notes that Aboriginal people who complete high school have labour force participation rates almost identical to that of non-Aboriginal Canadians, and that therefore a primary step toward socio-economic equity for First Nations would be for Aboriginal people to attain a high school graduation rate equal to the national average.[117]

T8FNs are at a significant disadvantage to accessing employment and business opportunities, and thereby have lower potential to benefit in any meaningful way, given their differential access to education and training opportunities. This was a key issue identified in two separate rounds of scoping for the Site C Project (Hendriks: 2011; T8FNs Team 2012a). As with any large project with a large workforce requirement and a long lead time, the Site C Project and its Proponent need to carefully consider the institutional and systemic barriers that keep First Nations people at a disadvantage.

[116] There is also a high level of concern that the education that is available for the T8FNs is not culturally appropriate. There is little, if any curricula that enhances understanding or practice of Dane Zaa culture, language or life skills. Cultural aspects of education are covered in Section 6.2 and are not reiterated here.

[117] Although, it is worth noting that Aboriginal people without post-secondary education make less than other Canadians with the same educational attainment level (Wilson and MacDonald 2010). However, Aboriginal people with university degrees have moved almost on par with non-Aboriginals with that level of schooling (as reported in Ireland 2011).

6.4.1 Key Issues

Historically, First Nations in Canada have had lower access to quality and diverse education and training. First Nations members generally have lower educational attainment and training completion statistics compared to the non-Aboriginal population, across virtually all Canadian jurisdictions. The Auditor General of Canada (2004) found that "a significant education gap exists between First Nations people living on reserves and the Canadian population as a whole", estimating that at current levels this gap could take as much as 28 years to close. Studies also suggest that Aboriginal youth are likely to leave the education system with much lower levels of educational attainment than non-Aboriginal youth (e.g., Taylor, Friedel and Edge 2009).

Accessibility and quality of education and training opportunities for T8FNs members has been a consistent problem over the years. Drawing from previous studies, issues scoping for this assessment, and interviews and focus group results, the following issues related to education and training were identified among the T8FNs:

- Poor and often distant access to education and training opportunities;
- Low educational attainment rates;
- Appropriateness of educational curriculum and "streaming" of Aboriginal students; and
- Poor quality of education.

6.4.2 Baseline Conditions and Trends over Time in Education and Training among the T8FNs

Typical measures of educational attainment and success are not aligned particularly well with First Nations values and culture. As stated in a report by the Canadian Council on Learning (2009), there is a gap between Aboriginal perspectives and government reporting frameworks with respect to indicators of learning outcomes. This suggests that current indicators may not be particularly useful for creating strategies and policies. That said, current indicators are an important measure of the ability of First Nations to engage in the wage economy and adapt to effects on their traditional livelihoods.

Among the factors that merit consideration when measuring education and training are:

- Availability of education and training in the T8FNs communities;
- High school graduation rates (including "school leaving" certificates);

- Per cent of the population at different levels of educational attainment (e.g., completed university or college, completed trades designations);
- Functional literacy and numeracy, where information is available; and
- Barriers to training and education, as reported by T8FNs.

Information from secondary sources such as planning and policy documents, census, academic and other published data, and interview and focus groups, was used to identify the current status and trends over time for the education and training measures identified above among the T8FNs.

As with many of the indicators of social, economic and cultural well-being and quality of life, it is difficult to find dedicated, consistent educational and training data for the T8FNs. This is largely due to the lack of a separate Aboriginal or T8FNs-controlled school system, something several T8FNs members indicated is a future goal.

Information was collected as available on the interim years for all three school districts - #59, #60, and #81 – where T8FNs students who live in the four home reserve communities attend. Data breaking down specific educational attainment for T8FNs is limited due to Census tract and community size issues, so some extrapolation from regional or provincial data was required. As a result quantitative data should be regarded with caution.

6.4.2.1 Overview of available education programs

As noted in Section 5, Halfway River, West Moberly and Prophet River all have elementary schools in the community. Doig River students typically attend Upper Pine Elementary which is in Rose Prairie about 40 minutes drive from the DRFN band office.

Hendriks (2011) reported that some tutoring during lunch hours (DRFN) and after school (HRFN and WMFNs) is also available.These programs help youth with challenges but are not always consistently staffed.

None of the four communities have secondary schools on reserve. Typically, Prophet River students will travel to Fort Nelson, Doig River and Halfway River students will go to schools in Fort St. John, and West Moberly students have choices in Chetwynd or Husdon's Hope. Given the distance from Halfway River (which can be as long as a 3.5 hour round trip daily commute), some students are placed in a Boarding Home Program while some commute. According to the Ghanada Managent Group (2011) long commute times from Halfway River leaves students with little time to focus on family, home life and academic studies outside of school hours.

There are a number of options for students seeking post-secondary education in northeastern BC. Northern Lights College was established in 1975 and serves the residents of the school districts of Peace River (North and South), Fort Nelson, and Stikine. The college operates eight campuses and learning centres, situated in Atlin, Chetwynd, Dawson Creek, Dease Lake, Fort Nelson, Fort St. John, Hudson's Hope and Tumbler Ridge. Students may choose from a wide range of academic/university transfer, basic education, career, vocational, and trade programs.

The University of Northern British Columbia has a commitment to all areas of university activities, including research. Its programs and research are designed to be especially relevant to the needs of northern BC. Classroom instruction is delivered at the Prince George Campus and regional campuses in Fort St John, Terrace, Quesnel and Wilp Wilxo'oskwhl Nisga'a. Teaching centres are also found in Prince Rupert, the Nass Valley, Williams Lake, Dawson Creek, Chetwynd, Fort Nelson, and Tumbler Ridge, among others.

Dawson Creek Regional Training Annex offers Graduate Equivalency Diploma courses, trades and technical mathematics, college preparation, private tutoring, confidential testing and assessment, classes and individual instruction.

Grande Prairie Regional College offers a wide variety of programs including university studies, options for degree completion, certificate and diploma programs and trade programs. Instruction is based on campuses in two communities in northwestern Alberta: the City of Grande Prairie and the Town of Fairview.

6.4.2.2 Overview of available training programs

Available training programs largely provide members with support to become qualified for posted positions in oil and gas and other extractive industries. This includes cook training, job readiness, on-the-job training, resume, interview skills, and safety training tickets (Hendriks 2011). Examples of some of the training identified by T8FNs members as available in the communities validates this observation:

- DRFN: H_2S Alive, First Aid, Petroleum Employment Training, Finance/Budgeting workshops, film training with Gary Oker.
- HRFN: Medivac trains HRFN members.
- WMFNs: Bridges to Trades program is funded collaboratively by WMFNs, industry, the Nicola Valley Institute of Technology and the Northeast Aboriginal Skills and Employment Program, introductory trades training but is only it its infancy.

> WMFNs is also involved in the Mining Fundamentals Program. This program is funded collaboratively by WMFNs Northern Lights College and industry. It provides academic support, numeracy training, and equipment simulators. Safety tickets are included in training. The Mining Fundamentals Program guarantees a job if you finish the program. The program provides a rent-free residence to live during training (Hendriks 2011).

Other examples of recent training initiatives include environmental monitor training. T8FNs environmental monitoring involves elders (and sometimes youth) going out before an activity starts, reporting on any observed environmental or operations issues. T8FNs wish to expand training programs to include reclamation, remediation, sampling, and integrated vegetation management. Summer job opportunities and training for youth are also identified as positive programs in each of the T8FNs.

There are training gaps. They include: heavy equipment operations and construction skills (DR08 August 7, 2012); training in tourism, conservation and business; life skills training, and long term employment training; usable certifications (e.g. First Aid, firefighting, firearms, ABE, GED, etc.), and writing and literacy skills training;

6.4.3 Examination of Education and Training Issues

6.4.2.3 Quality of Education

The quality of education in the local schools has been linked to difficulty recruiting and retaining teachers, challenges with parent involvement, and small student populations with very limited course and program offerings.

An indicator of the quality of the education is competency relative to grade level. Koehn et al. (2004) noted that testing by Northern Lights College of 20 DRFN members taking a 10 month Petroleum Employment Training program found that their educational competency levels averaged in the grade 8-10 level, **even if they had received graduation certificates from the local high school.** This is an indication that T8FNs members, even those who graduate, are not receiving the quality of education they need to compete in the workforce.

It was also reported that students are being given a “social pass” – promoting children to the next grade before they are academically ready. There is a common perception that the kids are just shuffled through without dealing with learning issues. Members reported that the school system ends up providing many T8FNs youth with a ‘leaving certificate’, which means that they do not receive a graduate equivalency diploma and their underlying

problems (often learning disability related) and overlying problems (inability to access further training and meaningful work without a high school diploma) are not addressed.

Indeed, the granting of 'leaving certificates' actually downloads additional education costs to the First Nations, which incur significant costs to send adults to Adult Basic Education and other forms of upgrading programs afterward. This results in a substantial wealth trasnfer out of the First Nations communities away from support for post-secondary education. In essence, the First Nations end up paying for highschool since the Provincially-run highschools do not properly education FN members.

Other challenges impacting on the quality of education include: too few Aboriginal teachers; high staff turnover; and insufficient preparation of primarily young and inexperienced staff to teach in the province's small, northern schools. Funding for children's after school programs is never adequate from government programs, so First Nations provide additional funding (Hendriks 2011).

Involvement of parents is another of the indicators of success for students (Kavanaugh no date). T8FNs members report younger parents are taking a more active role in the upbringing and education of their children than prior generation of parents. However, parents working away from the community at long-distance commuting operations (primarily in resource extraction sectors) are often not present to support children and youth (Hendriks 2011).

6.4.2.4 High school graduation rate

The current high school graduation rate for Aboriginal people on reserve in Canada is about 50 per cent, compared to 67 per cent for off reserve Aboriginals and some 90 per cent for non-Aboriginal people (Hodgson 2010). In BC, with numbers changing little between 2005 and 2009, 49 per cent of Aboriginal students were graduating versus 82 per cent of non-Aboriginal students (Ministry of Education no date). According to BC Statistics (no date), using Statistics Canada Census data, in 2006 the differences in the educational attainment status of BC Aboriginal people and non-Aboriginal people were as follows:

Table 9: Educational Attainment Data, BC Aboriginal vs. Non-Aboriginal Populations

2006 Educational data for BC residents aged 25-64	Aboriginal on-reserve	Aboriginal off-reserve	Non-Aboriginal
No certificate, degree or diploma	43 per cent	26.2 per cent	11.6 per cent
High school or equivalent highest completed status	62.8 per cent	52.2 per cent	37.5 per cent
Completed post-secondary	37 per cent	47.8 per cent	62.5 per cent

At the provincial level, Aboriginal females are doing substantially better than Aboriginal males (BC Statistics no date). Overall, however, there has been little recent improvement in educational completion rates for First Nations, especially in the on-reserve category. There is a significantly higher number of adult learners among Aboriginal people as well, reflecting a strong desire by many First Nations people to improve their employment opportunities by returning to school after an earlier departure from learning.

Similar numbers are the norm among the T8FNS. In SD#60 – Peace River North (including students from Doig River and Halfway River), the six-year completion rate[118] for Aboriginal students in 2009/10 was 54.7 per cent, while for SD#59 – Peace River South (including students from West Moberly) it was 45.7 per cent, a **decrease** by about 5 per cent over the past half decade. In SD #81 – Fort Nelson (including students from Prophet River) the 2009/10 rate was 55.2 per cent for Aboriginal students (Ministry of Education 2010). As identified by Stevens (1985), these "high drop out rates, low achievement, and special educational needs" have been common for some time among First Nations in the SD#60.

High absenteeism rates may be a factor in the lower graduation rates. Statistical data for SD#60 from 1985 indicates that First Nations elementary school students (grades 1 through 7) had absenteeism rates on average about 3.5 times higher than non-Aboriginal students (Stevens 1985).

Academic performance deteriorates for many students during high school; "when kids go to high school, they nosedive"; attendance at schools away from reserve appears to reduce performance; reduced performance could result from the social challenges of being a minority; education quality results in kids needing to upgrade later.

There are some programs to promote Aboriginal student success, such as the Northeast BC Aboriginal Stay in School Program, an industry funded program for on-reserve students

[118] The proportion of student that complete grade 12 within six years of entering grade 8.

that rewards achievement and provides some limited funds toward books and other supplies. The success of this program is unknown.

6.4.2.5 Post-secondary Educational attainment

Educational attainment is commonly defined as the highest grade completed within the most advanced level of education or training attended. Table 10 summarizes the highest educational attainment data for several First Nations in the proposed Site C Project area, including the four T8FNs, from 2006 Census data (as reported in Lions Gate Consulting 2009). There are substantial differences both between on- and off-reserve First Nations populations and between First Nations in the region and BC non-Aboriginal averages.

First Nations between the ages of 25 and 64 years have a much higher percentage of individuals that have not obtained a high school diploma compared to the BC average. However, the education attainment among area First Nations living off reserve is higher than the percentages observed for all First Nations in the province. Conversely, on-reserve education attainment in the RSA is much lower than for the aboriginal population in BC.

Table 10: Highest level of education for 25 to 64 year olds, 2006, BC Hydro Site C Project Regional Study Area (on and off-reserve Aboriginal population)

	On-reserve	Off-reserve	On and off-reserve	Total BC Population
No certificate or diploma	62 per cent	35 per cent	42 per cent	12 per cent
High school certificate	13 per cent	27 per cent	20 per cent	26 per cent
Apprenticeship or trade	10 per cent	15 per cent	13 per cent	12 per cent
College, CEGEP or other non-university cert.	11 per cent	16 per cent	15 per cent	20 per cent
University certificate, diploma below bachelors	2 per cent	2 per cent	4 per cent	6 per cent
University certificate or degree	2 per cent	5 per cent	6 per cent	24 per cent
Total	100 per cent	100 per cent	100 per cent	100 per cent

A study of aboriginal student achievements in BC (Heslop 2009) found the following key gaps in educational attainment:

- Grade-to-Grade Transition Rates: There is a gap in the rate at which Aboriginal students transition from grade to grade in secondary school, compared to non-Aboriginal students.

- Academic qualifications of graduates: Based on the academic GPA upon graduation from high school, 8% of Aboriginal graduates from 2001/02 to 2005/06 were university-eligible (or had a GPA of 75% or higher in four academic grade 12 courses). A much larger proportion of non-Aboriginal graduates were university-eligible (31%).
- Post-secondary institution and program destinations: Aboriginal high school graduates are much less likely than non-Aboriginal graduates to enroll in a B.C. university (16% vs. 37%) or an urban college (16% vs. 24%).

The limited survey data available on educational attainment for the T8FNs communities mirrors these disconcerting gaps. According to a 1996 T8TA survey, 45 per cent of on-reserve respondents had a high school equivalency[119], while 23 per cent of respondents had taken university or college classes[120] (T8TA 1997).

The T8TA (1997) survey also identified clearly that there was a strong desire for higher levels of attainment:

- 100 per cent of respondents expressed a desire to have high school completion; while 72 per cent stated they would like to attend university or college;
- Virtually all respondents indicated they desired additional occupational related training, with strong emphases on general trades and business-related training; and
- There was also strong interest in gaining additional certifications required for work in sectors like oil and gas, such as WHMIS, H_2S Alive and confined space training.

One of the big concerns raised about educational attainment amongst T8FNs is the tendency for First Nations people to be streamed into education and training for lower skilled labour. Dane Zaa people have raised concerns about being funnelled or streamed into high school curricula that focus on low-skilled labour positions instead of more skilled trades or professional careers.

At the B.C. wide level, Aboriginal students are much less likely than non-Aboriginal students to enrol in a university degree program and therefore less likely to complete a Bachelors Degree or First Professional Degree within five years of completing high school. However, Aboriginal students are almost twice as likely to finish a certificate program (Heslop 2009). This is partially due to the lower academic qualifications at graduation, but

[119] Different T8FNs showed different educational attainment results. In WMFNs the high school equivalency rate was 50 per cent; PRFN was 25 per cent; HRFN was 25 per cent; and DRFN was 27 per cent.
[120] Only 12 per cent of PRFN, HRFN and DRFN had taken any university or college classes, while 44 per cent of WMFNs respondents had.

has also been associated with racially-based streaming of First Nations people by educators.

In addition, T8FNs have raised concerns that the education system does not offer life skills training that the T8FNs need in order to succeed and manage their economy, society and culture. For example, money management is a substantial issue among all of the T8FNs but there is little effective programming in education or training for this important life skill (se also section 6.5.4.2).

6.4.2.6 Functional literacy and numeracy

Western education, training and employment testing processes are not structured to value oral knowledge and history tradition. Also, children's literacy can be limited, particularly when parents do not read to their children. Koehn et al. (2004) noted that for DRFN members, the weakest academic areas are math and English.

No data is currently available for the T8FNs on critical literacy as well as numeracy skills. However a 1985 study of Peabody Picture Vocabulary Tests in the School District (SD #60), which includes DRFN members, indicated the following serious deficiencies:

- Only one of the 49 First Nations students rated “above norm”, with an additional three out of 49 rating as “0 to 1 years below norm”.
- The majority of First Nations students rated between 1 and 5 years below norm (38 out of 49).
- There was a noted progressive decline in “vocabulary age” as First Nations students proceeded through school; older students were more likely to fall further and further behind (Stevens 1985).

6.4.2.7 Hurdles to educational attainment and training among the T8FNs

Barriers to access and success in education and training for T8FNs are significant and contribute to the lower educational attainment of members and poor preparation of First Nations students for further study or work. Some of these barriers are outlined below.

Children with learning and other disabilities: “There is a high rate of First Nations children too that are FASD [Fetal Alcohol Spectrum Disorder] and the system usually doesn’t help and we really have to help our children that are that way. Sometime they just

rush those children in grades that they can't comprehend" (HRFN member, in T8TA Treaty Education Team (2003g).

Continued lack of faith in the educational system: The colonial legacy and impact of residential schools has ingrained a negative perspective of education for many First Nations. The residential school system was so full of negative experiences and outcomes that for many people, it poisoned their opinion of education. This leads to a lack of a big push from some families for students to complete and excell in school. There is some anecdotal evidence that this is changing over time.

Those personally impacted by residential schools face significant barriers to accessing additional education or training. Some of the barriers to education and training created or exacerbated by the colonial legacy include: drugs and alcohol addictions, lack of self-discipline or low self-esteem; and perception that education has little value.

Lack of culturally appropriate education: The lack of First Nations-run schools and the cultural separation of the European education system from First Nations creates additional barriers for First Nations students. T8FNs members report that people often feel like they don't belong in the class and may not prioritize seeing a program through to completion or have the capacity to do so.

Lack of schools in the communities: Students travel outside of the community for school, impacting on school performance as well as quality of life for the families and communities. Long-distance commuting is required for both secondary school and training. This is a disincentive to accessing and completing education and training. Community members repeatedly raised the distance to schools as a concern. Members reported that DRFN kids leave for school at 7:15 and do not return until 5:30. One member associated the low graduation rate with the lack of access within the communities: "People don't finish high school in the communities, [due in part to the] long bus trip back and forth" (DR17, June 11, 2012).

Isolation of students and trainees: In addition, the small number of T8FNs students in much larger, primarily non-Aboriginal secondary schools can lead to feelings of isolation, racism, a sense of being behind in learning and associated shame, and other issues that affect self-esteem, quality of life and willingness to stay in school. As noted by one T8FNs member (in Hendriks 2011), "children are required to walk in both worlds, and generally do well on the reserve but struggle in the non-Aboriginal community".

Similarly, lack of access to local training opportunities puts would-be trainees from the reserves at an economic and social disadvantage because they need to leave their socio-cultural comfort zone to engage in training opportunities outside their home community.

This contributes to lower training completion rates and potential for increased social dysfunction of (typically younger) T8FNs members.

Transportation issues: Members do not generally own vehicles, cannot afford the additional time and cost to attend training programs in Fort St. John or elsewhere, or do not have transportation. Lack of transportation and lack of driver's licenses affects mobility and employability.

Accomodation issues: Accommodation outside of the reserve in urban centres is often expensive or unavailable. Training living allowances do help people complete training. Indeed, low socio-economic status keeps some people from being able to afford the additional time and cost to attend training programs in Fort St. John or elsewhere.

Literacy: Low literacy levels can make it difficult for members to access training and employment opportunities. Members can find the NENAS Training Application forms difficult to complete but require the training for employment.

Educational attainment: People may not have the educational background to enter training programs. A T8FNs business owner noted that despite best efforts by his company to train and hire First Nations people, the range of tickets required to work on location at the job site forecloses the option. For First Nations people, that large pre-work training load diminishes opportunities. (DR08, August 7, 2012)

Lack of available child care services. This is a continuing issue. One respondent to a T8TA survey from 1996 (T8TA 1997) suggested each community develop better child care services because: "at least 90 per cent of families in communities have parents stuck at home but wish they can take education training to have better jobs to raise their children".

Insufficient funding. Funding for training is generally insufficient or hard to attain. According to T8FNs members, "funding is always an issue"(Hendriks 2011). Funds are often insufficient from AANDC, and are insufficient or the individual must seek funding from the Nation (and the Nation must work to seek same from the developer). DRFN, for example, is stretched for training dollars with considerable additional funds going to post-secondary students beyond that made available by AANCD (Hendriks 2011).

Inadequate Adult Basic Education. While students are funded by the province while in their youth, they are not funded to complete high school if they return as adults. Any funding provided by the Nation for Adult Basic Education reduces the amount available to sponsor post-secondary education (Hendriks 2011).

6.4.3 Overcoming Gaps in Education and Training

The evidence indicates the T8FNs are not exempt from the education gap challenges that plague Aboriginal education across Canada. There is extensive concern that this gap in educational attainment is having significant adverse effects on employability, quality of life, income levels, health outcomes, and self-esteem

Currently, the lack of educated and trained people, especially in the on-reserve population of the T8FNs, is seen as a major bottleneck in T8FNs ability to take advantage of economic development. There are jobs, primarily in resource industries, but not enough trained T8FNs to take advantage of them. As one First Nations business owner put it:

> Work readiness is a huge issue. I would like to see everyone working... [I] really hope that First Nations people will have the training to put themselves in position to get some steady employment (DR08, August 7, 2012).

Specific to BC Hydro, educational and training supports put in place by BC Hydro for T8FNs are not sufficient to overcome these gaps. According to one participant:

> BC Hydro, as far back as I've been here, have been unwilling to talk to communities about the kind of mentoring, education and training programs that would be needed to stream first nation community members into operational jobs (Key informant 04, June 27, 2012).

However, another participant from HRFN noted that BC Hydro has started a program teaching people how to build boat launches and are focusing in on Aboriginal participants in that program (HR02, May 16, 2012).

Among the tools identified by T8FNs members and staff to increase education and training success are:

- Training and back to work programs for those on social assistance;
- Training living allowances to help people complete training;
- Training programs need to be delivered on-reserve;
- First Nation training in tourism, conservation and business;
- Life skills training and career development counselling on an individual basis;
- Apprenticeship training to enter the workforce, but then long-term training thereafter; those directed at usable certifications and skills (e.g., First aid,

firefighting, firearms, Adult Basic Education, Graduate Equivalency Diploma, writing skills training) (Hendriks 2011);

- Literacy and numeracy assessments of T8FNs population;
- Job mentoring for First Nations workers with other First Nations members;
- Additional funding for Adult Basic Education and post-secondary training for First Nations members;
- Additional funding for education coordinators; and
- Additional funding for early childhood development programs such as Head Start.

Despite the overall lack of educational attainment for T8FNs members, there are many in the communities who feel that each generation is becoming more educated than the one before it, and that it is through education in a system with one foot in each of the Dane-zaa and Western worlds that future generations of Dane-zaa will prosper.

6.5 Equity and Engagement in the Wage Economy

Sections 5.1.5, 5.2.5, 5.3.5, and 5.4.5 of this Baseline Community Profile examine economic issues at the local level. This section provides a high level, primarily qualitative examination of key issues related to maximization of engagement of T8FNs members in the wage economy, as well as other considerations such as cost of living and money management.

Dane-zaa have consistently had lower success engaging in the wage economy than non-Aboriginal populations that have increasingly settled in their traditional territory. This continues to this day and has created a situation where Dane-zaa in general have lower ability to take advantage of new economic development activities. This is a fundamental equity issue related to the lack of realization of tangible benefits to offset the adverse impacts of development on the land and people that have been identified throughout this Report.

6.5.1 Key Issues and Indicators

Key wage economic issues for T8FNs include:

- The still relatively recent increasing reliance on the wage economy for many T8FNs, which within the past one to two generations has seen an increasing tension between wage economy participation and a continuing desire to uphold and maintain the traditional economy and way of life on the land. As Koehn et al. (2004) suggests, the wage economy has in some ways challenged the T8FNs to reshape their definition of what constitutes well-being and quality of life. In the past, "happiness was traditionally tied to spending time with family and friends. The concept of material wealth was relatively unknown".
- Employment disadvantages in comparison with surrounding non-Aboriginal populations across recruitment (getting a job), retention (keeping a job), and advancement within a workplace or career path.
- Pressure to move off reserve to take advantage of jobs and business opportunities. Not only do these pressures make for difficult individual choices between expanding one's employment opportunities and staying close to home, the choice to move off-reserve has implications for the entire community, with concerns about a "brain and wealth drain" from reserve communities.
- Lack of capital, business skills and systemic barriers that constrain successful business starts for both T8FNs at the Band level and among individual members.

- High unemployment and vulnerability to boom and bust effects for First Nations workers, especially among the on-reserve population.
- Lower income and higher vulnerability to inflationary pressures for First Nations people, especially on-reserve populations and T8FNs residents in urban areas like Fort St. John.
- Money management issues and debt creation.

This section also identifies, based on inputs from T8FNs, some of the key elements of their preferred vision of a balanced economic future.

6.5.2 Employment

6.5.2.1 T8FNs Labour Market Characteristics

Given the small size of the communities, which constrains much of the typical secondary data available on the labour pool, the lack of research into on- versus off-reserve economic activity among the four T8FNs, and limited funding available to the T8FNs for strategic economic development and planning activities, there was only limited current information available on the local and regional T8FNs labour pools. Nonetheless, some general characteristics of the T8FNs' labour market were identified:

- A generally younger population than the regional average, meaning that there will be a rising proportion of Dane-zaa entering the job market in coming years;
- Higher unemployment than the non-Aboriginal population, with that shifting to **much higher** unemployment for the on-reserve population (in some cases an order of magnitude – e.g., 50 per cent vs. five per cent);
- Lower wage economy participation rates than non-Aboriginal populations, on a gradient from slightly lower to comparable among the off-reserve population to much lower for the on-reserve population; [121]

[121] Lions Gate Consulting (2009), using Statistics Canada 2006 Census data (in Table M-9), notes that among Aboriginal people in the Regional Study Area, which includes the four T8FNs, "participation rates for the off-reserve labour force [73.9 per cent] lag the general labour force in the PRRD [76.2 per cent] but there is a much greater disparity when compared to the on-reserve labour force [55.2 per cent]. In a similar vein, unemployment for off-reserve workers [12.7 per cent] is higher than the PRRD average [5.4 per cent] but it is also well below the on-reserve unemployment rate [19 per cent]."

- Much higher seasonal and casual employment among T8FNs, especially on-reserve;
- Lower than average percentage of workers in the professional and service provisions sectors, and higher numbers of workers in the public administration (typically at the Nation level) and primary sectors (usually in construction or oil and gas labour), but increasingly in skilled trades (Lions Gate Consulting 2009);
- On-reserve workers are much more likely to be involved in managerial positions (e.g., provision of band services) while off-reserve workers tend to be more engaged in sales and services occupations than their on-reserve counterparts (Lions Gate Consulting 2009);
- Much lower employment income per capita than non-Aboriginal residents in nearby communities;
- Fewer people over age 55 in the workforce, and therefore higher numbers of elders living in poverty or near-poverty conditions;
- Given the small size of the local labour demand, T8FNs exhibit a relatively higher reliance on jobs away from their home community than the non-Aboriginal population of the region (one major factor in out-migration and weak job prospects for T8FNs residents not willing to work in remote camp environments);[122]
- Perceived higher turnover rates than non-Aboriginal workers, especially in off-reserve and non-Nation-based businesses;
- A high reliance on Nation-based businesses for employment;
- Lower percentages of self-employed individuals on-reserve than in the off-reserve population (Koehn et al. 2004); and
- A perception, supported by available proxy evidence (Zietsma 2010), that First Nations members are the first employees to be let go when economic downturns occur.[123]

[122] It is worth noting that a relatively large number of T8FNs members, particularly men in the past but now including women more consistently, work in remote camps on extended shift rotations. This type of shift work has both pros and cons in terms of work environment, ability to spend time on the land, and family function. No research has been conducted among the T8FNs on the implication of long-distance commuting and extended shift rotations on personal, family or community well-being at this time.

[123] The fact that the PRRD's economy relies heavily on commodity resource extraction makes it vulnerable to rapid fluctuations, which have been shown to disproportionately affect First Nations people during market downturns in things like forestry, coal mining, or oil and gas. For example, Zeitsma (2010) found that Aboriginal people (aged 25 to 64) living in Alberta saw a considerable decline in their employment rate during the recent global economic downturn: 5.6 percentage points lower in 2009 than in 2008 (69.5 per cent versus 75.1 per cent). In addition, employment rate declines in Alberta were more than twice as large for Aboriginal people as they were for non-Aboriginal people over this period.

6.5.2.2 Employment hurdles identified by T8FNs

Dane-zaa have consistently had lower success entering into, staying in, and advancing in the wage economy than non-Aboriginal populations around them, and this continues to this day. First Nations members thus have lower ability to take advantage of new economic development activities.

There are a variety of personal, communal and systemic hurdles that have impacted on the ability of T8FNs to meaningfully access and succeed in the wage economy, and that need to be considered carefully during planning of future development activities. Figure 14 identifies some of these key factors.

Figure 14: Hurdles to Wage Economic Participation for T8FNs

Koehn et al. (2004) identified seven barriers to employment and success in the wage economy for DRFN members that can be extended to all the T8FNs:

1. **Addictions –** Drug and alcohol addictions can both be a drain on income and a hurdle to getting and keeping a job, as employment retention may be limited when money made on the job is often used to obtain drugs and alcohol. It was noted by T8FNs respondents that members with addictions issues have trouble working in Fort St. John because of ready access to drugs, alcohol or gambling. Some people with substance abuse issues do better at camps, but once out of camp substance abuse can ensue (Hendriks 2011).

2. **Emotional health** – a large number of T8FNs, bearing the "weight of recent history" from poverty, loss of connection to land, assimilation, abuse, racism and addictions, struggle with anger, depression, and other psycho-social impacts that makes it difficult for them to search out work and to interact with their non-Aboriginal co-workers when they do get work. Low self esteem, fear of failure, and anxiety can all hamstring employment success and workplace satisfaction.

3. **Location and transportation** – As one T8FNs member noted: "no job, no vehicle...no vehicle, no job" (Hendriks 2011). The vast majority of jobs are off reserve. Many members don't want to work off reserve or lack driver's licenses, vehicles or money for fuel to make long-distance commutes. Some companies provide buses, but members still must get to a point of hire, which is typically a larger community like Fort St. John. Other people have cars but cannot drive (e.g. elders or those who owe money for fines on their licences or have lost them for infractions). Community isolation, linked with long winters and often difficult road conditions, makes it difficult to consistently travel to work (Verification focus group, October 10, 2012).

4. **Lack of education and training**– Most jobs in industry require a Grade 12 education level. Most T8FNs members still do not have this qualification (see section 6.4). What jobs they can get tend to be entry-level and lower paying, which in itself can contribute to high turnover through lack of job satisfaction.

5. **Lack of child care** – T8FNs have higher birth rates and, critically, <u>earlier</u> birth rates (younger first time parents, including in many cases teenagers) than their regional non-Aboriginal counterparts. This constrains the ability of parents to start their working lives early, and inadequate child care on reserves makes it difficult for single parents, especially, to work during their children's early years.

6. **Higher than average health concerns and disabilities** – Learning disabilities, in particular, have been an issue for First Nations in the past in entering the wage economy.

7. **Lack of life skills** – For example, time management skills where people come to work on time and everyday. In addition, T8FNs members noted that young people are often not prepared for the transition to full-time work, especially on-reserve members. Employment outside of the reserve requires more life skills than some youth possess, especially when they lack a support system outside their home community.

While the barriers noted by Koehn et al. (2004) are primarily internal and inward-looking, there are external barriers as well. These include:

8. **Racism/Discrimination**: While less omnipresent than in previous eras (see section 4.1), there is still racism occurring on job sites that creates cross-cultural conflict or keeps T8FNs from getting or keeping jobs: "Even today, there is discrimination and members report that they have to do a better job to compete with a white" (Verification focus group, October 10, 2012). Some T8FNs members report being channeled into lower paying, lower skilled, seasonal work, and being the first workers let go as a project slows down. Sometimes this racism is purposeful and other times it is based on a lack of understanding of Aboriginal culture. Effective cross-cultural conflict avoidance training can be a powerful tool to minimize racism from occurring. Some T8FNs members indicated that racism appears to have decreased in recent years, and this may be occurring because Aboriginal people are less afraid to stand up for themselves (as reported in Hendriks 2011).

9. **Destructive nature of resource extraction jobs**: As noted by Community Advisors, "the difficulty in working on seismic and cut lines is that they then see that they are destroying their territory and land" (Verification focus group, October 10, 2012).[124]

10. **Exposure to economic downturns**: In 2011, Canadian Aboriginal labour force participation (age 25-54) was 73 per cent compared to 85 per cent for non-Aboriginal people, with numbers changed from 77.3 per cent vs. 84.9 per cent in February 2009 (Ireland 2011). This is a good indication, as noted previously, that First Nations are more exposed to job loss during economic downturns.

[124] Business people are not immune to this conflict between the desire to do well in the wage economy and distress at seeing – and causing – impacts on the land: "I am a contractor, but I have a lot of mixed feelings. I try to protect the trees and water here… but you have to make a living too" (DRFN elder, T8TA Treaty Education Team 2003b).

11. **Lack of mentorship and role models**: In a 2000 survey, 80 per cent of WMFNs youth felt job shadowing would be very beneficial to them (WMFNs 2000). Having a First Nations person with both the skills to train you up in a job and the cultural understanding of how you think and what you face in the job market can be invaluable.

6.5.2.3 T8FNs Employment Prospects with BC Hydro

The following Site C Project specific issues were identified by T8FNs members related to employment opportunities (T8FNs Team 2012a):

- Dane-zaa access to training and skills development is limited, leading to concerns that if Site C were to proceed, only a limited number of construction stage jobs would be on offer, Dane-zaa would be hired for general labour only, and "would be the first people let go".
- Concerns with the extremely limited number of jobs during operations, another sign of lack of economic development opportunity for Dane-zaa.
- Some T8FNs workers identified they would likely be conflicted with working on the Site C Project should it go ahead, given the damage that would be inflicted on the land (Hendriks 2011).

According to Scarfe (2006), "about 150 person-years of employment are directly associated with the operation of the G.M. Shrum and Peace Canyon generating stations", BC Hydro's current energy generation facilities in the Peace River valley. It is unclear how much, if any, of these person-years accrue to T8FNs members at the present time. However, T8FNs members suggest that construction of the two prior dams provided only limited employment to First Nations, and very limited if any opportunities for T8FNs members during operations (see sections 4.3.3. and 4.3.4). This is one cause of pessismism by T8FNs members about whether the Site C Project will be able to strongly contribute to employment of T8FNs members.

In a 2009 T8TA member survey, the main priorities for T8FNs for education and employment from Site C, should it proceed, were job training and mentoring, employment during operations, and employment during construction, in that order of priority (First Light Initiatives 2009). These findings seem to indicate a strong desire by T8FNs for

learning new skills and having longer term career development and job opportunities, rather than just cashing in on the relatively short construction phase for the Site C Project.

6.5.3 Dane-zaa Business Development

Band-level businesses and Nation-member owned businesses for each T8FNs community are identified in section 5.

Band-level businesses tend to be expanding in a variety of directions as funds from government settlements, industry agreements, specific contracts with developers, and EBAs come into the communities. Among the business development initiatives (beyond the traditional "bread and butter" of construction, oil and gas and forestry activities) being considered by Band-level businesses at this time are, among others:

- Ownership of commercial properties and urban reserves in Fort St. John, including leasing of reserve lands;
- Tourism, including eco-tourism, guiding/outfitting, and accommodation;
- Reclamation technology and goods provision (e.g., indigenous plant nursery); and
- Energy generation.

According to T8FNs members and staff, some T8FNs businesses have been quite successful, having carefully planned their line of business and made continued investments in corporate growth. Doig River Timber, a DRFN-owned forestry contractor, was pointed to as an example of a successful business that has brought benefits in terms of wages, jobs, skills development, and profit back to the community. Doig River Timber has a strong strategic alliance with Canfor guaranteeing a certain amount of cutting each year. It has also benefited from good management (Hendriks 2011).

Despite some successes, hurdles to effective T8FNs engagement in business remain. As one member put it:"we don't want to start new businesses but to fix the ones we have" (in Hendriks 2011). Current perceived barriers to Dane-zaa business success include the following:

- **Discrimination:** T8FNs members had strong opinions that there is not a level playing field for First Nations contractors: "A native contractor has to be way better than the white contractor to get the work" (Verification focus group, October 10, 2012).
- **Lack of equity and access to credit**: First Nations members on-reserve cannot grow their businesses by borrowing against the value of their home, like non-

Aboriginal homeowners can. In addition, lack of numeracy and financial/life skills training means that T8FNs members are often at risk of money management issues that hamper their credit ratings.

- **Lack of start-up funding**, e.g., lack of sufficient resources to purchase equipment.
- **Lack of a consistent labour supply,** especially among First Nations workers. Dane-zaa business owners and Nations-owned business would prefer to hire as many T8FNs members as possible, but often find that these workers lack transportations, minimum tickets, and have higher turnover rates (DR08, August 7, 2012).
- **Lack of business skills training:** There is a lack of knowledge among members about how to start up and operate a business. Many Dane-zaa have strong work ethic and business acumen but lack specific technical skills like the ability to develop a good business plan, access grants, accounting skills, management skills, computer training, etc. Indeed, many struggle with relatively low literacy and numeracy.
- **The "old boys network":** These are established, almost exclusively non-Aboriginal contractors, especially in the oil and gas and other resource extraction sectors, who access the bulk of work in their specialized sectors due to long-standing personal contacts and long track records. They are difficult for upstart First Nations businesses to compete with, for the above-noted reasons as well as higher economies of scale that often allow them to put bids forward that First Nations companies simply can't compete with. As a result of these advantages, members of the "old boys network" reportedly often lack interest in becoming joint venture partners with T8FNs precisely because they have preferential access to clientele already.
- **Lack of preferential treatment for First Nations contractors** to overcome some of these hurdles.

Some T8FNs raised concerns that companies' requirements of First Nations businesses are too high and that "they just want your signatures"- support for the project, rather than a long-term meaningful relationship. As noted by Community Advisors, First Nations are commonly only getting the "up front" work, rather than the long term benefits or jobs: "We are just running saws to make cut lines and such. All the real value comes later" (Verification focus group, October 10, 2012).

In specific relation to potential issues with the Site C Project, T8FNs members raised concerns that big – often international – contractors would receive the main contracts for the Project, with little opportunity for Dane-zaa -related business procurement (T8FNs Team 2012a).

To date, it does not appear that dialogue has occurred between BC Hydro and the T8FNs toward removing barriers and increasing procurement potential for T8FNs'-related business.

6.5.4 Income and Money Management

6.5.4.1 Income

2006 Census data shows large differences in the earning potential of on-reserve Aboriginal residents within the Regional Study Area (RSA) used by BC Hydro (which includes but is not limited to the four T8FNs) versus off-reserve Aboriginal residents, and large gaps between Aboriginal and non-aboriginal wages, as shown in Table 11:

Table 11: Median Personal income, 2006 (from Lions Gate Consulting 2009)

Category	Male	Female	Total
RSA on reserve	$10,785	$12,370	$11,875
RSA off reserve	$28,900	$15,545	$21,820
RSA total	$28,040	$17,420	$21,470
B.C. Aboriginal	$21,055	$15,365	$17,980
B.C. non-Aboriginal	$32,375	$20,460	$25,720

The gaps are substantial. Non-aboriginal B.C. men make some three times as much personal income, on average, than T8FNs men who live on reserve. The First Nation population on-reserve (not limited to T8FNs) earned noticeably less income than their off-reserve counterparts. In addition, off-reserve males earned more than male First Nations elsewhere in the province, while female off-reserves earned less than female First Nations elsewhere in the province. The nearly triple wages earned by off-reserve males is a clear incentive for young and working-age men, in particular, to migrate out from their home communities to urban centres like Fort St. John.

Specific data on income for the individual T8FNs is not generally available due to the small size of the communities. However, some limited data based on analysis by Koehn et al. (2004) indicated that in the early 2000s, the average family income in Fort St. John was $55,000, with $41,000 left after income tax. These income numbers substantially exceeded that of 30 elders and working age people polled at the Doig River reserve. Seventeen DRFN working age people reported incomes between $5040 and $22,945, while the 13 elders reported incomes between $4175 and $22,650.

In addition, 2001 Census data cited in WMFNs Land Use Department 2006, notes that during 2000, the median family income of persons 15 years of age and over was $12,450 for the Saulteau First Nation, as compared with $22,100 for B.C. as a whole. It seems reasonable to expect that WMFNs, a close neighbor to Saulteau around Moberly Lake, had similar average income rates. If this proxy study is reasonably accurate, this means WMFNs was likely seeing average incomes approximately 35-40 per cent lower than the BC average.

It is worth noting that among some of the small reserve communities, it is not always necessary to have a full-time job to have a reasonable standard of living. As noted in Koehn et al. (2004), "people can get by without full time work - housing provided by the band at a low cost, can hunt for some food, and social assistance can assist in income".

6.5.4.2 Money Management Issues

A variety of T8FNs members are reported to have money management issues, across all communities. Concerns include over-extension of credit, high interest rate payements, lack of an emergency "nest egg" fund, and inability to pay monthly bills (Koehn et al. 2004). These issues are reported not only for those typically thought to be economically vulnerable (elders, single parents – primarily women), but also for those holding down full-time jobs on reserve communities. Koehn et al. (2004) notes that money savings and management skills have not been taught effectively among many T8FNs community members and that in fact in many cases money is spent before it is even made, leading to debt creation.

Lack of personal financial and numeracy skills is a substantial concern in all of the communities. Given that First Nation payouts occur in some communities once a young person comes of age, based on settlements received from government, money management can be a major issue. As noted by Koehn et al. (2004), these payouts combined with limited financial acumen can lead to money disappearing quickly. A negative cycle where a "trust payout" (available in Doig River and Prophet River only) leads to over-spending on self, family and friends, is often reported to be followed by low employment and low income, because youth fall into a trap where they have no driver's licenses or employability certifications, drug and alcohol problems, children at young ages, high debt loads, and minimal education (due to various factors including low expectations/involvement from parents, anticipation of a trust payout, and poor educational conditions in the home or urban environment).

Money management is an example of an issue where traditional Dane-zaa values may come in conflict with the fiscal prudence required in the wage economy. Sharing is one of the primary Dane-zaa values and has always promoted community cohesion and ensured that everyone had the means to survive on a day-to-day basis. However, there have been reported issues of "oversharing", where members of the communities have in the past tended to over-spend on their relatives and friends during good economic times, leaving themselves with little left after the initial splurge. In the end, people who were originally well off sometimes end up with "no money for day to day needs/necessities" and end up seeking social assistance of one form or another (Koehn et al. 2004).

More effective money management skills training might reduce these risks.[125] The individual T8FNsareconsidering creative ways to educate children about money management, entrepreneurship, and wealth building as part of their social programming. In DRFN and PRFN, this training is usually provided shortly before youth receive trust monies.

6.5.5 Cost of Living Issues

Housing cost is perhaps the most important cost of living issue (other housing issues are discussed in the relevant subsections of section 5 and 6.6.1.8). According to CMHC (2011) the average annual household income in Fort St. John, before taxes, was $84,700, higher than the Canadian average of $72,391. Average monthly shelter costs were $1015. This is higher than the Canadian average of $905. However, the shelter cost to income ratio in Fort St. John is actually a bit better than the Canadian average at 20.1 per cent, versus the Canadian average of 21.8 per cent. This is due to the high income average in the community. However, when you take into consideration the fundamentally lower wages earned on average by First Nations people, whether on or off reserve, the average shelter cost to income data is likely quite a bit higher for First Nations people trying to make a living or go to school in Fort St. John. The high cost of housing off-reserve, and the availability of social housing on reserve, is one of the key factors keeping people living on reserve (Hendriks 2011).

Other cost of living issues include:

[125] It is worth noting that there are also concerns with the converse, where the value of sharing declines as people become more consumerist and individualistic. This was raised at least as often as an issue reducing community cohesion and creating rifts between "haves" and "have nots", especially in the reserve communities, than money management issues.

- Food costs for on-reserve families, including not only the direct price of food, but the time, gas and vehicle maintenance costs associated with procuring food from distant centres, and disproportionately affecting those who are unemployed, underemployed or employed at a low wage.
- The cost of basic services has increased over time (e.g., phones, electricity, energy, repairs to homes – Koehn et al. 2004).

The lack of local goods suppliers, owned by the Nations, also means that there is high "leakage" of income away from the reserve communities and away from T8FNs members in general. Ghanada Management Group (2011) suggested that:

> The problem amongst First Nations is that a substantial amount of the income enters the communities then quickly leaves due to non-local purchases, non-local hiring, and non-local ownership of homes and businesses. In short, dollars circulating outside of the community do not contribute to local economic wealth.

Promotion of local goods supply businesses is extremely difficult however, given low population levels and hurdles to business development for on-reserve members.

6.5.6 Desired Dane-zaa Economic Futures

There are conflicts reported by T8FNs members between maximizing engagement in the wage economy – people want to make money and flourish, and have financial security – and the desire to retain Dane-zaa cultural values and a vital link to the land-based way of life. These competing priorities are seen, for example, in the types of preferred jobs T8FNs members report seeking. A recent survey of T8FN members (First Lights Initiative 2009) identified that the most popular type of employment T8TA members were interested in included both lands protection (environment/wildlife-related jobs were ranked #1), and oil and gas and forestry activities.

It is not always easy to balance these worlds. Interview and focus group results and issues raised in previous T8FNs planning documents and meeting minutes indicate that increased reliance on the wage economy has contributed to reductions in self-sufficiency, traditional skills development, amount of time on the land, community building, volunteerism, and inter-generational knowledge transfer among T8FNs members.

Indeed, adoption of the wage economy means that many people want to be paid to go out on the land, attend meetings, provide food to others in community, and teach youth cultural

skills and knowledge. Loss of communal values has also occurred to some degree, including reduced sharing.

Dane-zaa members report seeking balance between the wage economy and the traditional economy. One element of this is increased economic diversification beyond fundamentally destructive/damaging resource extraction and energy sectors. Community Advisors for this Study were adamant that a priority for future economic development is not merely to see local economies grow, but to **diversify** (Verification focus group, October 10, 2012).

Individual T8FNs have echoed this priority in their planning and investment priorities. For example, WMFNs (2007) indicated a variety of potential future economic development activities such as ranching, alternative energy sources such as wind and geothermal, eco-cultural tourism, pine beetle forestry, reclamation, nursery and non-timber forest products. Note that these are primarily non-destructive renewable resource opportunities.

6.5.6.1 Potential principles of an alternative economic future for the Dane-zaa[126]

The following list identifies some of the principles for desired future economic activity by the T8FNs as recorded during the T8FNs Community Assessment.

1. Economic self-sufficiency
2. Control over land use decisions and/or some form of enhanced meaningful Dane-zaa stewardship
3. Economic growth in T8FN communities; more interested in creating community-based jobs as opposed to an economic future with increased outmigration and associated "brain drain"
4. Maximize non-destructive jobs on the land – conservation-based economy a priority. Options for T8FNs include monitoring and reclamation technology and supplies
5. Continued and enhanced land-based subsistence and mixed economy based on Treaty Rights, utilizing all traditional lands with no to minimal constraints on access - a key continued role for harvesting and freedom of movement on the land
7. Minimize inherently destructive activities (e.g., non-renewable resource extraction)

[126] *Please note that these economic principles, while drawing from previous T8TA and T8FNs documents and inputs from T8FNs members, do not represent policy statements for any or all T8FNs, unless otherwise noted. They are provided here for exemplary purposes only.*

8. A long term planning horizon and avoidance of "futures foregone" scenarios

9. Re-balancing of impact equity scenario that sees:

    - Benefits to T8FNs and members commensurate with socio-cultural and environmental costs shouldered by the Nations; and
    - T8FNs members accessing jobs and business opportunities of all types with similar success rates as their non-Aboriginal counterparts.

10. Proper distribution of resource revenues between levels of government in recognition of use and impacts on T8FNs' traditional territory

11. Proper capital transformations (e.g., turning non-renewable resource natural capital into other forms of social and financial capital)

12. Balance different economic activities – diversification

13. Stewardship (land protection) prioritized over economic growth and non-renewable resource extraction (see section 6.3)

14. Employment in jobs that are personal growth fulfilling, economically valuable, but also culturally appropriate – bottom line is employment that contributes positively to quality of life rather than causing psycho-social distress

15. Lifelong education and training plans for individual T8FN citizens to maximize their potential

16. Economic activities that promote both cultural practices and cross-cultural engagement

17. Living in balance and within the carrying capacity of the environment

6.6 Healthy Communities

> There are four aspects of being healthy; you have to be physically, mentally, spiritually and emotionally balanced. Well, today our people are very emotional… Today people are so angry and resentful that there is just literally hatred happening. Mentally, the people today are so caught up with drugs and alcohol… Half of the people are on the verge of an anxiety attack half the time when that never happened with our people. They weren't under that great deal of stress before, before our ways of life got changed with industry, you know the industrial development, the influx of settlers moving in and changing how we utilized land, how our connections were separated from the connection of the land and mother earth and everything else. Spiritually the churches took care of that they separated us from the way that we were shown which was our way to pray, our sacred ceremonies were taken away from us and in some places they were lost, they are, not were lost they are lost. So spiritually we are unhealthy right there because we're following a spiritual path that doesn't belong to us, it came from Europe. Physically we are weaker…a long time ago a young guy would be able to lift you and pick you up (WM01, May 18, 2012).

Such are the challenges facing the T8FNs. Healthy communities require healthy people, and T8FNs members have been subject to a great amount of stress, as individuals and as First Nations, over the past 200 years. These strains have exposed them to a great deal of social vulnerability, challenges they are often still seeking to overcome today.

Contributing factors to the health of individual T8FNs communities were examined in detail in a variety of sub-sections of section 5, as well as in Appendix E. This section examines, at a high level, T8FNs perspectives on issues that contribute or take away from the health of their communities.

6.6.1 Key Issues and Indicators

The rates of what can be called “dysfunction indicators” – suicide, depression, substance abuse, and domestic violence among many others – are significantly higher for Aboriginal populations (RCAP 1996). Testimonials and reports available from organizations such as Northern Health (2007) confirm these issues also affect the four T8FNs communities. The quantitative data on these issues is limited.

Many of the factors that are affecting the health of the T8FNs are related to cumulative effects of prior developments on the rights and interests of the T8FNs. This has been identified in Section 4 in general terms, Section 5 for each community, and in previous reports from the scoping process for this environmental assessment (Hendriks 2011; Treaty 8 First Nations Community Assessment Team 2012). T8FNs report facing a large number of negative social, economic and cultural impacts, which include:

- Social dysfunction, such as substance abuse and crime;
- High morbidity levels and low health (including sexual health) status indicators;
- Poor physical activity levels and fitness;
- Poor diet;
- Remoteness, increased out-migration and related effects on community function;
- Reduced family cohesion;
- Limited access to social and health services and physical infrastructure;
- Housing issues; and
- Intra- and inter-community cohesion and unity.

Strategies to overcome some of the health issues affecting thecommunities are included at the end of this section.

6.6.1.1 Social dysfunction issues

As noted by the WMFNs member's statement at the start of this section, many T8FNs people have become angry, resentful, and stressed in recent years for a variety of reasons, many of them beyond their control (e.g., rapid social, economic and cultural change). Social dysfunction follows this stress as people pursue unhealthy coping strategies or get caught up in dysfunctional social circles. This can happen at the on-reserve level, where alcohol abuse is often high and visible, and it can happen in urban areas, where strong economies have led to "boom town" effects that include increased access to money, drugs and alcohol.

As a result, alcohol and drug abuse and addictions are significant pre-existing issues in all four T8FNs. This causes social harm, health impacts, pressures on health and social services, and can also lead to financial deficits, considering that both large amounts of income go toward fueling addictions, and meaningful employment is hard to access for people with drug and alcohol issues. Members report it is difficult to maintain sobriety

when many others in the community have addictions, and other supports to treat issues such as depression, anger, etc. are unavailable (Koehn et al. 2004).

High rates of illicit drug and alcohol use are among the most predominant negative health practices for T8FNs. Of late, prescription drug abuse (e.g., oxycontin) has also reportedly become a concern (Verification focus group, October 10, 2012).

Substance abuse in some cohorts is so prevalent that it is hard to escape or teach children that there are options, as illustrated by these statements from T8FNs members in Hendriks (2011):

- "It is difficult for people to know what is normal with respect to alcohol and drugs, if kids see their parents drink alcohol excessively or doing drugs",
- "Many youth accept drunkenness as normal".
- There is a strong desire to overcome addiction: "it would be good if people sobered up".

Gambling (online, bingo, card games, casino games) is also believed by some T8FNs members to be more serious than is being acknowledged; there are "closet" gamblers in each T8FNs community. Gambling can be a serious money management and debt creation issue, and is also linked to crime and substance abuse issues. WMFNs (2007) suggests that gambling may be linked to increased engagement in the wage economy, with people having more disposable income.

6.6.1.2 Morbidity/health status

There are some striking health statistics that give a sense of the issues facing northern First Nations communities such as the T8FNs. B.C. government data indicated that while the average life expectancy in BC between 1992 and 2002 was 82.2 years, residents of Northern BC lived on average 78.1 years, and for First Nations in the Northeast, 76.1 years, fully a six-year gap against the provincial average (as reported in Northern Health 2007). Northern First Nations are more likely to die of injuries, motor vehicle crashes, and suicide than their non-Aboriginal counterparts, and are disproportionately more likely to die in their early and young adult years (Northern Health 2007).

First Nations are also more likely to suffer from certain types of morbidity. Aboriginal peoples have a diabetes rate some 40 per cent higher than non-Aboriginal people,

extremely poor dental health, are much more likely to suffer from HIV[127], and much higher rates of smoking than non-Aboriginal populations (Northern Health 2007).

In the T8FNs communities, although data is not available, members report that pregnancy rates are considered to be high, and many births are among younger women and unplanned. Community-specific sexually transmitted disease rates are unknown.

Among the T8FNs, there are increasing concerns that air and water pollution are contaminating food sources. This can lead to loss of faith in country food, increased sedentarism, and increased use of less nutritious store-bought food all leading to increased negative health outcomes like diabetes, obesity, and heart problems.

Health issues reported by T8FNs members during the Community Assessment and scoping exercises included the following:

- Perceived high rates of arthritis; including concerns that even children and youth are now susceptible to arthritis;
- Concern that levels of cancer are high in the communities, where cancer was never present at all years ago;
- Perceived high rates of diabetes in some First Nations;
- Concern about high smoking levels in the communities;
- Concern that people are now more susceptible to common colds, penumonia, bronchitis, and flu than previously;
- Increased obesity and associated health problems.

A particularly sensitive health issue is that of suicide. Northern Health (2007) notes some communities in northern BC have particularly high rates of youth suicide and hospitalizations related to suicidal behavior. There is no quantitative evidence available for the four T8FNs, but all report issues with suicide (Verification focus group, October 10, 2012). Recent suicides and sudden deaths have occurred in the communities. Community advisors noted no specific suicide prevention programs, and trained crisis counselors are only available in the urban communities, and are expensive.

As noted previously, Chandler and Lalonde (2007) have conducted research in B.C. that links low levels of cultural continuity (i.e., the ability to practice one's culture and have control over one's traditional territory) to increased risk of youth suicide. Cultural continuity is certainly an issue for the T8FNs. Indeed, one PRFN member identified that the

[127] Northern Health (2007) noted that while 13 per cent of the population in the Northern Health district was Aboriginal (highest in BC in the mid-2000s), some 54 per cent of new HIV cases between 1995 and 2006 in the district were Aboriginal people.

most effective solution for self-harm is to “get their connection with the land back” (PR05, Verification focus group, October 10, 2012).

6.6.1.3 Physical activity and fitness

There is a perceived need for greater adult recreation. Dane-zaa members are reportedly spending less time on the land, where the hard work of travelling the land and harvesting raw materials has kept them fit in the past. Higher numbers of adults and youth are obese due to bad diet as well as not participating in activities, not doing physical labour, driving quads instead of walking, and watching too much TV. This puts a greater onus on community programs to provide opportunities for physical fitness. Nonetheless, there is a lack of adult recreational programs in the on-reserve communities.

Given the small community sizes, children must travel to one of the larger communites - Chetwynd or Hudson’s Hope (WMFNs), Fort St. John (DRFN and HRFN), or Fort Nelson (PRFN) in order to participate in organized recreational activities. There is a concern that children may be stigmatized as "reserve kids" and will choose not to participate. This is compounded for families living in poverty (single-parent families are most likely to be in poverty), which limits children's ability to participate in expensive recreational activities like hockey.

6.6.1.4 Diet

There is very little quantitative data on this topic, but the testimony for this study reveals a concern that diets are high in fats and carbohydrates. The poor nutrition contributes to obesity. People feel they were healthier when they ate more traditional foods. For dietician services, people have to travel to Fort St. John which often limits access.[128]

[128] Workshops are reportedly available off-reserve for those affected by diabetes to learn how to improve their diet (as reported in Hendriks 2011).

6.6.1.5 Remoteness, outmigration and its effects

There are different perspectives among different demographics on the benefits and cons of living on a remote rural reserve. For elders, they can avoid the disconcertingly rapid pace of urban centres, and hopefully avoid increased non-Aboriginal cultural values and vices entering the community. At the same time, elders have trouble accessing the health care they need from these remote locations. For younger people, remoteness may create a strong sense of home and safety, or it may seem like a prison for those seeking increased education, social engagement with their peers, and career opportunities. Increasingly, people are driving back and forth to other locations many times during the week, which takes them away from their communities and families and creates increased public safety risks. As noted by Northern Health (2007), Aboriginal people in B.C. are an astonishing 9.3 times more likely to die due to motor vehicle accidents than non-Aboriginal.

As reported in other sections of this Report, there is a trend toward outmigration from reserve communities by many T8FNs members due in part to dysfunctional conditions in the reserve communities, and to the inability to access education, training, and employment opportunities in these remote locations.

A substantial number of members of each of the four T8FNs live in area urban centres. Fort St. John has the highest Aboriginal resident population in the region at 1645 residents, some 9.5 per cent of its population (BC Statistics no date). Overall, 12 per cent of the Peace River Regional District population is Aboriginal (the percentage of this that is T8FNs members could not be ascertained).

While natural growth in population (especially through births) is keeping the population numbers in the home reserves stable (though not growing), there have been much larger increases in the off-reserve population for each of the T8FNs. This is likely related to young people leaving the reserves for greater opportunities for education, training and employment, or as a result of lack of services and recreational opportunities in the small, remove communities. The perception that it is young people who are preferentially leaving is supported by the larger number of children in the off-reserve Aboriginal population than in the total populations of populated areas like Fort St. John and Dawson Creek in 2006 Statistics Canada Census data (as cited in Lions Gate Consulting 2009).

All told, the total registered (on and off reserve) population of the four T8FNs increased from 786 in 2001 to 942 in 2008, an increase of about 20 per cent.[129] The percentage of members living off-reserve increased from 45.4 per cent to 50.6 per cent during this time

[129] Data for this analysis was drawn from Lions Gate Consulting (2009), based on Census data from the four Nations.

period, making 2008 likely the first year where the majority of the T8FNs members lived off reserve.

Outmigration of some of the best and brightest of T8FNs members from the reserves may be leading to capacity and governance constraints at the community level. This is sometimes referred to as "brain drain", where there are fewer people left at the community level that have the skills to keep the community functioning at a reasonably high level.

6.6.1.6 Family cohesion

According to Statistics Canada, 35% of First Nations children in B.C. lived with a lone parent in 2006, compared to 16% of non-Aboriginal children. Exact numbers on this topic are not available for the T8FNs, but anecdotal reports indicate that there are many single-parent families in both the on- and off-reserve populations. This has impacts on the health of communities because children of single parents (mostly or entirely women) are more likely to live in poverty.

In addition, addictions and busy job schedules see some children effectively not being parented. Addictions of parents can lead to child maltreatment, increased psycho-social stress on young people, and increased numbers of children taken into care by social services.

6.6.1.7 Access to health and social services and physical infrastructure

Access to health and social services are limited in northern B.C. in general, but especially so for on-reserve First Nations members.[130] There are many barriers, including long wait times for specialists and long distances to travel in order to access services. Often, T8FNs patients need to travel and stay in Fort St. John overnight in order to access services. There is generally a concern that people lack access to the health professionals they need, and that the scope of services is too narrow. As a result of these barriers, people tend to end up not treating illnesses early on and receive treatment in emergency facilities.

Specific negative issues related to social services provision were identified during a T8TA planning exercise (Parslow and Parslow 2008): They included:

- Insufficient funding for services;

[130] Sections 5.1.8, 5.2.8, 5.3.8, and 5.4.8 identify health and social services issues at the individual T8FNs community level.

- Lack of sustained commitment to fund programs and services long term;
- Funds directed to administration preferentially above service delivery; and
- Lack of staff and resources at the community level.

There are generally very limited physical services and goods supply among the on-reserve communities. For example:

- There is generally no library, store, or gas station.
- Two reserves (DRFN and HRFN) experience frequent power outages.
- Equipment on reserve is often leased instead of owned, and getting equipment serviced is often difficult as vendors often have to come from Fort St. John, Chetwynd, Fort Nelson or Prince George at high cost to the First Nations, especially given inflationary pressures during resource (oil and gas) booms.
- Infrastructure funding is insufficient, with high maintenance costs for gravel roads.
- Lack of road maintenance affects bus transit in winter to and from the reserve communities.
- There is a lack of trained police officers and firefighters on the reserves, so services come from Fort St. John, Fort Nelson or Chetwynd. It is often difficult to get police to come out to the communities, which raises public safety concerns.

6.6.1.8 Housing issues

According to BC Housing (no date), in the late 2000s, Aboriginal people were three times as likely as non-Aboriginal people to live in homes in need of major repairs in B.C. – 21 per cent to 7 per cent.

While detailed information on the three main attributes of housing (affordability, availability and suitability) are not available for the four T8FNs, there is a recognized shortage of housing on all of the four reserves, due primarily to a lack of funding to construct new houses rather than lack of demand. Some young families are moving back to the First Nations as a result of high cost of housing elsewhere, including Fort St. John. Thus, the cost of living off-reserve is driving the need for new housing starts on-reserve.

Housing funding from the federal government is generally perceived as inadequate. The T8FNs report a constant need for funding for housing maintenance and a lack of funding from AANDC to construct needed new housing; Demand for skilled trades in urban areas and in the resource sectors means there are many work orders for minor repairs to houses that go unfilled for long periods of time and scheduling of timely maintenance work is a

challenge. In addition, house maintenance costs are high and subject to inflationary pressures due to limited availability of trades people willing to work out in the remote communities. Housing rental costs in the on-reserve communities are relatively low, however.

In urban areas, there is both a lack of housing in some cases and extremely high rental costs. Fort St. John in particular has a very expensive rental market, which constrains the ability of some T8FNs members to move there to attend college, get advanced training, or find a full-time job. The high cost of housing prevents youth from staying in Fort St. John, and as a result they travel back and forth to the reserve, with some bringing in drugs and alcohol (as reported by T8FNs members in Hendriks 2011).

6.6.1.9 Intra- and inter-community cohesion

> If we don't have unity, I don't care, you're not going to get anywhere. We need unity (DRFN elder, in T8TA Treaty Education Team 2003b).

T8FNs members raised a variety of issues related to intra-community and inter-community cohesion. Fighting between communities for access to limited resources was identified as a common occurrence in recent years. This is commonly referred to by community members as "divide and conquer" tactics, with the government or industry involved perceived as fostering disunity between the respective Nations. T8FNs members are concerned that a lot of their energy seems to go to fighting with their neighbours and relatives rather than uniting with them to make a unified stance on the issues they care about (e.g., WM11, May 24, 2012).

Inside individual communities, there are concerns that gossip and other hurtful actions are impacting on community cohesion and unity. And while the Dane-zaa value of sharing is still practiced, it is no longer universal. Some people and nuclear families are becoming more insular and inward-focused.

Volunteer rates are not known but anecdotal information indicates a cultural shift toward expectation of money by some menbers for many different types of transactions, including sharing of country food and teaching youth on the land.

6.6.2 Elder and Youth Perspectives on Healthy Communities

6.6.2.1 Elders

Elders report the following issues related to the health of communities:

- Insufficient funding from Health Canada for First Nations health programs and services;
- Lack of appropriate housing for seniors, both in the on-reserve communities (where maintenance and crowding issues are more prevalent) and in Fort St. John, where the high rental cost can be prohibitive. Elders who have to live in Fort St. John to receive health care reportedly have difficulty getting apartments;
- Limited income, poverty and increases in cost of living;
- Too many people involved in alcohol and drugs, whoare becoming lost. This is especially disconcerting when it is young people – "Now these young kids 'Oh, I'm 19, I'm going to town, get drunk, like a man'. But that is not a man." (T8FNs elder in T8TA Treaty Education Team 2003b).
- Reduced inter- and intra-community cohesion makes the elders sad (T8TA Treaty Education Team 2003b). Elders report there is too much gossip and fighting to find peace in the communities.
- Reduced respect for elders – "people don't have much time for old people", especially young people (DRFN 2012);
- Lack of transportation to go shopping and to health care appointments, especially for on-reserve elders;
- Reduced sharing practices, including reduced distribution of country foods to elders and reduced assistance by younger members for elders around their houses;
- Reduced time on the land – "nobody spends much time in the bush" (DRFN 2012); and
- Limited activities for elders to stay healthy in some First Nations, although elders stay active through traditional activities and caring for children.

As one WMFNs member stated, "We are too busy with our lives to look after the elders – this needs to change, they need the respect they deserve; we have to look after them" (T8TA Treaty Education Team 2003a).

6.6.2.2 Youth

Youth are an important and consistently growing subset of T8FNs population. As noted by Northern Health (2007), northern B.C. has the youngest population of any health authority in B.C., and First Nations people make up a significant portion of this young northern population. This creates planning issues as these young people are entering their working and childbearing years.

It is essential to understand the concerns and priorities of this key and growing demographic. However, there is only limited information available on youth, and it is often dated. For example, a survey of WMFNs youth (WMFNs 2000) found the following:

- 70 per cent were concerned about high rates of drug, alcohol and nicotine abuse;
- 55 per cent were concerned about sexually transmitted infections;
- 60 per cent were interested in parenting programs/workshops;
- 65 per cent felt there was a need for a full time counsellor for youth-related issues; and
- 50 per cent felt gambling was a problem in their community.

DRFN (2012) identified the following youth problems:

- Television, phones, electronic games, fast life, contributing to no time for families (doing things together);
- not enough chores and helping others without expecting money;
- no respect for self and others (acting like a teenager when an adult);
- bad eating habits(junk food), and poor health in general;
- Too much money;
- Too much freedom; and
- No discipline.

T8FNs youth and adults both expressed concern about self-esteem issues among youth. As noted by members in Hendriks (2011), there is a need to build self-esteem of youth by reacquainting them with what it means to be Aboriginal. Self-esteem rises when people are able to take care of themselves in the broader world.

T8FNs youth face difficult choices, often earlier in their lives than their non-Aboriginal counterparts. One of these is whether to leave their home community (for on-reserve members, especially but not limited to Halfway River and Prophet River) to access education, training and employment opportunities. Youth often do not want to move away from home, because they are concerned about racism, lack of social supports, and other concerns - "our youth are afraid to leave the reserve and go out into the broader world" (T8FNs member in Hendriks 2011).

Dane-zaa youth, like youth everywhere, also report peer pressure to use alcohol and drugs.

WMFNs (2007) noted a lack of activities for youth and a need for additional youth programming, as well as concerns about increasing social, economic and cultural gaps between youth and elders, which may decrease inter-generational relationships necessary to pass on Dane-zaa culture.

6.6.3 Strategies to Improve T8FNs Community Health[131]

It is apparent that the T8FNs exhibit substantial social dysfunction and that other factors contribute to the health of their communities. Primary drivers of social dysfunction include high levels of stress, rapid change, and lack of control experienced by the First Nation communities and individuals, persistent poverty, lack of access to education and training, cumulative adverse effects on traditional lands and resources, lack of agency, and remoteness, to name just a few. Section 7.1 examines some of the factors contributing to continued social, economic and cultural vulnerability among the T8FNs.

However, this Community Assessment is not merely a chronicle of dysfunction. It can also be stated that there is a variety of evidence to indicate that many members, families and even communities have overcome significant obstacles over the period of rapid change over the past two or more generations and have carved out happy and meaningful lives. Section 7.2 examines some of the goals and aspirations identified by T8FNs members, including for the creation and maintenance of healthy communities.

[131] Section 5 also identifies a variety of community-specific strengths and vulnerabilities and plans/strategies to improve the healt of communities.

A few of the specific strategies to promote healthy communities identified by T8FNs members or staff and shared during the course of this study are listed here (not in order of priority):

- Maximize land-based culture programs, especially for youth at risk;
- Develop more positive early childhood development programs in the communities to provide structure in children's lives, such as Head Start;
- Maximize youth-elder interactions, as noted in DRFN (2012) – "Talk to them; take them hunting and trapping; get them involved in things; take them to the bush";
- Dedicate staff and programs to improve community members' knowledge of dietary health, and supports for those with diabetes; and
- Make available additional recreational activities for youth, elders and working age people, to increase physical health status and positive social interactions.

7 CONCLUSIONS: WHAT FUTURE FOR DANE-ZAA?

This section summarizes key elements of the T8FNs vulnerability and resilience in the face of further possible change. It also attempts to capture some of the overarching T8FNs goals and aspirations for the future, against which the proposed Site C Project should be measured.

7.1 Evidence of Vulnerability among the Four T8FNs

Vanclay (2002) lists a series of "indicative impacts" in the form of adverse outcomes that can occur during periods of social, economic and cultural change. The T8FNs Team examined the current status of the T8FNs across all of these "indicative impacts" to get a sense of the degree of vulnerability of the four T8FNs to further social, economic and cultural change. Table 12 exhibits the results.

TABLE 12: Indicative Impacts of Social and Cultural Change for the T8FNs[132]

Vanclay (2002) "Indicative Impact" of Social/Cultural Change	T8FNs Status/Experience/Exposure to Social and Cultural Change
Mental health and subjective well-being: feelings of stress, anxiety, apathy, depression, nostalgic melancholy, changed self image, general self-esteem	-Strong and consistent evidence of heightened individual and community-level psycho-social anxiety, uncertainty, fear, frustration, hopelessness in the face of change, lack of meaningful role in governance and stewardship, social, economic and cultural marginalization, land alienation, and concerns about current and future contamination of food and water sources. -Evidene of low self-esteem linked to racism, residential school residual effects, poor educational performance, lack of respect from government.
Changed aspirations of the future for self and children	-Dane-zaa values, despite inroads from "Western" culture, remain strongly focused on protection of the land-based "way of life". - Youth face a difficult balance between two worlds, however, and tend to have higher focus on wage economy and new media than previous generations.
Experience of stigmatization or deviance labeling – the feeling of being "different" and socially marginalized.	-Social and political marginalization of (especially rural, on-reserve) residents of T8FNs has already occurred; small rural communities in a rapidly growing and increasingly urban region; perceived loss of power and voice for the T8FNs communities.

[132] T8TA Treaty Education Team (2003c) was of particular assistance in developing the list of vulnerabilities currently facing the T8FNs.

Vanclay (2002) "Indicative Impact" of Social/Cultural Change	**T8FNs Status/Experience/Exposure to Social and Cultural Change**
Perceived quality of surroundings especially "on the land"	-Substantially reduced over the past several decades, with increased avoidance and loss of use; strong contamination concerns and alienation due to both physical works and in-migration of non-Aboriginal harvesters and other land users.
Changes in aesthetic quality of surroundings	-Strong expression of distaste and unease, even sadness and psycho-social despair, with the changes in the sights, smells and noise associated with oil and gas development in particular, but also forestry, transmission lines, hydro projects, coal mines, among others.
Disruption of traditional economy	-Substantial reduction in traditional economy, incrementally continuing to decline; increasingly, contamination concerns as well as alienation and wildlife disturbance impacting on country food harvesting levels. -Land alienation increasing the cost and level of effort required to successfully harvest country foods. -Reduced transmission of Dane-zaa land-based knowledge may decrease capacity to harvest in the future.
Change in cultural values; also Cultural integrity – degree to which local culture such as traditions, rites, etc. are respected and likely to persist	-T8FNs members report changes (especially since the 1970s) in fundamental Dane-zaa values such as sharing and respect (especially for elders); linked by many to increasing wage economic reliance, less time on land, "Western" commercial values, and increasing nuclear families -Reduced cultural practices in general reported and knowledge of younger generations of values and cultural rites is reportedly decreasing.
Cultural affrontage – violation of sacred sites, breaking taboos and other cultural mores	-Some grave and spiritual sites have been destroyed by industrial development, including previous BC Hydro projects -Strong concerns about fate of culturally important areas should Site C proceed. -Inability to protect the land and practice stewardship values (e.g., leaving areas fallow for animals to replenish) has caused psycho-social harm to some members.
Experience of being culturally marginalized	-Elders in particular have found their cultural role as educators and leaders reduced; sadness and loss of purpose mentioned as outcomes. -"The Weight of Recent History" on socio-cultural conditions, especially the residual effects of residential schools but also increased non-Aboriginal populations gaining control over governance, has contributed to sense of cultural marginalization.
Profanization of culture – commercial exploitation or commodification of cultural heritage and associated loss of meaning	-Evident in the commodification of traditional knowledge; concerns also that First Nations members expect to be paid money for inter-generational knowledge transfer to younger generations, which is against Dane-zaa values. Not a huge issue for T8FNs at this time.
Loss of language or dialect	-Beaver and Cree language use among T8FNs has been in substantial decline for some time; rarely spoken in the home

Vanclay (2002) "Indicative Impact" of Social/Cultural Change	T8FNs Status/Experience/Exposure to Social and Cultural Change
Loss of natural and cultural heritage – damage to or destruction of cultural, historical, archaeological or natural resources, including burial grounds, historic sites, and places of religious, cultural and aesthetic value	-In Dane-zaa culture, the land has spiritual value in its natural state; some T8FNs members speak of the loss of spiritual value of the land once it is damaged; substantial areas of land have been completely cleared and industrialized, with long-term and potentially irrevocable loss of the spiritual state of the land -Peace River valley, though already heavily damaged, remains one of the most important areas for all four T8FNs; plays a remaining and desired continuing key role in Dane-zaa cultural landscape.
Changes in obligations (or adherence to) to living elders, youth, and ancestors	-Elders report less respect from youth and working age people; many members report less sharing and more individualistic people due to wage economic values. -Increased family breakdowns and poorer parenting as people become more individualistic; loss of family ties and high percentage of kids "in care". -Some signs of increased positive parenting as the shadow of residential schooling lifts.
Community and culture group attachment – sense of belonging; sense of place	-Still some members who have strong attachment both to home reserves and to traditional lands; increasing outmigration from home reserves reducing cohesion; however, many members do not spend time in "home" communities anymore due to lack of wage economic opportunities, persistent poverty, and concerns about social dysfunction. -Land alienation and reduced time on the land reduce sense of belonging to the land; as do physical changes to the land, which alter T8FNs ability to connect with it in a spiritual way. -Continuing concerns about lack of unity between and within communities – related to "divide and conquer" strategies by industry and government.
Social differentiation and inequity	-Increasing inequity and potential for conflict between T8FNs at the intra-community (e.g., those who have industry jobs vs. those who are unemployed), inter-community (members of different Nations fighting for business and job opportunities with industry), and regional levels (urban T8FNs members have much higher wage economic opportunity and educational attainment than reserve members). -In a wage economy, elders and single parent families (primarily female-led) are at a distinct socio-economic disadvantage. -Effects of money on personal coping strategies and relationships – greed, jealousy, lack of sharing.

The T8FNs and their members exhibit exposure to almost all of the adverse socio-cultural effects Vanclay (2002) describes. The T8FNs Team suggests this is indicative of a culture group and society that is uniquely vulnerable to further change should the Site C Project proceed.

These changes are impacts (cultural loss, rapid and largely uncontrollable social change) unto themselves, but they also have forced the T8FNs into other changes that have negatively affected their well-being and quality of life. For example, the "weight of recent history" has contributed to social dysfunction issues at the community level (e.g., substance abuse, gambling, crime, poor money management and debt creation, increased single parent families),that the T8FNs report increased with growing outside access, loss of traditional economy, and cultural decline, especially during the 1970s. As mentioned previously, all adaptations have costs – for the T8FNs, social dysfunction and its legacy is one of those costs.

7.2 T8FNs Overarching Goals and Aspirations[133]

T8FNs members believe that the future lies in their dreams; only by dreaming something can it come true in the real world. The T8FNs have identified during planning exercises (e.g., Parslow and Parslow 2008) and in prior pan-T8FNs statements (e.g., T8TA 2010b; 2004) many different future goals and aspirations. This final section of the Community Baseline Profile identifies some of these goals and aspirations. It is strongly suggested that the environmental assessment of the proposed Site C Project consider potential effects of the Project on the ability of the T8FNs to reach this desired future.

7.2.1 Review of Current Issues Affecting Dane-zaa Goals and Aspirations

> Too much of the area is already lost - we don't want to lose more (T8FNs member in Hendriks 2011).

Much of the T8FNs' concerns for the future are linked to the fundamental question of how much land has been lost already, and how much more loss can be sustained into the future. For many T8FNs members, too much has already been lost.

[133] *Please note that these goals and aspirations, while drawing from previous T8TA and T8FNs documents, do not represent policy statements for any or all T8FNs, unless otherwise noted. They are provided here for exemplary purposes only.*

Currently, T8FNs goals and aspirations face the following key hurdles:

- There is a loss of opportunity to undertake river-based activities as a result of the adverse effects of multiple hydroelectric developments;
- There has been extensive loss of wildlife habitat and associated reductions in wildlife populations from industrial and other human-caused activities on the land, reducing the ability to meaningfully practice Treaty 8 rights;
- There has been increased contamination of land, vegetation and water, and by extension increased contamination of the country food sources the T8FNs rely upon;
- Generations of T8FNs have faced oppression in the form of racism, government assimilation policies, foreign education systems, imposition of new laws and values, and loss of meaningful access and control over their traditional territory. This has led not only to direct loss and inequality versus non-Aboriginal peoples, but also to a legacy of social dysfunction marked by substance abuse, violence, and psycho-social stress. These effects have facilitated the continuation of inequality and despair;
- Poor educational access and completion rates have hampered the T8FNs ability to take economic advantage in the new wage economy which has become the primary "mode of life" for most members, especially those living on reserve, in only the past 30 years or so; and
- The T8FNs have been effectively marginalized through lack of Crown adherence to the promises of Treaty 8, increased in-migration of non-Aboriginal people into the Peace River area, geographic isolation, and lack of respect for T8FNs governance and stewardship by industry and a variety of levels of government.

On January 16 and 17, 2008, a series of pathfinders in the form of T8FN leadership, elders and staff worked with facilitators Charlie and Mary Parslow on a "Path for Treaty 8 Tribal Assocation" (Parslow and Parslow 2008). Key issues identified that can positively affect this path and build strength for the T8FNs included:

- Unity;
- Existing community social and cultural activities;
- Continuing to use traditional skills; and
- Incorporate cultural practices into business practices.

Key issues identified that can negatively affect this path and lead the T8FNs into a position of increased vulnerability in the face of future change included:

- Lack of coordinated planning on a regular basis and lack of a cohesive, collective T8FN plan;
- Government and outside individuals continuing to find ways to create rifts within and between communities (commonly known as "divide and conquer"), and competitiveness between member Nations leading to a lack of sharing, a primary Dane-zaa value;
- Geographical separateness between the communities;
- Lack of economic self-sufficiency among individual First Nations and at the T8TA level;
- Lack of funding for programs and governance structures;
- Lack of identification of viable economic initiatives for Treaty 8;
- Historic dysfunction that has reduced self-sufficiency on a land use basis;
- Lack of community gatherings, especially in winter and spring, and lack of funding to coordinate same; and
- Lack of cultural curriculum to teach government and industry about Dane-zaa ways.

The fact that there are more negative influences on community function than positive ones at this time was echoed throughout the research for the T8FNs Community Assessment. Nonetheless, there are some strengths the T8FNs can build on, chief among them their continued strong ties to the land and recently increasing re-commitment to multi-community and multi-generational gatherings on the land. The Peace River valley plays a key role in both of these factors of community resilience in the face of future change.

7.2.2 Some Key T8FNs Goals for the Future

The following list draws from the findings of the Community Assessment and Parslow and Parslow (2008).

Nation building – Key elements include:

- Individual and group empowerment - pride and confidence at the pan-Nation level;
- Increased T8FNs members' knowledge of Treaty Rights;
- Increased T8FNs control over services, including services supporting spiritual, physical, and mental health. This may include increased T8FNs roles in defining and providing education, social services, cultural programs, job training and mentorship.
- Unity for all T8FNs, including continuity of vision and communities working together.

Maximizing time on the land and cultural retention – Key elements include:

- Elders bringing back traditional skills and teachings to youth, primarily on the land;
- Incorporation of Dane-zaa culture into contemporary practices;
- Continued and increased use of the Peace River valley for gatherings and Treaty Rights practices;
- Increasing the number of areas protected for meaningful Treaty Rights practices, including increased Treaty Rights practices on private land and increased government controls over non-Aboriginal harvesting in key cultural areas.

Stewardship and governance –Key elements include:

- Respect from government and industry, with T8FNs recognized for their cultural distinctiveness, knowledge and contributions. This may include a need for increased cross cultural training for government and industry to promote more reciprocal and respectful relations with these actors;
- Increased jurisdiction over lands and resources in Treaty 8 territory, with Dane Zaa having a key role in planning, decision-making, and monitoring of activities on the land;
- Implementation of Dane-zaa values into land use management – e.g., when in doubt economic development should be subservient to land and water protection;
- Compensation for past infringements on Treaty 8 Rights.

Economic self-sufficiency - Key elements include:

- Development of a divers and sustainable economy with economic development controlled and guided by T8FNs;
- Maximizing employment in jobs that do not contradict T8FNs values or way of life;
- Resource revenue sharing to ensure financial independence and appropriate capital transformations at the community level;

Healthy and empowered individuals – In the end, perhaps the primary goal of the T8FNs, across the board, is to have Dane-zaa people that are (following Parslow and Parslow 2008):

- Healthy and high functioning;
- Educated;
- Self-reliant;
- Proud;
- Supportive of one another;
- Well organized; and
- Supported by strong institutions, including T8TA and their home First Nations.

As noted by Koehn et al. (2004), in the end the T8FNs are seeking to create and maintain a future where balanced First Nations persons are "as comfortable on the land, around the fire sharing oral history with youth, singing and drumming, as they are in the classroom, boardroom or control room".

8 CLOSURE

8.1 Next Steps

This Report is the culmination of Stage 2 of the T8FNs Site C Community Assessment process. This Baseline Community Profile for the T8FNs is subject to review and update up until its submission by the T8FNs for inclusion in BC Hydro's Application materials for the proposed Site C Project. The document will be reviewed and discussed with BC Hydro.

The third and final stage of the T8FNs Site C Communities Assessment process was submitted to BC Hydro on November 16, 2012. Stage 3 of the T8FNs Community Assessment was an Initial Impact Pathways Identification exercise. It involved identification by the T8FNs and the T8FNs Communities Assessment Team of potential interactions between the proposed Site C Project and the rights and interests of the T8FNs.

It is understood by the T8FNs that this document will be submitted as a technical appendix to the BC Hydro Application for the proposed Site C Project. The T8FNs, together and separately, reserve the right to reconsider, review, and submit additional information, including additional baseline conditions assessment materials, to the environmental assessment process for the proposed Site C Project.

8.2 Closure

If there are any questions about this Report, please contact both Alistair MacDonald at the Firelight Group Research Cooperative and Shona Nelson at the Treaty 8 Tribal Association, at the contact details below.

Alistair MacDonald

Alistair.macdonald@thefirelightgroup.com

(780) 488-0090

Shona Nelson

snelson@treaty8.bc.ca

(250) 785-0612 ext. 244

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APPENDIX A: LISTS OF QUESTION THEMES FROM INTERVIEWS AND FOCUS GROUPS

In all instances, whether interviews or focus groups, the T8FNs Team focused on gathering information on the following four topics:

1. What are the most important things for Dunne Za well-being and quality of life?
2. What are the key social, economic and cultural issues facing the community?
3. What does the Peace River Valley mean to you, your family and your community?
4. What effects do you think Site C dam could have on you, your family and community?

Interview Themes

INTRODUCTORY QUESTIONS

1. What is your job in the community?
2. What does this require you to do?
3. How long have you worked here?
4. Are you a band member (here or at any of the First Nations)?
5. Do you live here? If not, where?

BODY OF INTERVIEW

Priorities: These are the "What Matters Most" questions like:

- What are the priorities and values of your Band/community that people most want to protect and enhance? (Or "What makes people happiest in the community"?)
- How do people measure quality of life in this community"?)
- How can these values be protected?
- What is the community doing to protect them?
- Are there plans to enhance these values/priorities/ or reach goals?
- What are the greatest challenges your community faces [in your area of expertise]? Or "What are the key social, economic and cultural issues facing the community?"
- What are they caused by [to your knowledge]?
- How have things changed over time?

People:

- Who else should we talk to in your community [about your area of expertise]?
- Who else has knowledge on this topic?
- What kind of information would they have to offer?
- Who are the key people to talk to about the Peace River Valley in this community (gauge if they are qualified to answer in advance)?

Paper:

- What previous written information (annual reports, studies, visioning and other planning exercises, other materials) may be available to help us understand the social and economic conditions in the community [narrow down to their specific area of expertise]?
- Do you have any sort of archive or accessible information base with key documents?
- Who might have other information? How can we find them?

CLOSING QUESTIONS

At the end of the interview, the T8FNs Team interviewed added the "fourth P" of **Personal:**

- What concerns and/or excites you about the proposed Site C Project?
- What effects have other changes had on your community over time?
- What effects did previous Hydro projects (WAC Bennett; Peace Canyon) have on your community?
- What strengths and weaknesses does the community have to build on or overcome in the future?
- What does the Peace River Valley mean to you personally?

QUESTIONS SPECIFIC TO BUSINESS AND ECONOMIC DEVELOPMENT INTERVIEWS

EMPLOYMENT

- What are unemployment rates and underemployment (seasonal or part time work) rates like in your community? How have they changed over time? What has caused fluctuations?
- What are the major occupations in the community? Where do you get information about community employment rates and other economic information?
- Are you familiar with any work done to identify the excess labour supply in your community?

- What skills training and education needs are people in the community seeking? What skills training and education gaps have you seen keeping people from getting jobs?
- What kind of work do Band members prefer?
- Are there other hurdles to people getting work?
- What does the Band do to support people getting jobs?
- What government programs work for people looking to get jobs?
- Have people talked about potential for getting work from Site C? Is the community planning for it at all? How?
- Do you know if anyone from the community works for BC Hydro? If you don't, who might?
- What sort of relationship does BCH have with the community in terms of economic opportunity creation or training and educational supports?

BUSINESS

- Do you have a document listing band owned and band member owned businesses?
- What sort of businesses does the Band run? Sector? Joint venture or wholly owned? How many?
- How has the band owned or member owned business sector changed over time? (e.g., more, bigger, fewer, different sectors, more successful or less?) What factors have led to these changes?
- Are they successful? Can you give a sense of how many Band vs. non-band people work for them and their annual expenditures?
- Who are their clients?
- Can you describe how many Band member owned businesses there are? What they do? how to contact them? A list?
- What sort of hurdles do T8FN owned businesses face vs. their non-aboriginal counterparts?
- What does the Band do to support business development?
- What government programs are available to support business development? How well do they work?
- How can these hurdles be over come? Or can they?
- What tools does the community have to expand its business acumen and expertise/capital base?
- Do you know of any band-owned or band-member owned businesses that have procurement agreements with BCH?
- What sort of procurement preference and other negotiated preferences does the community based business sector need in order to take advantage if Site C proceeds?

PLANNING/VISIONING/GOALS

- Do you have any materials you can share with us on economic (employment, business) development priorities and goals for the community?
- Have you been involved in visioning exercises at the Band level where key values of the community have been recorded?
- Where do you see employment and business going in the next decade to 25 years in this community?
- What tools does the community need to meet its goals?
- What effect might Site C have on the ability of the community to meet its goals? Beneficial or adverse.

Focus Group Themes

Table A-1 identifes some of the main questions, prompt questions and type of information sought during T8FNs Community Assessment Focus Groups.

Table A-1: T8FNs Focus Groups Themes

Main Questions	Prompts	What are we trying to get at?
What are the most important things for Dunne Za well-being and quality of life?	What are the things that matter most for T8TA communities? -examples to be used only if there is extreme lack of input: traditional use, health, water, socio-economic and cultural well-being	VALUES AND PRIORITIES; GENERAL. Attempt to get youth to open up about what it means to be Dunne Za, what their values are, and what it takes to keep those values strong.
What are the key social, economic and cultural issues facing the community?	What are they caused by? What are the best things about life in your community? What part of living in your community need to be improved? How could it be improved?	BASELINE CONDITIONS – WHAT IS LIFE LIKE IN THE COMMUNITY?
What does the Peace River Valley mean to you, your family and your community?	If this elicits little response, you could move into questions about: "What are your goals for the future"? What are the priority needs and goals of the community for the future? What do you want to protect and promote?	- VALUES AND PRIORITIES; SPECIFIC TO PLACE
What effects do you think Site C dam could have on you, your family and community?	What are good things that could come with the dam? What are the bad things that could come with the dam? What do you think might change as a result of Site C and why?	INITIAL IMPACT PATHWAY IDENTIFICATION – STAGE 3 (T8FNs TEAM 2012b)

Appendix B: T8FNs Community Assessment Team Members

Table B-1 identifies all T8FNs Team members and their roles in the T8FNs Community Assessment.

Table C-1: T8FN Community Assessment Team

Team Member	Affiliation and Responsibilities
Shona Nelson	T8TA manager; Project Director, reviewer of draft materials
Verena Hofmann	Internal Project Manager; Research Lead, with Emphasis on Traditional Land Use and Culture
Alistair MacDonald	Firelight Group Socio-economic Impact Assessment Specialist; External Project Manager; Training, Economy and Writing Lead; Primary Author of Baseline Community Profile
Jennifer Roe	T8TA Staff member; Researcher; focus on demographics and other census data, education, measures of well-being and quality of life
Robin Acko	T8TA Staff member; Researcher Trainee; focus on traditional land use and culture
Anna Barley	T8TA Staff member; Research Assistant; focus on values, goals, and aspirations; housing; infrastructure; support on economic development
Susi Roy	T8TA Archivist; Research Support; in charge of TARR Archives searches; lead interview transcriber
Talese Shilleto	T8TA Staff member; Research Support; in charge of data management; interview transcription support
Dr. Ginger Gibson	Firelight – data analysis and report writing
Diana Gibson	Firelight – data analysis and report writing

Mapping support was provided by Fern Terbasket of T8TA and Steve Deroy of Firelight.

Review of draft materials was provided by Rick Hendriks of Camaredo Energy Consulting.

APPENDIX C: T8FNS SITE C COMMUNITY ASSESSMENT TEAM: COMMUNITY ADVISORS

Table C-1: T8FNs Community Assessment Team – Community Advisors

Community Advisor	Affiliation
Elder Sam Acko	Doig River First Nations
Elder Billy Attachie	Doig River First Nations
Counsellor William Field	Halfway River First Nations
Ross Willson	Halfway River First Nations (staff)
Brian Wolf	Prophet River First Nations
James Wolf	Prophet River First Nations
George Desjarlais	West Moberly First Nations
Counsellor Clarence Willson	West Moberly First Nations

APPENDIX D: INDICATORS COMPARISON TABLE

Compilation of Available Study Area Community Indicators

NOTE: Given the small size of the communities in question, many of the indicators Statistics Canada would typically collect data on are not collected for the T8FNs, limiting availailability and reliability of quantitative data. Sources include but are not limited to: AANDC 2012a through 2012d; Statistics Canada 2012a through 2012d; Statistics Canada 2007a through 2007d (2006 Census data), and Statistics Canada 2001a through 2001d.[134] *A notice of "no data" does not imply the information does not exist; only that it was not collected during the course of the T8FNs Community Assessment.*

INDICATOR	BC (where available and applicable)	BC Aboriginal on reserve average (where available and applicable)	DRFN	HRFN	PRFN	WMFNs
Total Registered Population as of April 2012	Not applicable	Not applicable	284	255	260	237
On Reserve Population 2011	4,573,321 (total population)	No data	120	170 (145 as of April 2012)	129	95 (85 as of April 2012)
On Reserve Population 2008	4,384,047 (total population)	No data	131	154	106	74
On Reserve Population 2006	4,074,385 (total population)	No data	124	102	86	51 to 55
2006-2011 On Reserve Population change		No data	-3.2%	+66.7%	+50%	+86.3%
On Reserve Population 2001	3,868,870 (total population)	No data	139	137	100	52

[134] BC population estimates from http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx.

INDICATOR	BC (where available and applicable)	BC Aboriginal on reserve average (where available and applicable)	DRFN	HRFN	PRFN	WMFNs
2001-2006 On Reserve Population change	Not applicable	No data	-10.8%	-25.5%	-14%	-1.9%
On Reserve Population 1996	3,689,760 (total population)	No data	115-120	137	99	69
1996-2011 On Reserve Population change	Not applicable	No data	4.3%	24.1%	30.3%	37.7%
Off Reserve Population 2008 (2001 in brackets)	Not applicable	Not applicable	131 (110)	88 (71)	128 (88)	130 (160)
Off Reserve Population Change 2001 to 2008	Not applicable	Not applicable	19%	24%	45%	-19%
On reserve as proportion of total Nation population 2008 (2001 in brackets)[135]	Not applicable	Not applicable	131/262 (116/226)	154/242 (139/210)	106/234 (102/190)	74/204 (72/160)
Population Growth on and off reserve 2001-2008	Not applicable	No data	Total = 15.9% On reserve = 12.9% Off reserve = 19.1%	Total = 15.2% On reserve = 3.9% Off reserve = 45.5%	Total = 23.2% On reserve = 3.9% Off reserve = 45.5%	Total = 27.5% On reserve = 2.8% Off reserve = 47.8%
% of Total Population on Home Reserve or Crown Land 2008 (2001 in brackets)	Not applicable	No data	50% (51.3%)	63.6% (66.2%)	45.3% (53.7%)	36.3% (45%)
Proportion of On Reserve population < 15 years old, in 2011	706,065 of 4,074,385 (17.3%)	27.1%	30 of 120 (25%)	45 of 170 (26.5%)	35 of 129 (27%)	25 of 95 (26.3%)

[135] Indian and Northern Affairs Canada data reported in Lions Gate Consulting Inc. (2009).

INDICATOR	BC (where available and applicable)	BC Aboriginal on reserve average (where available and applicable)	DRFN	HRFN	PRFN	WMFNs
% of On Reserve Population <15 years old in 2006	16.5% (of total BC population)	28.2%	42.9%	No data	No data	20%
Proportion of population 55 and over, in 2011	912,835	12.6%	15 of 120 (9%)	10 of 170 (5.9%)	15 of 129 (11.6%)	5 of 95 (5.3%)
% population 15 or older, 2011 (2006 in brackets)	81.9	No data	75% (67.9%)	70.8% (67.9%)	74.2% (75%)	54.5% (no data)
Median age, 2011 (2006 in brackets; *2001 in italics*)	38.4	29.9 (29.2; *27.3)*	34.3 (28.5; *22.2*)	29.1 (28.5; *28.2*)	27.6 (26.5; *26.5*)	22.5 (22.5)
Lived <5 years in same place, 2006 (2001 in brackets)	1,694,085	No data	70%	70% (60%)	50%	25% (40%) (extremely suspect data)
% of population age 25-64 with some post-secondary completion, 2006	No data	37%	15%	No data	No data	0% (extremely suspect)
% of population age 25-64 with no high school or equivalent, 2006	No data	43%	69%	No data	No data	Approximately 70% of on-reserve population 15 and over
% living on home reserve, April 2012	Not applicable	No data	138/284 (48.6%)	145/255 (56.9%)	105/260 (40.4%)	85/237 (35.9%)
% houses with crowding issues, 2006	No data	13%	9%	No data	No data	No data
Average # of people per private household, 2011 (2006 in brackets)	2.5	3.2	2.4 (3.2)	2.8	2.6 (3.3)	4.0
Average rooms/dwelling	6.4	6.2	6.2	No data	No data	No data

INDICATOR	BC (where available and applicable)	BC Aboriginal on reserve average (where available and applicable)	DRFN	HRFN	PRFN	WMFNs
% of kids living with both parents, 2006	No data	62%	75%	No data	No data	No data
Ratio of married or common law vs. not, 2006	No data	No data	35:55	50:70	40:55	
Average number of children per family household, 2011	No data	No data	1.8	1.4	1.7	No data
Number of private dwellings, 2011	No data	No data	49	63	57	47
Number of private dwellings, 2006	No data	No data	45-49	52	49	22
Number of private dwellings, 2001	1,643,969	No data	40	45	31	No data
% households requiring major repairs, 2006	No data	39.0%	17.4%	No data	No data	0%
% with knowledge of Aboriginal language 2006 (2001 in brackets)	Not applicable	23%	48% (50%)	No data (66.7%)	No data (60%)	30% (20%)
% aboriginals speak mother tongue, 2006 (1996 in brackets)	Not applicable	19.0% (20%)	42% (70%)	(66.7%)	No data	30.0%
Participation rate in wage economy, 2006 (2001 in brackets)	65.6% (65.2%)	57.1% (58.5%)	53.3% (47.4%)	50.0% (45%)	No data (64.3%)	71.4% (66.7%)
Employment rate, 2006, age 25-64 (2001 in brackets)	61.6% (59.6%)	54.5% (41.6%)	40% (31.6%)	20.0% (20%)	(42.9%)	57.1% (33%)

INDICATOR	BC (where available and applicable)	BC Aboriginal on reserve average (where available and applicable)	DRFN	HRFN	PRFN	WMFNs
Unemployment rate, 2006 (as reported in Lions Gate Consulting (2009); 2001 data in brackets)	8.5%	25% (May 2006, as reported in BC Statistics no date)	33.3%	50.0% (55.6%)	(33.3%)	0.0% (50%)
% work in public administration, 2006 (2001 in brackets)	No data	21.3%	30.8%	(20 of 95 worked in "other services" in 2001; AANDC 2012b)	(10 of 45 workers in health and education; 15 in other services in 2001)	30 on reserve members in health, education, business or other services
% work goods production or primary sector, 2006 (2001 in brackets)	No data	30.0	46.2	(30 of 95 worked in "agriculture, resource based or manufacturing, construction; AANDC 2012b)	(10 of 45 workers in "occupations unique to primary industry" in 2001)	10 on reserve members in primary industry
% work in services, 2006 (2001 in brackets)	No data	48.6	23.1	No data	(10 of 45 workers in "wholesale or retail trade" in 2001)	30 on reserve members in health, education, business or other services
% working 30+ weeks (full time), 2001	No data	35%	17%	No data	No data	No data
Land area of community	Not applicable	Not applicable	41.44 km^2 (noted at 11.97 km^2 in 2001)	40.73 km^2	4.58km^2	20.34km^2
Population density on reserve 2011 (2001 in brackets - persons/km^2)	(4.2) (total population)		10.5	4.2 (3.4)	29.3 (21.8)	4.9 (2.5)

APPENDIX E: PHYSICAL AND SOCIAL INFRASTRUCTURE IN THE T8FNS

Table E-1: Physical and Social Infrastructure in the T8FNs as of 2012

Infrastructure/service	DRFN	HRFN	PRFN	WMFNs
Child care	✓, yes, on reserve.	✓, yes, on reserve.	✓, limited child care available through school.	✓, yes, on reserve; created in 2012; waiting list.
Recreational centre	✓, gymnasium facilities available at the Band Office. Rodeo grounds on site. Additional recreation (e.g., pool) in Fort St. John	✓, gymnasium facilities available. Rodeo grounds on site. Additional recreation (e.g., pool) in Fort St. John	✓, gymnasium facilities available. Additional recreation (e.g., hockey rinks) in Fort Nelson	⊗, nearest hockey rinks and other recreational facilities in Chetwynd or Hudson's Hope
Firehall	⊗, volunteer only	⊗, volunteer only	⊗, volunteer only	⊗, volunteer only
Police station	⊗, serviced out of Fort St. John. Regular visits from Fort St. John RCMP.	⊗, serviced out of Fort St. John. Regular visits from Fort St. John RCMP.	⊗, serviced out of Fort Nelson. Sporadic visits from Fort Nelson RCMP.	⊗, serviced out of Chetwynd. Regular visits from Chetwynd RCMP.

Infrastructure/service	DRFN	HRFN	PRFN	WMFNs
Health centre	✓, health department/care on site at the Band Office with one part time employee (employee is also Education Coordinator). Visiting nurse and/or doctors weekly. Regular clinics, mammograms, diabetes, HIV, etc.	✓, health department/care on site at the Band Office with one full time employee. Visiting nurse and/or doctors weekly. Regular scheduled specialty clinics; mammograms, diabetes, HIV, etc.	✓, health department/care on reserve with one full time employee. Visiting nurses and/or doctors. Various specialty clinics throughout the year; mammograms, diabetes, HIV, etc.	✓, health department/care on reserve with 3 full time employees. Visiting nurses and/or doctors. Various specialty clinics throughout the year; mammograms, diabetes, HIV, etc. Healthy meals served weekly.
Nearest full-service health care centre	Fort St. John (hospital, multiple clinics and specialties)	Fort St. John (hospital, multiple clinics and specialties)	Fort Nelson (advanced health care centre) Fort St. John (for hospitalizations and specialties)	Chetwynd (advanced health care centre) Fort St. John (for hospitalizations and specialties)
School K-6	⊗, students attend Upper Pine School and are bused to and from.	⊗, school closed; students go to Upper Halfway School and are bused to and from.	✓, located on reserve – hot meal program provided.	⊗, students go to Moberly Lake School or Chetwynd and are bused to and from (Chetwynd).
High school	⊗, students attend high school out of Fort St. John and are bused to and from.	⊗, students attend high school out of Fort St. John and are bused to and from.	⊗, students attend high school out of Fort Nelson and are bused to and from.	⊗, students attend high school out of Chetwynd and are bused to and from.

Infrastructure/service	DRFN	HRFN	PRFN	WMFNs
Education Coordinator	✓, half-time	✓	✓	✓, full time
Aboriginal language instruction	✓, elders participated in a Beaver language program hosted by T8TA.	✓, elders participated in a Beaver language program hosted by T8TA.	✓, elders participated in a Beaver language program hosted by T8TA.	✓, elders participated in a Beaver language program hosted by T8TA.
Water treatment facility (potable water)	Unknown; there is a double lagoon sewage treatment facility reported to be working well	⊗	⊗, they do have a 1989 pumphouse and do chlorine injection when needed – only once in 20 years	✓, since 2011 floods water has been trucked in from Chetwynd
Culture Centre	✓, large administrative and cultural centre at Band Hall - Museum	⊗	New administrative and meeting hall completion in fall 2012	⊗
Library	✓, on site at the Band Office, housed in the same area as the museum and throughout building.	⊗	New administrative and meeting hall completion in fall 2012	⊗
Groceries (nearest full service grocery store)	Convenience store only; Fort St. John nearest grocery centre.	⊗, Fort St. John nearest grocery centre.	Convenience store only with irregular hours; Fort Nelson nearest grocery centre.	Conveniece store only; Chetwynd or Hudsons Hope nearest grocery centre.

Infrastructure/service	DRFN	HRFN	PRFN	WMFNs
Gas station (nearest gas station)	⊗	⊗, nearest gas station located at Mile 101	On site but irregular hours.	⊗, nearest gas station located at Saulteau First Nation.
All-season road access and distance to nearest centre	✓, 73.5 km from Fort St. John, primarily on paved road.	✓, 130.5 km from Fort St. John, on paved road.	✓, 85 km from Fort Nelson, all on paved Highway	✓, 34.9 km from Chetwynd and 32.5 km from Hudsons Hope, all on paved Highway
Main Reserve	Doig River No. 206	Halfway River No. 168	Prophet River No. 4	West Moberly No. 168A

APPENDIX F: CONCORDANCE TABLE

Table F-1: List of Baseline Topics from Annex A of Workplan Agreement and Where Information is Available in the T8FNs Baseline Community Profile Report

CATEGORIES	Preliminary Topics for Information Gathering	Location in Baseline Community Profile
People and the Economy	Population composition and dynamics (including mobility)	Sections 5.1.2, 5.2.2, 5.3.2, 5.4.2; Appendix E
	Economic activity	Sections 5.1.5, 5.2.5, 5.3.5, 5.4.5; Section 6.5; Appendix E
	Labour force (including labour pool analysis)	Sections 5.1.5, 5.2.5, 5.3.5, 5.4.5; Section 6.5; Appendix E
	Income sources and amounts	Section 6.5
	Employment by occupation, industry affiliation, unemployment rate	Sections 5.1.5, 5.2.5, 5.3.5, 5.4.5; Section 6.5; Appendix E
	Cost of living	Section 6.5
	Contribution (qualitative and quantitative) of the mixed and traditional use economy	Section 6.1; Sections 5.1.3, 5.2.3, 5.3.3, 5.4.3
	Skill shortages and surpluses	Sections 6.4 and 6.5
	T8FN economic and socio-cultural values, goals, priorities and principles	Sections 3 and 7
Infrastructure and Community Services	Transportation, utilities, energy, emergency, recreation and communications infrastructure and services	Sections 5.1.10, 5.2.10, 5.3.10, 5.4.10; Appendix E
	Housing, housing conditions, and household size	Sections 5.1.10, 5.2.10, 5.3.10, 5.4.10; Section 6.6; Appendix E
Individual, Family and Community Wellness	Physical, social and mental health conditions	Sections 5.1.8, 5.2.8, 5.3.8, 5.4.8; Sections 4.2.3.3 and 6.6
	Community and individual lifestyle health practices, perceptions and behaviours	Section 6.6

	Individual and community health determinants as identified by First Nations (e.g., traditional foods as a factor of healthy diet, subsistence food source, cultural and spiritual importance)	Section 3.4; Sections 6.1, 6.2 and 6.6
	Health care facilities and services	Sections 5.1.8, 5.2.8, 5.3.8, 5.4.8
	Family and community conditions (community well-being)	All of Section 5; Section 6.6; Section 7.1
	Human health risks	Sections 4.2, 4.3, 6.1, and 6.6
	Social and protection facilities and services	Sections 5.1.8, 5.2.8, 5.3.8, 5.4.8; Section 6.6
	Education and training programs and services	Sections 5.1.9, 5.2.9, 5.3.9, 5.4.9; Section 6.4
	First Nation health and wellness values	Section 2.5 and 4.3
	Role of traditional food in diet, including plants harvested for medicinal and other purposes	Preamble; Section 5.1.3, 5.2.3, 5.3.3, 5.4.3; Section 6.1
	Cultural and spiritual dimensions to traditional foods; links to individual and community health and well-being	Sections 3, 6.1, and 6.2
Traditional Culture/Current Use of Lands and Resources for Traditional Purposes	Species trapped, and abundance of furbearers available for trapping	Section 4.2; Sections 5.1.4, 5.2.4, 5.3.4, 5.4.4; Section 6.1
	Trapline areas and access to traplines	Section 4.2; Sections 5.1.4, 5.2.4, 5.3.4, 5.4.4; Section 6.1
	Species harvested, abundance of wildlife available for traditional hunting, success rates	Section 4.2; Sections 5.1.4, 5.2.4, 5.3.4, 5.4.4; Section 6.1
	Access to hunting areas	Section 4.2; Sections 5.1.4, 5.2.4, 5.3.4, 5.4.4; Section 6.1
	Fish species caught, fishing locations and access	Sections 4.2 and 4.3; Sections 5.1.4, 5.2.4, 5.3.4, 5.4.4; Section 6.1
	Fish species abundance, quality and safety to consume	Section 4.2 and 4.3; Sections 5.1.4, 5.2.4, 5.3.4, 5.4.4; Section 6.1

	Plant and berry species harvested for food, medicine, or other cultural uses, and abundance of plants available for traditional harvesting	Sections 4.2; Section 5.1.4, 5.2.4, 5.3.4, 5.4.4; Section 6.1
	Access to plant harvesting areas	Preamble; Sections 4.2 and 6.1
	Aboriginal language	Sections 5.1.6, 5.2.6, 5.3.6, 5.4.6; Section 6.2
	Governance and stewardship systems	Section 3; Sections 5.1.7, 5.2.7, 5.3.7, 5.4.7; Section 6.3
	Aboriginal values retention	Section 3; Section 6.2
	Traditional transportation routes	Sections 5.1.3, 5.2.3, 5.3.3, 5.4.3
	Renewable resource values and ability to sustain traditional economy	Sections 3, 6.1, and 6.3
	Prehistorical, historical and cultural context	Section 3
	Cultural landscape context and meaning	Preamble
	Oral history transmission and meaning	Preamble; Section 6.2
Non Traditional Land and Resource Use	Relationship of the following activities to enhancing or adversely impacting the traditional economy, and mode and quality of life, including in relation to land use conflicts, alienation and meaningful practice of existing Treaty rights and Aboriginal rights and interests: • Granular and mineral resources • Timber resources • Oil and gas activities • Non-traditional resource harvesting, including hunting and fishing • Tourism and recreation • Other commercial activities • Environmentally protected areas • Visual and aesthetic resources	Section 4.2; Section 5.1.4, 5.2.4, 5.3.4, 5.4.4; Section 6.1

Treaty 8 First Nations (T8FNs) Community Assessment Team

Site C Project: Initial Impact Pathways Identification Report

November 16, 2012

Submitted to BC Hydro as the Stage 3 Report of the T8FNs Community Assessment for the Site C Environmental Assessment

Site C Project:
Initial Impact Pathways Identification Report

Submitted by the Treaty 8 Environmental Assessment Team to BC Hydro as the Stage 3 Report for the Site C T8FNs Community Assessment

Disclaimer

The information contained in this report is based on research conducted by the T8FNs Community Assessment Team in 2012, as well as published works and archival research. It reflects the understanding of the authors, and is not a complete depiction of the dynamic and living system of use and knowledge maintained by T8FNs elders and members. The information contained herein should not be construed as to define, limit or otherwise constrain the Treaty and aboriginal rights of any of the above-listed First Nations or other First Nations or aboriginal peoples. Nor does it constrain or limit the identification through further study of additional impact pathways and characterization and significance prediction for impact pathways identified herein, for the purposes of submissions to the environmental assessment process for the Site C Project. Stage 3 was thus very clearly an initial impact pathway identification exercise, identifying some potential ways the Site C Project may impact on the T8FNs. It should not be treated by either party as a final set of impact predictions.

Additional limitations are identified in Section 4 of this Report.

Authored by:

The Treaty 8 First Nations (T8FNs) Community Assessment Team and The Firelight Group Research Cooperative (Lead Author – Alistair MacDonald)

On behalf of:

The Treaty 8 First Nations of Doig River, Halfway River, Prophet River and West Moberly

Submitted to:

BC Hydro

November 16, 2012

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1. Introduction

This "T8FNs Initial Impact Pathways Identification Report" (Initial Impact Pathways Report) is provided to BC Hydro by the Treaty 8 First Nations Community Assessment Team (T8FNs Team), in relation to the environmental assessment of the proposed Site C Hydroelectric Project (the Project or Site C). The T8FNs Team conducted a Community Assessment for the Doig River First Nations (DRFN), Halfway River First Nation (HRFN), Prophet River First Nation (PRFN) and West Moberly First Nations (WMFNs).[1] This study, funded by BC Hydro, was conducted by Treaty 8 Tribal Association (T8TA) staff and The Firelight Group Research Cooperative (Firelight).

The overall T8FNs Community Assessment was a three-stage process:

- **Stage 1: Baseline Study Scoping and Training Stage (Scoping Stage),** completed in June, 2012.
- **Stage 2: Baseline Community Profile Stage,** where the T8FNs Team collected existing information about current conditions and change over time in the four T8FN communities. Stage 2 was completed in November, 2012.
- **Stage 3: Initial Impact Pathways Identification Report Stage**, the current stage, where the T8FNs Team used what it learned during the first two stages to identify initial impact pathways between the proposed Site C Project and the T8FNs' society, economy and culture. These pathways were verified at a Community Advisor Workshop on November 6, 2012.

As per Appendix D of the Site C Environmental Assessment Participation Agreement: Work Plan/Terms of Reference for the Site C First Nations Community Assessment – Treaty 8 Community Baseline Profile (referred to as the Workplan Agreement herein), this Initial Impact Pathways Report is Deliverable #3 of the T8FNs Community Assessment, and marks the culmination of Stage 3 of the Workplan Agreement.

[1] Please note that when this document refers to the T8FNs or T8FNs communities, it is referring only to the DRFN, HRFN, PRFN and WMFNs. The other T8TA member – Saulteau First Nation - and other potentially affected First Nations were not part of this research.

2. Purpose of Stage 3 of the T8FNs Community Assessment: Initial Impact Pathways Identification

The Workplan Agreement calls for a Stage 3 Initial Impact Pathways Identification Report that identifies::

> "the potential impact pathways between the Project and the T8FNs, their Reserves, the Future T8FN Lands, and the exercise of their Section 35(1) Rights. This work would prepare the T8FNs for discussion with BC Hydro of the Environmental Effects of the Project".

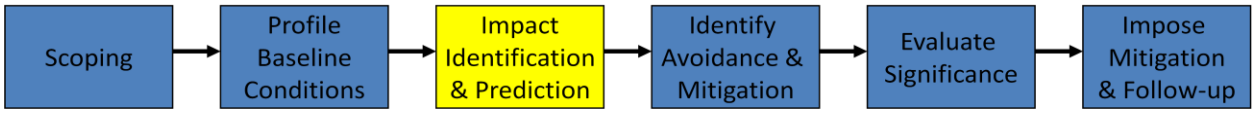
This Initial Impact Pathways Identification Report:

- Identifies some of the ways the Site C Project might impact on the four T8FNs should it proceed; and
- Develops an impact pathways identification table and an associated development component/valued component interaction matrix to assist the parties in engaging in further dialogue on potential Project effects.

Stage 3 was thus very clearly an initial impact pathway identification exercise, identifying some potential ways the Site C Project may impact on the T8FNs. It should not be treated by either party as a final set of impact predictions. See further discussion of limitations of this Report in Section 4 below.

Initial impact pathways identification is part of "impact identification and prediction", the third stage of a typical environmental impact assessment, as illustrated in Figure 1:

Figure 1: A Typical Six-Step Environmental Impact Assessment Process



Initial impact pathways identification adds a Scenario B – the future if the Project goes ahead – to already identified baseline and trend conditions (Scenario A), in order to:

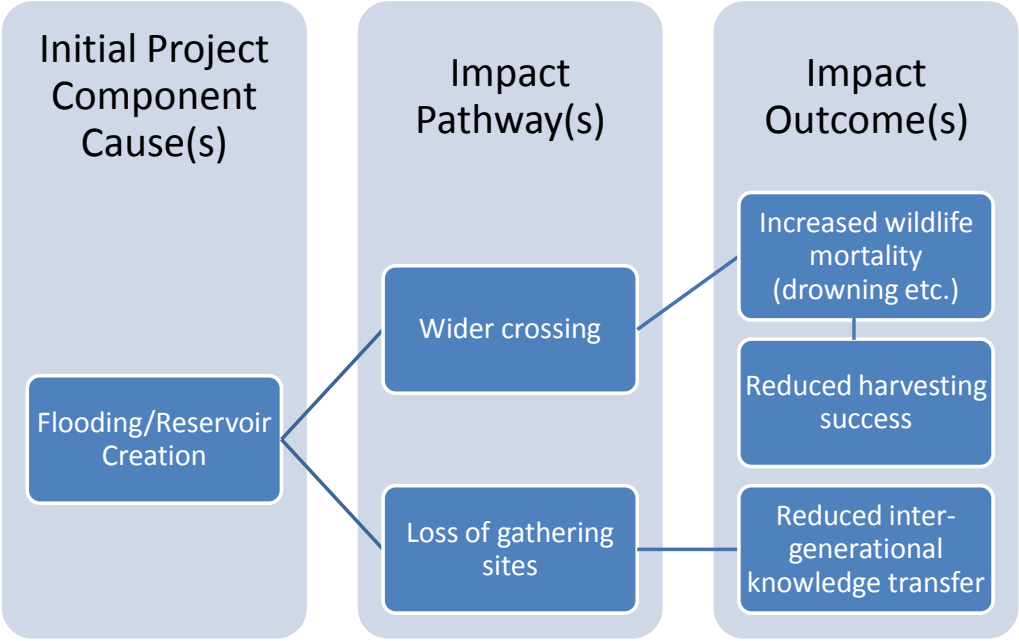
- Identify how development components are likely to change the environment (physical and human); and
- Develop an initial list of potential impacts and some information about their causes and direction (beneficial or adverse; good or bad).

Subsequent to initial impact pathways identification, additional impact characterization is conducted to clarify the implications of the development on valued components of the lived experience.

2.1 What are Impact Pathways?

What do we mean when we say "impact pathways"? An impact pathway is the means by which an initial change caused or contributed to by a proposed project or development (the two terms are used synonymously in this Report) or other human activity is predicted to translate into an effect outcome or series of effects outcomes. Figure 2 provides a simplified example in the Site C Project context.

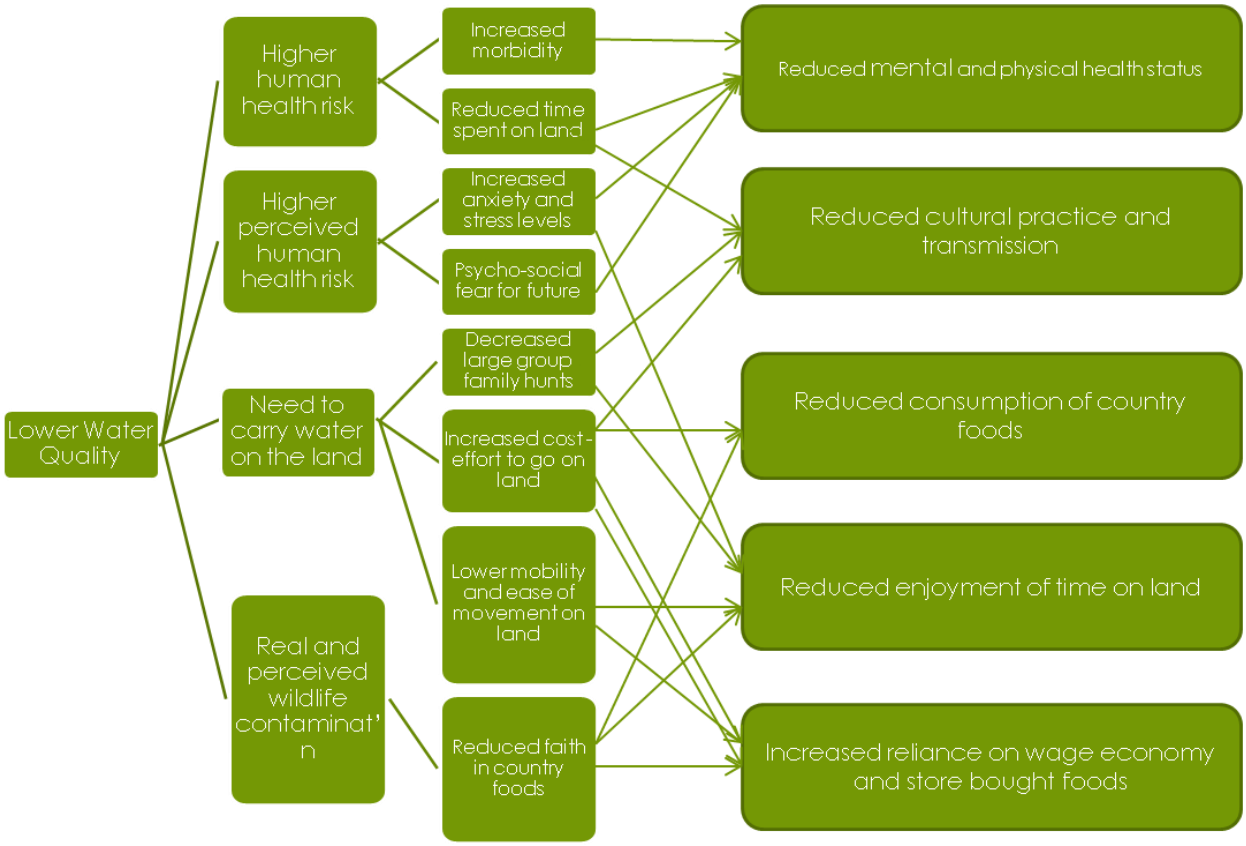
Figure 2: An Example Impact Pathway



Impact pathways tend to be complex and inter-connected in a variety of ways. Consider the hypothetical example of changes in water quality illustrated in Figure 3. Lower water quality caused by a specific industrial development (and this is an active concern for Site C – see Impact

Pathway #48)[2] is the initial cause identified. Effect pathways are in the second column, including higher perceived health risk, the need to carry water on the land, and perceived contamination of country food sources. These pathways can lead to initial and ultimate effects outcomes, including increased anxiety, less time spent harvesting, and poorer diet, among others.

Figure 3: Impact Pathways and Outcomes Associated with Reduced Water Quality



Impact outcomes are often mutually supporting and heavily inter-related. For example, in this case, the mixture of lack of faith in country food due to harvested species drinking contaminated water, the increased cost and effort of travelling with large amounts of water, and the pervasive sense that "something is wrong out there" all contribute to a loss of access and enjoyment of traditional activities on the land. This can lead in turn to reduced time spent on the land and reduced consumption of country food, with attendant negative outcomes for human health, well-being and cultural transmission.

[2] Where "Impact Pathways" with numbers are identified in the body text of this Report, they refer to the numbered Impact Pathways in Appendix B.

It is important to note that effects outcomes are not necessarily uni-directional. They may be positive, negative, or both, and are typically subject to some uncertainty that needs to be characterized in terms of confidence during the formal impact prediction stage. For example, Fort St. John may see both higher rental costs driving some T8FNs members out of the community back home to Doig River, at the same time that the increased wages might be causing a “brain drain” with many of the community’s best and brightest minds working in Fort St. John rather than on reserve. Both may happen concurrently, depending on circumstance, so both possibilities should be entertained during impact characterization moving forward.

It is also critical to keep in mind that the impacts of the Site C Project, should it proceed, would not occur in a vacuum. Cumulative effects from other past, present and reasonably foreseeable future developments and activities also add to the total effects on the rights and interests of the T8FNs. Those cumulative effects considerations are included in Appendix B.

3. Methods

All of the extensive information gathered during Stages 1 and 2 of the T8FNs Community Assessment was considered during Stage 3. This includes interview and focus group data from April through August of 2012, Verification Workshops with T8FNs Community Advisors in October and November, 2012 (see Section 6 for highlights from the latter session focused on Stage 3), results of previous studies such as the 2011 Site C TLUS (Candler et al 2012), and review of previously published materials. It also includes review of select BC Hydro materials, most importantly BC Hydro's August 9, 2012 *Candidate Valued Component Initial Screening Matrix* (as presented in BC Hydro 2012), which presents BC Hydro's initial perspective on potential impact pathways.

The T8FNs Site C Development Component/Valued Component (DCVC) Interaction Matrix, presented here as Appendix A, is a tool that shows some of the different Site C development components that may interact with valued components and associated indicators important to the T8FNs. It was developed based on a review of BC Hydro's *Candidate Valued Component Initial Screening Matrix* and prior experience of the T8FNs Team conducting similar exercises It focuses on the valued components and indicators, as well as the perspectives on potential impacts, identified by T8FNs members, staff and key informants, and therefore will likely differ from the impacts identified by other parties, including BC Hydro.

The Initial Impact Pathways Table (Appendix B) was developed starting with the *Issues List* template that the T8FNs Environmental Assessment Team has been sharing with BC Hydro for the purposes of discussion for some time. Changes were made to allow the incorporation of information about how Site C Project Components may interact withT8FNs Valued Components and indicators. Impact pathways were identified based on previous scoping work (e.g., Hendriks 2011), Stage 1 and Stage 2 Community Assessment results, as well as the author's professional judgment based on previous experience.

Appendix B was generated primarily through discussion with T8FNs staff, community members, and key informants during the T8FNs Community Assessment. During each interview and focus group there were questions posed toward the end of the discussion asking respondents to identify ways in which they think the Site C Project, should it proceed, would impact on them, their families and communities, the T8FNs in general, and the natural environment they rely upon. In addition, impact issues raised by community members during scoping (e.g., Hendriks 2011) and previously captured in the *Issues List* were largely left in the document and expanded upon as new information emerged. In some instances, information from the *Issues List* was deemed to fit into new or altered impact pathway categories, or was deemed to be related to either process issues or baseline information with little possible interaction with the Site C

Project, and was thus removed from the Initial Impact Pathways Table. This information remains catalogued in a separate spreadsheet (not attached herein) for the purposes of continuity of discussions between BC Hydro and the T8FNs.

A verification meeting consisting of the T8FNs Team Community Advisors was held on November 6, 2012. Nine community members, representing all four T8FNs, were involved in the day-long verification session. Verification consisted of reviewing a draft version of the Initial Impact Pathways Table with ample time for Community Advisors to comment.

Community Advisors verified the accuracy of the baseline and impact pathway information presented and provided additional detail. Community Advisors were asked to provide feedback on:

- What effects would be most likely to occur should Site C proceed, and via what pathways;
- Whether additional effects pathways needed to be added; and
- What geographic locations and T8FNs members are most likely to be impacted should Site C proceed.

Select priority issues identified by Community Advisors are identified in Section 6 on Verification Results, and incorporated into Appendix B's Initial Impact Pathways Table.

4. Limitations of the Stage 3 Report

This Initial Impact Pathways Report is provided to BC Hydro without prejudice to any other submission made by the T8FNs collectively or by any of the individual T8FNs in relation to the environmental impact assessment process for the proposed Site C Project. Additional knowledge and information, including information that relates to additional T8FNs valued components may have been gathered and presented prior to this Initial Impact Pathways Report or may be gathered subsequent to the release of this Report. Therefore, this Report cannot be treated as definitive.

The following limitations on the Initial Impact Pathways Report need to be recognized:

- This is not a comprehensive and final submission on effects by the T8FNs. Such a submission will only occur after the Proponent's Application is filed, during the Technical Review phase of the environmental assessment, as adequate information with which to make a comprehensive estimation of Project effects emerges.

- This is an initial impact pathways identification report, not a full characterization of the likelihood, magnitude, or other aspects of the impact pathway that can be used to estimate the significance of the potential outcomes of the Project-environment interaction. The Report is to be used to facilitate further dialogue between BC Hydro and the T8FNs on impact concerns and characterization.

- This Report does not delve into potential mitigation to avoid, reduce, or otherwise manage potential impacts. The Report is to be used to facilitate further dialogue between BC Hydro and the T8FNs on these issues, at the discretion of the two parties.

- This Report does not constrain itself to specific requirements of the environmental impact statement (EIS) Guidelines, but rather focuses on principles of good practice of effects assessment on the human environment and the issues the T8FNs wanted to focus on. As a result, there may be instances where the effects identified do not naturally fit under any specific EIS Guidelines category. This does not mean that they are irrelevant or should be excised or ignored without further dialogue between the parties. EIS Guidelines identify what information <u>at minimum</u> is required by the decision-maker. They in no way define good practice of impact assessment or delimit the universe of impact pathways that may merit consideration between parties acting in good faith to best understand the implications of the proposed Project.

- The Report includes reference in the Appendices to specific physical and biophysical Valued Components, without extensive benefit of specific technical expertise (at least among the T8FNs Team) in assessing these impacts. Impact concerns of this nature are faithfully relayed from their sources (either T8FNs members, staff or key informants, or previous documents such as Hendriks 2011). This document makes no assertions of technical expertise on these topics.

- Impact pathways listed are initial and partial only, and may be added to or subtracted from as additional dialogue occurs and additional information emerges. This proviso is relevant not only to the type of effect predicted, but also to the development components that may cause it to occur, and the locations and persons likely to be impacted. All are subject to update as the process proceeds.

- The focus on impact pathways herein is from the perspectives provided by the T8FNs and as such the pathways identified may differ from that of other parties. In addition, the valued components are primarily "anthropocentric" – human focused rather than ecosystem focused. They emphasize what people (in this case T8FNs) care about, not ecology or existence value independent of human values, goals, needs and aspirations.

- The impact pathways have been identified by a large but by no means a comprehensive sample of T8FNs members. Individual members may have perspectives that differ from those identified herein.

5. Introduction to the Findings Tables

The bulk of the findings are presented in the two appendices to this Initial Impact Pathways Report. Both spreadsheet-based tables should be treated as initial, working documents, open to update and revision as dialogue proceeds between the parties.

5.1 Appendix A: T8FNs Development Component/Valued Component Interaction Matrix

Appendix A is a Development Component/Valued Component Interaction Matrix (DCVC Interaction Matrix), identifying potential interactions between specific development or project components related to the proposed Site C Project, with Valued Components and indicators identified as important by the T8FNs.

The DCVC Interaction Matrix uses development components, some identified by BC Hydro (2012) and others identified by the T8FNs Team based on what it heard from the T8FNs or its experience in environmental impact assessment, as columns in an excel worksheet. It places Valued Components and indicators of the T8FNs as rows in the same worksheet. Where there is a potential interaction between a Site C development component and a T8FNs Valued Component/indicator, the specific cell where they intersect is identified with a number and a symbol:

- The number represents a specific impact pathway identified in Appendix 2 – Initial Impact Pathways Table;

- The symbol represents the likely direction of the interaction, which may be:
    - **?**, which denotes "unknown; additional information required";
    - **+**, which denotes "beneficial (good or positive) impact predicted";
    - **-**, which denotes "adverse (bad or negative) impact predicted"; or
    - **+/-**, which denotes "potential for both beneficial and adverse impacts".

  Blank cells indicate there is no currently known interaction or reason to expect an interaction.

Development components listed include all physical works and activities required for the development to proceed. It is inadequate to merely characterize development components as physical works or structures; they also need to include activities such as human regulation of water release from the dam and labour and business demand. The T8FNs table makes every effort to adopt the development component language used in the August 9, 2012 BC Hydro

"Candidate Valued Component Initial Screening Matrix" (BC Hydro Initial Screening Matrix). In some places, a simpler term like "human regulation of water release" is used. Additional development component have been added based on inputs from T8FNs members and the experience of the T8FNs Team and understanding of the Site C Project.

In good practice of socio-economic impact assessment (MVRB 2007), all temporal stages of a proposed project must be included in the impact assessment and identification of potential impact pathways. This includes pre-project planning stages[3], construction stages, operations, closure and post-closure stages. The closure and post-closure temporal scope is far enough in the future that the T8FNs have not focused much attention on this subject (although it is worthy of note that Impact Pathways #2 and #3 identify T8FNs concerns about structural failure of the Dam during operations). However, the T8FNs feel they are already being impacted during the pre-project planning stage of the proposed Project, issues reflected in Impact Pathways #33, #44-46, and #54, among others.

As with the BC Hydro Initial Screening Matrix, Appendix A treats wage economic participation issues separately from "on-the-land" physical works and activities. The specific development component of "Labour and Business Demand" includes the bulk of Site C interactions with the T8FNs valued component of "equitable access to education, training and economic opportunity".

The DCVC Interaction Matrix is primarily a useful guide for review of Appendix B, which provides the main findings of Stage 3. At this time, the DCVC Interaction Matrix identifies approximately 100 indicators under the five valued component categories, potential impacts upon which the Initial Impact Pathways Table describes in more detail.

5.2 Appendix B: Initial Impact Pathways Table

Appendix B – the Initial Impact Pathways Table- reports a series of information on 105 potential impact pathways identified by the T8FNs through the T8FNs Team. Building on both previous stages of the Community Assessment and scoping work for the T8FNs (Hendriks 2011, and later iterations of the T8FNs Issues Scoping List), Potential impact pathways are identified in an Excel spreadsheet. The following information is included for each initial impact pathway topic in the spreadsheet, in order of columns:

[3] At page 16, MVRB (2007) notes that "Temporal boundaries include the following: The planning stage when expectations of and speculation about a proposed development can impact the socio-economic environment".

1. **Impact Pathway Number**

For record keeping purposes.

2. **Level One topic**

The primary, high level issue category as defined during scoping (either in Hendriks 2011 or during the Community Assessment – T8FNs Team 2012).

3. **Level Two topic**

A secondary sub-category for the impact issue as defined during scoping or the Community Assessment.

4. **Level Three topic**.

A final more detailed indicator category as defined during scoping or the Community Assessment

5. **Community Assessment Valued Components (VCs)/Indicators**

This column identifies what Valued Component(s) from the T8FNs Baseline Community Profile the impact pathway interacts with and, in some circumstances, specific measureable indicators that may be altered by the Project interaction. The five T8FNs Valued Components used were:

- Meaningful Practice of Treaty Rights;
- Protection and Promotion of Culture;
- Meaningful governance and stewardship role for the T8FNs, including recognition and compensation for past infringements[4];
- Access to equitable education, training and economic opportunities[5]; and

[4] This Valued Component is important to the T8FNs. The concept that "the fix is in", that "Site C is a done deal", is a strong one among T8FNs people. The implication of this is, in part, that Site C already has and – should it proceed will to a much higher degree - created and accelerated existing psycho-social impacts of industrial development on the T8FNs. See Section 7.7 and Impact Pathway #45.

[5] This Valued Component category is a combination of two Valued Component categories from the T8FNs Baseline Community Profile –"equitable access to education and training opportunities" and "equity and engagement in the wage economy". They were combined here due to close inter-relations between education, training and economic activity.

- Healthy communities, including for example social function, services and infrastructure, and housing.

There was also an "Other" Valued Component category developed for impact concerns raised that did not naturally fit into any of the five above noted categories.

6. **Pre-Project Conditions (Issues Scoping Study and/or Inputs from Community Assessment), including Cumulative Effects**

This column identifies pre-existing conditions into which the Site C Project would be situated should it proceed. It is important to note that the Site C Project may create some new impact pathways from scratch, such as flooding of the Valley. But in other cases, there are existing cumulative effects pressures such as the strong oil and gas economy that already are causing impacts on T8FNs. In other words, the Site C Project will not occur in a vacuum. Specific cumulative effects impact pathways topics are included as Impact Pathways #35 through #37 in Appendix B, but are interspersed where relevant in this column for each impact pathway.

7. **Site C Project Component(s)**

The specific Site C project (or development) components that may influence on the T8FNs are identified in this column.

8. **Potential Effects Pathways**

Potential means by which the Site C Project development components may change the lived experience of the T8FNs (or some related ecological or physical attributes of their environment), are identified in this column.

In the case of the Site C Project, the majority of impacts are expected to start during construction, although there are already impacts on T8FNs from the project planning stage, and will be additional impacts (and the continuation of many started during construction, such as the long-term – effectively permanent – widening of the Peace River between Fort St. John and Hudson's Hope) during operations. The "Potential Effects Pathways" column attempts to identify when impacts may be felt in many but not all cases.

9. **Discussion of Potential Project Effects (Issues Scoping Study and Community Assessment)**

This column discusses potential effects outcomes, as identified during scoping or the Community Assessment (including Stage 3), on the T8FNs, including their direction (positive or

negative), where possible. Specific excerpts from inputs by T8FNs respondents are often included to more fully describe the potential effects.

10. Particular Locations and Groups Affected

This column identifies some of the specific locations and groups most likely to be impacted by the change discussed.

Notes and Provisos

The following notes and provisos are relevant to Appendix B - the Initial Impact Pathways Table:

1. Like BC Hydro's *Initial Screening Matrix*, there is no full characterization of potential effects outcomes in the Initial Impact Pathways Table at this stage. If an impact pathway (each numbered row can be broadly considered an impact pathway) is listed in the Initial Impact Pathways Table, it is considered a valid topic for further consideration – i.e., there is a potential interaction between the proposed Site C Project and the impact pathway until convincing evidence to the contrary is brought forward.

2. The Initial Impact Pathways Table is built on the same platform as the previous *Issues List* that has been distributed between the T8FNs Environmental Assessment Team and BC Hydro on several occasions. However, a variety of additional columns have been removed for the purposes of presentation here, and other columns have been altered to fit the focus of this exercise, which is not issues scoping but rather identification of potential impact pathways.

3. The T8FNs Team recognizes there are areas of overlap between some impact pathway categories. This is inevitable when considering the holistic perspective T8FNs have toward the land and its importance to their well-being and way of life. Appendix B does not shy away from this overlap, but embraces it. The purpose of this spreadsheet is to provide a discussion document that respects rather than hides from the multiple interconnections between causes and effects and the holistic perspective of T8FNs on likely effects outcomes of the proposed Site C Project.

4. In order to protect sensitive information, the published version of Appendix B has removed the contents of certain cells in impact pathways # 71, 75-77, 79-82, 84, and 90-91. Those cells have been blacked out.

6. Verification Results

The following were among the priority impact pathways identified in the November 6, 2012, Verification Meeting. They are offered here as examples of some of the key themes identified in the Initial Impact Pathways Table (Appendix B), without prejudice to the need for further work on impact characterization to determine which impact pathways are most likely to occur, of the highest potential magnitude, and other characteristics of significance. For greater clarity, this is not a currently comprehensive list of potential effects outcomes – that is in Appendix B.

EXAMPLE 1: Labour and business demand → In-migration of job seekers → Population Growth → Multiple Effects Outcomes

- T8FNs Community Advisors expressed substantial concerns about direct in-migration for Site C Project jobs, indirect and induced population growth in and around Fort St. John during the labour and capital intensive construction stage of the Site C Project. Identified potential impact pathways related to population growth caused by the labour and business demand of the Site C Project included:

    - Development of new businesses that crowd out First Nations businesses' market share and profitability;
    - Increased influx of non-Aboriginal people into an area where T8FNs are already an extremely visible minority group, with potential for increased racism and socio-economic marginalization of T8FNs members in Fort St. John;
    - An influx of young men, likely leading to increased social dysfunction in and around Fort St. John, and increase drugs, alcohol, crime and decrease sexual health (including pregnancy among young T8FNs women). These impacts will disproportionately impact on T8FNs members, many of whom live, work or go to school in Fort St. John and are vulnerable to social dysfunction for a variety of pre-existing systemic reasons;
    - Increased inflation and cost of living, which again disproportionately negatively affect First Nations, both those living on and off reserve;
    - Increased exposure to boom and bust effects. The large influx of people into the region for the construction phase may be short lived - "They are here for a number of years, the economy increases, then they leave and economy [shrinks]". Previous research shows that Canadian First Nations people are more vulnerable to the bust side of economic cycles (Zietsma 2010);

  - Increased demand for social and health services, including both in Fort St. John but also among T8FNs members returning to their home communities with drug and alcohol addictions to deal with;
  - Increased demand on physical infrastructure, as well as reduced public safety due to traffic;
  - Increased demand on housing – less accessible/less affordable in Fort St. John and due to some T8FNs members being forced out of the Fort St. John housing market, subsequent crowding pressures in their home communities they return to; and
  - Higher food costs – less food security more poverty less disposable income.

- Increasing money in the local and regional economies was also perceived both as a potential benefit ("In order to practice culture and traditions you have to have money") and a potential cause or contributor to adverse effects outcomes – a "double-edged sword" (PR04, November 6, 2012). For example, increased money is seen as directly linked to increased drug and alcohol abuse.

  "Biggest problem all around us is money. What's important? Your culture or money? Sometimes money brings you trouble. Causes you lots of trouble. The native people they don't want money, it brings lots of troubles, that's where we get sucked in" – (DR03, November 6, 2012).

  "If they build that dam all those drugs and alcohol will come to Fort St. John, already it's coming, a lot of people will be hurt, jail and stuff like that" (PR11, November 6, 2012).

- Impacts on family and community cohesion were also identified should Site C proceed. The increasing engagement solely in the wage economy has impacted on levels of sharing, nuclearization of families rather than communal interactions, and the introduction of new values that often do not fit in with Dane-zaa values.

EXAMPLE 2: Labour and business demand (Increased Population) + Increased Linear Disturbance on the Land (e.g., roads, rights of way) → Increased non-Aboriginal Harvesting Pressures → Reduced T8FNs Harvesting Success + Reduced Safety + Reduced T8FNs Enjoyment of the Land

- Site C would likely bring increased competition for wildlife and reduced enjoyment of solitude on the land by T8FNs members, as more non-Aboriginal recreational users and more hunters will be on the land. This will also increase wildlife disturbances, causing

less abundance of wildlife, reduced harvesting success, changes in diet, and reduced practice of the Dane-zaa mode of life.[6]

- Transmission lines and access roads were also implicated as potentially increasing competition on the land by non-Aboriginal harvesters and recreational users, increasing public safety risk, and contributing to less abundant wildlife due to disturbances. T8FNs members also noted that a contributing factor causing cumulative effects on wildlife is the BC's government's willingness to allow a large number of people to hunt in areas critical to T8FNs harvesting. They also noted that they are finding more and more animals which have been killed for sport, with only their heads removed.

- Specific T8FNs individuals from all four Nations who intensively harvest from the Peace River valley were the subject of much concern, with the Site C Project likely to cause loss of habitat, reduced abundance of key harvested species such as moose, and increased competition for resources with non-Aboriginal harvesters in the reservoir area. As one PRFN Community Advisor stated:

  "We have a band member that's living in Taylor, and he feeds his family that he harvests from the Peace River valley. Ever since there is oil and gas the animals have moved down. He hunts up the river. [If Site C proceeds] he will not be able to feed his family wild meat. Will not be able to harvest berries, will not be able to take his family to harvest berries – he takes his wife and kids" (PR05, November 6, 2012).

EXAMPLE 3: Dam → Reservoir Creation → Increased Wildlife Mortality → Reduces Wildlife Population Health → Reduced Harvesting Success for T8FNs → Reduced Time on the Land in the Peace River valley → Reduced Inter-generational Knowledge Transfer → Contribution to Decline of T8FNs Mode of Life

- While there are a variety of development components from Site C that would have adverse impacts on people and the environment, by far the one with the biggest effects, according to the T8FNs, would be the flooding of the Peace River between Fort St. John and Hudson's Hope, creating a new reservoir connected to the existing Dinosaur Lake and Williston Reservoirs, and (effectively creating an unbroken man-made water body

[6] This set of multifaceted potential effects outcomes is a good example of the complex and interlinked nature of an initial cause (increased population in the area due to Site C labour and business demand) on a variety of (often mutually reinforcing) effects outcomes. In this case, that increased population may have substantial impacts on meaningful practice of Treaty 8 rights, in combination with other Project-specific and cumulative effects causes. This issue is taken up in more detail in Section 7.4.

through the heart of T8FNs territory). Some examples of effects of flooding are provided here.

- Flooding and increased mortality was mentioned as a major impact concern for ungulates and wildlife in general that crossed the (currently much narrower) Peace River channel. There are major concerns about moose; community members observed that the population is already in decline and government still issuing permits to hunt for non-subsistence (non-Aboriginal) harvesters. Among the factors that may reduce wildlife population health, distribution and abundance in the Peace River valley should the Site C Project proceed include:

    - Blocked migration routes;
    - Loss of easy crossings, with animals drowning as was seen with the Williston Reservoir;
    - Debris also contributing to animals drowning;
    - Increased predation of ungulates as they lose their key areas of refuge and easy escape routes across the Peace River;
    - Loss of habitat in general;
    - Loss of critical breeding and calving grounds in the would-be inundation zone, especially on islands in the Peace River; and
    - Loss of denning places for bear, coyote, wolf, beaver, and fishers

- Again, as a direct result of these biophysical impacts on wildlife species, there would be adverse impact outcomes on the meaningful practice of Treaty 8 rights as well as the protection and promotion of Dane-zaa culture. For the Dane-zaa, harvesting and culture are intrinsically connected, effectively inseparable. As one Community Advisor noted, “culture is part of Treaty rights, not separate”. Less wildlife leads to lower harvesting levels and less ability to exercise treaty rights, which in turn leads to a lowered ability for T8FNs members to transmit their culture to younger generations. Similar issues occurred with decline in caribou, sheep and goats when the Williston Reservoir was developed in the 1960s.

- T8FNs members noted that two of the islands down the middle of the Peace River are considered sacred to the Dane-zaa as well as being prime ungulate calving grounds. Their flooding represents a cultural loss.

- Similarly, less time on the land and less traditional harvesting could reduce inter-generational knowledge transfer via the Dane-zaa experiential and oral history education system. Community advisors noted that oral tradition is tied to the landscape and traditional practices. An elder shared a story about how the act of harvesting prompts lessons for youth:

"When we catch beaver, there is 100's of different kinds of stories, animal based stories. When I tell stories, so many little kids, every sitting on the ground you can hear a pin drop, that's all they want, they want story time. These stories will continue for next generation. My grand daughter can tell stories, my 8 year old. She tell stories to everyone and then I hear her tell stories, she didn't miss one word" (DR03, November 6, 2012).

- T8FNs members also reaffirmed the importance of burial sites (see Impact Pathway #27) and gathering places (see Impact Pathway #20), as well as harvesting of wild plants such as medicines and berries, as central to the practice of culture, their Treaty guaranteed mode of life. Flooding is expected to impact on all these cultural values. For example, flooding was identified as likely to cause a lessened ability to harvest medicinal plants (see Impact Pathway #41); the loss of a unique ecosystem with unique plants, especially on the south facing slopes of the north shore of the Peace River. It was noted that the compilation of elder knowledge on the location, nature and importance of specific plant species is far from complete and could be lost forever if further work is not conducted. For example, "this area [Peace River valley] grows a certain plant that treats lung ailments…this area grows that plant and I've never seen it anywhere else" (WM01, November 6, 2012).[7]

EXAMPLE 4: Dam → Reservoir → Buildup of Sediment and Mercury among other Contaminant →Reduced Water Quality → Reduced Fish Health → Reduced Faith in Country Food from Reservoir → Reduced Consumption of Fish → Multiple adverse effects outcomes

- The combination of increased sedimentation, loss of spawning grounds, reduced migration capacity, reduced water quality, changed aquatic ecosystem dynamics, increased debris, and increased numbers of non-Aboriginal recreational users boating and fishing in the inundated zone, is of high concern to the T8FNs.All together, these and other factors are expected to lessen the ability of the T8FNs to harvest fish and thereby meaningfully practice their Treaty 8 rights.

- Cumulative effects related to contamination of terrestrial country food that already exist, from activities such as oil and gas development (see Section 4.2 of the T8FNs Baseline Community Profile – T8FNs Team 2012b), were also identified as reducing the

[7] In addition, many berry picking sites may be lost, adding to existing loss of berry picking sites due to variety of reasons including industry and government spraying of herbicides. This disproportionately impacts on women, who tend to harvest more berries than men.

availability of country food, a situation that is expected to be exacerbated by the loss of habitat, disturbance, increased harvesting pressures by non-Aboriginal harvesters, and direct Project-related wildlife mortality from the Site C Project. The multi-variable importance of country food is discussed further in Sections 7.5 and 7.6 below.

EXAMPLE 5: Labour and Business Demand + Pre-Project Planning → Lack of Advance Training to Overcome Systemic Hurdles to T8FNs Engagement in Wage Economic Opportunities → Continuation of Inequitable Distribution of Economic Benefits → Multiple Effects Outcomes (especially Lack of Benefits)

- T8FNs members in general have expressed strong concerns that they will not be able to take full advantage of whatever economic benefits are available should the Site C Project proceed. This is based on prior experience with menial jobs (where jobs were available at all) coming from previous BC Hydro projects, lack of advance training initiatives (a serious concern for many T8FNs, perceived as a sign that BC Hydro is not serious about benefitting the T8FNs), and BC Hydro's perceived poor track record hiring, retaining and advancing First Nations people in its Peace River workforce, among other factors.

- T8FNs members have also expressed concerns about reduced community and inter-community cohesion among T8FNs if there is competition for the small number of beneficial jobs and business opportunities likely available to First Nations. This is a pattern that has been seen in boom periods in the past, such as with oil and gas growth. According to Community Advisors (November 6 , 2012) "limited access to opportunity and competition between members for limited contracts creates significant divisions". Community and inter-community cohesion is a concern in relation to pre-project planning – the T8FNs are worried about effects of the creation of divisions between T8FNs members and communities:

  "Some of these people [seeking economic opportunity versus trying to avoid the environmental impacts of the Project] are going to be brother and sister and it's going to basically divide people" (WM01, November 6, 2012).

- T8FNs members, especially staff and leadership, also noted that Site C is already having substantial effects on governance and administration capacity for each T8FNs community, through the environmental assessment and consultation process. Limited human resources that could be used for other urgent community priorities are already being over-committed to managing this file, which only adds to the existing over-

burdened land use management and governance system for T8FNs (See Impact Pathway #68).

7. Further Discussion on Select Key Impact Pathway Topics

The following list of impact considerations is not exhaustive, but rather illustrative of some key and impact pathways considerations.

7.1 Some Priority Potential Impact Pathways and Outcomes, by T8FNs Valued Component

The following potential impact pathways and/or outcomes were among those highlighted by T8FNs members for each of the five T8FNs Valued Components.

Potential effects of Site C on T8FNs meaningful practice of Treaty 8 rights (Valued Component #1) include but are not limited to:

- Reduced high value habitat and harvesting area available/accessible
- Reduced wildlife, plants and fish available for harvesting
- Reduced faith in country food and water – increased contamination
- Reduced quiet enjoyment of land/increased non-Aboriginal presence
- Reduced time spent on the land and reduced harvesting practices
- Inability to practice commercial aspects of Treaty 8 rights

Potential effects of Site C on T8FNs culture (Valued Component #2) include but are not limited to:

- Loss of gathering sites
- Flooding of grave sites – “desecration”
- Loss of physical heritage – known and unfound
- Loss of oral history – due to flooding of vital landmarks
- Reduced land base for cultural practices = reduced inter-generational knowledge transfer

- Continued negative impacts on Dane-zaa values due to both physical changes on the cultural landscape and increased wage economic activity in the region.

Potential effects of Site C on T8FNs having a meaningful role in governance and stewardship (Valued Component #3) include but are not limited to:

- Lack of recognition of – and compensation for – prior infringements by BC Hydro
- Reduced sense of control and autonomy over one's own future
- Decreased faith in government and regulatory system – sense of being ignored
- Inability to maintain stewardship responsibility over traditional territory

Potential beneficial effects of Site C on T8FNs education, training and economic development (Valued Component #4a) include but are not limited to:

- Some construction stage employment and business opportunities
- Some training opportunities prior to and during construction stage
- Limited number of longer-term operations stage jobs and business opportunities
- Potential spin-off benefits in employment and business (e.g., housing starts to house in-migrants may benefit T8FNs workers and businesses)
- Increased income with which to practice increasingly expensive traditional cultural (harvesting) practices on the land (e.g., to purchase gas, equipment, water).

Potential adverse effects of Site C on T8FNs education, training and economic development (Valued Component #4b) include:

- "Brain drain" out of reserve communities
- Exposure to boom and bust cycles
- Flooding of farmland/loss of food security
- Increased local and regional inflation and cost of living
- T8FNs ability to take advantage of jobs, training and business opportunities severely limited by systemic hurdles – impact equity issue
- Potential for poor job satisfaction due to destructive nature of Project

- "Futures foregone" – e.g., eco-tourism, guiding
- Impact inequity – negative changes on T8FNs larger than beneficial offsets, for example:
    - lack of direct revenues
    - low long-term job numbers
    - weak T8FNs business capture
    - economic leakage out of region

Potential effects of Site C on T8FNs on healthy T8FNs communities (Valued Component #5) include:

- Decreased community cohesion (increasing income disparity; competition for work/business)
- Increased drugs and alcohol and negative social influences, especially in Fort St. John, but also filtering out into T8FNs reserves
- Reduced local trades availability in remote T8FNs for maintenance
- Pressures on access to health and social services
- Pressures on housing, especially in Fort St. John
- Increased reliance on store-bought food, poorer diet
- Increased family dysfunction associated with rotational work and long-distance commuting

7.2 Ability to Take Advantage and Impact Equity

Some beneficial economic impacts from Cite C were identified by T8FNs members, as seen on the previous page (Valued Component #4a). Nevertheless, the vast majority of issues raised by T8FNs members were negative; this is reflected in the impact pathways. Although members were specifically asked throughout the data collection for the T8FNs Community Assessment to identify both beneficial and adverse potential effects, they primarily identified adverse effects outcomes. This reflects widespread public concern among the T8FNs about the Project.

In general, there are also strong concerns by the T8FNs that even beneficial impacts they do encounter are likely to be less beneficial for them than is likely for other, non-Aboriginal populations, due to a variety of built in systemic hurdles to full engagement in the wage economy by the T8FNs and their members. As noted by a Community Advisor, there is both a low likelihood the T8FNs will be able to take full advantage of Site C employment opportunities,

and higher priority needs for T8FNs to focus on protecting, that may not be reconcilable to Site C:

> "People see that they cannot get the jobs or those jobs are temporary – they end up back in the community. They know they need their traditional practices" (WM01, November 6, 2012).

There is a strong impression that outsiders and non-Aboriginal people are most likely to benefit from Site C ("they are the ones that reap the benefits" – PR05, November 6, 2012). This would represent a fundamental impact inequity that, contributed with the adverse environmental, social and cultural weight of impacts likely to befall the T8FNs, has contributed to the opposition of the T8FNs to the Site C Project proceeding:

> "Seems like a process is being developed to ostracize First Nations people. They say we are willing to employ First Nations people to do this. Then they put in processes that are hard to meet and overtime the First Nations people get phased out and in the end the local white people, a very small number of them have lifetime positions in those jobs no matter what industry it is. It's usually people from the outside that are brought in and have those jobs" (WM01, November 6, 2012).

T8FNs members also expressed strong concerns that they need to think long-term rather than focusing on accessing short- term construction stage jobs that will be gone after a couple of years, replaced with minimal operations phase employment.

Thus, by and large, T8FNs members do not appear to consider the benefits likely to accrue, even in a best-case "ability to take advantage" economic scenario, as adequate to offset the likely adverse impacts on environment, culture, economy and society of the T8FNs should Site C proceed. Some of the adverse impacts, in fact, are generally deemed unmitigable and irreconcilable with "what matters most" to T8FNs well-being and quality of life, such as (but not limited to) the loss of gathering places, grave sites, and wildlife habitat in the Peace River valley.

7.3 Cultural Impacts and the Land

Cultural impacts may be felt at both the tangible and intangible levels (Gibson et al, 2011). Regardless of the EIA process and constraints it may put on consideration of intangible cultural effects, it is evident from the information collected from T8FNs members that the cultural landscape that is the Peace River valley has both tangible and intangible values to the T8FNs that should be considered and which changes upon may have substantial to significant adverse

impact outcomes. The Peace River valley and practice of cultural activities in general, in other words, is not merely a utilitarian exercise, but one that is of the utmost importance to the well-being and quality of life of individuals, communities and the agglomeration of people who consider themselves Dane-zaa in one form or another.

For Dane-zaa, culture, the land, and natural resources and their harvesting are effectively inseparable (see Section 3 of the T8FNs Baseline Community Profile – T8FNs Team 2012b). The importance of the land to the T8FNs and its members simply cannot be overstated. For T8FNs, the land is critical:

- For social relations
- To promote and pass on cultural skills, knowledge and values
- For spiritual solace and ceremony and to feel close to ones ancestors and nature – quiet enjoyment of the land
- For population health
- For food and other materials needed to survive – physical sustenance
- As a gift to pass down to future generations

Any adverse effect on the land, especially to a critical cultural area and integral part of the Dane-zaa cultural landscape such as the Peace River valley (see Preamble to the T8FNs Baseline Community Profile – T8FNs Team 2012b), has a high potential to adversely affect Dane-zaa culture. The magnitude of the impacts are increased when other portions of the land and other aspects of culture are under cumulative effects pressures, as is the case in T8FNs traditional territory and culture at the present time, as detailed throughout the T8FNs Baseline Community Profile (eg. Sections 4.2 and throughout Section 5).

7.4 Minimum Requirements for Meaningful Practice of Treaty 8 Rights

Of all the issues raised during the T8FNs Community Assessment, the most important and most often raised was meaningful practice of Treaty 8 rights. A variety of the impact pathways identified in Appendix B are related to impacts on meaningful practice of Treaty 8 rights. Other than the previously mentioned potential for increased income to pay for the increasingly expensive costs of travelling and harvesting on the land, the impacts on T8FNs meaningful practice of Treaty 8 rights are overwhelmingly estimated to be of a negative nature.

To understand T8FNs issues related to meaningful practice of Treaty 8 rights[8] it is first important to understand minimum agreements for Treaty rights practice to occur. At minimum, Treaty Rights are understood to include, but are not limited to, hunting, fishing, trapping and gathering for sustenance and livelihood purposes. The full practice of these rights reasonably includes, and is not limited to, access to sufficient lands and resources in which the rights can be exercised. "Sufficient" refers not only to quantity but quality, and is evaluated from the perspective of what is required to fulfill not only subsistence requirements, but also cultural needs, of the First Nation now and into the future.

Determining what is "sufficient" encompasses a suite of interconnected tangible and intangible resources that underlie the meaningful practice of rights. From the T8FNs perspective, these resources include, but are not limited to:

- Routes of access and transportation;
- Water quality and quantity (clean and plentiful from natural sources);
- Healthy populations of game in preferred harvesting areas;
- Cultural and spiritual relationships with the land;
- Abundant berry crops in preferred harvesting areas;
- Traditional medicines in preferred harvesting areas;
- The experience of remoteness and solitude on the land;
- Feelings of safety and security;
- Reasonable access to land - lands and resources accessible within constraints of time and cost;
- Socio-cultural institutions for sharing and reciprocity; and
- Healthy connection to and adequate protection of and respect for spiritual sites.

Any negative influence on any of these "sufficiency" requirements is arguably an adverse impact on T8FNs' meaningful practice of Treaty 8 rights.

7.5 An Example of Multiple Effects Outcomes: Country Foods

In the Baseline Community Profile, T8FNs qualitatively reported overall reduced (but still relatively high) reliance on country food production, sharing and consumption. These activities are described as critical to future retention of the social, economic and cultural way of life of T8FNs members. Country food harvesting is a practice that people report:

[8] Exactly what those Treaty 8 rights are is also a point of contention; T8FNs perspectives on the nature of Treaty 8 rights are discussed further in Section 6.1 of the T8FNs Baseline Community Profile.

- Brings together multiple generations and promotes respectful and appropriate relationship building;
- Promotes activity on the land, which is good for mental and spiritual health, as the land is recognized as a source of solace for T8FNs members;
- Allows for the passing on of traditional teachings about the skills and knowledge needed to survive on the land;
- Promotes use of Aboriginal language;
- Promotes physical health through higher activity levels;
- Contributes to a diet that is typically healthier than store-bought foods;
- Creates a sense of pride and self-sufficiency among harvesters; and
- Promotes values retention and community relations through sharing of foods in the community after a successful hunt.

However, when the end purpose and enjoyment of the harvesting trip comes into question as more land is alienated or country food is increasingly reported as being contaminated, harvesters may choose to stay home and purchase potentially more expensive and less healthy store-bought foods. All of the above-noted spin-off benefits can be lost. For example, as a result of decreased access to country foods there has been a reported increase in the consumption of high-cost, store-bought foods, including processed meats and other products with less than ideal nutritional value. Increases in obesity rates, high blood pressure and diabetes have been linked to this shift in diet in Canadian Aboriginal peoples (Dialogos Educational Consultants 2006).

Thus, any reduction in the availability of country food sources (or access to same) can have multiple adverse impact pathways and outcomes for harvesters and families. In addition, increased engagement in the wage economy may reduce the time available for harvesting or the inclination to do so as new values are imported into the T8FNs communities. Altogether, Site C Project-specific and cumulative effects related to the land, culture and country food appear to have high potential to (potentially irrevocably) alter the Dane-zaa mode/way of life.

7.6 Food Security (Impact Pathway # 40)

According to Agriculture and Agri-Food Canada (1998). “Food security exists when all people, at all times, have physical and economic access to food to meet their dietary needs and food preferences for an active and healthy life".

Recent research (UNBC et al 2010a; 2010b) indicates that both DRFN and PRFN members express consistent desire to access more of their preferred country foods, suggesting they do not have adequate food security. Qualitative inputs from the HRFN and WMFNs also indicate there are pressures, in particular, on country food security.

The Site C Project could contribute to decreased food security among the T8FNs due to:

- Reduced abundance and health status of harvested species in the Peace River valley, an active and important harvesting area and important habitat area for critical life stages of many harvested species;
- Reduced faith in country food, especially but not limited to fish;
- Reduced amount of time on the land, harvesting less country food, as access to, knowledge of, and preference for, specific areas are altered by physical/sensory changes;
- Increased costs and effort required to harvest country food, as distances to travel from home increase due to progressive land alienation;
- Greater competition for country food sources as the regional population grows due to labour demand;
- Loss of key harvesting areas due to direct disturbance on wildlife such as increased vehicle collisions during the high traffic construction period and increased drowning in the wider channel; and
- Lack of interest, resources and/or knowledge among many T8FNs members to go out on the land and harvest country food, due to the loss of close-to-home preferred harvesting areas and increased engagement in the wage economy.

In addition, Site C would irrevocably remove some of the best farmland in the Peace River Regional District, potentially impacting on regional store bought food self-sufficiency (Impact Pathway #30). Decreasing food security, from the T8FNs perspective, is a valid, multiple-cause and effect, impact consideration moving forward with the Site C environmental assessment.

7.7 Psycho-Social Effects, Mental Health and Well-Being and Quality of Life for T8FNs

A critical aspect of well-being and quality of life – often ignored in environmental impact assessments - is one's mental health. T8FNs members discussed mental health as consisting of a mixture of confidence that one's (and one's family's) physical needs can be met (e.g., food security), combined with a complex mixture of self-determination, self-esteem, spiritual health, and connection to land, to name some of the complex variables. The "weight of recent history"

of cumulative effects of the imposition of a new way of life, governance structures, cultural mores, etc. on T8FNs, described in Section 4 of the Baseline Community Profile, has eroded this multi-faceted aspect of well-being over time, a tide which has only been turning in recent years as the T8FNs attempt to reassert themselves as fully functioning, self-governing Nations. Vulnerabilities remain, and psycho-social effects associated with the Site C Project proceeding may negatively impact on this important aspect of T8FNs well-being and quality of life, by:

- Reducing their sense of self-governance, agency, and meaningful contribution to decision-making;
- Creating a sense of foreboding associated with prophecies by Dane-zaa Dreamers that one or more dams will fail;[9]
- Reaffirming the "deep seated sense of injustice" still felt by the T8FNs from previous BC Hydro developments (Key informant 04 (July 26, 2012), especially if recognition of past infringements and compensation for same is not forthcoming;
- Reaffirming an existing sense of social, economic and political marginalization, of their concerns being ignored by industry and government. For example, a Community Advisor noted:

  > "Going to flood a valley where our people used to live, where we could point out, this is what happened here…this is where our main trail is. I don't understand, Ministry of Heritage, they will recognize the Gold Rush trail coming through the Caribou in central BC from beginning to end, they protect that. Why don't they protect our area? It's an insult. In our eyes we are being seen as a people that don't exist" (WM01, November 6, 2012).

- Continuing loss of the traditional stewardship role of T8FNs members on their traditional territory;
- Loss of bequest value the ability to pass down this place to future generations;
- Changing this critical part of the Dane-zaa cultural landscape (physically, biophysically, and perceptually), which has been raised as a serious psycho-social concern by T8FNs land users, who not only harvest from and travel through this part of the Peace River valley, but take solace from its existence and inherent beauty and "peace";

[9]"White people don't understand, we are trying to use our own power to stop the dam. Our ancestors said, don't let them build another dam. Moses Wokeley said in a video it will flood us out" (PR11, November 6, 2012). "They said it would flood us out" (HR03, November 6, 2012).

- Contributing to existing high levels of concern about environmental contamination of country foods, which is already causing psycho-social anxiety, uncertainty and stress among T8FNs members.

These are but a few of the psycho-social effects causing agents identified by T8FNs members during the course of the multi-phase T8FNs Community Assessment. Psycho-social effects are valid and important effects pathways to follow up on. Health Canada (2005) recognizes that psycho-social effects can lead to biophysical health effects, and research by Chandler and Lalonde (2007) in British Columbia has identified a correlation between cultural continuity, self-determination and First Nations health outcomes (specifically suicide rates). Further examination of the likelihood, magnitude and significance of psycho-social effects contributions from the proposed Site C Project are strongly recommended.

8. Next Steps

The T8FNs Team suggests that this Report and Appendices be reviewed alongside Hendriks' (2011) Scoping Report, the most recent version of the *Issues List* and the T8FNs Team's Stage 2 Baseline Community Profile document. In combination, these documents provide a robust examination of pre-existing conditions and trends in the lived experience of the four T8FNs, and identify a wide variety of beneficial and adverse impacts the Site C Project may cause or contribute to on the rights and interests of the T8FNs, should it proceed.

Steps further down the impact assessment process will likely include the parties engaging in dialogue toward further characterization of the potential effects identified herein. Effects characterization typically includes but is not limited to:

- Likelihood of occurrence (and confidence in prediction);
- Duration and frequency;
- Magnitude of effect;
- Direction (beneficial or adverse);
- Acceptability (a value-based judgment for affected parties);
- Reversibility or manageability; and
- Significance (commonly a value-based judgment of the importance of the estimated change based on a mixture of the above criteria).

9. Closure

Should there be questions or clarification required regarding this Report, please email requests to alistair.macdonald@thefirelightgroup.com.

Signed November 16, 2012.

ORIGINAL SIGNED

Alistair MacDonald, M.A.
Director, Environmental Assessment Specialist
_____
The Firelight Group
10827 131 Street, Edmonton, AB
T: +1 (780) 488-0090
C: +1 (780) 996-5110
E: alistair.macdonald@thefirelightgroup.com

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NOTE: THIS LIST INCLUDES REFERENCES FROM APPENDIX B.

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Appendix A: Development Component/Valued Component Interaction Matrix

See attached .pdf document based on an Excel spreadsheet.

Appendix B: Initial Impact Pathways Table

See attached .pdf document based on an Excel spreadsheet.

- No Currently Predicted Effect
- ? Unknown - additional data required
- + Potential beneficial impact
- - Potential adverse impact
- +/- Potential for both beneficial and adverse impacts

		Primary Development Components Identified by BC Hydro August 9, 2012								More Detailed Development Components Identifed by BC Hydro August 9, 2012						Additional or more Detailed Development Components Identifed by T8FNs Team				
		Dam and Generating Station (entire footprint)	Spillways	Reservoir (including Hudson's Hope berm)	Transmission Line to Peace Canyon	(Temporary and Permanent) Access Roads and Rail	Highway 29 Realignment	Quarried and Excavated Construction Material	Worker Accomodation	Site clearing and preparation for all site facilities	Installation and operation of temporary facilities	Aggregate and filter processing plants	Concrete batch plant	Transportation of construction materials and supplies	Sand and gravel source pits	Human regulation of water release	Pre-project planning, including training program development and implementation	Transportation of workers	Labour and business demand	Work rotation schedules
MEANINGFUL PRACTICE OF TREATY 8 RIGHTS	AIR QUALITY					14,-	14, -	14, -	?	14, -		14, -	?	14, -	14, -			14, -		
	WATER QUALITY	10,48, -		10,48, -		48, ?	10, 48, -	48, ?			48, ?	48, ?	48, ?	48, ?	48, ?					
	AVAILABILITY OF HIGH QUALITY TERRESTRIAL HABITAT	19,95,96, 97,100, 103,104, -		19,95,96,97,100, 103,104, -	19, -	19,-	19, -		?		19, -				19, -					
	AVAILABILITY OF HIGH QUALITY TERRESTRIAL HARVESTING TERRITORY	19,42,43, 47, -		19,42,43,47, -	19, -	19,-	19,-		?		19,-				19,-					
	PERCEIVED RISK OF TRAVEL ON LAND	3,13, -		3,13, -		13,89, -	13, -; 89, ?	?						89, -						
	PERCEIVED RISK OF TRAVEL ON WATER	12,32, 88, -		12,32, 88, -						88, -						12, -				
	OBSERVED QUALITY OF AQUATIC COUNTRY FOODS (FISH)	5,39,48, 72, -		5,39,48,72 -																
	AVAILABILITY OF HIGH QUALITY AQUATIC HABITAT	4, 7, 10,+/-; 95, -		4, 7, 10, +/- ; 95, -																
	HEALTH STATUS OF FISH	6,39,48, -	6, -	6,39,48, -												6, -				
	ACCESS TO AND KNOWLEDGE OF HIGH QUALITY AQUATIC HARVESTING TERRITORY	4,32, -		4,32, -																
	LEVELS OF FISH HARVESTING AND CONSUMPTION	4,5, 7,32,39, 48,72, -		4,5,7,32, 39, 48,72, -																
	OBSERVED TERRESTRIAL WILDLIFE HEALTH	12,42,72, 98,101, -		42,72,98,101, -	42,98, ?	42, ?										12, -				
	LEVELS OF TERRESTRIAL WILDLIFE HARVESTING AND CONSUMPTION	42,43,47, 72,99, -		42,43,47,72,99, -	42, ?	42, ?													42, -	
	GROUNDWATER QUANTITY AND QUALITY	9,48, ?		9, 48, ?												?				
	HARVESTING SUCCESS RATES	4,42,47, 99,101, 104, -		4,42,47, 99,101, 104, -	42, ?	42, -	?	?			?								42, -	
	AMOUNT OF TIME SPENT ON THE LAND	7,13,20, 43,49,72, -		7,13, 20,43,49,72, -		17, +/ -	20, +/ -; 49, -	17, -		17, -	17, -	17, -		17, -	17, -				22, +/-	
	TRANSPORTATION ROUTES AVAILABLE	12, +/-		12, +/-	31,+	31,+	31, +/-				?					12, -				
	QUIET ENJOYMENT OF THE LAND	17,26,32, 49, -		26,32, 49, -	17, 31 -	17, 31, -	31,49, -	17, -			17, -	17, -	17, -	17, -	17, -			17, -		
	AESTHETIC AND SENSORY APPEAL OF THE LAND	25,26, 49, -		25,26, 49, -		14, -	14,25, 49, -	14, -		14, -		14, -		14, -	14, -			14, -		
	DEGREE OF FOOD SECURITY (TRADITIONAL FOODS)	7,39,40, 42,72,98, 99,101, 104, -		7,39,40, 42,72,98, 99,101, 104, -	42,98, ?	42, ?													42, -	
	ACCESS TO LAND	13,19,32, 43, +/-		13,19, 32,43, +/-	19,31, +/-	19,31, +/-	19,31, 43, -								19, -					
	AVAILABLITY OF HABITATION SITES ON THE LAND	34, -		34, -			34, -		34, -										34, -	
	ABILITY TO PRACTICE COMMERCIAL ASPECTS OF TREATY RIGHTS	38,47, 56, -		38,47, 56, -																
	COMPETITION FOR RESOURCES WITH NON-ABORIGINALS	32,39,42, 43, -		32,39,42,43, -	31,42, 43, -	31,42, 43, -	31, ?				?								42,43, -	
	PRODUCTION OF CRAFTS FROM THE LAND	38, -		38, -																
	HARVESTING OF WILD PLANTS (INCLUDING BERRIES)	41,105, -		41, 105, -	41, ?					41, -										
	TRAPPING RATES AND SUCCESS	38,47, 101, -		38,47, 101, -	17, -	17, -	17, -	17, -			?			17, -	?					
	BEQUEST VALUE (ABILITY TO PASS LAND DOWN TO FUTURE GENERATIONS)	18,20,21, 25,26,27, 28,29,46, 49,98,99, 102, -		18,20,21,25,26, 27,28,29,46,49, 98,99, 102, -	18, 98, -	18, -	18,20 -								18, -	18, -	46, -			
PROTECTION AND PROMOTION OF DANE-ZAA CULTURE	GATHERINGS ON THE LAND	19,20,34, 95, -		19,20,34,95, -			20,34, -		34, -										34, -	
	PROTECTION OF HERITAGE RESOURCES	21, -		21, -			21, -													
	INTER-GENERATIONAL KNOWLEDGE TRANSFER	19,20,29, 41,43,72, 74,105, -		19,20,29,41,43,72,74 ,105, -			20, -			41, -									22, -	
	MAINTENANCE OF DANE-ZAA VALUES	20,29,43, 46, -		20,29,43,46, -			20, -										90, -		22, -	
	PRACTICE OF CEREMONY AND ARTS	19, -		19, -																
	LANGUAGE MAINTENANCE	20,23, -		20,23, -			20,23 -												23, -	
	PRACTICE OF SPIRITUALITY	20,26, 28,		20,26, 28, -			20,28, -													
	KNOWLEDGE OF TRADITIONAL MEDICINAL PRACTICES	41,105, -		41,105, -																
	CONNECTION TO LAND	20,25,26, 49, -		20,25,26,49, -			20,25 -													
	PROTECTION OF GRAVE SITES/BURIAL GROUNDS	21,27, -		21,27, -			?													
	CONTINUITY OF ORAL HISTORY	20,21,24, 29, -		20,21,24,29, -			20,21, 29, -													
	KNOWLEDGE OF CULTURAL LANDSCAPE	20,21,24, 29, -		20,21,24,29, -			20,21, 29, -													
MEANINGFUL ROLE IN GOVERNANCE AND STEWARDSHIP	NATURAL FLOW REGIME FOR PEACE RIVER	8, -		8, -																
	DANE-ZAA ROLE IN DEVELOPING PROTECTED AREAS	33, -		33, -													33, -			
	RETENTION OF TRADITIONAL LAND STEWARDSHIP ROLE	46,95, 102, -		46,95, 102, -													46,69, -			
	RESPECT FOR DANE-ZAA AS A GOVERNMENT BY INDUSTRY AND OTHER GOVERNMENT	44,45, -		44,45, -													44,45,68, 69, -			
	MEANINGFUL ROLE IN DECISION-MAKING	44,45, -		44,45, -													44,45,68, 69,71, -			
	EFFECTIVE LOCAL GOVERNANCE																68, -			
	COMPENSATION FOR AND RECOGNITION OF PAST INFRINGEMENTS	37,44, -		37,44, -													44, -			

		Primary Development Components Identified by BC Hydro August 9, 2012								More Detailed Development Components Identifed by BC Hydro August 9, 2012							Additional or more Detailed Development Components Identifed by T8FNs Team				
	No Currently Predicted Effect	Dam and Generating Station (entire footprint)	Spillways	Reservoir (including Hudson's Hope berm)	Transmission Line to Peace Canyon	(Temporary and Permanent) Access Roads and Rail	Highway 29 Realignment	Quarried and Excavated Construction Material	Worker Accomodation	Site clearing and preparation for all site facilities	Installation and operation of temporary facilities	Aggregate and filter processing plants	Concrete batch plant	Transportation of construction materials and supplies	Sand and gravel source pits	Human regulation of water release	Pre-project planning, including training program development and implementation	Transportation of workers	Labour and business demand	Work rotation schedules
	? **Unknown - additional data required**																			
	+ **Potential beneficial impact**																			
	- **Potential adverse impact**																			
	+/- **Potential for both beneficial and adverse impacts**																			
EQUITABLE ACCESS TO EDUCATION, TRAINING AND ECONOMIC OPPORTUNITY	IMPACT EQUITY (VERSUS NON-ABORIGINAL PARTIES)																54,59, 63, -		54,59,63, 66, -	
	REVENUE FOR T8FNS	44, -		44, -													44, -			
	EQUITABLE ACCESS TO BUSINESS OPPORTUNITIES																51, ?		50,51, 54,?	
	BUSINESS REVENUES FOR DANE-ZAA OWNED BUSINESSES																51, ?		50,51, ?	
	POVERTY LEVELS																		52,53,75, +/-	
	COST OF LIVING/INFLATION																		53, -	
	ACCESS TO TRAINING																57,58,59, 66, ?		57,59, ?	
	TRAINING SUCCESS																57,58, 66, ?			
	EDUCATIONAL ATTAINMENT RATES																57,61, ?		59,61, ?	
	EQUITABLE ACCESS TO JOBS																57,59,63, 64,66, ?		57,58,59, 61,63, 64, ?	
	JOB RETENTION RATES								65, 94, ?								57,59, ?	65, ?	55,58,59, 60,65, 94, ?	94, ?
	CAREER DEVELOPMENT/ADVANCEMENT RATES																57,59, ?		55,58,59, 60,63,64, ?	
	FUNCTIONAL LITERACY AND NUMERACY																58, -		58, -	
	AVAILABILITY AND COST OF TRADES/MAINTENANCE																		87, -	
	ECONOMIC DIVERSIFICATION LEVEL	30,56, -		30,56, -																
	EXPOSURE TO BOOM AND BUST CYCLES	30, -		30, -															55,58,60, 61, -	
	AVOIDANCE OF ECONOMIC FUTURES FOREGONE	30,56, -		30,56, -																
	ECONOMIC SELF-SUFFICIENCY	38,42,47, 56, -		38,42,47,5 6, -													58,59, ?		22,54,55, 59, ?	
	INCOME LEVELS	47, -		47, -															52, 64, ?; 58,61,75, -	
HEALTHY COMMUNITIES	PUBLIC SAFETY	2,3,12,13,3 2,88, -		2,3,13,32, 88, -		89, -	89, ?			88, -	?	?		89, -	?	12, -		89, -	89,93, -	
	MENTAL HEALTH/EXPOSURE TO PSYCHO-SOCIAL STRESS	3,25,26, 43,44,45, 46,49,74, -		3,25,26, 43,44,45, 46,49,74, -		#, -			94, ?								44,45,46, 68,69,71, 77,90, -		54,75, 94, -	94, ?
	FOOD SECURITY (AGRICULTURE AND STORE BOUGHT FOODS)	30,56, -		30,56, -																
	OUT-MIGRATION EFFECTS (E.G., "BRAIN DRAIN")																		51,57, -	
	FAMILY COHESION/UNITY																		75,82, 92, +/-	82,92, -
	SEXUAL DIVISION OF LABOUR (PRESSURES ON WOMEN)																		92, -	92, -
	EFFECTIVE MONEY MANAGEMENT																		75, -	
	COMMUNITY COHESION																77, ?	?	53,74,90, 93, -	
	INTER-COMMUNITY COHESION	20, -		20, -			20, -										90, +/-		52,90, -	
	SOCIAL FUNCTION	25, -		25, -													69,71,77, ?		55,62, 67,75,76, -	
	SUBSTANCE ABUSE LEVELS																69,71, ?		80,81, 84, -	
	CRIME RATES																		75,76, ?; 91, -	
	RISK OF SELF-HARM	25,45,46, ?		25,45,46, ?													45,46,69, 71,77, ?		62,75, ?	
	SELF-ESTEEM ISSUES	28,45, 46, -		28,45, 46, -					94, ?								45,46,58, 69,77, -		22,60, 62,94, ?	94, ?
	MORBIDITY RATES AND OVERALL HEALTH STATUS	16,41,70, 73,78, ?		16,41,70,7 3,78, ?													77, -		55,70, 73,78, ?	
	YOUTH VULNERABILITY/RESILIENCE	20, -		20, -			20, -										58, -		62,67,79,8 2,92, ?	82,92, -
	ELDER VULNERABILITY/RESILIENCE	25,28, 74, -		25,28, 74, -															22,74, -	
	RISK OF PHYSICAL ABUSE																		76, ?	
	DIET/NUTRITION	40,42,43, 72, -		40,42,43,7 2,73, -															42,53, 73, -	
	ACTIVITY LEVELS	42,43,70, 72,73, -		42,43,70,7 2, -															70, -	
	SEXUAL HEALTH																		62,79, -	
	ACCESS TO HEALTH AND SOCIAL SERVICES																		83,84, 92,93, -	92, -
	ADEQUATE PHYSICAL INFRASTRUCTURE (INCLUDING MAINTENANCE)																		51, ?; 87,93, -	
	ADEQUATE HOUSING (AVAILABILITY, ADEQUACY AND AFFORDABILITY)								?										85,86, -	
	ENJOYMENT OF WORK/JOB SATISFACTION	56, ?		56, ?					65, 94, ?									65, ?	64,65, 94, ?	94, ?
OTHER	EARTHQUAKE/SEISMIC ACTIVITY RISK	1, ?		1, ?																
	FLOODING RISK	2,3, 11 -		2,3, 11, -						?						11, -				
	LOCAL CLIMATE CHANGE	16, -		16, -																
	GHG EMISSIONS	15,+/-		15, +/-						15, -										

NOTES

1) Absence of evidence is not evidence of absence. A blank cell - indicating "no currently predicted effect" - does not imply that there will be no impact, but rather that there is no current evidence available to the T8FNs Team of a potential interaction.

2) Where multiple development components are identified as potentially impacting on a valued component or indicator, they are typically exemplary rather than exclusive.

Further discussion between the parties will be required to confirm, expand or reduce the expected valid interactions.

3) The T8FNs Team recognizes some overlap between different Development Components that may need to be reconciled through further discussion between the parties.

4) Numbers in the cells are linked to the "Impact Pathway" numbers in Appendix B to the Initial Impact Pathways Identification Report.

5) In most cases, impact pathways that involve the reservoir also by necessity implicate the dam and generating station, which creates the reservoir.

6) This Table and Appendix B do not speak to the temporal length of each potential impact pathway. These often differ - for example the amount of time where areas of high habitat suitability may be lost differs fundamentally between the reservoir creation and "installation and operation of temporary facilities". Further temporal effects characterization is required.

7) In many cases, there are complex inter-linkages between development components and multiple valued components. See for example Impact Pathway #19, which relates specifically to the effects of a reduced land base on cultural practices.

While not examined in detail in either Appendix A or Appendix B, this clause and effect relationship extends across many other aspects of Dane-zaa well-being and quality of life, such as "mental health", "self-sufficiency", and "self esteem issues".

Impact Pathway #	Level 1	Level 2	Level 3	Community Assessment VCs/indicators	Pre-Project Conditions (Issues Scoping Study and/or inputs from Community Assessment) including cumulative effects	Site C Project Component(s)	Potential Effects Pathways	Discussion of Potential Project Effects (Issues Scoping Study and Community Assessment)	Particular Locations and /or Groups Affected
1	accidents	seismicity	reservoir-induced earthquakes	other		dam; reservoir	filling of the reservoir could result in earthquakes	Inadequate information available at this time to make predictions	immediate Peace River valley area, not limited to inundation zone (may have upstream or downstream effects); all people and infrastructure in
2	accidents	structural	dam stability	other	T8FNs spoke of concerns raised about structural issues at W.A.C. Bennett Dam related to sinkholes in the past decade as signs that engineering is not perfect and is fallible.	dam; reservoir	dam failure	concern about cumulative effects of ongoing changes to forest cover in the Peace RIver valley for seasonal melt rates, run-off and flooding potential; dam break flooding could interact with active or sealed gas or oil wells; Taylor gas plant could be affected; community concerns; "And when they build the dam, there will be landslides, because land has already slid down by itself without any water helping it. And if they build that dam there will be more landslides...and when the slides occur, they will bust the dam, and the people downstream will probably be drowned"; concern about apparent fault line along the Moberly River; concern about geotechnical conditions at the dam site; concern about a terrorist threat to the dam	primarily downstream of proposed Site C Dam site but with implications for inundation zone as well)
3	accidents	structural	dam stability	healthy communities; perceived risk of catastrophic dam failure	Dane-zaa prophecy by multiple Dreamers holds that dams across the peace river will fail; Charlie Yahey was the last dreamer/prophet. He said that dam is not going to hold. He already dreamed that there was a hole underneath there that was a sink hole. They fixed that, but he said that dam will go. A lot of dreamers, as well as Charlie Yahey said if you fool around with nature, nature will fight back; "It's kind of scary because I feel like the dam could just malfunction, and then a sudden flood, that's what creeps me out. "	dam; reservoir	perceived risk of Peace River dam failure as predicted by Dreamers	creation of psycho-social fears associated with dam failure and potential effects outcomes; concern for future generations; "messing with nature will 'pay you back" in the end"; uncertainty and perceived risk - living in the shadow of several structures predicted by trusted Dane Zaa culture heroes to fail - should not be under-estimated in terms of significance	all T8FNs, particularly people that use areas in the Project Activity Zone and downstream of the proposed Site C Dam
4	aquatic	fish	habitat	meaningful practice of Treaty 8 rights; availability of fish and knowledge of fishing locations	important fish habitat and T8FNs fishing values are associated with the Peace River and nearby tributaries such as Halfway River and Moberly River	dam; reservoir	flooding of large inundation zone likely to change aquatic habitat dynamics and eliminate some fishing holes and create other new ones	aquatic habitat between Hudson Hope and Site C will be altered or destroyed as a result of reservoir creation. There are concerns from T8FNs members that the reservoir will cause them to have reduced knowledge of and success at fishing in this altered waterbody. There's concern that as the water levels rise, those fishing spots will be submerged themselves or will change so the fishing holes that exist now will disappear and new ones will have to be found as the reservoir is created and the river flow obviously changes in terms of where the water is and how the banks erode	all T8FNs and especially harvesters or would-be harvesters alienated from the area due to reduced fish numbers in the inundation zone
5	aquatic	fish	migration	meaningful practice of Treaty 8 rights; fish health status; fish populations	there are many different fish species and spawning runs in the Peace River and local tributaries, of which the most important is in the Halfway River; trout (lake, dolly varden and rainbow), whitefish, and jackfish are most plentiful, but other species present as well; northern Pike also come up the Moberly River	dam; reservoir	entrainment of fish upstream of Site C Project, altering migration patterns and associated reproductive health issues	"Where are the fish coming from the Halfway River and Moberly River going to go once they get into the reservoir."; BC Hydro studies indicate fish are migrating below the proposed Site C Dam, therefore the dam will impede fish passage and natural migratory routes; the dam will block access to bull trout and dolly varden spawning areas and migration routes; the Project engineering plan does not include a fish passage way, which would be two kilometres long due to the height of the dam; the project will affect fish spawning in both the Peace River and Halfway River; "Sloughing from the north bank of the river impacting fish spawning" due to increased sediment;	T8FNs harvesters who use areas upstream of proposed Site C Project location, including both the main branch of the reservoir and tributaries.
6	aquatic	fish	population	meaningful practice of Treaty 8 rights; fish health status	"In the 70s and 80s, there used to be more fish. There used to be a lot of fish in the Charlie Lake (Fish Lake), Fish Creek, and Beatton River. There were lots of fish, and now they are gone."; "You can see dead fish below the Peace River dam now;" spill events result in significant fish mortality at the WAC Bennett overflow;	dam; reservoir	spill events from the WAC Bennett Dam result in spill events at Peace Canyon Dam and will also result in spill events at the proposed Site C dam; increased levels of oxygen in the water may result in fish suffocation	general concern about effects on fish populations; concerns about fish mortality in the Halfway River; "could lose some fisheries"; arctic grayling numbers will be impacted negatively by the reservoir system extending into the Moberly and Halfway Rivers; increase in population of some fish species has the potential to increase sport fishing, promote charter fishing tours, and create imbalance to the natural functioning of the ecosystem; the turbines will physically kill the larger fish and with oxygenation loading from the turbines it is expected fish mortality will exceed 17% of the fish that pass through the turbines; concern about which fish species would be negatively impacted and if there was enough habitat to maintain the fish; concerns about spilling at Williston with respect to fish entrainment and mortality in the current system and what would happen to fish if Site C had a spill event;	T8FNs harvesters who use areas upstream and downstream of proposed Site C Project location.
7	aquatic	fish health	methyl mercury	meaningful practice of Treaty 8 rights; fish health status (scientific and traditional knowledge observations)	there is low to no faith in fish brought out of Williston or Dinosaur reservoirs and downstream of the dams due to mercury and other health concerns; methylmercury levels were elevated following inundation related to WAC Bennett Dam and Peace Canyon Dam; levels thought to be still elevated in some species, including bull trout; for this reason, many T8FNs people are not harvesting fish in the reservoirs or not consuming fish caught in reservoirs; concerns about current levels of methylmercury in Peace River; desire to be involved in future baseline work to determine methylmercury levels	dam; reservoir	levels of methylmercury will increase as a result of reservoir creation, similar to the first two hydroelectric projects on the Peace River; accumulation of mercury in water affecting fish and reducing attractiveness of fishing to harvesters	perceived risk, observed change and advisories related to bio-accumulation of mercury in fish will likely reduce harvesting and consumption of fish from reservoir by T8FNs; reduced perceived viable T8FNs fishing territory between Hudson's Hope and Site C; reduced First Nations confidence in area fish; the perception of high levels of methylmercury will keep people from fishing in the reservoir; reduced willingness to harvest and consume fish from reservoir; "I think about all of the mercury and stuff that would be in the water now and affect all that fish." "Caught a big bull trout at Dunlevy one time. Didn't want to eat it; put it back [concerns about mercury]. Asked about how much – like "once a month" – you can eat these fish?; Even the water looks gross; all over. What is that white stuff that floats down the river; cast a line and your line catches to it.; People are embarrassed and scared when they talk about eating fish from within the reservoir. "	harvesters from all four T8FNs; Peace River in the inundation zone and surroundings; Halfway, Moberly, Cache Creek, Farrell Creek in inundation zone and upstream on the tributaries where fish migrate

8	aquatic	hydrology	downstream	meaningful role in governance and stewardship for T8FNs	T8FNs have a strong desire to re-implement a natural flow regime on the Peace River; development of WAC Bennett and Peace Canyon dams changed conditions downstream, including at the Peace-Athabasca Delta; T8FNs interested in how downstream flows and geomorphology have changed over time; "All Dunne Za are river people; all rely on rivers and Peace River is the largest and most important of those rivers. All other rivers flow into it. "	dam; generating station; reservoir;	inability to re-establish natural or near natural flow regime; increasingly anthropogenic controls over previously natural systems	continuation of reduced seasonal variation in Peace River flows; entrenchment of human control over the natural environment; construction of a new dam undermines efforts to restore natural flow regime on the Peace River [futures foregone]; concerns about what the maximum and minimum flows out of Site C would be and whether lower flows could be expected over the summer, noting that downstream impacts to terrestrial, aquatic and human communities are a concern for some First Nations;	T8FNs, other First Nations downstream in Peace River valley extending all the way to the Peace Athabasca Delta;
9	aquatic	hydrology	groundwater	meaningful practice of Treaty 8 rights	Candler et al (2012) mapped locations of groundwater springs near Bear Flats known to and consistently used by T8FNs	dam; reservoir	increased water levels could create new interaction with groundwater aquifers directly or through increased pore water pressure	Concern about the effects of reservoir creation on groundwater	all current or future users of groundwater sources, including T8FNs who use springs in the immediate Peace River valley area (e.g., near Bear Flats)
10	aquatic	hydrology	sedimentation	meaningful practice of Treaty 8 rights		dam; reservoir; Highway 29 realignment	increased sediment loading through erosion of soil during inundation and following inundation and water fluctuations of reservoir, and due to settling out of solids in the reservoir	concerned about sedimentation in the reservoir and upstream rivers (Halfway, Moberly, etc.) and potential terrestrial and aquatic impacts.	users of the Peace River, Halfway, Moberly Rivers and other affected tributaries
11	aquatic	hydrology	tributaries	meaningful practice of Treaty 8 rights	Concerns that Halfway River already flooding more than usual, with higher water levels. "All Dunne Za are river people; all rely on rivers and Peace River is the largest and most important of those rivers. All other rivers flow into it. "	dam; reservoir	Greater than expected flooding during reservoir filling or during reservoir operations creating greater than expected impacts on the biophysical and human environment	Concern that reservoir operation will exceed one the 1.8 metres planned by BC Hydro; flooding on the Halfway River will go further up than 14 kilometres: "...our community thinks that the water will back-up right to the community"; given that dam has a freeboard of 8 metres, concern that periodic flooding up the Halfway River and Moberly River will result in flooding further up these rivers; concerns that spilling would affect the levels of the Moberly River; looking for written assurance on maximum levels and reservoir footprint;	especially Halfway River; primarily but not exclusively HRFN concerns
12	aquatic	ice dynamics	freezing	meaningful practice of Treaty 8 rights	"I lived at this place Attachie and it used to freeze and animals used to cross all the time and now it does not freeze anymore."; the ice used to come up the River much further before the dams were constructed; "I remember we used to drive across the River at Taylor."; people would cross the Peace River in winter on the ice and in the summer in rafts, but this is no longer possible; not natural that the river does not freeze	dam; generating station	Additional controls over water flow in the Peace River may extend open water area (never frozen) further downstream	Continuation and extension of reduced human transportation and animal migration across the Peace River, further east. Increased public safety and wildlife mortality issues in the transition area between frozen river and non-frozen river. Impacts on ecology of downstream areas unknown and risky.	Downstream of Site C Dam to an unknown linear extent; any T8FNs users or other would-be users of cross-channel travel corridor across the Peace River
13	aquatic	reservoir	bank stability	meaningful practice of Treaty 8 rights	already, on both sides of the Peace River valley, there are areas of high erosion and potential for catastrophic slope failure (e.g., the Attachie Slide); partly attributed by T8FNs to increased human-caused change in the valley through water regulation, Highway 29 building, and agricultural activities.	dam; reservoir; Highway 29 realignment; access roads	instability could result in landfill leaching or eroding into the reservoir; Site C will contribute to shoreline erosion; heightened potential for landslides;	concerns about river valley slope stability in the proposed inundation zone and upslope areas, old Highway 29 area, and potentially in the new Highway 29 realignment area, for decades to come; existing sloughing along Highway #29 is an indication of what will follow if Site C is constructed; there will be further erosion in the event Site C is constructed along the Peace River and Halfway River; "Are the river banks along the Peace River strong enough to withstand the power and force of an expanded river?"; the issue of slope stability is one of the most common concerns coming out of the T8FN communities; slope stability changes and slides have potential to create substantial impacts to traditional practices such as hunting, gathering and spiritual use in the area; desire to see an assessment of shoreline stability with respect to what the flows are currently; public safety issue;	primarily the inundation zone, with emphasis on the banks of the reservoir; any T8FNs users or would-be users who choose to avoid travelling in the area due to perceived or observed public safety risks
14	atmospheric	air quality	emissions	meaningful practice of Treaty 8 rights	high levels of hydrogen sulphide from neighbouring gas fields occur occasionally throughout the region; air quality reduced in Fort St. John area over the years due to increased population and various emissions sources.	multiple	concern that reduced air quality from project-related activities (e.g. dust) may be cumulative; concerns about dust generation along reservoir shoreline	Contribution to lower air quality at local and regional level, especially during high emissions and earth moving/rock crushing construction stage	all Project Activity Zones where emissions sources are located or travelling through or where earth moving and/or rock crushing activities occurring; transportation routes; any T8FNs users of locations or travel corridors with increased dust and traffic
15	atmospheric	air quality	greenhouse gases	meaningful role in governance and stewardship for T8FNs		dam; generating station; reservoir; site clearing and preparation	beneficial effects possible from reduced emissions by alternative energy generation sources; adverse effects possible from loss of carbon sequestration through clearing and loss of vegetation in inundated zone	if Site C is developed to actually replace alternatives as opposed to just adding to energy consumption, it could result in long-term reductions in emissions and greenhouse gases from fossil fuel burning; Site C would also eliminate carbon sequestration and emit greenhouse gases from the reservoir	global pollutant with potential effects for global, regional and local ecosystems and economies

16	atmospheric	climate	microclimate	meaningful practice of Treaty 8 rights	T8FNs reported changes to local weather and seasonal patterns, e.g. warmer winters and increased winds, affecting peoples' security and well being; the Peace River has a climate that is noticeably less cold in winter, part of its refuge status for animals; Williston reservoir changed the climate in the region; winter temperatures are warmer, summer temperatures are cooler, generally windier all year; increased freezing on roads due to moisture from a warmer Peace River downstream of the Peace Canyon Dam; increased sandstorms due to the Williston reservoir	dam; reservoir	changes in micro-climate due to creation of large body of slow moving water	Increased fog and humidity from reservoir creation might adversely affect farming in the region; Site C would result in further change to the climate in the region, including increased wind and tornados (dust devils); "some of the elders said it will be foggy in Fort St. John, it will be more moist, it will be windy and the water is going to pick up [the] wind"	Peace River valley and surrounding plateau; especially Fort St. John and possibly Hudson's Hope areas
17	atmospheric	noise	vibration	meaningful practice of Treaty 8 rights	High number of large and noisy vehicles on the road servicing the oil and gas industry in vicinity of DRFN and HRFN; isolation requires people to own large, noisy vehicles in order to travel in winter; road to Alberta busier with paving; "there is a lot more traffic on the roads due to oil and gas activity"; "gas wells bring too much traffic and too many people into the community"; opportunity to walk everywhere and to take children out on the land considered a positive aspect of reserve life in DRFN, but undermined by traffic and noise	multiple	increased noise, smells, traffic, vibration, dust, and non-Aboriginal human presence in the variety of construction and borrow material locations (Project Activity Zones) may impact on T8FNs enjoyment of the land and harvesting success as wildlife disturbed	construction phase alienation of T8FNs from the "Project activity zone"; increased noise during construction of Site C (e.g. at quarries, transporting materials, etc.) would exacerbate already noisy conditions in DRFN, HRFN and WMFNs; reduced area available for meaningful practice of Treaty 8 rights; reduced "quiet enjoyment of the land."	all Project Activity Zones, which extend to places beyond the immediate Peace River valley as described by BC Hydro in its Project Description materials - including the distance from Project Activity Zones at which not noise or vibration from project-related activities can be observed by T8FNs land users or wildlife
18	cultural heritage	culture	bequest value	protection and promotion of Dane-zaa culture; bequest value - ability to pass land down to future generations	strong desire to pass down Peace River valley to future generations of Dane-zaa in as natural and pristine a condition as possible, despite existing infringements on use and access. topocide "the land has changed so dramaticlly that people can no longer relate to it."	multiple	building of dam creates futures foregone whereby future generations may not be able to use and know the land in tradtional ways	"Cumulative effects are a form of cultural genocide"; once the land is gone it is gone forever; "very concerned about the futue of the children, who will not be able to use the land the same way he grew up using it, and animal habitat along the river that would be gone forever"; reduced meaningful practice of Treaty 8 rights; reduced knowledge of cultural landscape - for future generations; "Leave the river alone; leave it just the way it is."; "Moberly River - this is where I exercise my treaty rights- I live off the land as taught to me by my grandparents, please don't take this away." Halfway River: "there would be no more culture for us next generation of kids, no experiences with fishing, hunting and plant picking if the dam goes ahead."; "Want to see something for kids' future, two dams in territory should be good enough."; "In Halfway it's different, it's mostly about hunting. We hunt lots and skin lots of moose. We hunt back on the river. I think it would affect ten or fifteen years from now, I have sons, where are they going to go hunting ten or fifteen years from now if the Site C comes up? Where are they going to go fishing? The elders talked about they were back in the past, I'm talking about the future, the elders won't be here but the next generations will be here, even with all the impacts. Everywhere I go now I hear about elders but nobody talks about the generation that's going to be coming up."; "We just want to make sure that those spots are always there for our kids."	All T8FNs; specific to the immediate Peace River valley between Fort St. John and Hudson's Hope
19	cultural heritage	culture	cultural practices	promotion and protection of culture; engagement in ceremony and crafts	Children need to be trained by their parents in the First Nation mode of life; "now you've got to pay people to teach the kids"; drumming was nearly lost in DRFN but now there is some effort to bring it back; drumming has been lost in HRFN and youth need to be taught how to drum; no more dancing is occurring in the communities; elders continue to encourage youth to respect the animals and to cover animals to thank them for their lives; food preservation remains an important part of traditional activities; some people continue to sew moccasins, but need to make their own hides; "some still do moose hides"; women elders are teaching younger women how to tan hides; "moose hide tanning is disappearing"; proposed cultural programs are not always implemented due to lack of funds, or get implemented with key activities or personnel excluded;	Multiple	reduced land base for traditional practices and reduced harvesting; reduced gatherings	Reduced practice of ceremony and learning of traditional skills. A DRFN member noted that with Site C and other cumulative effects-causing activities occuring, there may be less moose around, and it will be hard to teach her daughter how to tan moose hide; make mocassins; all those skills may be lost	All T8FNs who use or desire to use the Peace River valley and other Project Activity Zones for practice of Treaty 8 rights; implication for future generations of T8FNs members

20	cultural heritage	culture	gatherings	promotion and protection of culture; number of cultural gatherings and inter-generational knowledge transfer	Hudson's Hope, Halfway River (Attachie), Old Fort and Taylor are recognized as historic gathering places; Fort St. John (near current Wal-Mart) was also a gathering place; there are winter indoor camps teaching youth hunting skills, and cultural awareness activities; Beaver camp is a positive program in DRFN, but was not held in 2011; DRFN holds an annual rodeo, Doig Days, and summer camps; WMFNs continue with culture camps every August, where youth and adults learn about hunting, carving moose, skinning moose, making hides, and making dry meat; PRFN continues with annual cultural celebrations; annual powwow held in HRFN; in general, people do not gather as often anymore due to other demands on their lives; Bear Flats gathering and Paddle for the Peace are important events for WMFNs; Peace River valley recognized for having several important gathering places that contribute to cultural continuity and social cohesion among the T8FNs; "the struggle to maintain our culture is an important part of our lives"; "we need to be strong in our own culture in order to integrate with a new culture"; "we need to avoid thinking that our culture is less than other cultures"; "I am worried that the cultural strength simply is not there"; some children do not know who they are, but WMFNs is trying to address this with more cultural programs for children; "we need to pass on our traditions and not have to learn them from books; "it does not matter what the outside world does - we will survive"; "my culture motivates me to show that I can achieve things - don't give up, keep going is what I learned from my elders"; HRFN is strongly encouraging people to get back on the land - camping, hunting and fishing; "youth need to learn their culture of hunting and trapping in order to live a free life like their parents and grandparents did - we can go hunting whenever we want"; need to provide survival, hunting, fishing and related skills to youth; need to provide summer camps for bush skills; cabins; canoeing, hunting, and fishing areas; Gathering and camping places, places of importance for sustenance, part of oral histories; Hudson Hope gatherings / rodeo / festival each spring; up to present still have gatherings; Paddle for the Peace happens annually;	Dam; reservoir; Highway 29 realignment	flooding out of, and loss of access to, culturally significant gathering areas; potentially reduced inter-generational time together on the land	Reduced access to important gathering sites in the Peace River valley reduce community cohesion; reduced inter-generational knowledge transfer; loss of oral history; reduced well-being and quality of life; inability to get out to historically, culturally and spiritually important places contributes to overall Dane-zaa cultural decline; important current and historic gathering sites at Attachie and Bear Flats will be flooded;	All four T8FNs and future generations; Bear Flats; Attachie; Cache Creek, amongst other locations in the inundation zone
21	cultural heritage	culture	heritage resources	promotion and protection of culture; physical and intangible cultural resources	Cultural heritage resource sites have been recorded within the flood zone and along the upland areas; Peace River historically and currently is a location for ceremonial and community activities; there are sacred sites in the river near Hudson Hope, including "singing rock" and sites on the islands in the Peace River, of which WMFNs members have particular and extensive knowledge; gravesites are located near Attachie and Bear Flats; water in general is sacred and the Peace River is the largest water body in the region; the waters of the Peace River are vital to Dane-zaa cultural and physical survival; the history of the fur trade in the Peace River valley is important; the Peace River is the historic boundary between the Beaver and the Cree where conflicts, peaceful meetings for trade, and celebrations took place, where the last buffalo jumps occurred, where there were large camps at gathering places, and where seasonal crossings of the Peace occurred - these are historical events that are still important today; the Peace River is recognized as a revered area where the dreamers went, and had dreams and made predictions about the future; members from all four First Nations, including more distant Prophet River, have memories, both personal and communal (historic) of travelling and travel patterns on the Peace River; many places along the Peace River are still used as locations for teaching traditional activities, for cultural sustenance (people love to look out over the Peace from the highway); people want their children to be able to catch their first fish at Halfway River like they did, or to harvest their first moose north of Cameron Lake like they did; Prophet River members used to travel by horse to Taylor; Doig River band used the Old Fort area south of Fort St. John, but not any longer due to alienation; Moberly and Halfway (Hudson's Hope Band) would gather on both sides of the River for fur trading at Hudson's Hope; Attachie is an important historical place	inundation; Highway 29 realignment	flooding of key historic areas and current gathering places (e.g., Attachie, Old Fort, Cache Creek among others; loss of archaeological sites found and unfound;	Spiritual loss and loss of future knowledge of how people lived in the past; lost connection with ancestors; "dancing rock" site will be destroyed by flooding; historical, cultural and spiritual sites and places will be flooded; "a lot of our history will be lost and flooded"; "there are sacred places that would be affected by Site C"; sites of cultural importance to First Nations and Europeans will be flooded; "Site C would further erode our culture"; concern expressed related to the development of an archaeology predictive model without any prior work or input from T8TA; concerns about the BC Hydro Archaeology RFP that treated T8TA as a referral agent vs. a Treaty Indian with rights, and that there needed to be a process that created meaningful involvement from the outset vs. after project completion review; the Heritage Act only provided an opportunity to remove T8TA artifacts and did not reflect traditional use practices or incorporate traditional use concerns; expressed interest in expanding community capacity to undertake heritage resources work; Site C will result in flooding of gathering places, grave sites, permanent and temporary occupation sites, teaching areas, and other key elements of the Dane-zaa cultural landscape; "Once a place is under water, it is lost to our culture. It is like it was never there"; potential impact outcomes include: reduced intergenerational knowledge transfer; loss of oral history; alteration of cultural landscape reducing connection to land; reduced gathering opportunities; psycho-social loss; The sad thing I see is the loss of the archaeology sites in the valley. The loss is spiritual. "History and culture will be heavily impacted; Archaeological evidence will be impacted"	all T8FNs; primarily the north shore of the Peace River from Fort St. John to Peace Canyon Dam, including Attachie, Cache Creek and Old Fort areas
22	cultural heritage	culture	influence of dominant culture	promotion and protection of culture	Increased reliance on the wage economy has reduced Dane-zaa self-sufficiency, traditional skills development, community building, volunteerism, time on the land and education of next generation; adoption of the wage economy means people want to be paid to go out on the land, attend meetings, share food in the community, and a loss of communal values has occurred to some degree; increasing participation in the wage economy increases the influence of external forces on First Nation culture; people are working in mines and oil and gas away from the community, and the result is less time for harvesting; "we are living the city life"; creation of the welfare system discouraged people from practicing their rights to hunt, trap and fish; the modern culture is "too fast a life for me"; there was a time, not that long ago, when people used to take their time; people used to visit for long periods of time, but not any longer; too many activities for youth do not involve hunting; recreation programs in Fort St. John may be preventing people from participating in traditional activities; "many children and youth are not fit enough to undertake the physical work required when living out on the land."	labour and business demand	increased short-term vibrancy in local and regional economy increasing T8FNs participation in wage economy, with potential adverse cultural spin-off effects	elders are sent to monitor activities at Site C and elsewhere and this prevents them from doing other things of value for their families, for their community and for their traditional culture; employment away from the reserve for Site C would lead members to permanently relocate in order to obtain seniority;	all T8FNs and home communities
23	cultural heritage	culture	language retention	promotion and protection of culture	Beaver/Dunne Za language use appears to be on the decline – "people are losing their language"; language is necessary to understand some traditional cultural activities; difficult to teach language to children and there are few language teachers on the reserve; "young people don't speak Beaver"; "we were taught to be ashamed of our language"; need to teach language to children; "language should be a big part of our culture, but too many people are speaking English"; "young generation not learning their language"; people who know the language are forgetting it. On the other hand, the Beaver language program is positive and ground-breaking; compact disc created to teach language to children; language making a bit of a comeback after almost completely disappearing; more children showing interest in learning the language; there are some efforts to develop a language program within the schools; parents encouraging children to understand the language even if they do not speak it; some children learning from their grandparents	Dam; reservoir; realignment of Highway 29; labour and business demand	reduced access to areas for gatherings reduces cultural transference; reduced places for transmission of oral history and use of Beaver language on the land; increased wage economy activity reduces cultural practice and language use	Reduced practice of First Nations languages; "Language retention is kinda low. I know my language. Trying to get younger generation to learn their languages. Easier to learn when young. Everyone should sit around with elders at culture camp; better place to learn than in the community. Culture program along with land study."	All T8FNs and home communities; implications for future generations of T8FNs members

24	cultural heritage	culture	oral history	protection and promotion of culture	strong oral histories associated with area, including memory of community relations, rafts, travel routes, trails connecting First Nations people; arguments between First Nations and the Hudson's Bay Company over the price of furs / method of trade, which was subsequently quelled during gold rush; lack of trust between First Nations and first settlers.	reservoir	flooding will cover up areas of cultural reference	loss of oral history and loss of physical points of reference on the land critical to inter-generational knowledge transfer in oral cultures - elders or the people that want the future generations to have a sense of reference to the land so that they can always go back in the future years to a particular place and say, "what type of person are you" and say "I'm this" or "I'm that" or "my ancestors lived on that area, they hunted in there or we camped in that area when we were younger, all of those give you a sense of who you are, a guidance, so those are like guiding posts, songs stories, give you a sense of trail."; "Getting used to how the landscape has changed would be difficult"; "Maybe they (i.e. next generations) won't miss it, they'll never know how it looks... It's easier for the elders to show us how our culture was, but you know how they said they show spiritual places and stuff, it's easier for them to show us that stuff and teaching us more about the culture by taking us there." "Less access to wildlife or less abundant wildlife = less ability to tell stories and reduced oral tradition and culture".	All four T8FNs and future generations; all areas covered by flooding in the Peace River valley
25	cultural heritage	culture	overall well-being and quality of life	protection and promotion of Dane-zaa culture; memories of Peace River valley; intangible connection to land of ancestors	memories of the Peace River valley are central to many T8FNs members; to their oral history and sense of self; " I have memories of me and my grandparents and parents, all of us, camping just outside of Hudson's Hope just by Farrell Creek we camped there and they used to have a rodeo there. That was one of our summer fun things to do, was taking time out to go to that rodeo and camp there for a week or so."	dam; reservoir; Highway 29 realignment;	damming of Peace River and flooding of large parts of valley causing changes in the viewscape and physical changes on the land, along with reduced access or complete indundation of key gathering, harvesting, transportation, and other areas with memories attached	Psycho-social loss, sadness, anxiety, especially among elders but also among working age people with strong memories of the valley and youth who are just forming relationships with the valley; anger, disappointment, a sense of loss - "I think for me it would be devastating and I know for my mother it would be devastating because over a lot of the years our family has travelled up and down that valley it's been our route to our relatives, we have relatives in Profit River as well so. It's just the memories you know. It would just be a shame to see all that under water. I drive that everyday pretty much that road and when I look at the signs and think that could be that water level I just think on a daily basis it just gets me."; "Also, loss of oral history. When I was younger, I probably wouldn't have cared about something like this, I was starting to learn who I was as a Dane-zaa woman and Cree woman that I realized things like this are really important to me, because I'm learning about my culture now and land is like connected to who I am, and I don't want to see more land loss, I don't want that to happen, I want to be able to speak about that with my children and pass on what I'm learning, stories that I hadn't heard yet, and those things, they don't need to be lost we've already lost so much... we need to learn to salvage what we have, what we have left, we have lost so much already and it's about preserving it and keeping it alive. I feel like stirring up something in their souls or in their memories, because I believe that our ancestors are always connected to us and stirring that up, so it's kind of awakened them to who they are; Because I would like her [the respondent's young daughter] to feel the same sentimental value that they showed me that I feel and I'd like to show her, and if it's gone we won't be able to... Our culture will slowly continue to be lost and sooner or later when she has her babies, it's going to be like nothing, like our culture never existed. I just want to keep the culture going as long as I can"; many community members would despair and feel loss of identity at the loss of the Peace River valley.	All four T8FNs
26	cultural heritage	culture	relationship to the land	protection and promotion of Dane-zaa culture; quiet enjoyment of the land	Peace River valley one of the few good places left, even with existing alienation	dam; reservoir	increased access for recreational non-Aboriginal harvesters to the area between Site C and Hudson's Hope, including tributary rivers, increased power boat access, increased access to harvesting areas up the tributary rivers; creation of RV parks in PRV or other types of worker accomodations for Site C may add to alienation	reduced Aboriginal enjoyment of the land due to increased non-Aboriginal recreational and harvesting use; reduced solitude and quiet enjoyment of the land; leading to alienation and less time on the land in the Peace River valley; "quiet and stillness and peace of mind" are things T8FNs appreciate in the bush; Site C will increase traffic, make the region more dangerous for people and wildlife; "So as far as controlling this reservoir, there's going to be a whole bunch of people, they're going to have boat tours and all that stuff and anybody that's living on the river, the farmers that live there won't have a safe environment also, and the party-goers with their expensive boats and partying - they may negatively impact on experience of the land by T8FNs".	all T8FNs and members with desired traditional acitvities in the Project activity zone
27	cultural heritage	culture	sacred sites	protection and promotion of culture	"[There are] lots of graves under the WAC Bennett dam, people [Hydro and government] don't care about that."; Peace River valley considered one of the better places to be buried; fundamental difference from category of physical heritage resources due to "desecration" concerns of human, spiritual, remains, but a related topic	dam; reservoir	flooding of grave sites, known and suspected; including potential re-surfacing of human remains	according to T8FNs members, burial grounds are located on the south and north banks and would be flooded; there is a loss of burial grounds for which mitigation will not be possible - "do we dig up all the graves and move them all?"; psycho-social effects associated with "desecration" of Dane-zaa grave sites - loss of the place where Dane-zaa bury their dead; "You flood the river, you flood the river and if there's a burial site, it will come out, because the spot that the hole you cut and it's coming up pretty soon, the box, pretty soon the bones all come out."; "There are a lot of people buried on that river."; Site C will "disrespect and destroy the graves of our ancestors".	primarily the north shore of the Peace River from Fort St. John to Peace Canyon Dam, including Attachie and Cache Creek areas
28	cultural heritage	culture	spirituality	promotion and protection of culture; practice of Dane-zaa spirituality	Communities no longer have spiritual leaders who can teach the traditional spiritual ways; the Peace River Valley is an essential place for Dunne-za to practice our culture; "the churches...separated us from the way that we were shown which was our way to pray, our sacred ceremonies were taken away from us and in some places they were lost - they are, not were - they are lost to us". On the other hand, there is greater practice of traditional spirituality than previously during the dark times of residential schools and assimilation policy; elders continue to sing songs and say prayers in the community and at community gatherings; the Christian church has less influence among youth; many historical ceremonial practices of elders have been lost and replaced by both Christian and native practices from other traditions, such as sweats; people now feel more pride in their aboriginal identity, origins and history despite the efforts by the Christian churches to extinguish that; different religious practices respect each other in the communities;	Dam; reservoir; Highway 29 realignment	flooding or other alienation from spiritually significant sites in Peace River Valley	Effects of the Project on spiritual well-being cannot be adequately mitigated; "how do you mitigate the spiritual link to the land - it is irreplaceable"	All T8FNs; inundated zone and Peace River valley between Fort St. John and Hudson's Hope; implications for future generations of T8FNs members

29	cultural heritage	culture	traditional knowledge	promotion and protection of culture	community members still share knowledge and work together as in the past; "It was not cool to be Indian a generation ago, but this is changing"; there is a cost to maintain traditional knowledge, as traditional knowledge and oral history studies are costly; Peace River valley is a "cultural landscape" integral to continuation of the Dane-zaa oral tradition, seasonal round, and "mode of life".	Multiple	reduced access reduces practice which reduces knowledge of Peace River Valley	Site C would have a negative effect on First Nation cultural sustainability: "Will the future stories be 'when we used to have caribou', 'when we used to have moose'?"; "We would not be able to show future members where we currently hunt in the valley."; "The dam will ruin the history of our people in that valley.";	All T8FNs and their relationship to the Peace River valley in the Project Activity Zones areas; implications for future generations of T8FNs
30	land use	agriculture	food security	sustainable development and economic diversity; amount of producing high value farmland; local and regional food security	there is a variety of high quality, class 1 agricultural land in the Peace River valley between Hudson's Hope and Fort St. John	dam; reservoir	flooding of farmland creating irrevocable, permanent loss;	high quality, class 1 agricultural lands will be lost due to flooding; loss of farms; reduced agricultural land and local/regional production of foods; poorer diet or increased food costs; reduced regional food security; reduced ability of Peace River country residents to grow large amounts of garden produce at commercial scale (futures foregone);	all regional residents, especially those at economic margins (closer to or below the poverty line)
31	land use	competition for resources	terrestrial access	meaningful practice of Treaty 8 rights; access to land and waters for traditional practices; public safety	existing radically increased access has already adversely impacted on T8FNs' Treaty rights; "We are at a perfect location for [non-Aboriginal] recreationists. We have seen approximately 80 people quadding at Crying Girl Prairie - they are shooting guns and roaring up and down the roads with their quads. We want to protect our community." Increased roads in the territory have increased non-Aboriginal hunting pressures and safety (vehicle and accidental shooting) risks; some people don't feel welcome or safe on the land anymore; previous development has resulted in loss of trade routes and commercial (Treaty protected) rights with other Aboriginal peoples due to land alienation, loss of river transport corridors, reduced hunting practice and reduced hunting success; there are roads everywhere now, not only for vehicles, but for ATVs, snowmobiles and motorcycles, which are very hard on the environment and stressful for animals; there are already too many big trucks on the road; some people do not feel welcome or safe on the land anymore;	Highway 29 realignment; temporary and permanent access roads; transmission line to Peace Canyon	moving the highway will limit T8FNs access to some portions of traditional territory in the Peace River valley; increased access in other areas via new roads, right of ways, or Highway 29 realignment may increase access for both T8FNs and (primarily) larger numbers of non-Aboriginal recreational users/harvesters	reduced land base for traditional practices; alienation of additional areas through road and highway building and creation of industrial borrow sites; uncompensated loss of "Dane-zaa territory"; concern about access roads and transmission lines through Peace-Moberly Tract; new roads in the Peace Moberly Tract, in the event the Project proceeds, would be a highly contentious issue; desire to play a role in implementation of transportation access; proposed power line will result in better access into the Peace Moberly Tract for all-terrain and four-wheel drive vehicles by non-natives; concern that off-site infrastructure (roads, transmission lines, quarries, hauling, etc.) will have direct impacts during construction and open territory to new industrial activities; there are doubts that the roads can be decommissioned to prevent future access; creation of a road south of the dam would open up the region to hunting by non-Aboriginals, and the area is one of the few remaining areas with high biodiversity; on a permanent basis, WMFNs would be by-passed by the upgrading of the Jackfish Lake Road by the Project; construction of a permanent bridge across the Peace River may alter the transportation patterns in the region; concern that transportation along Highway 29 during construction will limit access to Fort St. John for education, training, employment and activities during construction; concern that travel times will increase during construction; "Land is important to us, without the land, you kill our spirit and that's what you are doing. We get nothing and we can't get what we need from the land." preferred harvesting sites used only in times of great hardship.	any new roads or other access points related to the Project in the Project Activity Zones, as well as areas where existing access roads are decommissioned (e.g., existing alignment of Highway 29); all T8FNs, especially current and would-be users of the Peace River valley for practice of Treaty 8 rights or other activities on the land
32	land use	competition for resources	water-based access	meaningful practice of Treaty 8 rights; competition for resources with non-Aboriginal harvesters; public safety	previous reservoirs (Williston; Dinosaur Lake) have seen increased non-Aboriginal recreational boating and fishing activities in areas primarily previously used by T8FNs.	dam; reservoir	increased water-based access for recreational non-Aboriginal harvesters to the area between Site C and Hudson's Hope, including tributary rivers, increased power boat access, increased non-Aboriginal access to harvesting areas up the tributary rivers; ability of First Nations to practice treaty rights on the land would be further decreased through additional land alienation resulting from Site C; increased numbers of non-Aboriginal recreational users may alienate T8FNs access to reservoir;	increased harvesting and disturbance pressures on fish and wildlife in and around inundated zone; "while the project will create new reservoir recreational opportunities, these will not offset the quality and value of lost river-based recreation"; the creation of "improved" recreational access sites will allow even more people to come from away to camp, hunt, fish and boat on the River; flooding up the Halfway River will turn Graham River Park into an even bigger party area; "the public access for the bridge would affect the area to the north in the Peace Moberly Tract; there are few places that remain that have the biological diversity of the Peace River; Dane-zaa require diversity to maintain cultural sustainability; "We need an area for us and not for recreation."; "There are people out there who want to have beach front property."; river boats would have easier access up the Halfway River - "We don't want river boats"; "What about aircrafts and float planes that would use the reservoir to access our areas?"; concern that recreational access cannot or will not be managed; reservoir and transportation changes will increase sport hunting access; concern about increased non-Aboriginal use of the land (e.g., boating up the inundated Halfway River) reducing Aboriginal quiet enjoyment of the land; concerns about decreased boating safety associated with making the Peace River Valley into a recreational reservoir and increasing powerboat traffic; "A reservoir, particularly a reservoir that close to Fort St. John, you're going to see far more recreational and sports users and non-Native users that will interfere with fishing practices. There will be speed boaters and that kind of stuff".	T8FNs members who use or desire to use the stretch of the Peace River between Hudson's Hope and Fort St. John for transportation, fishing, and access to harvesting locations for practice of Treaty 8 rights, including the Moberly River and Halfway River, in particular, in the would-be inundated zone. Halfway River valley of particular concern to HRFN members, but the entire inundated zone and shoreline areas are important to all T8FNs.

33	land use	planning	protected areas	meaningful role in governance and stewardship for T8FNs	Twin Sisters area and the proposed Peace-Beaudreau protected area in the Peace River region are two "low hanging fruits" that could help kick start a protected areas initiative; the Peace Moberly Tract and Area of Critical Community Interest are important places for wildlife habitat continuity; there was a low 4% maximum protection ceiling in the Fort St. John LRMP, as opposed to 9% in the other adjacent planning areas; there is a need to determine thresholds for industrial development activities within the planning region; there is a need for development reclamation planning and implementation in the region; "BC Government watching industry is like the fox watching the henhouse"; "Cooling down the economic hyper-growth in the region would foster a more rational approach to land use and conservation."; "Why is BC Hydro bringing up the regional land use plans if they are no longer being implemented?"; concern that First Nations do not have a meaningful voice in planning future change meaning that future goals and vision for the Peace River Valley will not be attained	Pre-Project planning process (a valid development component already ongoing - proper SEIA and CIA recognizes that Project-related effects start well in advance of ground-breaking)	Site C directly conflicts with T8FNs vision of what land use should look like in the future for Peace River valley (see Site C Declaration)	Site C would create a "futures foregone" scenario for land use and protection in the Peace River valley currently not reconcilable to T8FNs vision of their desired future	All four T8FNs, now and into the future generations
34	land use	treaty rights	camping	meaningful practice of Treaty 8 rights; availability of camping sites	no good places to camp as good sites taken up by non-Aboriginal hunters - "we don't get out as much as a result"; most occupancy in recent years has been overnight or weekend camping; historically, there were longer term seasonal camps throughout the area for different Dane-zaa groups; First Nation's people used to meet frequently in what is now Taylor and in the area that is now the Walmart in Fort St. John	Dam; reservoir, Highway 29 realignment; worker accommodation (including RV sites); labour demand	reduced or lost access to traditional habitation sites; increased non-Aboriginal camping presence in Peace River Valley	reduced temporary habitation (camping) by T8FNs in the Peace River valley; contributing to reduced time spent in the area and reduced enjoyment of the lands and harvesting in the area; Site C would contribute to effects of existing development on camping by bringing more people to the area; "we won't be able to camp in that area"; RV sites to be set up for workers; likely also to see would-be job seekers	All T8FNs who use or desire to use the Peace River valley and other Project Activity Zones for practice of Treaty 8 rights; implication for future generations of T8FNs members; specific areas of focus include but are not limited to Attachie (Halfway
35	land use	treaty rights	cumulative effects (developme nt in general), project effects	meaningful practice of Treaty 8 rights	"It is difficult to find a place to hunt where there is not development or infrastructure"; "agriculture and industry are pushing us into a corner"; "there are fewer places to camp and hunt"; wildlife scared off by oil & gas activities; spills not reported; areas now cleared and fenced off; over 8500 gas well sites in DRFN area; potential to reclaim the land following conventional well development may not occur if wells now used for shale gas development; BC has no oil and gas land restoration fund; areas where WMFNs can harvest are already affected by forestry, the first two dams, roads, gas exploration, coal mines, etc.; "if not a pipeline, it's a power line. If it's not a power line it's an oil rig, and if not an oil rig it's going to be a coal mine."; "As impacts move further into our remote areas, what alternative refuge or habitat would animals have available to them? What will we have available to continue practicing our rights?"; there is concern about the range of resource development, agricultural development and recreational initiatives within the provincial Crown forest lands situated north and south of the Peace River; "We are no longer able to practice the mode of life that we have been promised."; "If there wasn't a lot (i.e. of other resource development and agricultural development) going on, a proposed Project like this might be tolerable..."; see Section 4.2 of the T8FNs Baseline Community Assessment for further discussion of cumulative effects on the Dane-zaa.	multiple	animals "pushed down into the valley" by industrial impacts in places like Farrell Creek, Del Rio, would see their areas of refuge further reduced by the development of Site C; Site C would reduce faith in quantity and in some cases quality of berries, other food plants, medicinal plants, clean water, fish, and other natural materials relied on by Dane zaa for physical and cultural sustenance;	Site C will interact with the effects of existing development; "I am concerned that the Horn River to the north and a dam to the south will have huge indirect impacts to us and we will be ignored and left alone to live with the consequences"; concern that Site C will further impact people's connection to the land; the many impacts of just the proposed Site C itself would have a cumulative effect; "Site C has too much of an impact"; the effects of the new dam cannot be separated from the effects of the prior dams; there will be further flooding of camping, hunting and trapping areas; Site C would further reduce the proximity of wildlife and limit the ability of members to transfer knowledge to the next generation; "There's physical facilities, flooding, the bank sloughing, access roads, transmission lines, and there's other things like small pipelines and water intakes. All these things have an effect." Concerns about the cumulative effects on habitats if hectares of land are taken by other interests in the area (oil and gas, wind power, gas pipeline, transmission lines); "Too much area already lost, don't want to lose more areas where Dane-zaa can currently harvest." "At some point so much of a resource will have been taken up that taking up more will mean that exercise of the right becomes practically impossible that's what Site C represents, at least to West Moberly, Saulteau, Halfway and in my estimation Prophet and that's said in the context that all of the other river valleys".	Project Activity Zone and beyond; all T8FNs
36	land use	treaty rights	cumulative effects (Peace River Peace Canyon to Site C), project effects	meaningful practice of Treaty 8 rights; % of Dane-zaa hunting, fishing, trapping, picking berries; and amounts	there is a desire to continue to use the Peace River valley and to even increase use; there is a loss of opportunity to undertake river-based activities as a result of effects of multiple hydroelectric developments - issue is similar to loss of caribou due to loss of caribou habitat; "effects of prior development need to be considered"; some agricultural uses are accepted in the Peace River valley, even though Treaty Rights extend over private land; use of the valley by First Nations would increase if the number of non-native hunting and fishing licenses decreased; First Nations use the Peace River valley despite limited access points; "people have come to appreciate what they have almost lost"; need to consider activities in Farrell Creek and Peace Moberly Tract in determining cumulative effects; coal-bed methane is taking up land in WMFNs region; "Elders used to fish by the Peace River, we would take a little hook, potato, and bannock. Now, today, we would starve if we go down there and do not bring a piece of beef. We used to drink the water, dip our cup into the water, and now we cannot just because of all the loggers."; amount of recorded land use and occupancy within the immediate Peace River valley in recent years has been affected by cumulative alienation effects, including uptake of lands for farming and other private holdings, increased oil and gas development, increased forestry, and reduced faith in certain food sources (e.g. fish contaminated by methylmercury in Dinosaur and Williston reservoirs), increased traffic and roads; respect for farmers has reduced harvesting on the north side of the Peace River valley; area between Halfway River reserve and Peace River at Farrell Creek Road are extensively harvested, but there is alienation due to forestry, roads, farming and increasing gas development; "too much of the area is already lost - we don't want to lose more"; the agricultural activities in the Peace River Valley have reduced the potential of First Nations to carry out traditional activities, including hunt, fishing and gathering; the land has become alienated from First Nations, as agriculture has displaced wildlife leading to less wildlife or lower quality wildlife;	multiple	animals "pushed down into the valley" by industrial impacts in places like Farrell Creek, Del Rio, would see their areas of refuge further reduced by the development of Site C; Site C would reduce faith in quantity and, in some cases, quality of berries, other food plants, medicinal plants, clean water, fish, and other natural materials relied on by Dane zaa for physical and cultural sustenance	reduced harvesting, intergenerational knowledge transfer; reduced practice of mode of life; loss of connection to land and animals; reduced well-being and quality of life; concern about land displacement and how changes to fee simple land – land loss and the corresponding compensation to existing land owners would potentially create more land loss within the Treaty 8 Traditional Territory as provincial land became designated as fee simple land - private and therefore extinguished traditional use and practices.	Project Activity Zone and beyond; all T8FNs

37	land use	treaty rights	cumulative effects (prior Peace River hydro developme nt), project effects	meaningful practice of Treaty 8 rights	With W.A.C. Bennett Dam, people were flooded out with little notice; buildings, grave sites and communities were completely flooded; moose and other animals drowned en masse; animal migration patterns changed; important harvesting and wildlife habitat was lost with the creation of the new reservoirs; there was increased methylmercury in fish, changes in fish health and distribution, and loss of faith in fish for harvesting; connections were lost between people (e.g. Kwadacha or Finlay Forks with other Dane-zaa); loss of revenue from hunting and trapping; loss of travel routes up the Finlay and Parsnip Rivers; Peace River no longer freezes in the winter, so people and animals cannot cross the water body in winter; there are now reduced numbers of certain animal species (e.g. porcupine) on one side of reservoir; ice builds up on shorelines in winter in a slope, making it risky for animals to travel, and potentially causing increased mortality; "Now when you go camping you won't see one caribou. There used to be a thousand and it is the WAC Bennett Dam that did this. When the Dam came in there was no more fur."; "the impacts associated with construction and operation of the first two facilities upon the way-of-life of WMFNs must be considered when assessing the effects of the third Site"; "When they built W.A.C. Bennett Dam, they forgot about the caribou"; at first, the Provincial government promoted the reservoir for fishing, but fishing proved dangerous due to "100 foot missiles" in the form of large logs floating rapidly to the surface, fishing required a large boat, and the fish were contaminated with methylmercury; "to this day there is not much First Nations harvesting activity on the Williston Reservoir"; there has been a loss of river transportation corridors due to prior hydroelectric projects, reducing hunting practice and success; people have low to no faith in fish from existing reservoir due to mercury and other health concerns; certain animals rarely seen on one side of the river now, e.g., porcupine and lynx; animal populations cut off from one another by the existing reservoirs; there is a lack of faith in government and industry among First Nations – in part related to lack of recognition or reparations for prior infringements, such as the WAC Bennett Dam; there is a strong desire to re-implement a natural flow regime for the Peace River Valley	multiple	Site C would exacerbate previous and still existing BC Hydro project effects on the Peace River valley in a large number of ways identified in Section 4.2 of the T8FNs Baseline Community Profile.	reduced harvesting, intergenerational knowledge transfer; reduced practice of mode of life; loss of connection to land and animals; reduced well-being and quality of life; concern about land displacement	Project Activity Zone and beyond, including areas affected by the Peace Canyon Dam and WAC Bennett Dam; all T8FNs
38	land use	treaty rights	economy	meaningful practice of Treaty 8 rights; practice of commercial aspects of Treaty 8 rights; production of crafts from bush materials	"We have a treaty right as First Nations people to actually hunt and kill wild game and sell it to make a living off of it because that was part of our trade with the other groups coming from south, they used to trade us salmon for moose meat. That's a commercial, that's barter system, a commercial way of gaining what you don't have."; no reports of current guiding activities in the Peace River valley; given ecological characteristics of the area, it could support guiding activities	multiple	reduced economic vitality of traditional and mixed economy; reduced trapping; reduced barter of goods from the land; reduced production and sale of craft goods; impacts on wildlife reduces their health status and abundance thereby reducing harvesting practices and harvesting and trapping success; by extension this can negatively impact commercial Treaty rights for sale or barter of country foods	reduced production of crafts which lessens intergenerational knowledge transfer, reduces self-sufficiencey, reduces intergenerational relationships; increases reliance on wage economy and market goods; loss of income from reduced harvesting opportunities "Site C is going to impact our commercial rights, even if we are not using that right in the Peace River valley right now."; "It's a treaty right and it's a commercial right. I think what we need to do also is to find out how this project will impact that right."; "I know some people at home, what we do at home is we appoint a community hunter and what the community hunter does is hunt for those single parents, you know the women, that don't have anybody to hunt for them, elders, or anybody that just needs meat and they get paid to do that, that's basically their job." Any potential future guiding activities will be eliminated within the Project inundation areas, creating a "futures foregone" scenario arguably linked to commercial aspects of Treaty 8 rights.	all T8FNs, not limited to current land users, due to overarching and communal nature of Treaty 8 rights; with particular emphasis on current and desired harvesters within the Project Activity Zones or who depend on mobile wildlife resources that travel through the would-be affected area; T8FNs members who currently conduct guiding activities, have done so in the past, or who may desire to do so in the future; any Project Activity Zones that will be physically
39	land use	treaty rights	fishing	meaningful practice of Treaty 8 rights	there is already a loss of river-based fishing on the Peace River for local First Nations due to non-native fishing, purchase of lands by BC Hydro, and lack of access; HRFN members have to go into the mountains in order to fish as a result of activities closer to the reserve; boat launches are being constructed at important fishing areas to facilitate fishing - these benefit T8FNs members but are also potentially accessed by non-natives; the Peace River remains an important water route between Hudson Hope and Taylor, with a lot of boat traffic - many Dane-zaa fish up and down this stretch of the Peace River; WMFNs already have reduced fishing areas due to the restrictions in Moberly Lake to protect the native species, lake trout, which is almost extirpated, even though Moberly Lake used to be known by the name that translates as "Lake of Plenty" because it was the lake that people went to when their cache's ran out	dam; generating station; reservoir	Reduced faith in reservoir fish health (contamination); increased non-Aboriginal boat traffic in reservoir; concerns about debris in the water creating risks for boaters.	increased reservoir-based fishing by non-natives; concern that river boats will become more common and have access up the tributaries following reservoir creation; HRFN cannot prevent or control increased fishing on the Halfway River by non-natives; effects of Site C wlll contribute to the loss of faith in fish; especially due to methyl mercury	HRFN in particular is reliant on the Halfway River and concerned about inundation effects associated with Site C: "I have sons, where are they going to go hunting ten or fifteen years from now...where are they going to go fishing?";
40	land use	treaty rights	food security	meaningful practice of Treaty 8 rights; access to adequate country food to feed family and community	100% of DRFN and PRFN respondents in UNBC et al (2010a; 2010b) stated they want to utilize more country food; people that are concerned about hunting, trapping and fishing as a subsistence activity complain that there's too much sport hunting and too much pressure on wildlife stock and too much habitat degradation in conversion for them to be able to harvest enough wildlife to sustain their communities or their families. Food security exists when all people, at all times, have physical and economic access to food to meet their dietary needs and food preferences for an active and healthy life.	multiple	contribution to land alienation, habitat reduction, access to lands, wildlife observed health status, etc. may all contribute to reduced harvesting practice and success	reduced ability by T8FNs members to feed their families preferred country foods; reduced individual and population health; reduced cultural practices; reduced time on land	all four T8FNs
41	land use	treaty rights	harvesting of wild plants	meaningful practice of Treaty 8 rights	"There are now so many invasive plants. Plants that are not indigenous to this continent are growing out there in the wild and a lot of them look similar to our natural plants and if we pick the wrong ones, we can either die or get really sick"; berry picking sites have diminished over the years due to development; berry patches have been sprayed by herbicides in many areas, but the reasons for this spraying are unclear and opposed by T8FNs; gathering of berries and medicines continues to be an important part of the culture; there are rare medicinal plants located on the south facing banks of the Peace River; "I have no plans to pick berries or go hunting in some locations, as now there are too many people around."	dam; reservoir; site clearing and preparation, including along proposed transmission lines	loss of land due to flooding; reduced access into valley	Site C will flood berry picking sites and affect other gathering sites in the area; introdcution of invasive species by construction activities, boating in reservoir, of concern. Spraying around transmission line is an issue. Also, introduction of invasive plants may come from increased traffic .	T8FNs members actively utilizing portions of the Peace River valley; previously alienated but seeking to use the area again; future generations of T8FNs members

42	land use	treaty rights	hunting	meaningful practice of Treaty 8 rights; public safety; competition for resources with non-Aboriginal harvesters	high increase in non-Aboriginal hunting competition through much of T8FNs traditional territory; some T8FNs people are actually wearing reflector vests even while they are in their camps and not just when they are hunting; industry is posting "no hunting" signs around their work area; "If you go in anywhere this side of Johnson Creek and Williston in the hunting season, you cannot find a place to camp or hunt moose because of the amount of activity"; T8FNs have to travel further to hunt; harvesting opportunities are reduced as a result of fewer and sicker animals; WMFNs selected Moberly Lake for their reserve due to the wildlife and now that wildlife is being affected by development; concern that now that caribou is gone, next most important species to WMFNs, namely moose, will be next - priority species are caribou, moose, elk, deer in that order; one species is not a direct replacement for another; industry workers are hunting and taking up hunting areas normally exclusively used by First Nation members; WMFNs members must now hunt elk but this is not a preferred species; "there is not much land left"; moose no longer found in locations where they used to be; "there is way too much hunting from non-native hunters"; HRFN members hunt and fish frequently along the Halfway River	multiple	increased regional population; increased water-based and terrestrial access for non-Aboriginal harvesters	Site C would reduce First Nation ability to harvest wildlife; further loss of moose hunting areas; loss of hunting opportunity could be very negative depending upon the effects of the Project on moose and other species hunted; "If it is going to back-up Moberly River, my gosh, it is an important hunting territory!"; traditional transportation routes will be affected; family hunting patterns could be altered	all T8FNs hold Treaty 8 rights in Peace River valley; primarily impacting on current and would-be future traditional harvesters in the inundated zone and any areas where additional access is created in the greater Peace River valley by the Project
43	land use	treaty rights	mode of life	meaningful practice of Treaty 8 rights; protection and promotion of culture	the treaty right is our right to pursue our mode of life, which means everything that we do for the purpose of surviving from the land with no boundaries; it is not only hunting, fishing, trapping or gathering, but the right to education, the right to economic development, cows and ploughs...; there is a loss of First Nation self-reliance and weakening of younger generation through lack of engagement in traditional economy; there is continued use of the Peace River valley by several Dane-zaa families as their 'grocery store', especially for game, but also fish and food plants; loss of communal values has occurred to some degree in the First Nation communities; "I am still out on the land, still walking, still praying"; people continue to eat rabbits and porcupine; people hunt, camp and fish; "majority of people still know how to hunt, but maybe there will be nothing left to hunt"; "current generation is less afraid to defend Treaty Rights"; there remain good teachers of traditional activities; "Treaty 8 means to the Indian people a lot more than words can ever describe"; adults who no longer spend time in the country still want their children to learn; need to take youth out into the bush more frequently; all four First Nations have a right to defend treaty rights in the Peace River because the Treaty covers 840,000 square kilometres and the rights apply everywhere no matter where we are as long as its on Treaty 8 territory; people are not having cookouts while fishing by the rivers, not travelling by horse, not hunting or trapping beaver, and not eating lynx; "people used to camp the entire summer, but now this is less frequent"; "there has been a big change in 17 years"; "less hunting over the past 10 years"; "only the odd person is hunting";"kids are not learning about dry meat"; adults who no longer spend time in the country still want their children to learn; need to take youth out into the bush more frequently; substance use is affecting youth's ability to learn about their culture; "the old way-of-life provides no income"	multiple	loss and alienation of critical portion of cultural landscape with high traditional use values in Peace River Valley (see T8FNs Baseline Community Profile Preamble and Candler et al (2012))	reduction of a critical portion of the cultural landscape, which combines both culturally important areas and remaining high harvesting and ecological values for preferred harvesting species for T8FNs, could have substantial impacts, including reduction of traditional harvesting practices, reduced hunting, trapping and fishing success, reduced consumption of country food, reduced sharing, loss of traditional skills, reduced inter-generational interaction and knowledge transfer, reduced self-sufficiency, psycho-social impacts such as a sense of loss of cultural continuity and "sense of self". The Peace River valley is considered one of the "last, best places" for maintenace of T8FNs mode of life protected under Treaty 8.	harvesters and would-be harvesters of current and future generations of all T8FNs.
44	land use	treaty rights	past infringements	meaningful role in governance and stewardship for T8FNs; recognition of - and compensation for - past infringements	"There is a deeply rooted sense of injustice from prior infringements by WAC Bennett and Peace Canyon Dam"; "I feel like we don't matter because really up in the north compared to the province I think we are just a handful of First Nations people yet our territory covers a third of the province and our voice doesn't count for anything it seems. It makes me mad when I think way back when our grandfathers signed the treaty with the understanding that it was a peace treaty and that it was a sharing treaty and it's not like that. They come and take over they put us on little blocks of land called reserves and they changed our whole mode of life and they are still changing it today with this development and dams they are putting in and we are still suffering the effects of Williston. The Bennett Dam and they are going to do it all over again."; "Members have received zero benefits from the two previous dams. These guys got nothing when the Bennett Dam and the Peace Canyon Dam were built, they got absolutely nothing. A few trap lines were bought out and that was it. "There is a strong sense amongst T8FNs that they received the brunt of negative effects without commensurate/compensatory benefits from any BC Hydro projects to date.	multiple; including pre-Project planning	decision-making process perceived as structured so that it is largely beyond the ability of the Dane-zaa to control their own future; sense of a "done deal" contributing to anomie; if Site C goes ahead without dealing with claims over past infringements, this will add to "deep seated sense of injustice" of T8FNs	psycho-social effect of inability to control one's own future and protect interest of current and future generations; sense of hopelessness and helplessness; anger and anxiety; continuation of impact inequity started with WAC Bennett Dam; decreased faith in government; "reason the opposition to Site C is so strong is because of this deeply rooted sense of injustice associated with WAC Bennett and [Peace Canyon]," "That beautiful valley over there, every time I drive through this I wonder why they are wrecking this place, I just have a mad feeling in me, but what can I do?"; "What I'm saying is it will shake these communities to their foundation as a people and it will cause them to question who they are and where they've failed. To large extent the effect [of Site C proceeding] would be tantamount to an extistential break. In the 70s and 80's they fought hard and they've spent a lot of their energy and their cultural and spiritual power in opposition to the previous Site C and now this Site C. If the government decides not withstanding everything that's going to be presented in the environment impact assessment process to proceed and build this dam and flood this valley, that decision will get appealed, we will have a big court battle, and if we lose, these communities have no place to go, it's not that, you know, this decision is a decision that can't be shrugged off. You know, what I think will happen is at a deep community level, a lot of people will be pushed back into the idea that it doesn't matter what they do, how hard they fight, how much evidence they have of the importance of this place that the Crown will not listen to them and that there is no reason to fight to sustain, at which no one else is willing to respond to, it's the same sort of thing with caribou right now. In the face of all kinds of laws and international attention on the need to do something we're losing an argument right now with the province and with the federal government."	all T8FNs

45	land use	treaty rights	respect	meaningful role in governance and stewardship for T8FNs	there is a noted lack of respect for T8FNs by government and industry across a variety of categories and issues; lack of respect for and recognition of Dane-zaa culture as the first culture in the area; for example the infamous “first man over the Rockies” monument; the Dane-zaa in many ways feel like "forgotten people".	pre-Project planning process (a valid development component already ongoing - good SEIA and CIA recognizes that Project-related effects start well in advance of ground-breaking)	lack of meaningful outcomes for T8FNs out of regulatory/EA process could increase psycho-social effects on individual and communal mental health and sense of control over lands, resources and futures	increased alienation, increased psycho-social effects with negative mental and potentially physical health outcomes, sense of loss of control, lack of willingness by T8FNs to engage in this and future EA/regulatory processes if there is a sense of a "done deal" without a chance for meaningful T8FNs input	all T8FNs; not limited to one geographic location
46	land use	treaty rights	stewardship	meaningful role in governance and stewardship for T8FNs; ability to meet stewardship responsibilities handed down through generations	T8FNs members attempt to go out to different areas so as not to deplete the resources in any particular area; there has been enforced loss of Dane-zaa role as stewards of traditional lands through government and industry regulation; "since time immemorial our people have not only managed the land but they managed the animals and all the natural resources that we required to survive as a people"; "we see ourselves as stewards of the land"; travelling on horseback and on foot (as opposed to motorized vehicles) are ways of being able to manage the animals properly and this is part of the First Nation mode of life; some First Nation young people are now choosing to avoid using ATVs for hunting, using them only sporadically when it comes to taking an animal out; "The fighting for and result of the caribou case makes me feel proud." "We were land managers, we always were, we still were, we managed how we harvested what we survived on, we practiced what is called the seasonal round. Loss or area is going to be a piece that is missing from our seasonal round of hunting, already heavily impacted from oil and gas development, we have partially lost the right to govern that land traditionally like we always have." "[We have] no recognition as a people, meaning, we have no respect from industry or govt and the knowledge we carry re: to land use and management."	multiple, including pre-Project planning	failure to meet stewardship requirements laid down by the Creator if Site C proceeds; lack of control or voice in future land use	concerns about lack of a meaningful voice for First Nations in planning for future change and inability to see future First Nation goals and aspirations for the Peace River Valley attained; potential for serious psycho-social harm in form of sense of helplessness, worthlessness, anomie, failure, and associated social dysfunction (e.g., addictive behaviours; poor coping strategies); "T8FNs members may face an "existential break" should Site C proceed. All their energies poured into avoiding it over several decades would seem for naught, and contribute to a larger sense of lack of agency; lack of control, over their own futures, sense of marginalization"; deeply rooted need to save the valley: "there is this community at the family level and at the community level a strong sense that we have to save the valley to save ourselves, that too much has been taken so it's like what my wife has said, this is what her dad told her she had to do, so it's, you know it's a no compromise type of thing. "	all T8FNs, including future generations
47	land use	treaty rights	trapping	meaningful practice of Treaty 8 rights	First Nation members continue trapping and some own provincial traplines; construction of trapline cabins by HRFN considered a positive action for supporting member activities on the land. T8FNs members reported trapping ...in the to-be inundated zone (Candler et al 2012, First Light Initiatives 2009).	dam; reservoir	trapping activities will be eliminated within the Project inundation areas and may also be affected by migration and disturbance effects	the full extent of the effect will depend on the fate of wildlife in the area outside the inundation zone; "We don’t want no compensation. We want the trap line the way it is. We don’t want no dam whatsoever." Important to recognize that Treaty 8 trapping rights not limited to commercial trapline rights.	all T8FNs held commercial traplines or other trapping areas in the Project Activity Zone. ADDITIONAL INFORMATION FORTHCOMING IN T8FNs BASELINE COMMUNITY PROFILE.
48	land use	treaty rights	water	meaningful practice of Treaty 8 rights	already, T8FNs unwilling to "dip a cup" virtually anywhere in their territory, unlike the old days; need to carry water everywhere now, which ncreases costs and efforts of harvesting; access to spring water is an important part of exercising rights; "We live on water; all of the creatures live on water. Yeah, it is very important to us."; there is loss of faith in the quality of water in the Peace River Valley and its sub-watersheds; Charlie Lake is suspected to be contaminated and not harvested frequently for subsistence any longer; all this activity that is happening, industrial activity, the dams, it's contaminating the water on a massive scale; "We used to drink water from any little ponds, creeks, and then the last how many years now we can't drink the lake water anymore, the river water, we can't drink it anymore, we can't even swim in it anymore."	multiple; dam; reservoir; Highway 29 realignment; quarried and excavated construction material; storage and stockpile of construction materials;	rising waters will scour banks and hillslopes, increasing turbidity and potentially bringing hazardous materials into water (e.g., from landfills); inundating existing roads will release chemicals; reservoir creation will interact with oil/gas wells leading to water contamination; concern about inundation of dam materials on water quality; springs that people rely upon could be flooded by the reservoir; large quantities of overburden will need to be placed either in or near the river during construction, reducing water quality; concerns about contaminated sites in proposed inundation zone (e.g. Lynx	lower water quality and negative impacts on aquatic habitat; "The north bank of the river will be constantly sloughing and the sediment will wash downstream destroying spawning grounds for fish"; reduced faith in water quality; need to carry bottled water; contamination risk to fish and wildlife, affecting willingness to harvest from area.	primarily the reservoir area, including major tributary inundation zones such as Moberly and Halfway Rivers; all T8FNs who travel on the land or water in the area
49	land use	visual and sensory resources	overall well-being and quality of life	healthy communities; aesthetic enjoyment of PRV	First Nation members indicated a strong connection to the current viewscape of the Peace River valley as seen, in particular, from Highway 29; "Peace River valley is beautiful and people enjoy the area"; beauty of region surrounding the First Nation communities is valued by many; HRFN is surrounded by animals and their habitat; "All the land along the river is so beautiful. The river is important, you get on top of the hills and you look out on a beautiful country"; "Throughout the 90's, off and on, this was our little driving area where we could go and relax and watch wildlife or whatever, so we would take this little road, we just wondered through it, it's so beautiful, throughout the summers and into the fall. So we usually wondered through it because it's closer to the river. There are not a whole lot of areas where you can get down to the river and just enjoy, that's close in by our home."	inundation; physical infrastructure put in place; moving Highway 29	changed viewscape with more industrial and anthropogenic (human-made) aspects; "tainting" of physical characteristics of impacted area will create sensory disturbances of a variety of types, including changed visual appearance, smells, noises, vibrations, taste of harvested resources and water	Reduced aesthetic value and recognizability for T8FNs; reduced solace from the aesthetic landscape; inability to "decompress" from mental strain of increasingly busy, urbanized, and wage economy lifestyle; reduced Treaty 8 rights practices by T8FNs in the affected area, leading to reduced access to important gathering sites in the Peace River valley;	Members of all four T8FNs; primarily impacting on those members who travel through or practice their rights in the Peace River valley on a more regular basis

50	socio-economic	business development	opportunities	equitable access to education, training and economic opportunity; percent of business opportunities likely to accrue to T8FNs from Site C	the T8FNs are exploring ownership of commercial properties and urban reserves in Fort St. John, including leasing of reserve lands; First Nations also exploring tourism, properties, and other economic development; unknown degree of T8FNs engagement in construction activity in FSJ to date; some success from DRFN-based businesses reported in Fort St. John; existing T8FNs business engagement with T8FNs reported as limited and difficult to access: "BC Hydro sends you RFPs, but small First Nations businesses are not as competitive as 50-year old businesses;" "BC Hydro say they promote First Nations businesses – but really it is just tiny...difficult to get work from BC Hydro". Community isolation limits business development opportunities; typically have to move into larger communities to take advantage of busines opportunites via economies of scale and proximity; this impacts on community cohesion and function and contributes to the creation of "haves" in urban areas, and "have nots" in the reserve communities	labour and business demand; worker accommodation	potential business development opportunities for T8FNs, especially in construction; size of project components & lack of "set aside" for T8FNs raises strong concerns about ability to take advantage of capital and labour intensive construction phase; not a level playing field to start with; large contracts, specialized technology, weaker starting point for T8FNs businesses due to existing hurdles make it posssible T8FNs business "capture" will be limited; increased demand for housing in Fort St. John due to in-migration effects of Site C could increase housing starts & other construction activities	large – often international – contractors would receive the main contracts for the Project, with little opportunity for Dane-zaa -related business procurement; "while West Moberly has gravel deposits and Saulteau has gravel deposits and we have small contractors who would be able to provide moderately small volumes, they're not going to be given a contract opportunity to do that because BC Hydro is going to be developing their own gravel pits and essentially use crown resources rather than having to buy gravel in a market economy. Those [gravel transport] jobs are going to be too big for most first nation's corporations to have opportunity"."There are no guarantees. It is 'if you register with our Aboriginal procurement program, we will see'". First Nations member companies could supply services in relation to construction of Site C; "Site C will provide limited business opportunities for First Nation businesses"; unclear whether First Nation companies would secure many contracts; contracts will be short term leading to overinvestment in equipment; most materials will not be purchased locally; "I don't think that Site C would have much affect on First Nation business since we lack the training and equipment, which would limit our participation to joint ventures"; disproportionately low engagement of Dane-zaa companies and workers in construction; "Company workers [from away] do not spend locally, other than drugs and alcohol"; "How can our contractors even be considered for meaningful [contracts] because I hear that contractors are already hired or secured and they don't need us?" Degree to which T8FNs businesses and workers could capture induced housing and infrastructure work is unknown and likely lower than that of non-Aboriginal businesses due to existing hurdles; interest in long-term opportunities for T8FNs to become involved in ecosystem restoration and habitat management in the event the dam proceeds.	all T8FNs - impact equity issue; beneficial effects for T8FNs (should they be encountered) are more likely to accrue to urban-based T8FNs businesses and workers; out-migration of those local people with highest business acumen impacts on both the person leaving (loss of connection to home, subject to increased social isolation in a non-Aboriginal community) and the people left behind (family cohesion, "brain drain", reduced capacity to run community infrastructure)
51	socio-economic	business development	readiness	equitable access to education, training and economic opportunity; ability to take advantage	"Some businesses are not afraid to invest and have made good business decisions"; business success requires equity, a good business plan, good credit, obtaining grants, a status card, qualifications consistent with the business opportunity, "character, collateral, capacity", need for skilled management; barriers identified by T8FNs include: the "old boys network", lack of interest on the part of potential joint venture partners, lack of start-up funding, high housing costs, and lack of sufficient resources to purchase equipment; there is a lack of training in business development; First Nations lack experience in many sectors; lack of knowledge among members about how to start up and operate a business; failure to properly prepare for the next contract; limited activity and industry partnership agreements in PRFN area; any access to small contracts offering limited returns still requires a large investment; HRFN does not provide funding to businesses but provides support in other ways; the current mortgage and housing arrangement within each of the First Nations does not allow band members to build equity, which limits the ability to participate in business opportunities	labour and business demand; pre-project planning	lack of level playing field between First Nations and non-Aboriginal businesses means that unless there is dedicated pre-project planning to improve T8FNs business competitiveness, little benefits are likely;	to succeed in business as an individual often requires moving to urban areas such as Fort St. John, which contributes to "brain drain" in reserve communities; little evidence of plans by BC Hydro to use the Pre-Project Planning period to maximize investment in T8FNs business acumen and other necessary investments to maximize T8FNs access to potential business opportunites from Site C; if such benefical impacts are not forthcoming, this would contribute to fundamental impact inequity issues where T8FNs feel the brunt of adverse outcomes environmentally and socio-culturally, without commensurate economic benefit. NOTE: MANY T8FNS MEMBERS FEEL THAT THERE IS NO AMOUNT OF ECONOMIC BENEFIT THAT OVERCOMES THE "UNMITIGABLE" EFFECTS OF LOSS OF THE PEACE RIVER VALLEY.	all T8FNs - impact equity issue; beneficial effects for T8FNs (should they be encountered) are more likely to accrue to urban-based T8FNs businesses and workers
52	socio-economic	economic	poverty	equitable access to education, training and economic opportunity	there is some poverty on the reserve; lack of education is contributing to poverty; poverty limits the ability to participate in the wage economy	labour and business demand	potential for increased wage economy opportunities for T8FNs members - higher income	Site C would result in further transfer of wealth away from the reserve as members go to live and work in Fort St. John; Hurdle: Jobs likely only available to semi-skilled or higher applicants; effects felt strongest in reserve communities.	Primarily impacting on home (reserve) T8FNs and residents there
53	socio-economic	economic development	cost of living	equitable access to education, training and economic opportunity; local and regional inflation	cost of food and other goods high in WMFNs, still high but less in Chetwynd, then decreases again in Dawson Creek; often cost difference is not enough to merit driving to Dawson Creek for goods; costs of food and goods in Wonowon considered to be high; costs particularly affect those who are unemployed, underemployed or employed at a low wage; considering the high cost of housing off-reserve, social housing keeps more people living on the reserve; some members have challenges paying bills in all four T8FNs	labour and business demand	in-migration and large influx of funds in the local economy; increased people in the Fort St. John area may create inflationary pressures on goods and services/increasing cost of living	Site C would result in a medium-term (5-10 years) growth cycle in the local economy; concern that construction of Site C could contribute to inflation; if Site C goes ahead, there is concern that tradespeople could be unavailable to the communities or more expensive when available; Site C could result in further transfer of wealth away from the reserve as members go to live and work in Fort St. John; people at the economic margins most vulnerable include T8FNs, who tend to have lower incomes than non-Aboriginal urban dwellers; pulse of in-migration during Site C construction raises concerns about cost of living increases (especially an issue for those who do not have high paying jobs in the region),	All T8FNs communities and members living in the Peace River Regional District, with greater impacts likely in Fort St. John and among DRFN and HRFN, which rely on Fort St. John for goods and services

54	socio-economic	economic development	impact equity	equitable access to education, training and economic opportunity; sustainable development and impact equity; net benefits to Dane-zaa	benefit agreements with industry bring revenue into the communities, but the negative side is that the communities have to accept the developments and the adverse effects; Dane zaa have consistently had lower economic status in the wage economy than non-Aboriginal populations around them, and this continues to this day; First Nations members have lower ability to take advantage of new economic development activities, and this is a fundamental equity issue related to the experience of impacts and realization of benefits; "Profits from [previous] dams don't help the poor; those affected pay ever-higher prices for fuel"	pre-project planning; labour and business demand;	Lack of pre-project preparation time, investment and prioritization of T8FNs could contribute to the continuation of existing systemic hurdles to T8FNs taking advantage of beneficial (income, jobs, training, business opportunities) likely to accrue from the Site C Project.	impact inequity for T8FNs; unacceptable balance of impacts and benefits; from T8FNs perspective, environmental losses will not be adequately offset by any amount of money; net loss for Dane-zaa versus net gains for BC Hydro and other actors; impact inequity, with non-Aboriginal, often large, out-of-region firms, getting disproportionate access to benefits while T8FNs receive disproportionate bulk of negative social, economic, cultural and ecological effects; large amount of income and profits from constrcution phase "bleeding" out of the regional economy rather than staying; all going south; what is in it for Dane-zaa?; "Concerned people will come from all over the world to build the dam and then leave this place and leave us with nothing"; "short term jobs don't compare to long term negative effects on habitat"; elders want to preserve land for as long as they can; "Money will never bring back the things they are taking away from us."; "NO jobs or benefits from the first two dams."; all construction and operations level activities, including revenue generation and economic stimulus will disproportionately "leak" away from the regional economy and not benefit the T8FNs; large amount of workers required unlikely to be satiated by local available labour supply, so large in-migration of workers from outside; also concerns that large contracts will lead to minimum available jobs for local workers and local businesses; benefits primarily will accrue to southern BC and other markets, while adverse environmental and socio-economic-cultural impacts primarily felt by Dane-zaa; lack of guaranteed benefits to offset impacts; percent of income that bleeds from local and regional economies may be high if region and T8FNs not prepared in advance to fully take advantage; "No certainty in any benefits from it in the future. And the price of electricity keeps going up. No benefit at all."	All T8FNs
55	socio-economic	economic development	impact equity	healthy communities and equitable access to education, training and economic opportunity; exposure to boom and bust effects	It is a common perception that First Nations are the first ones let go during down times; statistical data show that First Nations in BC saw increases in unemployment more than twice as large as that of non-Aboriginal people during recent global downturn; "[We] work for a few months and get laid off and someone from outside comes in and takes that job. Very short term jobs. Don't hire same people as last job".	labour and business demand during construction	increasing money in economy for limited time period followed by relatively quick de-mobilization after construction; increased pace of development creates boom and bust economic cycles and social issues that First Nations often more vulnerable to due to historic inequities; rapid transitions from labour intensive construction phase to extremely labour poor operations phase may create major bust effect; even if direct employment is low during construction for T8FNs, they are structurally more exposed to economic downturns	impact inequity across social dysfunction indicators and economic success indicators in a high economic growth period between First Nations and non-Aboriginal people; likely faster descent for First nations in economic bust periods; First Nations mental and spiritual health issues in addition to physical ones; "Site C will result in a significant boom/bust cycle in the local economy; sudden decrease in employment following construction of Site C"; "One of the negative things would be that things will be really busy for three years, but not opportunities afterward. Operational part will be so slow. No long-term development opportunities."	All T8FNs, especially those engaged during construction phase of Site C should it proceed; possibly strongest for T8FNs residing in Fort St John area;
56	socio-economic	economic development	sustainability	Equitable access to education, training and economic opportunity; alternative economic development opportunities	in Peace River Valley now, meaningful (though reduced) practice of Treaty 8 rights continues down in low lying areas; potential for eco-tourism raised by T8FNs; minimal tourism currently ongoing in the area; recognized as beautiful stretch of river with remarkable amounts of ungulates and furbearers visible if travelling along the river;	dam; reservoir	altering the Peace River may irrevocably remove or radically reduce the feasibility of future economic development opportunities in the Peace River valley, including but not limited to eco-tourism, sustainable farming, meaningful practice of Treaty rights for T8FNs;	Example only: inability to create viable Peace River valley tourism ventures, should the beauty of the Peace River valley be undermined and eco-tourism potential not tapped; this can be contrasted by the potential beneficial economic impacts of increased attractiveness of the reservoir area as a recreational site for area non-Aboriginal people; fairly stable shoreline in the reservoir may promote significant changes to on- and off-water recreation and tourism activities, ranging from small family outings to large scale commercial recreation and tourism activities and businesses; there is the potential for development of shoreline destination parks along the reservoir. In general, there are trade offs between keeping a place "wild" and attracting a certain type of tourism dollar, versus creating a local recreational area for residents.	Would-be T8FNs entrepreneurs, now and for future generations - futures foregone scenario

57	socio-economic	education and training	existing training programs	equitable access to education, training and economic opportunity; access to training	Bridges to Trades provides introductory trades training that is well-attended by students but may be too early to know how effective this program will be in the long-term; most training programs geared to provide members with support to become qualified for posted positions in oil and gas; training includes "tickets", cook training, job readiness, on-the-job training, resume, interview skills, safety training; safety training tickets are expensive but members cannot get employment without them; medivac trains HRFN members; "people need to be educated in permanent employment - and they are not"; Mining Fundamentals Program (MFP) guarantees a job if you finish the program, involves college providing academic support, numeracy training, equipment simulators; safety tickets included in MFP; MFP provides rent-free place to live during training, but must pay rent once working; accommodation difficult to find and very expensive in Tumbler Ridge; weekly circle programs occur as part of the MFP; NEASEP now has circle meetings as part of other programs; existing successful training programs include film training in DRFN; environmental monitor training delivered every third year with both new and repeat training - involves elders going out before an activity starts, reporting and determining issues, but looking to expand programs to include reclamation, remediation, sampling, integrated vegetation management, etc.; summer job opportunities and training for youth are positive programs; T8FNs members indicate extremely limited training inputs from BC Hydro to T8FNs; INAC funding insufficient to fully support members seeking post-secondary education; First Nations often pursue industrial contributions to post-secondary education; funding for training must come from Band funds; "funding is always an issue"; funding for trades training is particularly lacking; often possible to seek training funding from the future employer; First Nations often stretched for training dollars with considerable additional funding going to post-secondary students beyond that made available by AANDC; NENAS training dollars must be associated with a permanent job; there are often strings attached to corporate training dollars	labour and business demand; pre-project planning	inequitable access to education and training may lead to reduced ability for T8FNs members to take advantage of job and business opportunities from Site C; need for bolstering of T8FNs training access well in advance	continued impact inequity with minimal skilled jobs for T8FNs from Site C during construction or operations; continued economic marginalization of T8FNs in region; exacerbation of existing sense of injustice with associated psycho-social effects outcomes; "Really hope that First Nation people will have the training to put themselves in position to get some steady employment out of Site C."; " BC Hydro, as far back as I've been here, they have been unwilling to talk to communities about the kind of mentoring, education and training programs that would be needed to stream First Nation community members into operational jobs with BC Hydro. "	all T8FNs - impact equity issue; especially youth and non-employed working age population that is interested in entering into the job market
58	socio-economic	education and training	numeracy	healthy communities; lack of money management and other life skills	lack of personal financial and numeracy skills is a substantial concern in all of the communities; T8FNs are considering creative ways to educate children about money management, entrepreneurship, and wealth building; money management programs provided to youth are considered positive; training usually provided shortly before youth receive any trust monies; there is a strong sense of pride around acknowledging lack of numeracy skills; some people simply do not want to learn financial management; some members are in arrears on house payments, social assistance payback (i.e. they receive advance social assistance, which they are expected to pay back, while awaiting employment insurance), etc.; people often not saving, have high debt, bad credit, trouble paying bills, and generally "cannot get ahead"; innumeracy extends to a lack of understanding of timelines and schedules; lack of longer-term money management - "money made is money spent"; people live paycheque to paycheque; people living day to day	labour and business demand	increased money in local and regional economy	Increased potential for money mis-management during boom economic periods; T8FNs more exposed to economic downturns during "bust" periods;	All four T8FNs and members
59	socio-economic	education and training	opportunities	equitable access to education, training and economic opportunity	there is a lack of access or ability on the part of Aboriginal young people to take advanced training; already a significant shortage of trained employees in the communities considering the number of available jobs; need for First Nation training in tourism, conservation and business; there is a need for life skills training; people lack the basic skills required to achieve their goals - "there is the dream and then there is the reality"; there is a need for apprenticeship training to enter the workforce, but then long-term training thereafter; training needs to be directed at usable certifications (e.g. First Aid, firefighting, firearms, Adult Basic Education, Gradual Equivalency Diploma, etc.); writing skills training needed; Hurdles include lack of available day care in most T8FNs communities.	labour and business demand	Dane-zaa access to training and skills development is limited, leading to concerns that if Site C was to proceed, only a limited number of construction stage jobs would be on offer; Dunne Za/Dane zaa would be hired for general labour only, and “would be the first people let go”;	limited number of potential First Nations members available to be trained to take employment on Site C; any training for Site C should be directed at longer-term benefits to the communities to improve service delivery; concern that funding required to train First Nation members to work on the proposed Project will not be adequate; education, training, and long-term employment opportunities should be offered equally to all T8FNs. This is an "ability to take advantage" issue.	All four T8FNs and members of working age or coming into working age in the next half decade.
60	socio-economic	education and training	readiness	equitable access to education, training and economic opportunity	some people do not get into or stay in training as a result of drugs and alcohol, lack of self-discipline or low self-esteem; "people are smart but they are not getting an education"; functional literacy is an issue among adults and some young adults; full extent unknown; "often people feel like they don't belong in the class"; "there needs to be training and back-to-work programs for those on social assistance; people may not have the educational background to enter training programs; training living allowances do help people complete training; people may leave their education to seek temporary employment, then their employment finishes and the cycle repeats itself; people may lack the required commitment to see a program through to completion; people tend to complete training but then still require support to obtain employment; overall lack of education, but each generation becoming more educated than the one before it; some people cannot afford the additional time and cost to attend training programs in Fort St. John or elsewhere	labour and business demand and pre-project planning	Lack of pre-project preparation time, investment and prioritization of T8FNs could contribute to the continuation of existing systemic hurdles to T8FNs taking advantage of beneficial effects (income, jobs, training, business opportunities)	Dane-zaa access to training and skills development is limited, leading to concerns that if Site C was to proceed, only a limited number of construction stage jobs would be on offer; Dane zaa would be hired for general labour only, and “would be the first people let go”.	All four T8FNs and members of working age or coming into working age in the next half decade.
61	socio-economic	education and training	youth post-secondary school	equitable access to education, training and economic opportunity	there is a lack of accommodation for persons wishing to train outside of the reserve; youth often feel overwhelmed by the idea of post-secondary education; many youth do not have exposure to post-secondary education and so do not consider it; "intelligent people stop going to school for social reasons"; "there are four high school graduates sitting at home collecting social assistance"; following grade 12, youth must leave the community and the region to pursue university; no training is offered in the communities; "in order to be successful, you must leave the reserve and then come back"; "it is as though youth are afraid to go out into the world and they need to be encouraged to take the opportunities that are out there"	labour and business demand	Lack of pre-project preparation time, investment and prioritization of T8FNs could contribute to the continuation of existing systemic hurdles to T8FNs taking advantage of beneficial effects (income, jobs, training, business opportunities)	Dane-zaa access to training and skills development is limited, leading to concerns that if Site C was to proceed, only a limited number of construction stage jobs would be on offer; Dane zaa would be hired for general labour only, and “would be the first people let go”.	All four T8FNs and members of working age or coming into working age in the next half decade.

62	socio-economic	education and training	youth secondary school	equitable access to education, training and economic opportunity	there are no secondary schools in any of the communities, and the morning bus ride to high school requires kids to get up early; academic performance deteriorates for many students during high school; "when kids go to high school, they nosedive"; attendance at schools away from reserve appears to reduce performance; reduced performance could result from the social challenges of being a minority; education quality results in kids needing to upgrade later; the school system graduates kids with a "leaving certificate"; challenges are not addressed and kids are just shuffled through; colleges push upgrading to make money; kids walk out of college when they find out they have to upgrade; colleges creating barriers by requiring upgrades; as a result of leaving certificates, First Nations end up paying for Adult Basic Education for up to 4 years; "Band pays twice because high school does not educate First Nation children"; small class sizes make it difficult to develop age-specific programs; education of youth is required so that First Nations can manage more of their own affairs; youth increasingly aware that they need to have a grade 12 education; only a few graduates each year in HRFN; "grade 12 needs to be mandatory for employment at the Band Council"; access to education for First Nation members is far away and requires travel or re-location, which seperates families; "children are required to walk in both worlds, and generally do well on the reserve but struggle in the non-Aboriginal community"; parental support tends to decrease when kids begin to attend high school and this may be contributing to declining performance by students; parents working away from community (at mines) not always present to support children and youth; lack of self-discipline in youth may be related to poor parenting	labour and business demand	Poor T8FNs ability to take advantage of training opportunities reducing succes, alongside increased exposure to risks by T8FNs youth in urban environments to receive training	Increased exposure of young Dane-zaa members in urban areas to social dysfunction, poverty (comparative to boom town cost of living), etc. May increase failure rates and levels of dysfunction among young Dane-zaa members.	All four T8FNs and members of working age or coming into working age in the next half decade.
63	socio-economic	employment	opportunities	equitable access to education, training and economic opportunity; sustainable development and economic diversity; T8FNs employment at Site C; long-term jobs for T8FNs	some First Nation members do not like to go off-reserve to look for employment; there is very little unemployment in WMFNs, and unemployment on other FNs is limited to those seeking temporary or part-time employment; those who want to be working are working; some lack of employment opportunities in HRFN, but when some people obtain employment they often use the money to obtain drugs and alcohol; there are some HRFN members who want to be working more; typical HRFN female members employed in camps as cook helpers, camp cleaning, catering; typical HRFN male members employed as equipment operators, mechanics; people want jobs right outside their door, but often you have to go to the job"; community isolation limits employment opportunities; training often leads to low-paying jobs from which people cannot make a living; "there are always other part-time opportunities"; construction of prior dams provided almost no employment to First Nations and almost no First Nation members ever worked at existing hydro projects; lack of available day care and high number of single parent families is a hurdle to long-distance commuting; people drive back and forth to other locations many times during the week, which takes them away from their communities and families: "people used to travel to town twice a year, and now it is twice day."	labour demand, ; pre-Project planning	variety of systemic hurdles to maximizing T8FNs employment during construction/operations of Site C; lack of training, low educational status, stigma of working on this project and psycho-social effects, lack of quality work environment in primarily non-Aboriginal companies; etc.; also, relatively short term nature of construction; is there incentive for T8FNs to engage? While labour demand is high during construction, slows down rapidly during operations; small number of operations level jobs, most of which have not been shown likely to be available to T8FNs (specialized, high training required)	concerns with the extremely limited number of jobs during Site C operations, another sign of lack of economic development opportunity for Dane-zaa; 2009 survey identified that T8TA members, should Site C go ahead, would prefer to maximize long-term operations jobs over short term construction phase jobs; one of the negative things would be that things will be really busy for three years, but no opportunities afterward; limited (disproportionately small) percentage of Site C workforce likely to be T8FNs; there are likely disadvantages in recruitment, retention and advancement of T8FNs workers; "Site C will have minimal to no effect on employment for First Nations"; "Will there be any job or future long term employment opportunities for me if they build the dam?"; "Site C will shift employment but it will not create new employment for First Nations"; Site C construction could provide some employment in trades and camps; should opportunities in oil and gas decrease, there could be some need for employment from Site C; First Nations will need to know the qualifications and positions offered by Site C; employment at Site C will require more training of First Nation members; whether T8FN members will obtain employment during construction is uncertain; any employment for First Nation members on Site C would be lower-end and short-term; what is really required is full-time, long-term employment; "skilled people will be from far away"; overall not much employment benefit is anticipated from Site C; training started far too late for members to benefit; concern that many members would not be qualified to take employment on the Project; for Site C to have any impact on employment of First Nations, positions will have to be very structured so that people with limited work experience can enter the workforce; short term jobs do not compare to long term negative effects on habitat; there is potential for a sudden decrease of any employment following construction of Site C - few long-term jobs for Dane-zaa, contributes to net loss for Dane-zaa versus net gains for BC Hydro and other actors (e.g., non-Aboriginal population with higher access to training and educational opportunities	All four T8FNs and members of working age or coming into working age in the next half decade.
64	socio-economic	employment	readiness	equitable access to education, training and economic opportunity; T8FNs employment at Site C	there are lower graduation rates for Dane zaa vs. non-Aboriginal children for a variety of reasons, and this affects employability; some opportunities to work are not taken up for a variety of reasons: lack of available and affordable childcare, cost of equipment and supplies, substance abuse issues, "some members may be unemployable", lack of financial motivation; people with addictions have trouble working in Fort St. John; some tend to do better at camps, but once out of camp substance abuse can ensue; "zero tolerance" is not always a helpful policy; in general, people lack supports when they seek employment off-reserve; people conflicted with working on Site C given the damage that would be inflicted on the land; "one member quit work over the thought of the area being flooded"; lower highschool graduation rates, resulting from a variety of reasons, affects employability; there is a lack of access or ability to take advantage of training for Aboriginal young people; functional literacy is an issue among adults and some young adults, though the full extent is unknown;	labour demand especially during construction stage; pre-Project planning period - training opportunities made available	variety of systemic hurdles to maximizing T8FNs engagement in employment during construction and operations of Site C, should it proceed; lack of training, low educational status, stigma of working on this project and psycho-social effects, lack of quality work environment in primarily non-Aboriginal companies; etc.; also, relatively short term nature of construction; what incentive is there for T8FNs to engage?	Linked to weak educational attainment and lower levels of access to and completion of training than non-Aboriginal populace in the region. Likely to see T8FNs have limited access to employment opportunities from Site C, and what is available more likely to be entry level work with lower satisfaction and pay. Again, an impact equity consideration.	All four T8FNs and members of working age or coming into working age in the next half decade.
65	socio-economic	employment	retention	equitable access to education, training and economic opportunity; job satisfaction and turnover rates for T8FNs workers	T8FNs note that First Nations employees are the first ones to be let go during economic downturns, or when a project goes into slowdown, or are hired for one seasonal job but then passed over for no reported reason the next season; perception of racism is part of this. T8FNs also report concerns from past work in destructive industries, including psycho-social effects of building previous dam structures, which create high turnover rates, as well as cross-cultural conflict within primarily non-Aboriginal camp workforces; T8FNs, like many First Nations groups, prefer jobs that are non-destructive and in line with Aboriginal values; experience at W.A.C. Bennett Dam saw some workers quit due to fundamentally disrespectful activities associated with flooding ancestral lands	labour and business demand phase	variety of effects pathways (low job satisfaction, racism, lack of advancement and training, long-distance commuting, destructive nature of work) may all influence T8FNs retention rates in Site C construction should the Project proceed	job turnover may be high and job satisfaction low for T8FNs working on dam construction, affecting quality of life and well-being for them and their families; example of low job satisfaction due to destructive nature of hydro development: "[In the case of the WAC Bennett Dam] The hills were sliding into the lake and the water goes up and down, what he seen was graves, half of the graves sticking out of the ground after the water goes down, he seen that, and he said, "I made a lot of money but there was so much devastation with WAC Bennett Dam" that he quit, he was working with a survey company. And if it disturbed a man to quit a good paying job then that same feeling is going to hit somebody else with the Site C. "	all T8FNs, particularly potential Site C workforce and their families at home

66	socio-economic	employment	transportation	equitable access to education, training and economic opportunity; access to training and jobs	people cannot afford vehicles and/or insurance and so do not own vehicles; some companies provide buses, but members still must get to a larger community; people do not have licences or insurance; "no vehicles or licences makes work challenging"; some people have cars but cannot drive (e.g. elders); many owe money for fines on their licences; "this is a serious issue"; need a clean driving record to get a licence, including no prior DUI, no tickets, etc.; young people not ever getting their licence due to violations of requirements of graduated licence system; high cost of fuel also poses limitations; people sometimes miss important employment activities beyond work due to lack of transportation (e.g. meetings); "no job, no vehicle...no vehicle, no job"; people do not generally own vehicles; safety-ticket training is on the reserve, but other training programs need to be delivered on the reserve.	labour and business demand; workforce accommodation	Poor T8FNs ability to take advantage of employment opportunities due to systemic barriers and distance effects	lower abiity to take advantage for T8FNs; contribution to impact inequity for T8FNs.	All four T8FNs and members of working age or coming into working age in the next half decade.
67	socio-economic	employment	youth	equitable access to education, training and economic opportunity	employment outside of the reserve requires more life skills than some youth possess; lack of support system outside of community; youth not prepared for the transition to working life; youth often complain that companies treat them badly; summer on-reserve work programs for youth are considered important to providing skills and experience	labour and business demand; workforce accommodation	Increased population due to in-migration creating higher social dysfunction in and around Fort St. John	Increased exposure of young Dane-zaa members in urban areas to social dysfunction, poverty (comparative to boom town cost of living), etc. May increase failure rates and levels of dysfunction among young Dane-zaa members.	All four T8FNs and members of working age or coming into working age in the next half decade. Youth residing in or around Fort St. John especially vulnerable
68	socio-economic	governance	chief and council	healthy communities; meaningful role in governance and stewardship for T8FNs;	Chief and Council of all four First Nations often out of town due to demands of development; more meetings means more time away from the community; so far, Site C has not been too bad but expected to be more demands and greater need for staffing; "BC Hydro is a difficult proponent"; compensation does not really reflect the increased workload; "Site C has already affected the community by taking up time and resources"; Site C is creating significant stress and worry for Chief & Council and the members; staff attend meetings for Site C but this means that we need to cover for them when they are away; staff members returning from meetings concerning Site C are distracted from their work; needs of HRFN members sometimes do not get met as a result of Chief and Council dealing with development; Chief and Council often absent from community due to large number of demands; members can get angry that Chief and Council is not available because they are out of town; needs of members sometimes do not get met as a result of Chief and Council dealing with development, which leads to an overall lack of communication with members; relationships between Chief and Council and staff affected by fact that Chief and Council have too much to deal with and staff end up having to address member issues that are sometimes best addressed by Chief and Council; members do not appreciate the amount of work and issues facing Chief and Council; companies do not understand that they will have to wait in order to get a meeting with Chief and Council; companies often arrive in First Nation or contact First Nation thinking that they can get access to Chief and Council who are often booked months in advance, and this negatively affects relationships with companies; "Chief and Council typically receive 200 emails per day"; "Chief and Council dealing with too much"; not enough time for Chief and Council to properly address matters; both opportunities and challenges get missed	pre-project planning, including environmental assessment and regulatory process	environmental assessment, consultation and regulatory process for Site C is extensive, expensive, time consuming and technical	"if Site C were to go ahead, it would be disheartening, especially for WMFNs Chief and Council"; "it would prove that the government does not listen to us and that our voice does not mean anything to them"; "any good relationships with government would be non-existent if Site C goes ahead"; Site C already causing substaantial impacts on T8FNs community governance resources; less capacity left for community governance priorities	All four T8FNs; Chief and Council and governance administration management and staff
69	socio-economic	governance	stewardship	meaningful role in governance and stewardship for T8FNs; degree and sense of autonomy and control over one's own future	"we are getting companies to listen to some of our concerns, but they still do things behind our backs"; strong sense that industry and government do not listen to First Nations concerns and don't respect First Nations as governments (see Booth and Skelton 2011)	Pre-project planning	Environmental assessment process and consultation process widely perceived by T8FNs and members to be "a done deal" where their voices will not be heard in a meaningful (i.e., decision-making) way.	Potential to increase psycho-social impacts, sense of alienation, loss of agency, loss of control over future, lack of faith in industry and governance, increase anger, apathy and other socially dysfunctional emotions among T8FNs members. Such psycho-social effects can be linked to negative stress, mental and physical health outcomes, and social dysfunction outcomes.	All four T8FNs; Chief and Council and governance administration management and staff, but also lay persons feeling psycho-social effects; elders particularly affected by lack of respect, but youth more at risk long-term to cultural continuity and lack of agency issues (see Booth 2010)
70	socio-economic	health	adults recreational activity	healthy communities; sedentary populations	recreation program director tends to result in more active adults; there is a general perception that adults in the First Nations need to be more active throughout the year; recreation facilities are required in PRFN, WMFNs; there is a lack of adult recreational programs, as programs in WMFNs are focused on children; children must travel to Chetwynd (WMFNs) or Fort St. John (DRFN) in order to participate in organized recreational activities; children may be stigmatized as "reserve kids" and will choose not to participate; poverty may also limit children's ability to participate in recreational activities; younger families more aware of need for recreation and more willing to travel to town to allow their children to participate; high rate of participation by young boys in hockey, but need for more recreational opportunities for girls; recreation facilities are required in PRFN, WMFNs; there are differing perspectives on whether there are enough recreational opportunities available to youth; kids can get bored sometimes; youth have access to school recreation activities but often cannot participate since they have to take the bus; youth and families often cannot access recreation activities unless they have vehicles; out-of-town recreational activities allow youth to visit with aboriginal youth in other communities; "some youth may become lazy with the arrival of high-speed internet in the community"; internet, facebook and cell phones have changed the First Nations.	multiple	increased land alienation may lead to sedentary trend in T8FNs; lack of ability/desire to go out on land	Continuation and exaccerbation of lower activity levels among T8FNs as available "sufficient" lands for meaningful practice of Treaty 8 rights declines, and engagement in the wage economy increases. Variety of potential health and well-being outcomes.	All four T8FNs, especially youth; risks higher for people less active on the land.

71	socio-economic	health	anxiety	healthy communities	[redacted]	pre-project planning; multiple	Environmental assessment process and consultation process widely perceived by T8FNs and members to be "a done deal" where their voices will not be heard in a meaningful (i.e., decision-making) way. Should Site C go ahead, these issues may come to a boil.	Potential to increase psycho-social impacts, sense of alienation, loss of agency, loss of control over future, lack of faith in industry and governance, increase anger, apathy and other socially dysfunctional emotions among T8FNs members. Such psycho-social effects can be linked to negative stress, mental and physical health outcomes, and social dysfunction outcomes.	All four T8FNs and members; those with closer connections to the land and memories of simpler times (e.g., elders); youth at higher risk for self-harm
72	socio-economic	health	contamination	meaningful practice of Treaty 8 rights; also healthy communities	elders say "water is mother earth's blood, just like the blood that runs through our veins, it's the same thing so it's very important to keep that water healthy and clean because if you don't mother earth is going to get sick and we as a people are going to get sick and we won't become healthy people"; there are many abandoned industrial and chemical sites where animals have access - this could be contaminating the food chain; health issues related to oil and gas have been kept quiet by government and industry; the water in the region is no longer clean but is contaminated in one way or another	multiple	perceived and observed risk factors may reduce time on land, country food consumption and T8FNs quality of life	See Section 7.5 and 7.6 of Initial Impact Pathways Identication Report	Dedicated land users/harvesters, but also concerns across communities due to distribution of country food across many families; T8FNs members who travel extensively on the land in the
73	socio-economic	health	diet	healthy communities	knowledge of good nutrition is lacking in the First Nations; dietary programs are a positive step to addressing these issues; diets often include foods that are high in fats and carbohydrates; even some traditional foods are high in fats and flour; poor nutrition contributes to obesity; younger people seem to be more aware of the need to eat fruits and vegetables; people were healthier when they ate more traditional foods; people have to travel to Fort St. John for dietician services; the foods that are being consumed are too often not natural or wholesome; diet was better in the old days; wild meat, potatoes, bannock, berries; "Now we are spoiled; eating too much McDonalds, too much easy food; "kids here eat a lot of junk food"; country food perceived as healthier than store bought;	multiple	exposure to urban environment by job seekers increases store bought food, as does additional income and lack of time spent on the land and reduced harvesting success;	continuation of trend toward reduced country food in diet; increased levels of diabetes, obesity, heart disease and other health issues for T8FNs; also, increased sedentary lifestyles contributing to health effects; reduced country food harvesting, sharing and consumption has multiple impacts (see Report Body Text)	T8FNs members who move to urban areas for education, training, jobs and business opportunitiesm less likely to access country food
74	socio-economic	health	elders	healthy communities	limited activities for elders to stay healthy in some First Nations; some elders stay active through traditional activities and caring for children; some elders may not be active enough and some appear to be "shut-in"; some elders not able to manage for themselves; elders too old to learn new employment skills, and have limited employment opportunities; elders identify strong connections to, and enjoyment of, Peace River Valley;	dam; reservoir	reduced access to preferred lands	reduced social and cultural status of elders; reduced quality of life and mental health for elders;	Elders, especially remaining active land users or those who would like to travel on the land in the Peace River valley
75	socio-economic	health	gambling	healthy communities	[redacted]	labour and business demand	Influx of money into local and regional economies create Increased disposable income which may lead to increased problem gambling; increased in-migration to work zone and Fort St. John may increase access to legal and illegal gambling	[redacted]	workers and workers' families during construction stage, especially those migrating into work zone and Fort St. John for work
76	socio-economic	health	maltreatment	healthy communities	[redacted]	labour and business demand	multiple pathways, including psycho-social effects and increased long-distance commuting; new in-migration to region	[redacted]	Women and youth almost always at highest risk of abuse of many forms
77	socio-economic	health	mental health	healthy communities; self-esteem; self-honor	[redacted]	multiple, starting with pre-Project planning stage	psycho-social impacts of continued and exacerbated loss of control over future, lack of voice, and cultural loss, should Site C proceed, could contribute to loss of cultural continuity and self-determination	[redacted]	All four T8FNs and members; those with closer connections to the land and memories of simpler times (e.g., elders); youth at higher risk for self-harm

78	socio-economic	health	morbidity	healthy communities; individual and community health indicators	perception that there are high rates of arthritis in some First Nations; concern that people, even children and youth, are now susceptible to arthritis; concern that levels of cancer are high in the communities, where cancer was never present at all years ago; perceived high rates of diabetes in some First Nations but not others; dedicated staff and programs for diabetes considered necessary in DRFN but currently not provided; workshop available off-reserve for those affected by diabetes to learn how to improve their diet; air and water pollution, contaminated food sources, loss of faith in country food, increased sedentarism, and increased use of less nutritious store-bought food all lead to increased negative health outcomes like diabetes, obesity, heart disease, arthritis, cancer; smoking levels remain a concern in the communities; improved roads and transportation to larger communities is believed to have increased obesity; some people not watching their weight, not participating in activities, not doing physical labour, driving quads instead of walking, and watching too much TV; concern that people are now more susceptible to common colds, penumonia, bronchitis, and flu than previously.	multiple	increased perception of contamination of country food sources, especially fish, combined with reduced availability of terrestrial wildlife, lack of access and other land alienation may reduce practice of traditional harvesting and increase consumption of less healthy store-bought foods; increased dust in air from project-related activities	exacerbation of negative health status indicators among T8FNs including: sedentarism, diabetes, other morbidity, obesity; increased particulate in localized areas around project construction-related activities impacting on respiratory health of T8FNs land users	On the respiratory side of morbidity, land users in the immediate construction areas may be subject to increased health effects; on general morbidity, all T8FNs and members may be affected
79	socio-economic	health	sexual health	healthy communities	[redacted]	labour and business demand	increased in-migration into the PRRD, especially around Fort St. John, of Site C workers and job seekers, overwhelmingly male, could lead to increased STIs, especially among vulnerable sub-populations (women, especially young Aboriginal women in urban environments)	Site C will bring more outsiders and communicable diseases to the region and communities; pulse of in-migration during Site C construction raises concerns about social dysfunction (drugs and alcohol in communities, increased risks for women),	T8FNs members living in Fort St. John and Taylor, especially younger unattached women
80	socio-economic	health	substance abuse and availability in First Nations	healthy communities; access to drugs and alcohol, negative social influences and addiction levels	[redacted]	labour and business demand	Site C will induce in-migration by workers and job seekers; increased money in the local and regional economies; pulse of in-migration during Site C construction raises concerns about additional social dysfunction (drugs and alcohol in communities, increased risks to women),	availability of drugs and alcohol in the First Nations may increase as a result of the Project; an influx of workers will lead to more alcohol in the region; "when there is a lot of money, there is always trouble with drugs and alcohol"; "My biggest concern as Chief is what will happen when we have all drugs and money flowing around. This is my biggest fear."; the large workforce will bring more money and drugs to the region; "With all the new people coming in, we're going to be hit with alcohol and drugs, you name it, and it's going to destroy our nation also". "People coming in from far away to build the Site C dam bring alcohol and drugs. They won't leave our people in peace, even up in Doig. New people we don't know bringing drugs in. Bad influences. Already losing young people to drugs; would get worse; "With the quick money comes drugs and alcohol";	Younger people more at risk; people with more regular access into Fort St. John may be at slightly higher risk, but impacts migrate out to rural communities from urban boom towns
81	socio-economic	health	substance use and availability in Fort St. John	healthy communities	[redacted]	labour and business demand	inducement of in-migration by workers and job seekers; increased money in the local and regional economies	increased population leading to negative social influences including increased addictions to which T8FNs have high vulnerability; "workers do not spend locally other than drugs and alcohol";	Younger people more at risk; T8FNs workers, especially in Fort St. John area, subject to higher pressures related to substance abuse
82	socio-economic	health	youth at risk	healthy communities; single-parent families	[redacted]	Workforce rotation schedules	increased long-distance commuting and extended rotational shiftwork disproportionately impacts on women and children of primarily male workforce	Site C could adversely affect the time parents are present with their children; steady income could improve the relationships between children and parents; long-distance commuting may increase single parent families;	Youth, especially in single parent families, living in Fort St. John area or rural reseves in area; single parent caregivers (almost exclusively women)

83	socio-economic	health and social services	quality and access	healthy communities	there is insufficient funding from Health Canada for health programs and services in the First Nations; the community and regional health services are overused with long waits for doctors and dentists, so people end up sicker in emergency or in hospital; early morning appointments in Fort St. John require an overnight stay for off-reserve members; First Nation members have difficulty getting to health services and facilities due to lack of transportation, even with bus services from the First Nations; health services in Chetwynd not increasing with the drug problem; lack of access to medical health professionals, including doctors, nurses and specialists; lack of mental health professionals; services that are offered in the First Nations are good, but scope of services provided is narrow; there is a community health representative in each community, but a need for more certified emergency personnel in the First Nations, and better access to health care professionals; population of elders does not justify seniors' centre on any of the reserves;	labour and business demand	in-migration and large influx of funds in the local economy will increase demand on health and social services from larger populations, and from higher dysfunction associated with boom economy	concern that health and other related social services are not adequate to respond to the potential effects of the Project; pulse of in-migration during Site C construction raises concerns about access to social and health services, especially in the more remote Dane-zaa communities which rely on Fort St. John-based health care; "hospital wait time will be way longer than it already is, and clinics will be busier"	Fort St. John and people seeking services in Fort St. John - more impactful on DRFN, HRFN, WMFNs
84	socio-economic	health services	substance abuse treatment	healthy communities	[redacted]	labour and business demand	inducement of in-migration by workers and job seekers; increased money in the local and regional economies	increased population leading to negative social influences including increased addictions to which T8FNs have high vulnerability; increased pressure on existing programs like Helping Hands;	All four T8FNs, most particularly those who are exposed to boom conditions during Site C construction (living, learning or working in Fort St. John)
85	socio-economic	housing	conditions	equitable access to education, training and economic opportunity; healthy communities	there is a shortage of housing on all of the four reserves, due to a lack of funding to construct new houses; degrees of overcrowding vary between reserves; there is a lack of appropriate housing for seniors, and housing often has poor access for seniors on all of the reserves; new housing construction undertaken by contractors from off-reserve hiring local members; some young families are moving back to the First Nations as a result of high rents and high cost of housing elsewhere, including Fort St. John; cost of living off-reserve drives need for housing on-reserve; constant need for funding for on-reserve housing maintenance; lack of funding from AANDC to construct needed new housing; "housing funding is not adequate"; there are many work orders for minor repairs to houses; scheduling of work is a challenge; costs for house maintenance are high;	labour and business demand	potential for housing pressures in Fort St. John due to in-migration and inflation force people to move back into home reserve communities	existing pressures on housing would be exacerbated by additional crowding;	DRFN, HRFN and WMFNs in particular
86	socio-economic	housing	Fort St. John	equitable access to education, training and economic opportunity; healthy communities	high rental costs in nearby muncipalities limit Dane-zaa from finding housing when they attempt to obtain post-secondary education - "Housing is another impact. People can't go to post secondary school in town because the rent is so high. People can't buy houses because the market is crazy"; lack of housing in Fort St. John has many effects on members trying to undertake activities in Fort St. John, including attending college; elders living in Fort St. John to receive health care have difficulty getting apartments; high cost of housing prevents youth from staying in Fort St. John, and as a result they travel back and forth to the reserve	labour and business demand	increased population through in-migration and money in the economy, may increase pressures on housing in Fort St. John especially, and also increase costs, pushing marginalized people out of the housing market	concern that housing costs will further increase in Fort St. John with construction of Site C, resulting in increased demands for housing on the First Nation reserves; increased homelessness; increased cost of living; increased crowding and associated health and social dysfunction issues in Fort St. John;	T8FNs members living, learning or working in Fort St. John
87	socio-economic	infrastructure	conditions	healthy communities; equitable access to education, training and economic opportunity; access to skilled tradespersons to properly maintain local physical infrastructure	only so many services can be provided on small reserves; no library, no grocery store, or gas station on any of the reserves; DRFN and HRFN experience frequent power outages; there is no back-up power for water treatment in DRFN; lack of a water treatment facility in HRFN, results in substantial costs to provide bottled water; Public Works equipment on reserve is often leased instead of owned, and getting equipment serviced is often difficult; vendors often have to come from Fort St. John, Chetwynd, Fort Nelson or Prince George at high cost to the First Nations; "there are no on-reserve vendors"; costs are already hyper-inflated due to the oil and gas industry; infrastructure funding is insufficient; gravel roads are high maintenance; roads throughout the region are also affected by heavy rains; lack of road maintenance affects busing in winter; lack of police officers and firefighters on the reserves, so services come from Fort St. John, Fort Nelson or Chetwynd; difficult to get the police to come to the First Nations; lack of trained staff	labour and business demand	skills drain toward high paying jobs during construction of Site C may see trades (e.g., plumbing and electrical), and other services, less available to the First Nations; can include loss of individuals with trades from First Nations to Fort St. John, or less availability of urban-based contractors	reduced function of physical infrastructure; increased wait times from construction, maintenance and repair of physical infrastructure; increased cost of these activities in both reserve communities and Fort St. John, but with reserve communities likely to have much longer wait times due to draw of skilled labour and business to primary activity zone in Fort St. John; also potential for local "brain drain" with skilled labour drawn to higher wage opportunities; pulse of in-migration during Site C construction raises concerns about pressures on physical services and infrastructure; skills drain toward high paying jobs building the dam may see longer waits for housing, maintenance (e.g., plumbing and electrical), and other services, especially in the more remote Dane-zaa communities which rely on Fort St. John-based businesses; increased crime in boom economy of Fort St. John may further reduce availability of fire and peace officers in Doig River and Halfway River;	DRFN, HRFN and WMFNs in particular
88	socio-economic	public safety	debris	healthy communities	T8FNs strongly concerned about impacts of woody debris in previous reservoirs on wildlife and boater safety; "One of the things that have always been scary for me is the debris [at WAC Bennett Dam]. It's kind of sad to see, it's all along the shore line and when you see the shore line all falling in and the erosion and I know that when I sat on that water use planning committee that was one of the things we really looked at and every year the land base is getting eroded and so for me when my uncle used to talk to me about that area and they used to trap up and down that valley "	site clearing and preparation; dam; reservoir	woody debris may be a public safety and wildlife health issue; perceived risk of water transport (e.g., debris) may reduce T8FNs boating in new reservoir and in Moberly and Halfway Rivers; both debris from valley bottom and from erosion along the banks over time may create dangerous conditions;	increased public safety risk of travelling along banks of reservoir and in the reservoir, as well as ecological impacts of debris in water; reduced T8FN travel in those areas; the reservoir clearing needs to consider removal of woody debris; "We were told unequivocally (i.e. in March 2009) that BC Hydro would remove all the vegetation, but now BCH removing only commercially viable timber. This is an indication that you aren't to be trusted."	T8FNs who use the Peace River for water-based transportation

89	socio-economic	public safety	traffic	healthy communities; vehicle collision rates	concern that recent flooding in Spring 2011 has revealed that bridges in the region are not sufficient to prevent significant delays to transport of goods	variety of project facilities in and around urban and traditional land use areas; transportation of workers and transportation of construction materials and supplies;	increased traffic in and around Fort St. John and Highway 29 and around borrow sites and activity zone increased project-related traffic may increase vehicle collisions as well as wildlife collisions during construction	reduces T8FNs use of area roads; potential for increased accidents and injuries; increased wildlife mortality and disturbance; increased roads and increased traffic associated with Site C will create vehicle collision risks;	Project Activity Zones; all areas where Site C transportation occurs
90	socio-economic	social	cohesion	healthy communities; values shift; income disparity and out-migration; unity between and within communities; community cohesion	[redacted]	labour and business demand; pre-project planning;	potential for "divide and conquer" tactics of industry and gov't to reduce intra- & inter-community cohesion; "crab bucket" between those who succeed economically due to new development, & those who do not; increased out-migration from small communities due to highlabour demand in Fort St. John area during construction; creation of haves & have nots; impact inequities even within T8FNs; potential for reduced willingness to share and volunteer; additional money in the economy dividing and changing people; competition for business opportunities within & between T8FNs	potential reserve de-population; brain-drain phenomenon increased; reduced social cohesion and community function in T8FN reserve communities; increased income disparity; lateral violence; decreased social cohesion; poorer quality of life for those on the economic margins; if Site C were to proceed, it could politicize the First Nations - "the community could be torn apart by the Site C dam"; the Site C project has mobilized the First Nations against a common enemy; the proposed Project has provided people with the courage and confidence to be more vocal; alliances have been created that might not have existed otherwise; if Site C were to proceed, the community would become further mobilized to fight the Project through the courts, if necessary; the response to Site C could be more unpredictable and conflict-oriented.	all four communities and other area First Nations; only a small and select group of T8FNs members likely to gain work and business from Site C; many will face negative impacts while only a small number likely to benefit
91	socio-economic	social	crime	healthy communities		labour and business demand	in-migration and increased money in region may cause negative social "boom" effects;	concern that development of the Project will result in increased violence in the communities; "Site C will bring more people, which will bring more problems - we have enough problems"; the construction camps will bring in workers from away along with additional social problems; "We see drug, alcohol and crime problems when new people come around to work and have no ties or responsibility to the area. It seems like they don't care or need to care about respecting us because they are just here for the money and then they leave."; "BC Hydro plans to bring in 2000 workers to work on the proposed dam site. Where do we fit in and how does this affect our community?"; concern that policing services are not adequate to respond to any increase in crime	Young people and those with histories of substance abuse more likely to be affected by or commit criminal activities
92	socio-economic	social	families	healthy communities; percent of workers doing rotation work; sexual division of labour	some T8FNs workers accustomed to long-distance commuting and camp life; others are reluctant to leave community for this type of work;	labour and business demand and work rotation scheduling	increased long-distance commuting and extended rotational shiftwork disproportionately impacts on women and children of primarily male workforce	increased pressures on families at home; family dysfunction and breakup rates may rise; demand for family and other social services may rise (see Report); proper work rotation schedules, social supports in communities and culturally appropriate work environments all essential	Long distance commuting camp workers, their spouses and children
93	socio-economic	social	Fort St. John	healthy communities; quality of life in Fort St. John	Fort St. John already seen as a rough and tumble boom town unwelcoming to T8FNs and unattractive to live in for a variety of reasons	labour and business demand	increased population through in-migration and increased money in the economy may create multiple adverse pressures on social and physical infrastructure, as well as bringing (or increasing) negative dysfunction issues in the community	decreased quality of life, especially for people at the economic margins in Fort St. John or susceptible to negative social factors, including T8FNs members - "this dam kind of bad for people, you know this time they talk about it's going to hurt a lot of people, not only native people it's going to hurt the town here too, where everything will be changed."	T8FNs residing in Fort St. John area
94	socio-economic	social	racism	healthy communities; equitable access to education, training and economic opportunity	"you did very well for a native person"; there are "aboriginal support workers" but not "Caucasian support workers"; youth report racism at the school; racism appears to have decreased in recent years, and this may be occurring because Aboriginal people are less afraid to stand up for themselves	labour and business demand; worker accommodation	exposure to in-migrant workers and businesses with no knowledge of Dane-zaa culture and potentially racist (purposeful or non-purposeful attitudes)	potential for social stress, low worker self-esteem, workplace conflict; high T8FNs turnover rates;	T8FNs working or seeking work from Site C Project, particularly during construction stage

95	terrestrial	ecology	biodiversity	meaningful practice of Treaty 8 rights	the Peace River valley contains many unique "complexes" of habitat, biodiversity and environmental features around key gathering places (e.g. Hudson's Hope, Lynx Creek, Bear Flat)	dam; reservoir	flooding of large areas of high biological and therefore high harvesting value to T8FNs.	the loss of regional biodiversity due to the proposed Project and its effects on biodiversity; there is a need to consider biodiversity off-sets (i.e. to offset the ecological footprint of this proposed hydroelectric development)	Peace River valley and nearby connecting ecosystems
96	terrestrial	species at risk	biodiversity	meaningful practice of Treaty 8 rights; meaningful role in governance and stewardship fo T8FNs	grizzly bears have been sighted in the Peace River valley on the north and south sides; "There's a lot of grizzly bear and lynx habitat. Good hunting area."; grizzlies are a culturally important species;	multiple	sensory disturbance and habitat loss	concern about loss of bear dens, habitat, and migration across the Peace River; concern that loss of habitat will result in further reductions in biodiversity in the Peace River Valley, as was the case for bison, and as may occur for fisher	Peace River valley and nearby connecting ecosystems
97	terrestrial	wildlife	habitat	meaningful practice of Treaty 8 rights; amount of high value habitat available	horse pastures located in area; moose licks, good populations of moose, elk, deer, caribou; black bears and berries, eagles, ducks, other birds nesting in area; there are already considerable effects on wildlife habitat due to oil and gas development, mining, forestry; entire north side of the Peace River is plentiful with game, especially during the winter; concerns about BC Hydro's knowledge of winter feeding by wildlife; moose calving occurs on islands in the Peace River; moose numbers are decreasing as a result of development; e.g. Del Rio and Farrell Creak are now overwhelmed with oil and gas - the animals are being forced downstream from the Del Rio area due to all of the activity there; also 10-15 mines proposed in the Peace River region; forestry and pesticides also a problem; habitat being substantially altered so that it is no longer suitable for moose; Peace Moberly Tract is one of the last remaining areas for moose; contaminants and their effects on moose are a concern; animals pushed down into the valley by industrial impacts in places like Farrell Creek, Del Rio;	dam; reservoir	habitat changes when you go from a river to a lake/reservoir; physical loss of land; reducing available high-value habitat	reduced high value habitat adversely impacting on abundance and health status of terrestrial and aquatic habitat and adversely impacting harvesting potential; "My biggest concern about flooding that valley is that what it's going to do to that habitat and there is a huge difference to me between a river valley and a lake shore or a reservoir shore because the banks of this reservoir are continuing to slough constantly and it's not stable it's not like there is an established shore line, that shoreline is moving all the time and sloughing in and sloughing in and it's not reasonable to say to me if you flood an area the animals will continue to use it in the same way as they did. I know that's not true." "When you look at it, this is a major river corridor the only river corridor in our area that the animals use, that's why it's so important. The river corridor has its own climatic zone, it's different from the higher level areas, and there is lots of food and water there right. [...] In the winter time a lot of them spend the winters along the river because there is not so much snow and the feed is a lot easier to get at."	Peace River valley and surrounding areas; all four T8FNs
98	terrestrial	wildlife	health	meaningful practice of Treaty 8 rights	wildlife increasingly being found with lumps, white stuff inside, spots and mushy tissue; concern that wild meat is more contaminated from certain areas, particularly those affected by oil and gas where animals may be drinking water from contaminated sumps;	multiple, e.g. transmission line to Peace Canyon;	concern that Site C may further impact wildlife health in a variety of ways; disturbance effects would reduce wildlife individual health status;	effects of electro-magnetic fields may further impact wildlife health; even if health issues are not scientific and labelled "perceived", perceived risks have real negative outcomes, affecting choices made by harvesters.	Peace River valley and nearby connecting ecosystems; T8FNs harvesters and would-be harvesters in these areas
99	terrestrial	wildlife	migration	meaningful practice of Treaty 8 rights; especially population health of ungulates	Peace River valley considered an important wildlife refuge and migration route; cumulative loss of habitat connectivity resulting from multiple reservoirs cutting the north side of the Peace River Valley off from the south side; as a result of the WAC and Peace Canyon dams, the Peace River does not freeze in the winter time, and animals cannot cross the River; "From the past, when the first dam was built, a lot of the animal corridors were cut off, even for people as far north as Prophet River, the traditional corridors, you can talk to various community members and even find that some species are extinct, and it doesn't matter that they're putting in this dam and they've done their checklist and they're checking it twice, the long term effects environmentally are something that they should actually take into consideration, they didn't do that with the first dam and they cut off some very specific animal corridors";	dam; reservoir	Site C would create additional barriers and hazards for key wildlife species that use the Peace River valley, especially but not limited to the large ungulates; debris in the reservoir may further impede the ability of animals to cross the reservoir; trails that animals use to safely access the shoreline will be under water; inundation reduces migration and cuts off population of animals, reducing species reproductive genetic diversity	increased cumulative "cutting off" of connecting habitat for migration between north and south side of Peace River Valley; migration across the reservoir will be impeded due to the width of the reservoir; negative effects of bank instability on ability of moose and other wildlife to access or cross the reservoir; large mammals known to be extremely hesitant to approach or cross areas of prior slope failures; may take decades for areas of instability to re-establish vegetation and stability conducive to migration; concern that effects on migration will have implications for harvesting; "You will be cutting off wildlife habitat and migratory corridors."; concern that caribou may be using the Peace River for migration, and that this migration could be affected by the Project; past impacts to caribou, goats and sheep south of Peace Reach in the Williston because of the Wiliston reservoir's impact on their migration route - concerned the same will happen to foothill ungulates; "What are you going to do to the migration route of the animals south of the Peace River and west of the Site C Dam because the flooding of that land is going to have the same impact the Williston had on the mountain ungulates?"; "In all my discussions with other groups, BC Hydro, environmentalists, everybody, nobody has talked about the possibility of a species of animals becoming an endangered species in the eastern foothills of the Rocky Mountain Trench and onto the plains, which is south of this Site C, because the animals right now have a hard enough time crossing the river as it is because of the rock face on the south side, it's just about all the way. There's just certain places where there's little ravines or gullies or coolies or whatever you want to call them, that run in there, that have, literally, mountain trails going up the side that these animals use, once the flooding starts, they're not going to be there anymore. As a matter of fact, because of the debris that's going to be floating a lot of animals are going to drown again, and I know those animals cross that river at an amazing rate."	Peace River valley and nearby connecting ecosystems; T8FNs harvesters and would-be harvesters in these areas
100	terrestrial	wildlife	migratory birds	meaningful practice of Treaty 8 rights		resevoir	inundation of wetlands and Peace River islands	changes to land features (e.g. harvesting and flooding of old growth timber) affecting migration; loss of wetland habitat; concern that mitigation will not be effective	immediate Peace River valley but potentially distant regions also
101	terrestrial	wildlife	population	meaningful practice of Treaty 8 rights	"I have not seen a porcupine in how many years?"; mountain goats are no longer being seen by WMFNs in the region following construction of the WAC Bennett Dam; prior efforts to transplant sheep to the region between Peace/Williston and Rocky Mountain Trench have been unsuccessful; reservoirs have cut off populations from one another; "we used to count the animals as we drove along the Peace River"; there used to be porcupines in the area, but now only infrequent; rabbits, beavers, muskrats continue to be hunted, and their populations fluctuate but nothing out of the ordinary; there used to be a lot more rabbits and porcupine than there are today; animals like fisher, marten and rabbit are not tracked as frequently in the area anymore; bison introduced by Provincial government are now wandering on the roads, and have had a significant effect on moose.	dam; reservoir	various effects on terrestrial wildlife from Project physical works and activities;	the Site C dam would further diminish wildlife populations, including rabbits, and birds; concern that wildlife population effects need to be considered in the context of First Nation hunting; inundation will lead to drowning of animals; there will be an increase in animal mortality trying to cross reservoir; concern about effects of Site C on bear population; beaver and other furbearers will not be able to live in the reservoir; increased morbidity in animals either/or reducing willingness to harvest in the area (Dane-zaa values of letting area heal) or increased perception of poor health equalling contaminated country food;	Peace River valley and nearby connecting ecosystems; T8FNs harvesters and would-be harvesters in these areas

102	terrestrial	wildlife	raptors	meaningful role in governance and stewardship for T8FNs; protection of and promotion of culture;	eagles and other raptors nest near the Peace River in large numbers; "The Peace River valley is habitat for bald eagles, they eat fish there."	multiple	inundation and other impacts on the land may negatively impact on culturally important species such as eagles and tree species	concern about the effects of Site C on eagle habitat - "Concerned about impacts to eagles as they are considered ancestors [to the Dane-zaa] which are depended on when people are young; trees are used for blessings, also very important"; because these species are culturally and spiritually important, any impacts on them may reduce cultural practices or cause psycho-social harm	immediate Peace River valley
103	terrestrial	wildlife	songbirds	meaningful role in governance and stewardship for T8FNs		dam; reservoir	inundation of Peace River islands;	islands in the Peace River are important for birds during sensitive life stages	immediate Peace River valley; especially islands in would-be inundated zone
104	terrestrial	wildlife	ungulates	meaningful practice of Treaty 8 rights; mortality rates among ungulates	Peace Moberly Tract and the entire south side of the Peace River is highly valuable as habitat; world-class wildlife refuge, especially for ungulates; islands in Peace are key breeding areas for ungulates; even more valuable are the islands in the Peace and the lowlands on the north side in particular, especially for ungulates, and avoidance of predators; many species cross the Peace River making use of the island habitat; area from Farrell Creek to Williston Reservoir is “renowned” for elk; populations of ungulates are down, particularly moose and caribou, yet government is still giving out moose licences; population of species such as deer, moose, elk have diminished considerably; the area between Groundbirch, Farrell Creek, Peace River and the HalfwayRiver valley is “of very great importance for the moose population”; WAC Bennett adversely affected caribou such that herd numbers are now depleted; elk have moved in where sheep used to be; concern that warmer climate is resulting in higher populations of ticks, which are infesting the fur of moose and other animals; geographic distribution and migration patterns, numbers, and health status of several key ungulates has changed over the past 50 years, and many members see a role for the WAC Bennett Dam in that change; "The WAC Bennett Dam, even the animals, animals if they swim across, like a moose or caribou, when their heads are sticking out they can't see which way to go, they will usually go down by the river and then the moose drown";	multiple, especially dam; reservoir	floating debris in reservoir may harm or kill ungulates; loss of winter habitat for ungulates; increased drownings with wider crossing and or increased predation of tired animals; increased harvesting from boats by non-Aboriginal recreational users; animals "flushed out" of valley subject to easier harvesting in upland areas	"Animals get scared when they go across, if it's not big water they will swim across but if it's over a kilometer then they drown. On both sides of the hill it's kind of straight down, once the animals try to drink water and if they slide in they won't come back up, they can use their front feet to get to the ground but their back feet don't touch the ground, they fall back and there's no way their down to get out"; "The animals, they live in the whole valley right now, they go back and forth, elk and everything, moose, deer, and the migration and everything in different areas, they have their own system so we build a reservoir, that ecosystem or whatever is going to be broken and then were going to have these deer, or elk, going to be one little herd and a lot of in-breeding and stuff like that, whereas way out here, there's going to be some healthy animals, and then you know we're slowing that system down. You know, (unclear) from the dam but there will be people on this reservoir with jet boats getting into all these areas and hunting them down and so we're actually doing them in."; reduced wildlife abundance in Peace River valley; concern about the effects on ungulate calving on the islands in the Peace River; concern that moose, deer and elk will go the way of the caribou as a result of the construction of Site C; Site C will result in loss of key ungulate habitat on the islands and north Peace lowlands, and to a lesser degree up area rivers like Halfway and Moberly; decreases in elk calving success; loss of elk habitat due to inundation; effects on elk migration; effects on elk activities in the lower Halfway River due to inundation; ""Site C Dam will do the same thing to the foothill ungulates (deer, elk). It will block their migration route. There will be a lot of debris, it’s too easy for an animal to get in but too hard for them to get out because of the debris, and they get stuck in the reservoir and swim until they get tired and drown. No matter what, there will be debris in the river for at least 10-20 years." loss of winter refuge reducing population; reduced health of ungulates.	Peace River valley and nearby connecting ecosystems; T8FNs harvesters and would-be harvesters in these areas
105	terrestrial	plants	biodiversity	meaningful practice of Treaty 8 rights; traditional healing - knowledge and practice; access to medicinal plants	there are some medicinal and food plants that grow preferentially or solely in the Peace River valley - e.g., wild onion, and other medicinal plants whose names people did not want to share; prickly pear cactus is a rare plant in the Peace River valley; berries are plentiful in the Peace River valley; concern about the classification of certain plant species as "waste wood", namely diamond willow, and birch, which have strong cultural connections for T8FNs;	multiple; dam; reservoir, Highway 29 realignment;	loss of access to areas where medicinal plants are known to grow; physical inundation of some medicinal plant growing and harvesting areas; reduced safety in other areas (slope stability) where they are found	reduction in availability of medicinal plants; long-term and irrevocable loss of knowledge of powers of certain medicinal plants; reduced well-being; reduced cultural knowledge; concerns about the effects of the Project on riparian habitat; concerns about plants currently located in the riparian zones that have cultural value; desires to see ethnobotany reflected in the work; concern that invasive plants from Site C and industrial development (land clearing, spraying of herbicides) will impact the availability and quality of food and medicine plants; some medicine plants may be lost forever; concerns about medicinal plant impacts where people don’t use drugs from the stores, but get them from the land; "Traditional herbal medicines will be destroyed by the reservoir, especially rare medicinal plants (referenced one for lung problems) identified by healers, these are medicines they know only grow in the Peace. Moberly and Halfway River valley’s in the flood zone"	south facing slopes of Peace River valley; elders and dedicated healers

APPENDIX B

Part 7 Community Baseline Report and EIS Integration Summary Table - Doig River First Nation, Halfway River First Nation, Prophet River First Nation, West Moberly First Nations

1 INTEGRATION OF COMMUNITY BASELINE REPORT INTO EIS: SUMMARY REVIEW TABLE - DOIG RIVER FIRST NATIONS, HALFWAY RIVER FIRST NATION, PROPHET RIVER FIRST NATION, WEST MOBERLY FIRST NATIONS

Through the Treaty 8 Tribal Association, Doig River First Nation, Halfway River First Nation, Prophet River First Nation, and West Moberly First Nations submitted a community baseline report of the four First Nations to be included in the Site C Clean Energy Project (the Project) Environmental Impact Statement (EIS). The community baseline report, entitled “Telling a Story of Change the Dane-zaa Way: A Baseline Community Profile of Doig River First Nation, Halfway River First Nation, Prophet River First Nation, West Moberly First Nation”, is presented in its entirety in this Appendix.

A Summary Review Table (Table 1) was prepared to specify where in the community baseline report certain topical information is located, and where this information was considered within the EIS. The information in Table 1 is presented by baseline information category (e.g., Traditional Use of Lands and Resources, Community Demographics, Services and Infrastructure, Economics, Community Health, and Non-Traditional Use of Lands). Where the First Nations identified an interest or a concern regarding a particular VC but the interest is outside the scope of the VC, it is discussed in Volume 5 Section 34 Asserted or Established Aboriginal Rights and Treaty Rights, Aboriginal Interests and Information, as identified in Table 1.

While the community baseline report focuses on social, cultural and economic information, to the extent that the baseline mentions concern with other VCs (e.g., environmental), this is captured in Table 1.

Table 1 and “Telling a Story of Change the Dane-zaa Way: A Baseline Community Profile of Doig River First Nation, Halfway River First Nation, Prophet River First Nation, West Moberly” were shared with environmental, social, economic, land use and health Technical Leads to guide them to relevant sections of the baseline report for review and consideration in their VC, as appropriate. For further details, refer to Volume 3 Appendix B Part 1: Approach to Gathering and Integrating First Nations Community Baseline Information.

Table 1 Summary review table - Doig River First Nations, Halfway River First Nation, Prophet River First Nation, West Moberly First Nations

Baseline Information Category	Category and Section of Baseline Report	EIS Section
Current Use of Land and Resources for Traditional Purposes	Fishing – Preamble; Figure 2 – p. xix; Table 3 – p. 96-97; Table 7 p. 147; Table 12 – p. 255-257; S. 4.2; 4.3; 5.1.3; 5.1.4; 5.1.7; 5.4.7; 5.2.3; 5.2.4; 5.3.3; 5.3.4; 5.4.3; 5.4.4; 6.1.3.3; 6.1.4.3; 6.1.5; 6.2.1 Trapping- Preamble; Figure 2 – p. xix; Table 3 – p. 96-97; Table 7 – p. 147; Table 12 – p. 255-257; S. 4.2; 5.1.3; 5.1.4; 5.2.3; 5.2.4; 5.2.11; 5.3.3; 5.3.4; 5.4.3; 5.4.4; 6.1.3.3; 6.1.4.2 Hunting – Preamble; Figure 2 – p. xix; Table 3 – p. 96-97; Table 12 – p. 255-257; S. 4.2; 5.1.3; 5.1.4; 5.2.4; 5.3.4; 5.4.4; 6.1.3.3; 6.1.4.1; 6.1.4.2 Vegetation - Preamble; Figure 2 – p. xix; Table 3 – p. 96-97; Table 12 – p. 255-257; S. 4.2; 5.1.4; 5.2.4; 5.3.3; 5.3.4; 5.4.4; 6.1.3.3; 6.1.4.4 Cultural and Spiritual Use – Preamble; Figure 2 – p. xix; Gatherings – p. iv-v; Table 3 – p. 96-97; Table 12 – p. 255-257; S. 3.3.9; 4.2; 5.1.3; 5.1.4; 5.2.3; 5.2.4; 5.3.3; 5.3.4; 5.4.3; 5.4.4; 6.2.1; 6.2.4	Section 19 Current Use of Lands and Resources for Traditional Purposes
	Fishing - Preamble; Traditional Use – pp. vi-vii; Figure 2 – p. xix; Table 3 – p. 96-97; Table 7 p. 147; Table 12 – p. 255-257; S. 4.2; 4.3; 4.4; 5.1.3; 5.1.4; 5.2.3; 5.2.4; 5.3.4; 5.4.4; 6.1; 7.2.1 Trapping- Preamble; Figure 2 – p. xix; Table 3 – p. 96-97; Table 7 – p. 147; Table 12 – p. 255-257; S. 4.2; 5.1.3; 5.1.4; 5.2.3; 5.2.4; 5.2.11; 5.3.3; 5.3.4; 5.4.3; 5.4.4; 6.1; 7.2.1 Hunting – Preamble; Figure 2 – p. xix; Table 3 – p. 96-97; Table 12 – p. 255-257; S. 4.2; 5.1.3; 5.1.4; 5.2.4; 5.3.4; 5.4.4; 6.1; 7.2.1 Vegetation - Preamble; Figure 2 – p. xix; Table 3 – p. 96-97; Table 12 – p. 255-257; S. 4.2; 5.1.4; 5.2.4; 5.3.3; 5.3.4; 5.4.4; 6.1; 7.2.1 Cultural and Spiritual Use – Preamble; Figure 2 – p. xix; Gatherings – p. iv-v; Table 3 – p. 96-97; Table 12 – p. 255-257; S. 3.3.9; 4.2; 5.1.3; 5.1.4; 5.2.3; 5.2.4; 5.3.3; 5.3.4; 5.4.3; 5.4.4; 6.1; 6.2.1; 6.2.4; 7.2.1 Monetary value of country foods – 6.1.3.2	Section 34 Asserted and Treaty Rights, Aboriginal Interests and Information Requirements

Baseline Information Category	Category and Section of Baseline Report	EIS Section
Health	Fishing - Table 3 – p. 96-97; 4.2.2; 4.3; 4.3.1; 4.3.3; 5.4.4; 6.1.4.3	Section 33 Human Health
Environment	Fishing – Ecology p. xv-xvi; Table 3 – p. 96-97; S. 4.2; 4.3; 5.1.3; 5.1.4; 5.2.4; 5.3.4; 5.4.4; 6.1.4.3	Section 12 Fish and Fish Habitats
	Vegetation – Table 3 – p. 96-97; S. 4.2; 4.3; 5.3.4; 5.4.4; 6.1.4.4	Section 13 Vegetation and Ecological Communities
	Wildlife – Ecology p. xv-xvi; Figure 2 – p. xix; Table 3 – p. 96-97; S. 4.2; 4.3; 5.1.4; 5.2.4; 5.3.4; 5.4.4; 6.1.4.1; 6.1.4.2	Section 14 Wildlife Resources
Community Demographics, Services and Infrastructure	Population – Appendix D – p. 286-289; Appendix E – p. 290-293; S. 5.1.2; 5.2.2; 5.3.2; 5.4.2; 5.5; 6.6.1.5; 6.6.2.2	Section 28 Population and Demographics
	Housing – Appendix D – p. 286-289; Appendix E – p. 290-293; S. 5.1.10; 5.2.10; 5.3.10; 5.4.10; 5.5; 6.5.5; 6.6.1.8	Section 29 Housing
	Infrastructure – Appendix E – p. 290-293; 5.1.10; 5.2.1; 5.2.10; 5.3.10; 5.4.10; 5.5	Section 30 Community Infrastructure and Services
	Transportation – Appendix E – p. 290-293; S. 4.2.2.3; 6.5.2.2	Section 31 Transportation
	Health and Social Services – Appendix E – p. 290-293; S. 5.1.8; 5.2.8; 5.3.8; 5.4.8; 5.5; 6.6.1.1; 6.6.1.7	Section 30 Community Infrastructure and Services
	Emergency Services – Appendix E – p. 290-293; S. 5.1.8; 5.2.8; 5.3.8; 5.4.8; 5.5; 6.6.1.7	Section 30 Community Infrastructure and Services
	Childcare, Education and Training Services – Appendix E – p. 290-293; S. 5.1.9; 5.2.9; 5.3.9; 5.4.9; 5.5; 6.4.2.7	Section 30 Community Infrastructure and Services
Economics	Labour Market – Appendix D – p. 286-289; S. 5.1.5; 5.1.12; 5.2.5; 5.3.5; 5.4.5; 5.5; 6.4.2.7; 6.5	Section 17 Labour Market
	Community Capacity - Education and Skills – Appendix D – p. 286-289; Appendix E – p. 290-293; 5.1.12; 6.4;	Section 17 Labour Market Section 34 Asserted or Established Aboriginal and Treaty Rights, Aboriginal Interests and Information Requirements
	Community Capacity – Local Businesses and Regional Economic Development - S. 5.1.5; 5.1.12; 5.2.5; 5.2.12; 5.3.5; 5.3.12; 5.4.5; 5.4.12	Section 18 Regional Economic Development Section 34 Asserted or Established Aboriginal and Treaty Rights, Aboriginal Interests and Information Requirements
	Regional Development Activities - S. 5.1.5; 5.4.5	Section 18 Regional Economic Development

Baseline Information Category	Category and Section of Baseline Report	EIS Section
Community Health	Cultural vitality: language, traditional activities - Figure 7 – p. 46 Table 2 – p. 47; Table 3 – p. 96-97; Table 12 – p. 255-256; S. 3.3; 3.4; 4.2; 5.1.6; 5.2.6; 5.3.6; 5.4.6; 5.5; 6.1; 6.2	Section 19 Current Use of Lands and Resources for Traditional Purposes
	Cultural vitality: language, traditional activities - Figure 7 – p. 46; Table 2 – p. 47; Table 3 – p. 96-97; Table 12 – p. 255-256; S. 3.3; 3.4; 4.2; 5.1.6; 5.2.6; 5.3.6; 5.4.6; 5.5; 6.1; 6.2	Section 34 Asserted or Established Aboriginal and Treaty Rights, Aboriginal Interests and Information Requirements
	Health conditions – Table 2 – p. 47; Table 3 – p. 96-97; Table 12 – p. 255-256; 3.4; 4.2.2.2; 4.3; 5.4.4; 6.1.3.1; 6.1.3.3; 6.1.4.3; 7.2.1	Section 33 Human Health
	Health conditions – Table 2 – p. 47; Table 3 – p. 96-97; Table 12 – p. 255-256; 3.4; 4.2; 4.3; 5.1.8; 5.2.10; 5.3.4; 5.4.4; 6.1.3.1; 6.1.3.3; 6.1.4.3; 6.6; 7.2.1	Section 34 Asserted or Established Aboriginal and Treaty Rights, Aboriginal Interests and Information Requirements
Non-traditional Use of Land and resources	Community Land and Resource Uses for Non-traditional Purposes – 5.1.5; 5.2.5; 5.4.5; 5.4.12; 6.5.3	Section 20 Agriculture
	Community Land and Resource Uses for Non-traditional Purposes 5.1.5; 5.4.5; 6.5.3; 6.5.6	Section 21 Forestry
	Community Land and Resource Uses for Non-traditional Purposes 5.2.5; 5.4.5	Section 23 Minerals (Gravel)
	Community Land and Resource Uses for Non-traditional Purposes - S. 4.2 5.2.3; 5.3.5; 5.4.3; 5.4.5; 6.1.4.2; 6.5.3	Section 24 Harvest of Fish and Wildlife Resources
	Community Land and Resource Uses for Non-traditional Purposes Table 4 – p. 117; 5.1.5; 5.1.12; 5.2.5; 5.4.12; 6.5.3; 6.5.6	Section 25 Outdoor Recreation and Tourism
Land and Resource Use Effects	Navigation – Transportation – Table 3 – p. 96-97; S. 4.3; 4.4; 5.4.4; 6.1.4.3	Section 26 Navigation
	Visual/Aesthetic– Table 3 – P. 96-97; Table 12 – p. 255-256 S. 4.2; 6.1.2.1; 6.1.3.1	Section 27 Visual Aesthetics