
RESEARCH OF THE TLUOS PERTAINING TO
TRANSCANADA'S PROPOSED
MCLEOD RIVER NGTL PIPELINE
BY THE ALEXIS NAKOTA SIOUX NATION



SUBMITTED BY ANSN CONSULTATION OFFICE
OCTOBER 2015

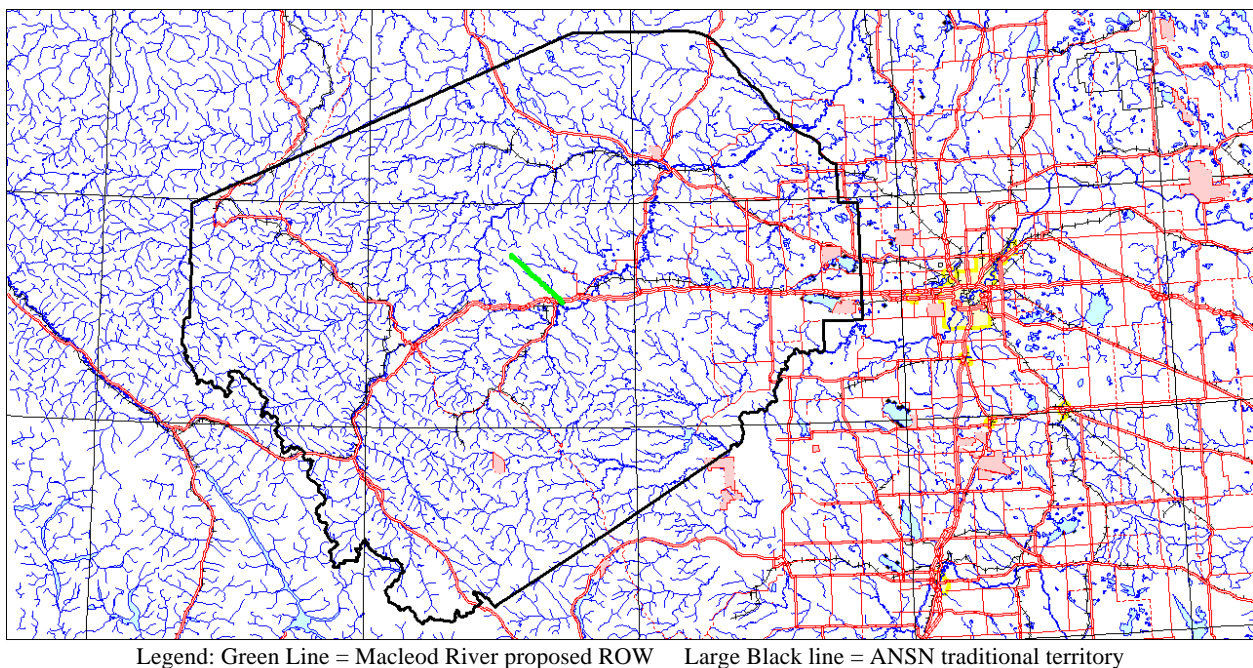
SUPPORT PROVIDED BY BARRY A. HOCHSTEIN, B.A., M.A.
FOUR MEDICINES CONSULTING LTD.

TRADITIONAL LAND USE AND OCCUPANCY RESEARCH REPORT

SECTION 1 - BACKGROUND

In TransCanada's fact sheet, they state that "the McLeod River Section was added to the 2017 NGTL System Expansion Project in late October 2014. The pipeline will consist of approximately 36 kilometres (km) of 48-inch diameter (1219 mm) pipe. The starting point of the pipeline will be at legal location NW-21-55-20-W5 and terminate at the existing valve site approximately five km west of Edson, AB, at legal location SE-11-53-18-W5."

This proposed pipeline is in the center of the Alexis Nakota Sioux Nation's ("ANSN") asserted traditional territory fully within the traditional area (see map below):



The ANSN is a signatory to Treaty No. 6, and asserts Treaty rights, aboriginal rights and traditional uses in this area. The ANSN also recognizes certain oral promises made during the negotiation of Treaty No. 6, and asserts these as additional treaty rights.

HISTORY OF ALEXIS NAKOTA SIOUX NATION

The Alexis Nakota Sioux are a people who, throughout the challenges of over three hundred years of migration, war, and strife have managed to preserve and celebrate their unique identity, culture, and language from generation to generation. ANSN members are direct descendants of two identifiable groups of Native people: the Nakota (Assiniboiné) who migrated ever westward in the 17th, 18th and 19th centuries as they detached themselves from the other tribes of the Siouan Nation, and the indigenous aboriginal kinship groups the Nakota (Assiniboiné) married into. These indigenous groups had, for thousands of years, occupied what is commonly known today as the Great Plains of central and southern Manitoba, Saskatchewan, and Alberta.

By the mid-18th century the Assiniboiné were well established on the Great Plains, and by the end of that century had pushed further north and west to the North Saskatchewan River, having established a vast range in which to travel and trade.



Camp Life (Assiniboiné)

Source: Northwestern University Library, Edward S. Curtis's "The North American Indian," 2003

Treaty Six was signed in 1876 at Fort Carlton on August 23 (Carlton Indians), August 28 (Willow Indians), and September 9 (Various Cree and Ojibwa Indians). Adhesions to the Treaty were signed in 1877 with Fort Edmonton area chiefs, including Chief Alexis. Treaty Six surrendered 121,000 square miles of the rich fertile plains of Central Alberta to the Queen of England, as it was:

...the desire of Her Majesty to open up for settlement, immigration and other such purposes as to Her Majesty may seem meet, a tract of country bounded and described hereinafter mentioned, and to obtain the consent thereto of Her Indian subjects inhabiting the said tract, and to make a treaty and arrange with them, so that there may be peace and good will between them and Her Majesty, and that they may know and be assured of what allowance they are to count upon and receive from Her Majesty's bounty and benevolence (Copy of Treaty Six, Pg. 2).

In exchange for the Indians' willingness to "cede, release and surrender and yield up to the Government of the Dominion of Canada, for Her Majesty the Queen and Her successors forever, all their rights, titles and privileges, whatsoever, to the lands included" – 121,000 square miles – the Indians were promised the following as it relates to Traditional Hunting and Fishing practices:

“Her Majesty further agrees with Her said Indians that they, the said Indians, shall have right to pursue their avocations of hunting and fishing throughout the tract surrendered as herein before described, subject to such regulations as may from time to time be made by Her Government of Her Dominion of Canada, and saving and excepting such tracts as may from time to time be required or taken up for settlement, mining lumbering or other purposes by Her said Government of the Dominion of Canada, or by any of the subjects thereof duly authorized therefor by the said Government.”

Adhesions to Treaty Six were signed at Fort Edmonton on August 21, 1877. Signatories included Pahs-Pahs-Chase - chief of the Ft. Edmonton Plains Cree; Catchis-Tah-Way-Skum, ancestral chief of the Alexander First Nation; and Alexis Kees-Kee-Che-Chi – ancestral chief of the ANSN:

We, the undersigned Chiefs and Headmen of the Cree and other Bands of Indians, having had communication of the treaty, a copy of which is printed in the report of the Minister of the Interior for the year ending 30th June, 1876, concluded at Forts Carlton and Pitt between the Indians inhabiting the country described in said treaty, and Her Majesty the Queen of Great Britain and Ireland, by Her Commissioners, the Honourable Alexander Morris, Lieutenant- Governor of Manitoba and the North-west Territories, the Honourable W.J. Christie and the Honourable James McKay, but not having been present when the negotiations were being conducted at the above mentioned places, do hereby for ourselves, and the Bands which we represent, agree to all the terms, conditions, covenants and engagements of whatever kind enumerated in the said treaty and accept the same as if we had been present, and had consented and agreed to the same when the treaty was first signed and executed.

By the early 1970s, Canadian courts began to acknowledge the existence of Aboriginal legal rights in the land other than those provided for by treaty or statute. In particular, the 1973 decision of the Supreme Court of Canada in *Calder v. British Columbia (Attorney General)* confirmed that Aboriginal peoples' historic occupation of the land gave rise to legal rights that survived European settlement, thus recognizing the possibility of present-day Aboriginal rights to land and resources. This was further affirmed through the constitutionalization of Aboriginal rights in Part II of the Constitution Act, 1982, entitled “Rights of the Aboriginal Peoples of Canada.” This necessarily created a newly authoritative legal foundation on which Aboriginal peoples assert historic claims and defend treaty-based and other rights.

35. (1) The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.

(2) In this Act, "aboriginal peoples of Canada" includes the Indian, Inuit and Métis peoples of Canada.

(3) For greater certainty, in subsection (1) "treaty rights" includes rights that now exist by way of land claims agreements or may be so acquired.

(4) Notwithstanding any other provision of this Act, the aboriginal and treaty rights referred to in subsection (1) are guaranteed equally to male and female persons.

This change to the Constitution Act did not create or define any new Aboriginal rights, rather it recognized and affirmed already existing Aboriginal rights, without spelling out what those rights were or where they might exist. What Aboriginal rights include have been defined over time through Supreme Court cases such as R. V. Calder and R. V. Sparrow. Aboriginal rights have been interpreted to include a range of cultural, social, political, and economic rights including the right to land, as well as to fish, to hunt, to practice one's own culture, and to establish treaties.

As of March, 2012, the total registered population of the ANSN was 1779 persons. As per its historic use, today ANSN members continue to utilize and rely on the land for its Constitutionally protected traditional way-of-life, inclusive of hunting, gathering, fishing, ceremony and others. ANSN asserts and practices its Aboriginal and Treaty traditional uses in areas per the below map:



MCLEOD RIVER PROJECT

TransCanada contacted the consultation office (Duane Kootenay) to have the ANSN TLU team members complete research to inform an assessment of how the proposed McLeod River 36 kilometres (km) of 48-inch pipeline might negatively impact ANSN Treaty and aboriginal rights. A scope of work was defined and a budget was subsequently negotiated and approved by TransCanada representative Chris Sillito and the ANSN Consultation Manager, Duane

Kootenay. Barry Hochstein of Four Medicines Consulting Ltd. participated in the process with both parties.

This report is the result of nine days of field research by the ANSN TLU team with two Elders from the community. Barry Hochstein participated and conducted technical (GPS units and digital downloads) research training for all nine days in the field. The team drove to the site Sunday evening August 9th, 2015, and completed their work nine days later, Tuesday, August 18th, 2015. To assist the ANSN TLU team, both TransCanada and CH2M Hill Inc. provided the team with digital copies of related maps, shapefiles of the proposed ROW, and additional logistical shapefiles which were easily uploaded into the team's GPS units.

SECTION 2 - THE TEAM

The team was comprised of two ANSN Elders, two ANSN field monitors, Barry Hochstein from FMC Ltd., Mark Anielski, President and CEO of Anielski Management Inc., and two CH2M personnel for health and safety, as well as providing logistical support with Argos, meals and accommodations. The CH2M team members were very respectful of the Elders.

As well as assisting with the senior review of the final report, Four Medicines Consulting Ltd. was engaged to provide daily on-site training for the ANSN field personnel, including the following:

- GPS digital download for GIS mapping to a new laptop
- Digital photograph downloading and filing
- Review of TLU data collection methods
- Digital photography and download from new Garmin Monterra GPS units

LANGUAGE

The Elders discussed using their own (Stoney) language to train the field research officers, and it was fully agreed that the bulk of the data sharing would be in Stoney, with minor exceptions for Barry and Mark as required (when new items were discussed). Barry and Mark traveled close to, but not directly with the Elders during the data-sharing time with the field officers. At certain locations, the Elders would call Barry and Mark over to look at something of significance that they felt warranted additional attention in the report, or to give context for other items.

Recommendation: Whenever possible, site information should be transmitted in the original language of the First Nation – the language in which the Elders learned about those uses themselves as passed down over millennia for accurate oral transmission of research information, the way it was originally taught to the Elders.

TECHNICAL CHALLENGES

For the first half of the field research, from about Km 0-Km 17, the GPS data appeared to be accurate, matching both CH2M's and ANSN'. However, about the time the proposed ROW

started crossing the existing ROW, the GPS data did not match up exactly, causing a level of concern regarding researching the correct area.

Upon further investigation, and comparison of data between ANSN and CH2M, it was discovered that data received from TransCanada to the ANSN Consultation team was somewhat dated, and had been updated several times over the course of the year (according to the CH2M participants). With a little assistance from CH2M's GIS department, the ANSN team was successfully able to download the correct, matching shapefiles of the proposed ROW to the ANSN GPS units, as well as the kilometre marker points.

Recommendation: The project proponent should ensure that the First Nation site research team has the most recent, up-to-date shapefiles to ensure that the team is accurately following the most recent proposed path of development. These files should be transmitted well in advance of the site research to ensure sufficient time to upload them into the First Nation team GPS units.

Failure to ensure this transmittal of updated information could have resulted in the wrong proposed ROW being researched; fortunately, this was caught and corrected in the field.

SECTION 3 – METHODOLOGY

The research methodology followed the classic Participatory Action Research (PAR) as outlined in *Mapping How We Use Our Land* (Arctic Institute of North America, 1994), with minor modifications being updated. Today the common phrase is “community-led consultation”, versus the alternative of “consultant-led consultation”; the former being instigated and carried out directly by the First Nation; the latter being instigated by the project proponent and typically carried out by consulting companies or environmental companies hired by the proponent.

The key questions were open-ended, allowing for the maximum flexibility for the Elders to define their aboriginal and Treaty rights themselves, and detail their perceptions of potential negative impacts to these rights. While aboriginal and Treaty rights have been partially defined and asserted by the courts, the Treaty, supported by the United Nations (UNDRIP) and public policy statements of the federal government (i.e. self-government as an inherent right), ultimately the assertion of the ANSN is that their rights can only be self-defined, and not be delineated by any other government or body.

The primary, single question asked of the Elders in the field research was if they could show the field researchers what aboriginal and Treaty rights could be negatively impacted if the proposed pipeline was built as per the project proposal.

SECTION 4 - CATEGORIES REVIEWED

The following are the major, broad categories of the uses associated with the ANSN's Treaty and aboriginal rights, however these are not exhaustive or in any way intended to limit these rights. Other rights may exist that are not delineated:

- Berries (as medicines, food sources, cultural purposes, ceremonial purposes and others)

- Birds (as food sources and for ceremonial purposes)
- Ceremonial Purposes
- Cultural Purposes
- Fish
- Gathering Sites
- Hunting (big game for a variety of uses, trails, habitat, water sources)
- Insects (bees for honey, other insects are animal food – i.e. ants for bears, woodpeckers)
- Medicines (may come from plants, animals, birds, etc.)
- Occupancy (cabins, camps, traditional trails)
- Plants (as medicines, food source, cultural purposes, ceremonial purposes and others)
- Reptiles
- Trapping (small game, furs, beaver dams)
- Travel / access routes
- Trees and shrubs (as medicines, food source, cultural purposes, ceremonial purposes and others)
- Water Sources

Certain of the traditional use categories are explicitly stated as rights in Treaty 6 (hunting and fishing); others are part of the ANSN aboriginal and Treaty rights, as asserted by the ANSN Elders and community, and therefore the ANSN team tracked all these categories.

Water, food and medicine were considered paramount. All of the above are part of the ANSN traditional livelihood.

SECTION 5 - CUMULATIVE IMPACTS

The information gathered is added to the ANSN Geographic Information System (GIS) database for tracking cumulative impacts. A next step will be to determine the amount of hectares or square meters of disturbance potentially to be caused by the ROW, and compare that against known, existing impacts.

Another aspect of the potential impacts reviewed is the level, or degree of disturbance by the proposed project.

Three Levels of Disturbance:

1. In the short-term, almost of the proposed ROW will be impacted by logging. A significant portion will be negatively impacted by constructing a pipeline and digging up the ground, travelling, etc.
2. In the mid-term, the pipeline ROW will have forced and natural re-growth, but limited to allow pipeline maintenance for the duration of the pipeline lifespan.
3. Long-term disturbance to the traditional, site-specific uses identified in this report

SECTION 6 - TEAM REPORTS

Enclosed in this report (unless otherwise redacted) as Schedule 'A' are maps and specific longitude and latitude locations of the hundreds of Aboriginal and Treaty right uses along the right-of-way.

THIS INFORMATION IS CONFIDENTIAL TO TRANSCANADA PIPELINE LTD.

SECTION 7 - CATEGORICAL REVIEW

HUNTING (BIG GAME FOR A VARIETY OF USES, TRAILS, HABITAT, WATER SOURCES)

This proposed ROW was rich in big game sign, and confirmed by the Elders as well. Evidence was seen of moose eating small trees, moose scrapings, scat from moose and deer, as well as fresh track of both. Deer antlers were found adjacent to a game trail.

Moose, elk and deer habitat was ideal for the maintenance of these big game animals. Moose, elk and deer scat were seen frequently; live white-tailed deer were seen almost every day while on site.

The Elders and field officers indicated that this is a common hunting area, known to band members, and they plan to return to hunt moose in the area.

Bear sign was evident throughout much of the proposed ROW, from bear scat to dug-up tree stumps.

Only a small amount of caribou lichen (food source) was noted in the middle area of the proposed ROW.

TRAPPING (SMALL GAME, FURS)

The site was also rich in fur-bearing mammal sign, including multiple small dens, from the smallest mice and squirrels to larger fox, badger and wolf. There was evidence of a wolf kill (moose) along the proposed ROW. There were large populations of squirrels and their dens throughout the high ground in the spruce treed areas.

There were two beaver dams noted, although both appeared to be dormant (not active). Small game trails were evident throughout the site.

BIRDS (AS FOOD SOURCES AND FOR CEREMONIAL PURPOSES)

Woodpeckers existed throughout the area, evidenced by the trees they had penetrated, and the very audible knocking. Small song birds were noted throughout. A bald eagle was spotted by the team flying directly over the proposed ROW. Hawks were noted through the region as well.

FISH

There appeared to be no fishing habitat along the proposed ROW, although there were several small streams and sloughs.

OCCUPANCY (CABINS, CAMPS, TRADITIONAL TRAILS)

While there were no cabins, human trails or gravesites noted along the proposed ROW one of the Elders noted that some band members had been born very close to the area.

BERRIES (AS MEDICINES, FOOD SOURCE, CULTURAL PURPOSES, CEREMONIAL PURPOSES AND OTHERS)

There were large berry patches noted throughout the proposed ROW. As the berry plants are also used (largely) for medicinal purposes, the specific sites are not included; however, some of the berries marked included:

- Blueberries
- High-bush Cranberries
- Huckleberries
- Low-bush Cranberries
- Moose berries
- Raspberries
- Saskatoons
- Strawberries

Berries and some medicines were harvested by the team as they travelled the proposed ROW.

PLANTS (AS MEDICINES, FOOD SOURCE, CULTURAL PURPOSES, CEREMONIAL PURPOSES AND OTHERS)

The Elders shared many trees, shrubs and plants with the field officers, but declined to have several of them recorded for this report. Along this proposed ROW there were at least three medicine plants identified that were not previously known to the researchers, but were known to the Elders, and which do not exist in known plant books on aboriginal medicines. The Elders did not have English names for most of the medicinal plants.

TREES AND SHRUBS (AS MEDICINES, FOOD SOURCE, CULTURAL PURPOSES, CEREMONIAL PURPOSES AND OTHERS)

Most trees had a combination of food and cultural purposes noted. Most of the trees have medicinal qualities in addition to cultural uses. One Elder aptly stated “The forest is the Creator’s pharmacy.”

Diamond Willow fungus was found and harvested. There were multiple stands of diamond willow throughout the proposed ROW.

CULTURAL PURPOSES

Certain tree species were identified as having high cultural uses. The cultural uses were shared, but the Elders asked to not include them in this report.

CEREMONIAL PURPOSES

While no ceremonial sites were noted during the review, all the cultural materials for ceremonies, such as sweat lodges were noted in various locations throughout the ROW. These include the boulders, willows and plants used for ceremonial smudging.

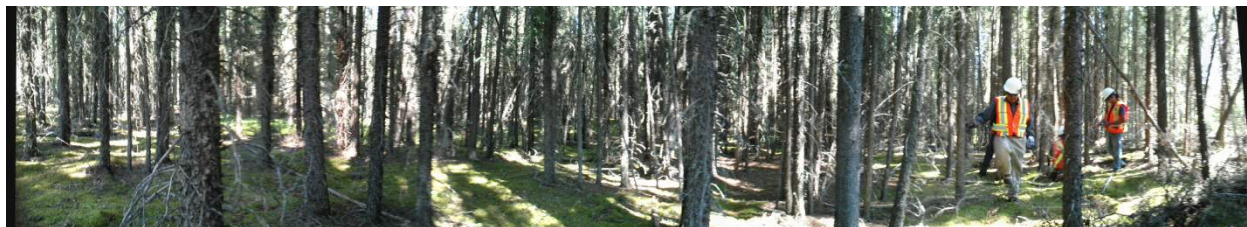
ADDITIONAL HABITAT DISCUSSION

The Elders noted two major types of habitat, which they classified simply as “low-ground” and “high-ground”. The low ground areas were requested by the Elders to be noted as: “*higher in significance*” than the high ground areas. In particular was the abundance of many different types of traditional medicines in the low ground habitat areas.

The environmental habitat could be approximated as follows:

- Low Ground habitat 30-35%
- High Ground habitat 65-70%

In high ground areas, there was little ground cover, as the spruce trees precluded much undergrowth. There were noticeably fewer medicinal plants in the high ground; however, there were medicinal plants of different types found in the high ground area, with mild-moderate significance.



In low ground areas, there were greater varieties of medicinal plants, and in general, ones that would be classified as *medium* to *high* significance to ANSN Elders.

SECTION 8 RE-ROUTE AREAS

Specific to the reroute and for the purposes of the Provincial Consultation process under FNC201507718, special attention was paid to the two re-routes and both teams reviewed these proposed ROW corridors. The majority of the re-route land was what the ANSN team consider “low-ground” habitat and of very high significance. The low ground areas were requested by the

Elders to be noted as: “*higher in significance*” than the high ground areas. In particular, was the abundance of many different types of traditional medicines in the low ground habitat areas.

There were hundreds of medicinal plants found on both re-routes, as evidenced in Schedule 'A'. The topography was very dense, and it made walking very difficult, but on the upside, there were a great many medicinal plants found in these two areas.

Elders Raymond and George Potts were asked if they knew who actively exercised their rights in this very specific area (the proposed pipeline ROW). They confirmed that there are approximately 12 ANSN families, including themselves that actively hunt for both moose and black bear along the proposed pipeline ROW, including the reroute areas, and neighboring vicinity. The number of tracks and sign of both moose and bear supported this assertion.

The Elders stated that they frequent the low-ground ROW areas to collect multiple species of medicinal plants and were quite concerned that these habitats would be destroyed by the pipeline construction. Some of the medicinal plants were very unique and not known from previous “mini-TLU studies”, or even in comprehensive TLU studies done in the past. The value of several of the medicinal plants was rated as “*very high*”, such as for traditional heart medicine. As such and as provided on Schedule ‘A’, ANSN has site specific concerns regarding FNC201507718 that requires commencement of discussion on mitigation.

SECTION 9 - FINDINGS

This proposed pipeline right-of-way (ROW) is high in cultural and traditional uses. There were high indications of big game animals (moose, deer, elk, and bear). Predator sign was also seen (small to mid-size animal dens).

Small game sign ranged from mice and moles, to very large squirrel dens and rabbit sign. Game trails were found consistently throughout the ROW, including big game, small game and small fur-bearing animal trails. Many trails crisscrossed throughout the ROW. If the pipeline ROW proceeds without changing the route, the small-middle sized mammal dens and squirrel dens will be destroyed in the ROW construction phase. In the spring, summer and early fall, the larger animals will likely leave the area, the squirrels may not. While some game trails were marked, there were small-large game trails throughout the entire proposed ROW area, most intersecting one another, which also made for easier walking. While bear sign was noted (dug up tree stumps and deadfall), there were no bear dens noted on the proposed ROW.

There were several water-sources noted along the ROW, including beaver dams, streams, seasonal creeks and muskeg.

There were no indications of cabins or burial sites along the ROW.

Birds were noted throughout the area, however there were no nests seen, and birds will generally leave the area.

Many berry batches were found throughout the proposed ROW. Most of the edible berry plants are also used for significant medicinal purposes (including the roots, stems, leaves and berries).

Culturally significant sites (including medicinal plants¹, plants for cultural and ceremonial purposes) were found throughout the proposed ROW. These included most wild berries and several other plants that were harvested by the Elders as they assisted in the field research. Many of the medicinal plants (but not all) are covered in the classic text “Aboriginal Plant Use in Canada’s Northwest Boreal Forest” (Marles *et al* 2012), although the traditional Stoney names are not included – just English, Latin, Cree and Dene.

SITE SPECIFIC DATA COLLECTED

Elders Raymond and George Potts were also asked if they knew who actively exercised their rights in this very specific area (the proposed pipeline ROW). They confirmed that there are approximately 12 families, including themselves that actively hunt for both moose and black bear along the proposed pipeline ROW and neighboring vicinity. As noted earlier in the report, the number of tracks and sign of both moose and bear supported this assertion.

In the low-lying areas, the harvesting of moose is for a multiplicity of purposes, affecting many aspects of the traditional livelihood of the people:

1. Meat - of all the animals hunted, the most prized is the moose for its meat
2. Hide – the hide is fully utilized and tanned for many purposes, including ceremonial lodge coverings, the making of moose hide jackets, moccasins, gloves, bags and other items
3. Bones – are cracked for their nutritional value. Some bones are also turned into tools, such as moose-hide scrapers
4. Nose – even the nose is made into moose-nose soup
5. Brains are fully utilized in the hide-making process
6. Part of the hide tanning process involves using certain wood for the fire and rotten spruce wood (very red in colour) for the tanning completion portion
7. All the innards are used

In short, almost every piece of a moose is fully utilized and incorporated into the culture and livelihood of the people. Of all the animals harvested, the moose is the highest value and highest sought-after.

Additionally, in the low-lying areas, there may be minerals in the water, attracting the animals.

Bears are hunted for food, their fur and for medicinal purposes. They are also attracted by the water sources in the low-lying areas. Short of baiting or calling, low-lying areas are the best locations for hunting these particular high-value animals.

Certain trapping is also confined to low-lying areas, such as for muskrat and beaver. At least two sites on the proposed ROW showed signs of past beaver presence (a beaver dam and at a stream

¹ For further reading on some traditional plant uses, including medicinal plants, please refer to Aboriginal Plant Use in Canada’s Northwest Boreal Forest, Marles et al, Natural Resources Canada, Edmonton, AB 2008.

further north, beaver cuts on trees and a beaver run). Some portions of these two animals also provide traditional medicine, such as the beaver castor.

The specific area within the proposed pipeline ROW is well known to the ANSN people as an active area for the Kootenay families, in particular. As noted above, the Elders also noted that some of the band members had been born very close to the proposed pipeline ROW.

The Elders stated that they frequent the low-ground areas to collect multiple species of medicinal plants and were quite concerned that these habitats would be destroyed by the pipeline construction. Some of the medicinal plants were very unique and not known from previous “mini-TLU studies”, or even in comprehensive TLU studies done in the past. The value of several of the medicinal plants was rated as “*very high*”, such as for traditional heart medicine.

The medicinal plants are normally harvested for about three months of the year, from mid-June to mid-September. It was acknowledged, however, that in an emergency, certain plants and their locations were known, and could be harvested even in the winter from under the snow.

The parts of the various medicinal plants used for medicine or food vary from plant to plant. For example, the blueberry plant is fully utilized (root, stem, leaves and berries) for heart medicine; the strawberry berry is eaten as food, and the root is used for heart medicine. There are other plants used for medicine that were found, but the names and parts were not shared with the researchers.

All the aforementioned berries are consumed for food purposes as well (particularly, but not limited to raspberries, high-bush and low-bush cranberries, huckleberries, rosehips and blueberries). It is also important to note that berries and other plants are also consumed by bears and other wildlife, as a critical element to their habitat as well. Even bears know traditional medicine and are known to use green willow bark for pain (the precursor to modern aspirin). Black bears also are known to create their own winter food to eat during hibernation consisting of berries and other plants, which they can snack on if they wake slightly before spring. While rare to find, the “poultice” of this mixture is a highly considered medicine by hunters and medicine people.

Tamarack is a medicine used for cuts and bruises. The bark is removed from a living tree and certain parts of the inside bark are used as a poultice for cuts and bruises. The bark itself can also be used as a combination splint and medicine for broken bones.

The fungus that grows uniquely on the diamond willow serves a multiplicity of purposes:

1. Ceremonial (the fungus is smudged in certain cultural ceremonies);
2. Medicine (the fungus is again smudged and inhaled for headaches and pain, under the direction of a knowledgeable practitioner/teacher/Elder); and
3. A chemical-free anti-mosquito repellent (smudged, it discourages mosquitoes in a local area)

Few other smudges provide this three-way benefit. The diamond willow fungus is a very important medicine, both for spirituality and medicinal practices. Having been taught by the Elders, the author personally uses this fungus for all three purposes. There are also protocols to follow for harvesting diamond willow fungus. The first (and most important) is that you carry tobacco as a gift offering to the Creator before you will find the medicine (and important that you place some tobacco in the ground as a “thanks offering” after harvesting). The second is that you will smell it before you see it. Of course, you have to know what the fungus smells like while attached to the willows. And just because there are stands of diamond willows doesn’t mean that they necessarily gave the fungus. The fungus only grows in select areas, known to the Elders. In 20 years of searching for this particular fungus, the protocols always work (as does their converse – you won’t find it without the tobacco), and very few (estimated as less than 1%) stands of diamond willow actually have the fungus.

As noted in this report, the low lying areas represent approximately 30% of the proposed ROW. As well, while the hunted animals frequent the entire area as part of their natural range, the preferred hunting areas were also in the low-ground habitat, where water and forage are more plentiful.

SECTION 10 - HEALTH OF THE HABITAT

The Elders noted that the health of the habitat was very good. They pointed out the healthy plants, and noted in only a few isolated cases where the plants were not healthy, or dying. In review with one of the Elders, it was felt that 99% of the existing, undisturbed habitat was very healthy, and only 1% of the same area was unhealthy, for unknown reasons. The sickly plants and trees were also in close proximity to the existing ROW. Habitat closer to the centre of the proposed ROW was much healthier.

SECTION 11 - VOLUME OF DATA COLLECTED

The two community researchers collected over 1800 waypoints from the two Elders. As well, the Elders also pointed out specific points of interest to Barry Hochstein and Mark Anielski, giving a total of well over 2,000 data points marked on the 36.4 kms of proposed ROW.

It should be noted that with only two Elders to conduct the field research, a “swath” of coverage was typically about 5-7 metres wide that they could see in good circumstances, less in denser forest. Several types of points of interest were skipped over, such as the never-ending squirrel dens in the spruce-treed areas of high ground, and larger patches of Labrador tea, rose hips, blueberries, high bush and low bush cranberries, and others. Given an 80-metre proposed ROW and the number of items skipped over, it would be reasonable to assume that there were five-six times the numbers of points missed, resulting in a total well in excess of 10,000-12,000 points of interest.

As noted above, it was interesting to note that the Stoney people use some different medicinal plants than other First Nations (Cree, Dene Dunne-Za, Blackfoot, Saulteaux), and this creates a wider range of known medicinal plants than previously known in similar such studies,

reinforcing the cultural diversity found in Alberta's First Nations, even though they may be in relative close proximity to one another.

SECTION 12 - POTENTIAL NEGATIVE IMPACTS TO ANSN'S TREATY AND ABORIGINAL RIGHTS

Below is a sample of potential negative impacts to ANSN' Treaty and Aboriginal Rights. This list is not all inclusive:

Hunting and Trapping – There will be a significant negative impact on hunting in the area during the construction phase, and potentially longer as several trails, large game beds and habitat will be destroyed in the construction phase as proposed. Development of pipelines are unnatural to the environment and may cause fragmentation of wildlife, alteration of food sources, and changes to populations and locations of species. As also likely seen through the rifle shots fired during day 5, increased access through oil and gas development may also increase the number of non-native hunters, potentially reducing the odds of success for First Nation members. The Elders were concerned that they (including the other 10 families) would have to alter their hunting patterns and travel further to hunt, resulting in increased time and expense. Some ANSN families live off-reserve in Edson.

Fishing – There were no known impacts to fishing in the area.

Traditional Uses - There will be a high impact and destruction to medicinal plants used by the ANSN people along the full length of the ROW, but particularly in the low-ground areas including the re-routes and the first quarter of the proposed ROW. The ANSN people consider traditional uses to be part of their Aboriginal and Treaty rights.

The entire proposed ROW is of high value to the ANSN First Nation members. We address two aspects of Treaty rights:

First are the "In-Treaty rights" as delineated in the actual Treaty (i.e. hunting and fishing). The whole of the area is rich in hunting habitat, evidenced by the big game sign (scat, bedding sites, trees stripped from moose easting, tracks, wolf kill sites for moose and visual sightings). It is traversed with game trails throughout. The potential loss of moose habitat, in particular, would be detrimental to the Treaty right of hunting. The Elders mentioned this particularly in reference to the "low-ground" areas, where there was water, noting even smallest trees and shrubs where the moose had eaten recently, stripping the leaves off the stems. From our estimation, this represented about 30-35% of the proposed ROW. The balance was high ground, which the Elders valued, but less so. There were no known fishing impacts along this particular proposed project.

Second are Treaty rights which are known to the people, but less recognized by government and industry. These are related to the oral promises of maintaining their traditional livelihood, and include trapping and all the traditional uses mapped. These are highly acknowledged by the Elders as their "rights", which are accepted on face value. These rights are all those delineated

in the report as both trapping and traditional uses (the latter being the most abundant, particularly some very significant, high value medicinal plants, some used for heart problem correction).

SECTION 13 - CONCLUSION

It was obvious that the pipeline would remove many important plants, and impact significantly on big game, their habitat and trails. The general consensus was that the surface disturbance, such as the removal of the trees (logging operations) was by far the greatest detriment to the landscape and disturbance of their traditional uses. Also, at least three major low-ground habitats would be destroyed by the proposed pipeline construction; these areas are of extreme concern to ANSN.

It is necessary that TransCanada and ANSN discuss mitigation measures, including but not limited to potentially relocating the pipeline around low-lying areas.



Reviewing a Day's Work