# SITE C CLEAN ENERGY PROJECT

## VOLUME 5 APPENDIX A11 PART 1

## COMMUNITY SUMMARY:
## HORSE LAKE FIRST NATION

***FINAL REPORT***

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**January 2013**

## Horse Lake First Nation

The Horse Lake First Nation (HLFN) has two reserves with a total area of 3,099.1 ha. The Clear Hills IR 152C Reserve is located 56 km northwest of Fairview, Alberta (150 km north of Grande Prairie) and the Horse Lakes IR 152B Reserve is located 60 km northwest of Grande Prairie, Alberta.[1]

According to Aboriginal Affairs and Northern Development Canada, as of December 2012, HLFN has a total registered population of 1,045 people, with 452 members living on HLFN's reserves.[2] HLFN has a Chief and four Councillors, and uses a custom electoral system.[3]

HLFN directs the Horse Lake First Nation Industry Relations Corporation (IRC). The IRC is mandated to lead project consultations and industry liaison, and assert treaty rights and interests with governments and industry.[4]

HLFN is a member of the Western Cree Tribal Council along with Duncan's First Nation and Sturgeon Lake Cree Nation.[5] HLFN is also a member of the Treaty 8 First Nations of Alberta.[6]

### Historical Background

HLFN is part of the Athapaskan Beaver linguistic group.[7]

Ancestors of the HLFN were known by many names, including the "Beaver Indians of Dunvegan," the "Beavers of Grande Prairie", and the "Dunvegan Band".[8] They lived primarily from hunting and trapping.[9]

The HLFN (the Beaver Band at Dunvegan) adhered to Treaty 8 on July 6, 1899.[10] The first lands for HLFN reserves were surveyed from 1905–1906. The Beaver Reserve number 152 was confirmed by Order-in-Council 917 on May 3, 1907. Horse Lakes IR 152B was officially confirmed in 1920 by Order-in-Council No. 936.[11] In 1927, the HLFN agreed to surrender

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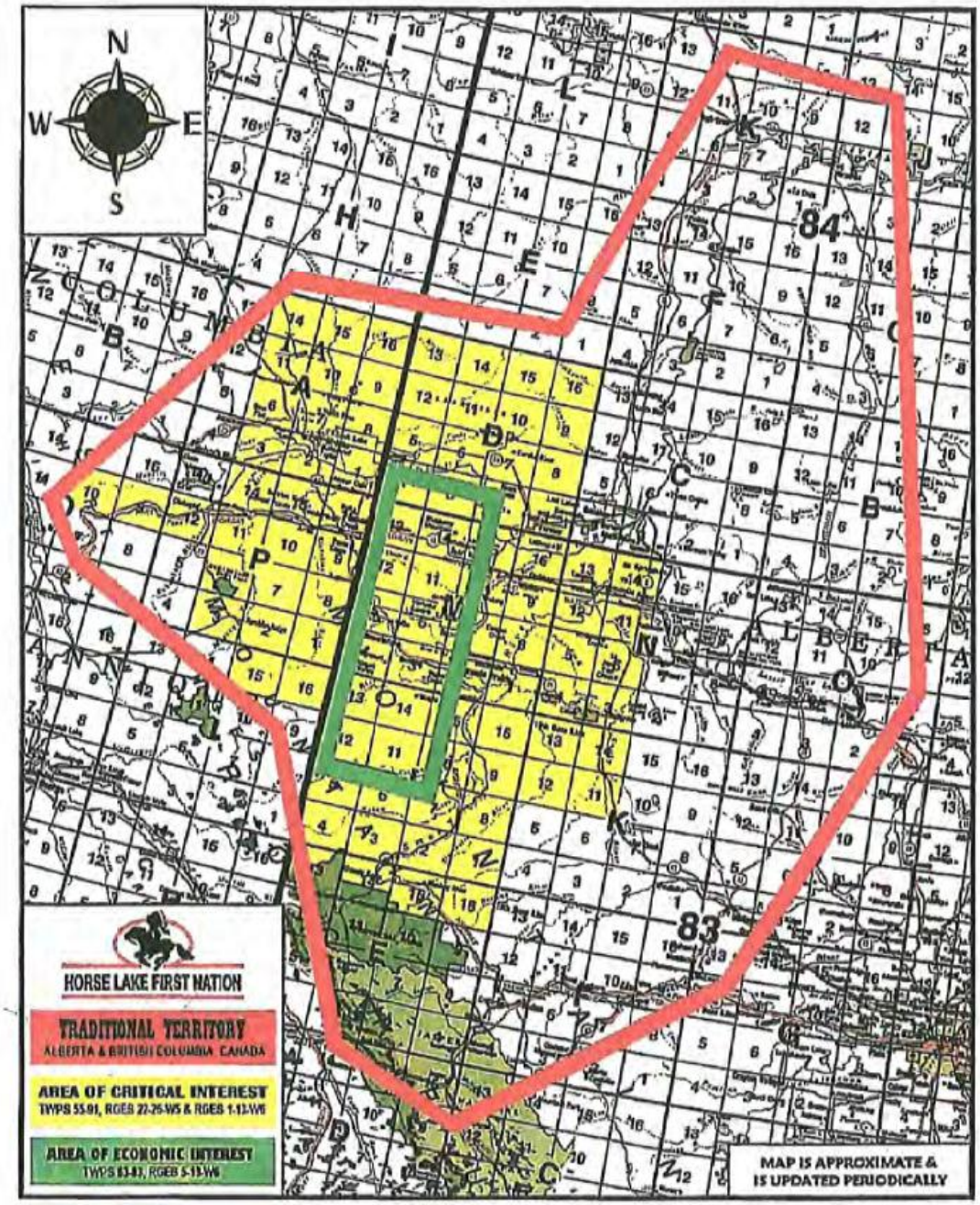
[1] Aboriginal Affairs and Northern Development Canada (AANDC). 2012. *First Nation Detail, Horse Lake First Nation*. Available at: http://pse5-esd5.ainc-inac.gc.ca/FNP/Main/Search/FNRegPopulation.aspx?BAND_NUMBER=449&lang=eng. Accessed: December 2012 ("AANDC, Horse Lake First Nation").
[2] AANDC, Horse Lake First Nation.
[3] AANDC, Horse Lake First Nation.
[4] Horse Lake First Nation Industry Relations Corporation. 2012. *About Us*. Available at: http://www.horselakeirc.com/. Accessed: December 2012.
[5] Western Cree Tribal Council. 2012. *Welcome to the Western Cree Tribal Council*. Available at: http://www.westerncree.ca/. Accessed: December 2012.
[6] Treaty 8 First Nations of Alberta 2012. *List of Nations*. Available at: http://treaty8.ca/default.aspx?ID=9&page=List of Nations. Accessed: December 2012.
[7] Alberta Ministry of Aboriginal Relations (AB MAR). 2010. *Métis Settlements and First Nations in Alberta: Community Profiles.* Available at: http://www.aboriginal.alberta.ca/documents/MetisSettlement_FirstNation_Profile.pdf. Accessed: December 2012 at 35.
[8] Bouchard and Kennedy Research Consultants. *Horse Lake First Nation: Ethnohistorical Review, Land Use History Project*. Prepared for Horse Lake First Nation ("Horse Lake First Nation: Ethnohistorical Review") at 4.
[9] Horse Lake First Nation: Ethnohistorical Review at iv.
[10] Horse Lake First Nation: Ethnohistorical Review at 69.
[11] Horse Lake First Nation: Ethnohistorical Review at 84 - 86.

IR 152. As part of the agreement to surrender the land, six sections of land were set aside for the HLFN near Clear Hills. On January 19, 1929, Privy Council Order-in-Council 1929-83 approved the surrender of land. The Clear Hills IR 152C Reserve was not confirmed until July 1959.[12]

[12] Horse Lake First Nation: Ethnohistorical Review at 96 - 97.

## Traditional Territory Map

Horse Lake First Nation and British Columbia Hydro and Power Authority. 2010. Horse lake First Nation Traditional Land Use Agreement for Site C Clean Energy Project: Schedule A.



# SITE C CLEAN ENERGY PROJECT

## VOLUME 5 APPENDIX A11 PART 2

## BC HYDRO CONSULTATION SUMMARY: HORSE LAKE FIRST NATION

***FINAL REPORT***

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**January 2013**

Volume 5 Appendix A, Part 2, provides a summary of consultation activities undertaken by BC Hydro with each of the 29 Aboriginal groups listed in Table 9.1 of the EIS, as required pursuant to section 7.2.1 of the EIS Guidelines. This summary describes consultation activities that took place between November 1, 2007 and November 30, 2012, including meetings, phone calls, letters and emails, and consists of a high-level description of "key events" followed by a chronological summary of the consultation process during the above time period.

Volume 5 Appendix A, Part 2, will be updated with new or additional information prior to the submission of the EIS to the Joint Review Panel.

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## HORSE LAKE FIRST NATION

## CONSULTATION SUMMARY

| **Defined terms** | |
|---|---|
| "AMEC" | AMEC Earth & Environmental, consultant for BC Hydro |
| "BCEAO" | Environmental Assessment Office, Province of British Columbia |
| "CEA Agency" | Canadian Environmental Assessment Agency |
| "EIS" | Environmental Impact Statement |
| "IRC" | Industry Relations Corporation, a department of the Horse Lake First Nation |
| "GIS" | Geographic Information Systems |
| "Golder" | Golder Associates Ltd., consultant for BC Hydro |
| "Site C" or "the Project" | proposed Site C Clean Energy Project |
| "*Stage 2 Consultation Agreement*" | Stage 2 – Proposed Site "C" Project Agreement for Consultation and Collaboration between Horse Lake First Nation and BC Hydro, dated March 3, 2009 |
| "*Stage 3 Consultation Agreement*" | Site "C" Clean Energy Project Agreement for Consultation and Collaboration between Horse Lake First Nation and BC Hydro, dated December 27, 2010 |
| "TLUS" | traditional land use study |

| **Defined terms** | |
|---|---|
| "*TLUS Agreement*" | Traditional Land Use Study Agreement for Site C Clean Energy Project between Horse Lake First Nation and BC Hydro, dated December 27, 2010 |

**Key events**

2007

- November: BC Hydro made initial contact with Horse Lake and expressed its commitment to effective consultation with respect to the Project.

2008

- May: BC Hydro met with Horse Lake's IRC Director for an introductory meeting about the Project.
- August: BC Hydro met with Horse Lake's IRC Director to discuss employment, business and capacity building opportunities, and to provide an overview of BC Hydro's Technical Advisory Committees. BC Hydro tabled a draft Stage 2 consultation agreement.

2009

- March: BC Hydro and Horse Lake finalized and executed the *Stage 2 Consultation Agreement*, dated March 3, 2009, which established the principles, process and scope for consultation between BC Hydro and Horse Lake for Stage 2 and provided capacity funding to enable Horse Lake to participate in the consultation process. The term of the agreement extended until the completion of Stage 2.
- April: BC Hydro attended Horse Lake's community meeting. BC Hydro presented a Project overview and responded to questions regarding economic opportunities, Project engineering, and potential effects of the Project on the downstream environment, fish and wildlife, and transportation.
- May: BC Hydro wrote to Horse Lake and enclosed materials from the environmental and socio-economic Technical Advisory Committees for the purpose of early information sharing.
- June: BC Hydro provided Horse Lake with a complete set of Stage 1 studies.
- September:
  - BC Hydro provided Horse Lake with nine Stage 2 studies, and offered to meet to

discuss the materials.

- Horse Lake sent an email to BC Hydro attaching a TLUS proposal for BC Hydro's consideration.

- December: BC Hydro had an introductory meeting with the person recently hired as Horse Lake's IRC Director. BC Hydro provided a general overview of the Project and an update on the status of Stage 2 baseline studies. BC Hydro provided Horse Lake with a disk containing Stage 1 and 2 baseline studies, and expressed interest in receiving feedback from Horse Lake on the results and potential data gaps. BC Hydro expressed interest in meeting with Chief and Council to address any questions or concerns they might have about the Project.

2010

- March:
  - BC Hydro met with representatives of Horse Lake (IRC Director, Councillor, advisor) to review the consultation that had taken place with the former IRC Director, and provide an update on status of the Project.
  - BC Hydro sent a letter to Horse Lake to seek input on the work plans that had been developed for 2010 environmental studies.
- April:
  - BC Hydro met with representatives from Horse Lake (IRC Director, Councillor, Elder) and provided a Project overview as the Councillor was unfamiliar with Site C. Horse Lake advised that it was reviewing the TLUS proposal previously submitted to BC Hydro by the former IRC Director.
- December: BC Hydro and Horse Lake finalized and executed a *Stage 3 Consultation Agreement* and *TLUS Agreement*.
  - The *Stage 3 Consultation Agreement*, dated December 27, 2010, established the principles, process and scope for consultation between BC Hydro and Horse Lake in Stage 3, and provided capacity funding to enable Horse Lake to participate in the consultation process. The agreement remains in effect until the completion of Stage 3.
  - The *TLUS Agreement*, dated December 27, 2010, outlined the objectives, methodology, deliverables and capacity funding for the TLUS. The methodology for the TLUS involved interviews with 75-100 Horse Lake members.

2011

- March:
  - BC Hydro provided Horse Lake with four additional Stage 2 studies in the area of fish and aquatics.
  - BC Hydro provided Horse Lake with summary documents describing proposed studies for the 2011 field program, and invited feedback and comments. The proposed studies were to be undertaken through the Environmental Program (Fish and Aquatics, Wildlife, Physical Environment), the Heritage Assessment, and the Socio-economic Assessment.
- May:
  - BC Hydro advised Horse Lake that it had submitted the Project Description Report and provided a link to the report.
- July: BC Hydro attended Horse Lake's Community Lands Conference, which was attended by Horse Lake's Chief and approximately 20 community members and Elders. BC Hydro presented a Project overview and responded to questions.
- October/November: BC Hydro met with representatives of Horse Lake on October 31 and November 22 to discuss the TLUS. BC Hydro agreed to provide technical support for producing the TLUS mapping products.
- December: Horse Lake submitted draft versions of the TLUS Methodology Report and the TLUS Community and Public Report (Public Report). Horse Lake advised that the report would need to be updated upon completion of the TLUS maps.

2012

- January: BC Hydro met with Horse Lake to prove comments on the draft versions of the TLUS Public Report and the TLUS Methodology Report.
- February:
  - BC Hydro advise Horse Lake that its TLUS maps had been posted to a File Transfer Protocol website, and provided a link to the website.
  - BC Hydro wrote to Horse Lake to provide an update on BC Hydro's proposed approach to Site C procurement and contracting work.
  - BC Hydro wrote to Horse Lake to provide an update on the progress towards completing an updated report regarding potential downstream changes, including

an overview of some preliminary study results. BC Hydro offered to meet with Horse Lake to review the interim results.

- March/April:
  - BC Hydro met with Horse Lake's advisor on March 14, March 30 and April 27 to discuss Horse Lake's participation in preparing a Community Baseline Profile for the First Nations Community Assessment. It was confirmed that Horse Lake's advisor would be coordinating the First Nations Community Assessments for Horse Lake, Saulteau First Nations, Duncan's First Nation and Blueberry River First Nations. BC Hydro agreed that Horse Lake could take a lead role on collecting baseline data, and the parties discussed budget, resources and timelines.
  - BC Hydro sent a letter to Horse Lake's attaching an updated map of the proposed Project footprint and offering access to associated GIS shape file data. The letter attached a memorandum describing the details of the new or amended information.
- May:
  - Horse Lake advised BC Hydro that it had posted final versions of the TLUS deliverables on a File Transfer Protocol website, which included: Ethno-historical Review; TLUS Methodology Report; TLUS Community and Public Report; A series of PDF maps including Bio, Category, Thematic and All Sites maps; and, Digital files for incorporation into Horse Lake's GIS containing site specific data.
  - BC Hydro provided Horse Lake with the Potential Downstream Changes Report (May 2012) and requested input regarding the results. The letter offered to arrange a meeting with BC Hydro's subject matter expert in hydrology to discuss the report's findings.
  - BC Hydro wrote to Horse Lake regarding the process and rationale for identifying the proposed Valued Components and spatial boundaries in the draft EIS Guidelines, and expressed interest in receiving feedback from Horse Lake.
  - BC Hydro met with representatives of Horse Lake to present the findings of the Potential Downstream Changes Report. BC Hydro's Senior Engineer and Hydrology Expert reviewed the report's findings, summarized as follows:
    - Surface water regime: BC Hydro reported that it was likely the Project would result in greater fluctuation of water levels near the Site C tailrace with effects diminishing further downstream and no fluctuations being observed at the

Town of Peace River. BC Hydro indicated that it expected no seasonal change in the timing of water releases.

- Ice regime: BC Hydro reviewed the expected changes in the ice regime as a result of the Project, explaining that (a) there would be no changes in ice thickness, (b) there would be no change in the timing of ice break-up, (c) there would be a slight delay in ice formation at Shaftesbury, an average of 5 days, and (d) there would be a slight delay in ice front progressions, with an average delay of three days at the Town of Peace River, and greater upstream.

- Geomorphology and sediment transport: BC Hydro explained that geomorphology referred to the river shape, while the sediment regime referred to the quantity, timing, and mode of transport of particulate matter by river flows. BC Hydro indicated that expected changes in flows as a result of the Project were not expected to influence the bedload transport capacity downstream or have any influence on channel erosion or deposition.

Horse Lake expressed interest in the climate's long term warming trends and how the Dunvegan Hydroelectric Project had been considered as part of BC Hydro's analysis. BC Hydro inquired as to when Horse Lake's technical staff would be able to review the findings. Horse Lake explained that while the existing *Stage 3 Consultation Agreement* provided some funding for a technical review, it might require additional resources. BC Hydro confirmed that it had a mandate to negotiate benefit agreements with B.C. based First Nations in the Project area, and noted its conclusion that potential impacts would be very minimal in downstream areas.

- June:

  - BC Hydro attended a training session for the First Nations Community Assessment with representatives of Duncan's, Horse Lake, and Blueberry River First Nations. Big Sky Consulting Ltd., consultant for BC Hydro, presented an overview of the First Nations Community Assessment, and led a workshop session where participants identified information requirements, potential interview participants, and key questions for interviews in different topic areas.

  - BC Hydro sent a Letter of Understanding to engage Horse Lake in preparing a Community Baseline Profile Report as part of BC Hydro's preparation of the Socio-economic Assessment. The Letter of Understanding included funding, terms of payment, a work plan and deliverables associated with the Community Baseline Profile Report. Horse Lake signed the Letter of Understanding and faxed a copy to BC Hydro on July 3.

- August/September: BC Hydro met with Horse Lake via teleconference on August 13 and September 26 to discuss Horse Lake's progress in preparing the Community Baseline Profile for the First Nations Community Assessment.
- September/October:
  - BC Hydro wrote to Horse Lake advising that the EIS Guidelines had been issued by the BCEAO and the CEA Agency on September 7. BC Hydro highlighted the areas of the EIS Guidelines that specifically addressed the incorporation of information from Aboriginal groups, and invited Horse Lake to provide additional information for BC Hydro's consideration in preparing the EIS. The letter included a specific request for a traditional territory map, as well as requests for information regarding Horse Lake's current use of lands and resources for hunting fishing and trapping, and other purposes, and information regarding how the Project would affect Horse Lake's current use of lands and resources, and their exercise of asserted or established Aboriginal rights and treaty rights. BC Hydro followed up in late October and advised that it remained interested in receiving additional information to support the preparation of the EIS.
  - BC Hydro sent a letter to Horse Lake which advised that BC Hydro had updated the Project footprint map for Site C, and provided a link to the updated map and associated shape file data. The letter attached a memorandum outlining the specifics of the new and amended information, which identified, among other things, a reduction in the area of the proposed Site C dam site from 3907 hectares (April 2012) to 2025 hectares (October 2012).

## Chronology of events

2007

On November 21, 2007, BC Hydro sent an introductory letter Horse Lake regarding the Project. The letter introduced BC Hydro's senior advisor responsible for First Nations consultation, and expressed BC Hydro's commitment to effective consultation with First Nations should the Project proceed further through BC Hydro's multi-stage decision making process.

2008

On January 8, 2008, Horse Lake sent an email to BC Hydro attaching a copy of its consultation protocol and requesting that BC Hydro contact the band to set up a consultation meeting.

On February 15, 2008, BC Hydro called Horse Lake and advised of the anticipated timeline for initial consultations.

On April 10, 2008, BC Hydro sent a letter to Horse Lake in follow up to BC Hydro's letter of November 21, 2007. The letter advised that BC Hydro had developed an engagement strategy for the Project and formed a team to consult with First Nations. The letter advised that BC Hydro planned to begin engagement with Treaty 8 First Nations in Alberta and the Northwest Territories in May and June, and would contact Horse Lake in the upcoming weeks to set up an introductory meeting. The letter attached the Stage 1 Summary Report.

On May 27, 2008, BC Hydro met with the Horse Lake's IRC Director to provide introductory information regarding the Project. BC Hydro provided a Project description and an overview of the approval process. BC Hydro expressed a desire to give a full briefing to Horse Lake's Chief and Council, and to discuss possible capacity funding.

On August 11, 2008, BC Hydro met with the Horse Lake's IRC Director to discuss employment, business and capacity building opportunities, as well as receiving input from Horse Lake with respect to BC Hydro's Technical Advisory Committees. BC Hydro provided an overview of the Technical Advisory Committees on the topics of Fish and Aquatics; Wildlife and Vegetation; Land and Resource Use (Agriculture, Oil & Gas, Mines, Forestry, Parks and Conservation Lands); Recreation and Tourism; Community Services and Infrastructure; Heritage; and Greenhouse Gases. In lieu of attending the Technical Advisory Committee meetings, Horse Lake advised that it would review the notes and information arising from the meetings and would consider retaining technical support to review key studies of interest to the community. BC Hydro tabled a draft Stage 2 consultation agreement, including capacity funding, for consideration by Horse Lake.

2009

On March 3, 2009, BC Hydro met with the Horse Lake's IRC Director. Horse Lake signed the *Stage 2 Consultation Agreement* and expressed interest in completing a TLUS.

- The *Stage 2 Consultation Agreement* established the principles, process and scope for consultation and collaboration between BC Hydro and Horse Lake for Stage 2, and provided capacity funding to enable Horse Lake to participate in the consultation process. The term of the agreement extended until December 31, 2009.

On April 14, 2009, BC Hydro participated in a community meeting at the Horse Lake reserve, which was attended by approximately 15 community members and Horse Lake's IRC Director. BC Hydro presented general information about the Project and responded to questions regarding economic opportunities, Project engineering, and potential effects of the Project on the downstream environment, fish and wildlife, and transportation.

On May 6, 2009, BC Hydro sent a letter to Horse Lake enclosing materials from the environmental and socio-economic Technical Advisory Committees that took place between September 2008 and February 2009. The materials included information on wildlife, fish and aquatics, land and resource use, recreation and tourism, community services and infrastructure, heritage, and greenhouse gases. BC Hydro advised that it was providing the materials for the purpose of early information sharing, and cautioned that the information should not be relied upon as a forecast of final study results.

On June 2, 2009, BC Hydro sent a letter to Horse Lake enclosing a disk containing the complete set of Stage 1 studies, as follows:

- Peace River Fisheries Investigations - Peace River Tributary Spring Spawning Migration, Tributary Summer Juvenile Rearing and Radio Telemetry Studies 2006.
- Peace River Fish and Aquatics Investigations - Peace River Tributary Summer Fish Distribution, Habitat Assessment and Radio Telemetry Studies 2005.
- Peace River Fisheries Investigations - Peace River and Pine River Radio Telemetry Study 2007.
- Peace River Wildlife Studies - Preliminary Inventory of Bat Species in the Peace River Corridor 2005.
- Peace River Wildlife Surveys - Inventory and Habitat Use of Bat Species in the Peace River Corridor (Field Work 2006, Final Report 2009).
- Terrestrial Ecosystem Mapping of the Peace River Study Area: Baseline Inventory Surveys 2007 (Field Work: 2005, 2006, 2007).
- Peace River Wildlife Surveys Summary Report - Winter Baseline Inventory Surveys 2006 (Field Work 2005 - 2006, Final Report 2009).
- Peace River Fisheries and Aquatic Resources Literature Summary (September 2008).
- Small Fish Surveys in the Peace and Halfway Rivers 2006.
- Peace River Wildlife Surveys - Baseline Inventory Surveys 2006.

- Expanded Legend for the Peace River Terrestrial Ecosystem Mapping Project 2007.
- Water Quality, River Sediment, Soil, and Vegetation Samples from the Peace River Watershed 2007.

On August 11, 2009, BC Hydro met with Horse Lake's IRC Director and provided an update on the Project including the status of outstanding issues to be resolved prior to completing Stage 2.

On September 4, 2009, BC Hydro sent the following Stage 2 studies to Horse Lake by courier:

- Peace River Fisheries Investigation Peace River and Pine River Radio Telemetry Study 2008. AMEC Earth & Environmental and LGL Limited
- Baseline Data Collection - Peace River Watershed Water Quality and Dinosaur Lake Limnology Sampling - 2008. Golder Associates Ltd.
- Peace River Site C Hydro Project Stage 2 - Baseline Greenhouse Gas Emissions Report. Jacques Whitford AXYS (Stantec)
- Peace River Site C Hydro Project Stage 2 Baseline Vegetation and Wildlife Report. Keystone Wildlife Research Ltd.
- Peace River Angling and Recreational-Use Creel Survey Interim Year 1 Report. LGL Limited.
- Site C Fisheries Studies - Baseline Peace River Tributaries Fish Use Assessments in Spring and Fall 2008. Mainstream Aquatics Ltd.
- Site C Fisheries Studies - Juvenile Fish and Fish Habitat Inventory of Peace River Tributaries in Summer 2008. Mainstream Aquatics Ltd.
- Site C Peace River - Mercury Levels in Peace River Fish Tissue – Data Report 2008. Mainstream Aquatics Ltd.
- Site C Fisheries Study Upper Halfway River Watershed Bull Trout Spawning Survey 2008. Mainstream Aquatics Ltd.

BC Hydro indicated that further Stage 2 studies would be provided once available and offered to meet with Horse Lake to discuss the provided materials.

On September 15, 2009, Horse Lake sent an email to BC Hydro attaching a TLUS proposal for BC Hydro's consideration.

On December 8, 2009, BC Hydro had an introductory meeting with the person that had been recently hired as Horse Lake's IRC Director. BC Hydro provided a general overview of the Project and an update on the status of Stage 2 baseline studies. BC Hydro provided Horse Lake with a disk containing Stage 1 and 2 baseline studies, and expressed interest in receiving feedback from Horse Lake on the results and potential data gaps. Horse Lake's IRC Director advised that until she familiarized herself with the Project, she would not be able to provide comments. BC Hydro expressed interest in meeting with Chief and Council to address any questions or concerns they might have about the Project.

2010

On March 10, 2010, BC Hydro met with representatives of Horse Lake (IRC Director, Councillor, advisor). BC Hydro reviewed the consultation that had taken place with the former IRC Director and provided an update on status of the Project. Discussion took place regarding the TLUS proposal submitted by the former IRC Director. Horse Lake advised that its members were nomadic and that a TLUS would show that they used areas in B.C. including the Halfway River.

On March 22, 2010, BC Hydro sent a letter to Horse Lake advising of its preparations for the field season of environmental work in 2010. BC Hydro asked for Horse Lake's input on the following work plans for 2010 environmental studies:

- Site C Fisheries Studies - 2010 Major Tributary Fish Inventory.
- Site C Aquatic Productivity Study - Preliminary Scope of Work.
- Site C Preliminary Mercury Modeling and Planning - Preliminary Scope of Work (Prepared by: Azimuth Consulting Inc. March 2010).
- Peace River Ungulate Monitoring Study Status: March 18, 2010.
- Site C Wildlife Studies - Preliminary Scope of Work - March 18, 2010.
- Ecosystem and Habitat Mapping Update - Peace River Baseline Inventory Work plan - 2010.
- Site C Heritage and Archaeology Studies - Preliminary Scope of Work.

On April 14, 2010, BC Hydro met with representatives from Horse Lake (IRC Director, Councillor, Elder) and provided a Project overview as the Councillor was unfamiliar with Site C. BC Hydro advised the Councillor that it had requested meetings with Chief and Council, but had been assured that consultation would occur through the IRC. The Councillor indicated that the current administration would have more involvement in the

consultation process. Horse Lake advised that it was still reviewing the TLUS proposal submitted by the former IRC Director.

On April 19, 2010, BC Hydro informed Horse Lake via telephone that the provincial government had announced that Site C would move forward to Stage 3, the Regulatory and Environmental Assessment Stage. BC Hydro confirmed that it would now be able to negotiate a consultation agreement for Stage 3 along with capacity funding.

On June 21, 2010, BC Hydro sent a letter to Horse Lake advising that Golder had been awarded the contract to conduct the Heritage Assessment for the Project, and that Golder would be holding a five day heritage training program in Fort St. John. Horse Lake would have the opportunity to identify interested members to attend this training in advance of potential employment opportunities.

On August 19, 2010, BC Hydro sent an email to Horse Lake attaching a proposal for a TLUS agreement.

On September 23, 2010, BC Hydro sent a letter to Horse Lake advising that Site C's First Nations Engagement Team had appointed a Director to oversee management of First Nations consultation. BC Hydro attached a draft Stage 3 consultation agreement for Horse Lake's review and consideration.

On December 13, 2010, BC Hydro sent an email to Horse Lake attaching the following: (1) a draft Stage 3 consultation agreement, (2) a draft TLUS agreement, (3) a template for a Band Council Resolution, and (4) sample wording for a Band Council Resolution.

On December 27, 2010, Horse Lake signed the *Stage 3 Consultation Agreement* and the *TLUS Agreement*.

- The *Stage 3 Consultation Agreement*, dated December 27, 2010, established the principles, process and scope for consultation between BC Hydro and Horse Lake and provided capacity funding to enable Horse Lake to participate in the consultation process. The agreement outlined the respective responsibilities of the parties, specifying that BC Hydro would provide Horse Lake with necessary information about the Project, that Horse Lake would be responsible for providing information about its concerns regarding the Project including potential impacts on section 35(1) rights, and that BC Hydro and Horse Lake would be jointly responsible for identifying strategies to avoid, mitigate, manage or accommodate those potential adverse impacts. The agreement identified capacity funding to support Horse Lake in retaining technical expertise to conduct a third party review of BC Hydro's work regarding potential downstream changes resulting from the Project. The agreement also addressed the topics of confidentiality, dispute resolution, funding and payment schedules, and communication between the parties. The agreement remains in effect until the

completion of Stage 3, subject to termination by either party upon 90 days written notice.

- The *TLUS Agreement*, dated December 27, 2010, between BC Hydro and Horse Lake outlined the objectives, methodology, deliverables and associated funding for the TLUS. The methodology for the TLUS involved interviews with 75-100 Horse Lake members to obtain information about traditional knowledge, use and occupancy in the defined study area. Under the agreement, the following items would be prepared and delivered by Horse Lake to BC Hydro:
  - A proposal outlining the TLUS research design and community notification;
  - An Archival Research Report;
  - A summary of the results from the Harvest Survey;
  - Maps in hard copy and digital format, including a map consolidating all "map biographies" produced, category maps for each category of traditional knowledge, use and occupancy identified in the *TLUS Agreement*, and thematic maps that may be requested by BC Hydro;
  - A Methodology Report; and,
  - A Public Report, reviewed by Horse Lake to ensure sensitive information was not included.

<u>2011</u>

On January 21, 2011, BC Hydro sent a letter to Horse Lake enclosing capacity funding cheques issued pursuant to the *Stage 3 Consultation Agreement* and the *TLUS Agreement*.

On February 14, 2011, Horse Lake sent an email to BC Hydro attaching a copy of its TLUS research plan.

On February 17, 2011, Golder sent a letter to Horse Lake regarding the 2011 Heritage Assessment field program. Golder indicated that it was currently preparing a request to the Archaeology Branch for an amendment of the existing Heritage Inspection Permit. In anticipation of receiving the permit, Golder was preparing to include potential participation from Horse Lake in the field work and analysis. Golder provided the preliminary details and advised that AMEC would be in touch to arrange the sub-consultant agreements and task orders required for the program should Horse Lake show interest.

On March 1, 2011, BC Hydro sent an email to Horse Lake providing a link to four Stage 2 studies, and sent a disk containing the studies to Horse Lake on March 24, 2011. The disk contained the following studies:

- Peace River Fisheries Investigation: Peace River and Pine River Radio Telemetry Study 2009. AMEC Earth and Environmental and LGL Limited. 2010.
- Site C Fisheries Studies: Halfway River and Moberly River Fall Mountain Whitefish Migration and Spawning Study 2009. Mainstream Aquatics Ltd. 2010.
- Site C Fisheries Studies: Halfway River and Moberly River Summer Fish Survey (2009). Mainstream Aquatics Ltd. 2010.
- Site C Fisheries Studies: Peace River Fish Inventory 2009. Mainstream Aquatics Ltd. 2010.

On March 11, 2011, BC Hydro sent a letter to Horse Lake advising that BC Hydro was engaged in planning for the upcoming field season of environmental work associated with the Project. The letter indicated that, in order to engage Aboriginal groups in discussion of this work, BC Hydro had prepared summary documents that described proposed studies for the 2011 field season. The letter enclosed study outlines and work plan summaries in the following topic areas:

- Environmental Program: Fish and Aquatics;
- Environmental Program: Wildlife;
- Environmental Program: Physical Environment;
- Heritage Assessment; and,
- Socio-economic Assessment.

The purpose of the proposed studies was to characterize baseline environmental conditions. The letter explained that the baseline data would be used to inform the assessment of potential environmental effects associated with the Project. The letter requested input from Horse Lake regarding the proposed studies, and explained that they could be changed or revised in scope or timing based on input from the Aboriginal groups.

On May 18, 2011, BC Hydro sent a letter to Horse Lake advising that BC Hydro had submitted the Project Description Report to the BCEAO and the CEA Agency, and provided a link to the report.

On May 26, 2011, BC Hydro sent a letter to Horse Lake advising that BC Hydro had retained Golder to conduct the Socio-economic Assessment for the Project, and that a First Nations Community Assessment would be a component of the Socio-economic Assessment. The letter proposed an approach for the First Nations Community Assessment involving the following five steps:

- develop a Community Assessment work plan for each community;
- gather, compile and validate community baseline data and information through focus groups and interviews;
- identify and confirm community Valued Components through community meetings;
- assess potential Project-related community effects; and,
- identify and evaluate mitigation measures to reduce unwanted effects on, and enhance benefit opportunities to, the community.

The letter advised that typical topics in a community assessment would include: demographics, economic activities, natural resource use, community and social services, housing, public infrastructure and political structure. The letter advised that BC Hydro would like to hire community members to provide research assistance, and would also provide training as necessary. The letter noted that some communities might wish to provide consulting services to BC Hydro, and provided contact information for the person who would be accepting proposals.

On July 22, 2011, BC Hydro participated in Horse Lake's Community Lands Conference held at the Horse Lake reserve, which was attended by the Chief, IRC Director, advisors, and approximately 20 community members including Elders. BC Hydro presented a Project overview and responded to questions.

On August 16, 2011, BC Hydro sent a letter to Horse Lake attaching a capacity funding cheque issued pursuant to the *Stage 3 Consultation Agreement*.

On September 30, 2011, BC Hydro sent an email to Horse Lake advising that the federal and provincial governments had announced a draft harmonization agreement that would refer the Project to a Joint Review Panel. BC Hydro noted that the regulators would be inviting written public comments on the draft agreement and provided links to the CEA Agency and BCEAO websites.

On October 31, 2011, BC Hydro met via a teleconference with Horse Lake (advisor) to discuss the progress of the TLUS. Horse Lake advised that a draft TLUS had been completed, including mapping information.

On November 22, 2011, BC Hydro met with Horse Lake (advisor) to discuss the TLUS. Horse Lake committed to completing the TLUS reports by December 2011, and BC Hydro agreed to assist with mapping productions.

On December 17, 2011, Horse Lake sent a letter to BC Hydro enclosing drafts of the TLUS Methodology Report and TLUS Community and Public Report. The reports were substantially complete, but would need to be updated upon completion of the TLUS maps.

- The TLUS Methodology Report was intended to provide an understanding of how Horse Lake arrived at the TLUS mapping results, provide a detailed account of the methodology applied in the research design and implementation phases of the Project, and to assess and weigh the relative merits and potential deficiencies of the survey data.
- The TLUS Community and Public Report (or Public Report) compiled the TLUS information that could be shared with any regulatory agency.

<u>2012</u>

On January 27, 2012, BC Hydro met with Horse Lake (advisor) and provided comments on the drafts of the TLUS Public Report and the TLUS Methodology Report. BC Hydro advised that it had completed digitizing the TLUS map data and would begin to generate maps.

On February 6, 2012, BC Hydro sent an email to Horse Lake attaching the following two documents intended to provide an update on BC Hydro's proposed approach to Site C procurement and contracting work:

- Examples of Potential Contracting Work Related to Construction (January 24, 2012)
- Site C Procurement Update for First Nations (January 24, 2012)

The email also provided web links to information presented at the Site C Business Information Session in fall 2011.

On February 10, 2012, BC Hydro sent a letter to Horse Lake to provide an update on the progress towards completing an updated report regarding the potential downstream changes expected with the Project. The letter provided an overview of the work carried out to date, a description of the scope of the current analyses, and some preliminary study results. BC Hydro offered to meet with Horse Lake to review the interim results or, alternatively, to meet upon completion of the updated report.

On February 28, 2012, BC Hydro advised that Horse Lake's TLUS maps had been posted on BC Hydro's File Transfer Protocol website, and provided a link to the website and access information.

On March 14, 2012, BC Hydro met via teleconference with Horse Lake (advisor) to discuss the First Nation Community Assessment. It was confirmed that Horse Lake's advisor would be coordinating the assessments for Horse Lake, Saulteau First Nations, Duncan's First Nation and Blueberry River First Nations. The parties discussed the capacity and resources that would be needed. Horse Lake's advisor stated that he had identified staff in each community to work as community researchers and interpreters. Horse Lake's advisor committed to developing a proposal, including budget, and scope of work for BC Hydro's review

On March 14, 2012, Management and Solutions in Environmental Science Inc. sent an email to BC Hydro attached its review of the EIS Guidelines, prepared on behalf of Horse Lake, Blueberry River First Nation, Duncan's First Nation and Saulteau First Nations.

On March 15, 2012, BC Hydro sent a letter to Horse Lake enclosing a disk containing Horse Lake's TLUS data and maps.

On March 26, 2012, Horse Lake sent an email to BC Hydro attaching final versions of the TLUS Methodology Report, the TLUS Community and Public Report, and the TLUS Interview Master List in accordance with the deliverables outlined in the *TLUS Agreement*.

On March 29, 2012, Horse Lake sent an email to BC Hydro attaching the final version of Horse Lake's Ethno-historical Review (prepared by Bouchard and Kennedy Research Consultants), submitted as a deliverable pursuant to the *TLUS Agreement* (Archival Research Report). The objective of the study was to summarize the documentary history relating to land use in the Peace River region by Horse Lake members and their ancestors, which involved a review of known and available historical records relating to the types and geographical extent of Horse Lake traditional land use over time, from the period of first Aboriginal-European contact in the Peace River region through to the 20th century.

On March 30, 2012, BC Hydro met via teleconference with Horse Lake to discuss the First Nations Economic Assessment. BC Hydro advised that the community could take a lead role in collecting baseline data, while Golder could provide support with documentation and report drafting. The parties discussed the information requirements and the template for a Community Baseline Profile report provided by BC Hydro.

On April 10, 2012, BC Hydro sent a letter to Horse Lake attaching an updated map of the proposed Project footprint and offering access to GIS shape file data used to generate the map.

On April 13, 2012, BC Hydro sent an email to Horse Lake and provided links to information regarding transmission line options, worker accommodation options, preliminary impact lines and land use, Highway 29 preferred realignments, outdoor recreation options, and potential use of 85th Avenue industrial lands. BC Hydro requested that Horse Lake review the information and indicate to BC Hydro which topics would be of interest for further consultation at upcoming meetings.

On April 26, 2012, BC Hydro sent a letter to Horse Lake enclosing a capacity funding cheque issued pursuant to the *TLUS Agreement*.

On April 27, 2012, BC Hydro met via teleconference with representatives of Horse Lake (advisor, IRC Director) to discuss Horse Lake's participation in the First Nation Community Assessment. Horse Lake (advisor) provided an overview of a proposed approach and regulatory requirements, with BC Hydro clarifying the deliverables. Horse Lake advised that it would start work on the Community Baseline Profile in May and June 2012, and advised of four potential community members from Horse Lake who could be involved in this work.

On April 30, 2012, BC Hydro sent an email to Horse Lake attaching materials to assist with preparing the Community Baseline Profile including (a) information requirements and (b) a template for a Community Baseline Profile.

On May 2, 2012, Horse Lake sent an email to BC Hydro which attached a memorandum to BC Hydro advising that it had posted final versions of the TLUS deliverables on a File Transfer Protocol website:

- Ethno-historical Review;
- TLUS Methodology Report;
- TLUS Community and Public Report;
- A series of PDF maps including Bio, Category, Thematic and All Sites maps;
- Digital files for incorporation into Horse Lake's GIS containing site specific data.

On May 9, 2012, BC Hydro sent a letter to Horse Lake which attached the updated Potential Downstream Changes Report, and requested input regarding the results. The letter offered to arrange a meeting with BC Hydro's subject matter expert in hydrology to discuss the report's findings.

On May 22, 2012, BC Hydro met with representatives of Horse Lake (IRC Director, advisors) to present the findings of the Potential Downstream Changes Report. BC Hydro's Senior Engineer and Hydrology Expert reviewed the report's findings with respect to

expected changes in the surface water regime, the ice regime, and geomorphology and sediment transport, summarized as follows:

- Surface water regime: BC Hydro reported that it was likely the Project would result in greater fluctuation of water levels near the Site C tailrace with effects diminishing further downstream and no fluctuations being observed at the Town of Peace River. BC Hydro indicated that it expected no seasonal change in the timing of water releases.

- Ice regime: BC Hydro reviewed the expected changes in the ice regime as a result of the Project, explaining that (a) there would be no changes in ice thickness, (b) there would be no change in the timing of ice break-up, (c) there would be a slight delay in ice formation at Shaftesbury, an average of 5 days, and (d) there would be a slight delay in ice front progressions, with an average delay of three days at the Town of Peace River, and greater upstream.

- Geomorphology and sediment transport: BC Hydro explained that geomorphology referred to the river shape, while the sediment regime referred to the quantity, timing, and mode of transport of particulate matter by river flows. BC Hydro indicated that expected changes in flows as a result of the Project were not expected to influence the bedload transport capacity downstream or have any influence on channel erosion or deposition.

Horse Lake expressed interest in the evidence BC Hydro had found with respect to the climate's long term warming trends, and how the Dunvegan project had been considered as part of the surface regime modelling. BC Hydro inquired as to when Horse Lake's technical staff would be able to review the findings. Horse Lake explained that while the existing *Stage 3 Consultation Agreement* provided some funding for a technical review, it might require additional resources. Horse Lake advised that it was interested in partnering with other First Nations to review the report. Horse Lake requested an update on BC Hydro's mandate to negotiate Impact Benefit Agreements. BC Hydro confirmed that it had a mandate to negotiate benefit agreements with B.C. based First Nations in the Project area, and noted its conclusion that potential impacts would be very minimal in downstream areas. BC Hydro stated that if Horse Lake disagreed with BC Hydro's assessment, it could send a letter requesting that BC Hydro reconsider, and provided further information about potential impacts of the Project on Horse Lake's current use of lands and resources and exercise of treaty rights.

On May 23, 2012, BC Hydro sent a letter to Horse Lake regarding the identification of Valued Components and spatial boundaries for the Environmental Assessment, and expressed its desire to consult further with Horse Lake on these issues. The letter explained the process and rationale used to identify Valued Components in the draft EIS Guidelines, and attached a graphic representation of the Valued Component identification methodology. The letter also explained the process of defining spatial boundaries for each

Valued Component. The letter expressed interest in receiving feedback from Horse Lake regarding the proposed Valued Components and related spatial boundaries.

On May 25, 2012, BC Hydro sent a letter to Horse Lake advising that BC Hydro had created a secured file transfer website for Aboriginal groups containing commonly requested Site C documents (e.g., environmental reports, maps and presentations). The letter provided a link to the website and access information.

On May 31, 2012, BC Hydro sent a letter to Management and Solutions in Environmental Science Inc. attaching a payment for its technical review of the EIS Guidelines on behalf of Horse Lake, Saulteau First Nations, Duncan's First Nation, and Blueberry River First Nations.

On May 31, 2012, BC Hydro sent a letter to Horse Lake attaching a capacity funding cheque issued pursuant to the *TLUS Agreement*.

On June 13, 2012, Horse Lake sent an email to BC Hydro attaching a proposed work plan and budget with respect to Horse Lake's participation in the First Nations Community Assessment.

On June 13 and 14, 2012, BC Hydro attended a workshop and training session for the First Nations Community Assessment in Fort St. John with representatives of Horse Lake, Duncan's First Nation and Blueberry River First Nations. Big Sky Consulting Ltd., consultant for BC Hydro, presented an overview of the First Nations Community Assessment and led a workshop session where participants identified information requirements, potential interview participants, and key questions for interviews in different topic areas. Participants discussed a number of topics including: incorporating historical information into the baseline studies, accessing data from consultants hired by BC Hydro, timelines for conducting the baseline research, and scheduling of community workshops and focus groups. Each participant was provided with a binder containing the following documents, among others: community researcher's guide to First Nations community baseline studies; information requirements for the community baseline profile; sample country foods questionnaire; and, a template for the community baseline profile. Researchers for each community received draft secondary baseline data pertaining to their community.

On June 26, 2012, BC Hydro sent a letter to Horse Lake advising that BC Hydro had retained Traditions Consulting to review the TLUS reports of various First Nations including Horse Lake's TLUS. The letter enclosed two reports prepared by Traditions Consulting, one assessing the completeness of the deliverables set out in the *TLUS Agreement*, and another identifying potential information gaps in the TLUS. The letter invited Horse Lake to provide any comments on the enclosed reports, any answers to the questions raised in the reports, or, any additional traditional knowledge or TLUS information.

On June 27, 2012, BC Hydro sent a Letter of Understanding to Horse Lake to engage it in preparing a Community Baseline Profile Report as part of BC Hydro's preparation of the Socio-economic Assessment. The purpose of the Community Baseline Profile Report was to identify key values and interests Horse Lake wished to have addressed within the environmental assessment for the Project. The Letter of Understanding included funding, terms of payment, a work plan and deliverables associated with the preparation of the Community Baseline Profile Report (which included a Country Foods Questionnaire Summary). The work plan described an approach in which (a) Horse Lake would oversee the data/information gathering and draft a report setting out the baseline conditions in the community, and (b) BC Hydro and Golder would use the information to inform the effects assessment.

On July 3, 2012, Horse Lake faxed a signed copy of the Letter of Understanding to BC Hydro. Horse Lake attached a memorandum confirming Horse Lake as an active participant in the EA review of the Project and its role in the community assessment. In the memorandum, Horse Lake stated that while it had opted to participate in the Socio-economic Assessment, it had related concerns that it wished to summarize for the record. In particular, Horse Lake noted that it had submitted comments identifying concerns and critical deficiencies with the EIS Guidelines. Horse Lake expressed concern that the Socio-economic Assessment, which was geared to address and fulfill the EIS Guidelines, would be subject to the same problematic limitations. Horse Lake remained hopeful that the Crown and the regulator would act on Horse Lake's concerns and issues with respect to the EIS. Notwithstanding its concerns, Horse Lake was prepared to work constructively with BC Hydro in the overall consultation process and the First Nations Community Assessment.

On July 17, 2012, BC Hydro sent an email to Horse Lake attaching a link to the Department of Fisheries and Ocean's comments on the Site C study boundaries for fish and fish habitat, as requested by Horse Lake.

On July 23, 2012, Horse Lake (advisor) sent an email to BC Hydro and requested a copy of the Electric Systems Operation Review and the Peace Water Use Plan. Horse Lake's advisor explained that he expected the reports to contain summaries and statements with respect to existing upstream and downstream issues, and would therefore be helpful in separating out the existing range of effects associated with BC Hydro's Peace River operations versus those that were anticipated or predicted to occur as a result of the Project. BC Hydro provided a link to the Peace Water Use Plan on August 8, 2012, and sent a letter to Horse Lake on August 20, 2012, enclosing a disk containing the Report on Electric System Operations Review (July 30, 1994).

On July 30, 2012, BC Hydro sent a letter to Horse Lake enclosing a capacity funding payment issued pursuant to the Letter of Understanding (June 27, 2012) for Horse Lake's participation in the preparation of a Community Baseline Profile.

On August 13, 2012, BC Hydro met via teleconference with Horse Lake's advisor to discuss the status of Horse Lake's work on the Community Baseline Profile.

On August 21, 2012, Horse Lake sent an email to BC Hydro and attached the "Aquatic Ecosystem Health of the Peace Watershed Project" (June 2012), prepared for the Mighty Peace Watershed Alliance by CharettePellPoscente Environmental Corp. Horse Lake advised that the report provided good information on the state of the Peace Basin within Alberta with a focus on aquatic health, which might be helpful in some of BC Hydro's work for the environmental assessment.

On August 27, 2012, BC Hydro sent a letter to Horse Lake enclosing a table titled "Preliminary Summary of Construction Phase Workforce" which summarized the timing, type of jobs and number of opportunities that BC Hydro anticipated would be needed to construct the Project. The letter provided a link to secured file transfer website where additional information regarding Project opportunities had been posted.

On August 31, 2012, Horse Lake sent an email to BC Hydro and enclosed Quarterly Financial Reports, for the periods from July 1, 2011 to March 31, 2012, prepared pursuant to the *Stage 3 Consultation Agreement.*

On September 11, 2012, BC Hydro sent an email to Horse Lake enclosing capacity funding cheques pursuant to the *Stage 3 Consultation Agreement*.

On September 21, 2012, BC Hydro sent a letter to Horse Lake advising that the EIS Guidelines had been issued by the CEA Agency and the BCEAO on September 7, and provided a link to where the document was available online. The letter highlighted the areas of the EIS Guidelines that specifically addressed the incorporation of information from Aboriginal groups. The letter requested any additional information such as mapping of traditional territories, traditional knowledge, concerns regarding potential for adverse effects on the various components of the environment as identified by Horse Lake, current land use information, including reasonably anticipated future use of lands and resources, current use of lands and resources for hunting, fishing and trapping, and current use of lands and resources for activities other than hunting, fishing and trapping. The letter advised that BC Hydro would like to continue to receive information with respect to any asserted or established Aboriginal rights and treaty rights of the community that may be adversely affected by the Project, and, in particular, information concerning hunting, fishing, and trapping. The letter expressed interest in understanding how the environment was valued by the community for current use of lands and resources for traditional purposes, including activities conducted in the exercise of asserted or established Aboriginal rights and treaty rights, and how current use may be affected by the Project. The letter invited Horse Lake to continue to identify any interests the community may have had with respect to potential social, economic, health and physical and cultural heritage effects of the Project.

On September 26, 2012, BC Hydro met via teleconference with the advisor for Horse Lake, Blueberry River First Nations, and Duncan's First Nation for an update on the First Nations Community Assessments for each community. The advisor committed to assisting BC Hydro in arranging meeting dates with Horse Lake to review the potential effects of the Project on wildlife and fish and fish habitat.

On October 5, 2012, BC Hydro sent an email to Horse Lake attaching a "save the date" sheet which outlined the dates for Site C Business Sessions to be held in November 2012. BC Hydro explained that the sessions were to provide information on BC Hydro's procurement strategy and potential contracting opportunities related to the Project.

On October 15, 2012, BC Hydro sent an email to Horse Lake attaching an invitation to Business Information Sessions scheduled for November 2012, and included a link for registration.

On October 24, 2012, BC Hydro sent a letter to Horse Lake advising the BC Hydro had updated the Project footprint map for Site C. The letter noted that in April 2012, BC Hydro had provided Horse Lake with the GIS shape file data and/or a PDF map of the Project footprint. The letter advised that the information had since been updated and provided a link to a secured file transfer website containing the updated map of the Project footprint, and associated shape files. The letter also attached a memorandum outlining the specifics of the new and amended information, which included a reduction in the area of the proposed Site C dam site from 3907 hectares (April 2012) to 2025 hectares (October 2012).

On October 25, 2012, BC Hydro sent a letter to Horse Lake in follow up to BC Hydro's letter of September 21, 2012, which had invited Horse Lake to provide any relevant information for consideration in preparing the EIS. The letter advised that BC Hydro remained interested in receiving information from Horse Lake to support the preparation of the EIS.

On November 14, 2012, BC Hydro sent an email to Horse Lake and attached the Site C Jackfish Lake Ungulate Program Work Plan. BC Hydro advised that it had applied to the Province to carry out the ungulate collaring study on the south bank of the Peace River and explained the purpose of the study was to assist in filling a data gap respecting ungulate movement in the area. BC Hydro requested any concerns or questions, and noted that pending approval of its application, there would be an opportunity for First Nations to participate in the work.

On November 15, 2012, BC Hydro sent a letter to Horse Lake which sought to address potential gaps in the information exchange between the parties. The letter requested that Horse Lake notify BC Hydro of instances where information requested in meetings or consultations to date had not been provided, and committed to following up on outstanding information requests as soon as possible.

# SITE C CLEAN ENERGY PROJECT

## VOLUME 5 APPENDIX A11 PART 2(A)

## UPDATED BC HYDRO CONSULTATION SUMMARY: HORSE LAKE FIRST NATION

***FINAL REPORT***

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***Prepared for:***

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**July 2013**

Volume 5 Appendix A, Part 2, provides a summary of consultation activities undertaken by BC Hydro with each of the 29 Aboriginal groups listed in Table 9.1 of the EIS, as required pursuant to section 7.2.1 of the EIS Guidelines. This summary describes consultation activities that took place between December 1, 2012 and May 31, 2013, including meetings, phone calls, letters and emails.

Volume 5, Appendix A, Part 2 is an update of the summary of consultation activities filed with the EIS on January 25, 2013.

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## HORSE LAKE FIRST NATION

## CONSULTATION SUMMARY

| **Defined terms** | |
|---|---|
| "BCEAO" | Environmental Assessment Office, Province of British Columbia |
| "CEA Agency" | Canadian Environmental Assessment Agency |
| "Davis LLP" | Davis LLP, legal counsel representing the Chief of Horse Lake First Nation |
| "EIS" | Environmental Impact Statement |
| "IRC" | Industry Relations Corporation, a department of the Horse Lake First Nation |
| "Golder" | Golder Associates Ltd., consultant for BC Hydro |
| "Horse Lake" | Horse Lake First Nation |
| "the Project" | proposed Site C Clean Energy Project |
| "*Stage 3 Consultation Agreement*" | Site "C" Clean Energy Project Agreement for Consultation and Collaboration between Horse Lake First Nation and BC Hydro, dated December 27, 2010 |
| "TLUS" | Traditional Land Use Study |

## Chronology of events

**2012**

On December 8, 2012, Horse Lake sent an email to BC Hydro, requesting to defer the meeting between the parties scheduled for December 10, 2012 due to a pressing matter in the Horse Lake community. Horse Lake indicated that work would continue on its community baseline profile report.

On December 12, 2012, BC Hydro sent an email to Horse Lake, inquiring if it was agreeable to making its TLUS report available to the CEA Agency and the BCEAO as an appendix in the EIS. Horse Lake responded by email on December 21, 2012, and indicated that it did not have any objection to its TLUS report being appended.

On December 13, 2012, BC Hydro sent a letter to Horse Lake, providing a link to the following draft EIS Technical Data Reports on a secured file transfer website:

- Aquatic Productivity Reports
- Downstream Ice Technical Data Report
- Contaminated Sites Technical Data Report
- Fluvial Geomorphology and Sediment Transport Technical Data Report
- Microclimate Technical Data Report
- Noise Technical Data Report
- Peace River Valley Ungulates Study Program Technical Data Report
- Water Quality Technical Data Report
- Air Quality Technical Data Report

BC Hydro noted that the reports were in draft form and that edits may be made prior to submission of the EIS.

**2013**

On January 18, 2013, McLennan Ross LLP sent a letter to BC Hydro, advising it acted as legal counsel to Horse Lake's IRC. The letter advised that the former IRC Director did not have any authority to conduct business on behalf of the IRC, and Horse Lake's Chief did not have individual authority to conduct business on behalf of the IRC. The letter advised that a new president had been appointed to the IRC and provided his contact information. The letter stated that future inquiries and correspondence that required the attention of the IRC should be sent to the new president.

On January 28, 2013, BC Hydro sent a letter to Horse Lake, advising that it had submitted the EIS to the CEA Agency and the BCEAO. The letter explained that the EIS described the rationale for the Project, identified potential effects and benefits, proposed measures to avoid or

mitigate effects and met other information requirements set out in the EIS Guidelines. The letter included links to CEA Agency and the BCEAO's websites containing the complete EIS. In accordance with Section 20.8 of the EIS Guidelines, BC Hydro also attached an Aboriginal Summary, presenting its understanding of asserted or established Aboriginal rights and treaty rights, and other Aboriginal interests potentially impacted by, and concerns with respect to, the Project. This summary also provided BC Hydro's understanding of the potential adverse effects of the Project on those asserted or established Aboriginal rights and treaty rights and interests.

On March 14, 2013, Horse Lake's IRC Director called BC Hydro to advise that the IRC was in the midst of moving its office to the Horse Lake community and confirmed that it had received the EIS. Horse Lake indicated that it was getting organized in order to draft its response to the EIS. Horse Lake requested that BC Hydro forward Horse Lake's TLUS report and associated maps, which BC Hydro committed to doing. The parties discussed Horse Lake's outstanding financial reporting pursuant to the *Stage 3 Consultation Agreement*.

On March 14, 2013, BC Hydro sent an email to Horse Lake, providing links to the BCEAO website containing Horse Lake's TLUS report and the EIS. BC Hydro noted that it had sent the TLUS maps on a disc to Horse Lake, due to the large file size.

On March 15, 2013, BC Hydro sent an email to Horse Lake's consultant, requesting an update on the Horse Lake community baseline profile report. Horse Lake's consultant suggested contacting the Chief about the status of the report and explained that he had ceased working on the report when internal issues arose at Horse Lake. The consultant explained that he no longer worked for Horse Lake, but indicated that he would be willing to provide an update on the status of the work should there be a resolution on Horse Lake's internal matters.

On March 26, 2013, BC Hydro called Horse Lake, providing the following updates: (1) BC Hydro had entered into an agreement (Letter of Understanding) with Horse Lake in June 2012 to deliver a community baseline profile report for inclusion in the EIS; (2) BC Hydro became aware of staffing changes at Horse Lake's IRC that had resulted in the termination of both of BC Hydro's lead contacts in regards to the work; (3) BC Hydro was interested in understanding the status of the project and whether it could be completed in time to form part of the EIS; and (4) a former Horse Lake consultant had offered to provide BC Hydro and Horse Lake with a briefing on the status of the work. Horse Lake advised that the briefing would be beneficial and provided BC Hydro with potential meeting dates. BC Hydro offered to arrange the meeting and to forward a copy of the Letter of Understanding to Horse Lake.

On March 27, 2013, BC Hydro called Horse Lake's former consultant to provide an update on a discussion with Horse Lake's IRC Coordinator respecting the community baseline profile report. BC Hydro indicated that Horse Lake expressed an interest in a briefing on the community baseline profile report and associated outstanding work. Horse Lake's former consultant agreed to provide the briefing by teleconference on March 28, 2013 and offered his services to support Horse Lake if it wanted his advice on how to approach the remaining work.

On March 27, 2013, BC Hydro sent an email to Horse Lake, attaching the following documents in relation to the community baseline profile report: (1) Letter of Understanding between BC Hydro and Horse Lake, dated June 27, 2012; (2) Horse Lake's summary work plan and budget provided in June of 2012; (3) community baseline profile report template, originally provided in March of 2012; and (4) community baseline profile report requirements, originally provided in March of 2012.

On March 28, 2013, BC Hydro met by teleconference with representatives of Horse Lake's IRC (President, Administrator, Staff Member) and a former Horse Lake consultant. Horse Lake's former consultant discussed the work completed on the community baseline profile to date and work that needed to be done to complete the report. Horse Lake agreed to finalize and submit the community baseline profile report to BC Hydro by the end of April, 2013.

A letter was received by BCH on April 5, 2013 from Davis LLP representing the Chief of HLFN, regarding litigation internal to HLFN and payments under the Stage 3 Consultation Agreement. A telephone conversation regarding the matter took place between Davis LLP and BCH legal counsel on April 8, 2013.

On April 15, 2013, Golder sent an email to Horse Lake, thanking Horse Lake for its efforts made in the completion of the Project's 2012 heritage resources impact assessment field program.

On May 3, 2013, Horse Lake (IRC Administrator) sent an email to BC Hydro, attaching quarterly financial reports pursuant to the *Stage 3 Consultation Agreement*.

On May 8, 2013, BC Hydro called Horse Lake (IRC Administrator) in regards to the community baseline profile report that was currently overdue for submission to BC Hydro. Horse Lake explained that the work on the report was slowed by the fact that Horse Lake's IRC had replaced its Executive Director. Horse Lake noted that the draft community baseline profile report had been completed and could be provided to BC Hydro following review by the new Executive Director. Horse Lake added that it might be able to submit the community baseline profile report to BC Hydro in the following few weeks.

On May 27, 2013, BC Hydro called Horse Lake (IRC Administrator) inquiring about an update on the community baseline profile report. Horse Lake advised that due to a death in the community, it would not be able to submit the report that week, but noted that it estimated that it would take approximately two more days to complete. BC Hydro subsequently received the report on June 18, 2013, outside the reporting period for this Updated BC Hydro Consultation Summary.

# SITE C CLEAN ENERGY PROJECT

## VOLUME 5 APPENDIX A11 PART 3

## ABORIGINAL LAND AND RESOURCE USE SUMMARY: HORSE LAKE FIRST NATION

***FINAL REPORT***

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**January 2013**

## Horse Lake First Nation (HLFN)

*In preparing responses to these questions, a range of publicly available published and unpublished studies were reviewed for information on traditional land and resource use by Horse Lake First Nation (HLFN) members.[1] The information on current HLFN use of lands and resources presented here is derived from the Traditional Land Use Survey (TLUS) and associated Country Food Harvest Study undertaken for the HLFN by Matthew General and funded by B.C. Hydro.[2] The TLUS Study Area was the traditional territory of the HLFN (Figure 1).*

*The registered population of HLFN in December 2012 was 1,045 people, of who 452 live on-Reserve.[3] Ninety-three (93) people living on the main HLFN Indian Reserve were interviewed, comprising nearly one-fifth of the on-Reserve population. The main HLFN community is at Horse Lake Indian Reserve 152B located near Hythe, Alberta between Dawson Creek, B.C. and Grand Prairie, Alberta. HLFN have another Indian Reserve in Alberta, Clear Hills 152C, located north of the Peace River and east of Worsely.[4] In 2001, HLFN settled a specific claim regarding the 1928 surrender of two other Indian Reserves.[5]*

*No interpretation of the TLUS interviews is presented in either the Methodology Report or the Community and Public Report. Some additional information is presented in the Country Food Harvest report. The main product from the TLUS interviews was the maps. Forty-four categories of information were collected and over 6,600 references to sites were identified where a HLFN individual had undertaken an activity.[6] Only ten categories of information, however, were depicted on maps. An additional three thematic maps depict amalgamated information from the ten category maps.[7] All the HLFN traditional use sites recorded for the TLUS are depicted on a Hodgepodge Map (Figure 2).*

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[1] The sources consulted for this study are set out in the References.

[2] General, Matthew (2011). Horse Lake First Nation Traditional Land Use Survey Community and Public Report, Horse Lake First Nation, November 2011; General, Matthew (2012). Horse Lake First Nation Traditional Land Use Survey Methodology Report. Horse Lake First Nation, January 2012; General, Matthew (2012). Horse Lake First Nation Traditional Land Use Survey Maps (13 Maps). Horse Lake First Nation and BC Hydro, February 2012; General, Matthew (2012). Horse Lake First Nation 2011 Traditional Land Use Survey Country Food Harvest Data. Horse Lake First Nation. February 2012.

[3] AANDC.First Nation Profiles. http://pse5-esd5.ainc-inac.gc.ca/fnp/Main/index.aspx.

[4] Clear Hills Reserve 152C is no longer occupied. A history of the establishment of Reserves for HLFN is provided in Bouchard and Kennedy Research Consultants (2012). Horse Lake First Nation: Ethnohistorical Overview. Horse Lake First Nation, 29 March 2012: 81-98.

[5] The two Reserves were located on the north side of the Peace River in the area of Fairview. Reddekopp, G. Neil (1996). The Creation and Surrender of the Beaver and Duncan's Band's Reserves. Indian Land Claims, Alberta Aboriginal Affairs, March 1996.

[6] The activities recorded are over a time span of "within living memory." (General, Matthew (2012). Horse Lake First Nation 2011 TLUS Country Food Harvest Data: 1).

[7] The ten categories are: moose kill sites, elk kill sites, deer kill sites, bird kill sites, bull trout kill sites, walleye kill sites, jackfish/northern pike kill sites, cultural sites, overnight sites, and plant/earth gathering sites. The three thematic maps

*In a review of the TLUS, we identified a number of problems, questions and concerns with some of the methodology employed and in the presentation of some of the results.*[8] *Nonetheless, it is our opinion that this TLUS Report provides the best available information relating to current HLFN use of lands and resources for traditional activities in the Study Area.*

*In this report, locations of HLFN uses of lands and resources are interpreted from the TLUS maps that accompany the TLUS report.*[9] *In summary, the TLUS maps depict limited hunting and fishing in the Peace River region of British Columbia. No information is presented in the TLUS on trapping.*

1. **What is the HLFN's current use of lands and resources for hunting, fishing and trapping activities, including the location of the activity, the species targeted, and the traditional uses of the harvested animals within the Current Use of Lands and Resources (Wildlife Resources) and the Current Use of Lands and Resources (Fish and Fish Habitat) LAAs and RAAs?**

   Moose is by far the most heavily hunted ungulate.[10] In total, 1,642 moose kill sites were recorded.[11] The area south and east of Dawson Creek is the main area of depicted kill sites. There are only two moose kill sites within the Current Use of Lands and Resources (Wildlife Resources) LAA: one is located at Hudson's Hope and one at Taylor. At least eighteen moose kill sites are depicted within the Current Use of Lands and Resources (Wildlife Resources) RAA including: two on the north side of the Peace River - one west of the Halfway River Reserve and one east of Fort St. John; 16 on the south side of the Peace River - seven around Moberly Lake, one west of Chetwynd, two north of Pine Le Morey Provincial Park, two in the area of Highway 97/Kiskatinaw River crossing, one north of Dawson Creek on the B.C./Alberta border, and at least three south of Dawson Creek between the highway and the Alberta border.

   In total, there are 274 elk kill sites identified from the interviews.[12] Two elk kill sites are within the Current Use of Lands and Resources (Wildlife Resources) LAA: one at Taylor and one north of Moberly Lake. Four elk kill sites are within the Current Use of Lands and Resources (Wildlife Resources) RAA: two are located north of Chetwynd, and two

are mammal kill sites with the three mammal categories, fish kill sites with the three fish categories, and a hodgepodge map that includes all ten categories (Figure 2).

[8] Traditions Consulting Services Inc. (2012). The two reports were provided to HLFN by BC Hydro. No response to the questions posed has been received from HLFN to date.

[9] The maps were produced by BC Hydro. The scale of the maps makes it difficult to identify locations and sometimes numbers with confidence.

[10] HLFN Moose Kills Category Map. The scale of the Moose Kills Map is 1:3,250,000 making accurate identification of numbers and locations difficult.

[11] General, Matthew (2012). Horse Lake First Nation 2011 TLUS Country Food Harvest Data: 16.

[12] General, Matthew (2012). Horse Lake First Nation 2011 TLUS Country Food Harvest Data: 8.

are located around Moberly Lake.[13] There are 102 deer kill sites identified from the interviews. One is located within the Current Use of Lands and Resources (Wildlife Resources) LAA on the south side of the Peace River south of Hudson's Hope. Eight are located within the Current Use of Lands and Resources (Wildlife Resources) RAA: one is depicted east of Dawson Creek, three are depicted southeast of Dawson Creek near the Alberta border, one is depicted at West Moberly, one is depicted at the southeast end of Charlie Lake, and two are depicted west of Charlie Lake.[14] There is no location information presented on the 72 bear and other mammals kill sites. Of the 455 bird kill sites identified, one unidentified bird kill site is located within the Current Use of Lands and Resources (Wildlife Resources) RAA in the area of Highway 97/Kiskatinaw River crossing.[15]

In total, 859 fish kill/catch sites were identified from the TLUS interviews.[16] Four fish kill sites are located within the Current Use of Lands and Resources (Fish and Fish Habitat) LAA in British Columbia including: one walleye and one jackfish on the Peace River at Hudson's Hope, one jackfish on the lower Pine River, and one jackfish on the Peace River at the B.C/Alberta border.[17] In the Current Use of Lands and Resources (Fish and Fish Habitat) LAA, on the Peace River in Alberta there is a concentration of fish kill sites at Many Islands and to the west.[18] In the Current Use of Lands and Resources (Fish and Fish Habitat) RAA, the concentration of fish kill sites continues along the Peace River east of Many Islands.[19]

**2. What is the HLFN's current use of lands and resources for activities other than hunting, fishing and trapping, including the nature, location and traditional use purpose within the Current Use of Lands and Resources (Wildlife Resources) and Current Use of Lands and Resources (Fish and Fish Habitat) LAAs and RAAs?**

Two HLFN cultural sites are depicted within the Current Use of Lands and Resources (Wildlife Resources) RAA. Both are located southeast of Dawson Creek near the Alberta border. No further information is provided on the two sites.[20]
Twenty overnight sites are depicted on the Overnight Sites Thematic Map including: three in the Current Use of Lands and Resources (Wildlife Resources) LAA in the area

[13] HLFN Elk Kill Sites Category Map.
[14] General, Matthew (2012). Horse Lake First Nation 2011 TLUS Country Food Harvest Data: 8; HLFN Deer Kill Sites Category Map. The deer category includes both white tailed and mule deer.
[15] General, Matthew (2012). Horse Lake First Nation 2011 TLUS Country Food Harvest Data: 8; HLFN Bird Kill Sites Thematic Map. The bird category includes ducks, geese, grebes, cranes, grouse, "chicken", ptarmigan, and an 'other' category (TLUS Methodology Report: 234).
[16] General, Matthew (2012). Horse Lake First Nation 2011 TLUS Country Food Harvest Data: 16.
[17] HLFN Walleye Fish Kills Category Map, Jackfish/Northern Pike Category Map.
[18] Only one fish in the concentration, a jackfish, is identifiable from the three category maps.
[19] HLFN Fish Kills Thematic Map. Fish, other than the three species depicted on category maps, include rainbow trout, dolly varden, arctic grayling, burbot, whitefish, gold eye, and an 'other' category (TLUS Methodology Report: 234).
[20] The category of cultural sites includes birth sites, old settlements, cache sites, sacred sites, burial places and an 'other' category (TLUS Methodology Report: 56).

of Taylor/Fort St. John; and 17 in the Current Use of Lands and Resources (Wildlife Resources) RAA: two at the south end of Charlie Lake and 15 south of the Peace River: two north of Pine Le Morey Provincial Park, one in the area of Carbon Lake, one south of the Peace River Canyon, eight in the area of Moberly Lake, one in the area of the mid-Kiskatinaw River/ Highway 97 crossing, and two southeast of Dawson Creek.[21] Thirty-three (33) plant and earth gathering sites are depicted on the Plant & Earth Gathering Sites Thematic Map including: five in the Current Use of Lands and Resources (Wildlife Resources) LAA, three around Taylor/ Fort St. John, and two along the Peace River near the Alberta border; and 28 in the Current Use of Lands and Resources (Wildlife Resources) RAA: four north of Pine Le Morey Provincial Park, two along the highway between Pine Le Morey Provincial Park and Chetwynd, one on Carbon Creek, three on the southeast side of Williston Lake, one at the east end of Williston Lake, two south of the Peace River canyon, two on the Moberly River east of Moberly Lake, five around Moberly Lake, two in the area of Boucher Lake, two west of Chetwynd, one in the area of the mid-Kiskatinaw River/Highway 97 crossing, and three southeast of Dawson Creek.[22] No information was provided in the TLUS as to species or materials gathered at the above locations.[23] In the Country Harvest Study, berry picking was noted as an important activity. Berries consumed, from highest to lowest frequency of use, included: wild blueberry, saskatoon berry, wild raspberry, huckleberry, wild strawberry, low and high bush cranberry, gooseberry and loganberry.[24]

**3. What is your understanding of the exercise of asserted Aboriginal rights or treaty rights by HLFN within the Current Use of Lands and Resources (Wildlife Resources) and Current Use of Lands and Resources (Fish and Fish Habitat) LAAs and RAAs?**

The HLFN assert, as an adherent to Treaty 8, that they have treaty and Aboriginal rights in northwestern Alberta, northeastern British Columbia, and the historic Treaty 8 area. This area includes the Current Use of Lands and Resources (Wildlife Resources) and Current Use of Lands and Resources (Fish and Fish Habitat) LAAs and RAAs. Community members have and continue to utilize lands and resources within these areas for a range of cultural, sustenance, socio-economic, spiritual, commercial, and other purposes.[25]

**4. Identify past, current and reasonably anticipated future use of lands and resources by HLFN members for traditional purposes who may be adversely impacted by the Project within the Current Use of Lands and Resources (Wildlife**

[21] HLFN Overnight Sites Thematic Map. Overnight sites include cabin, tent, lean to, and an 'other' category (TLUS Methodology Report: 235).
[22] HLFN Plant & Earth Gathering Sites Thematic Map.
[23] Plant and earth gathering sites include berries, food plants, medicine plants, firewood, construction logs, specialty logs, specialty rock, drinking water, and an 'other' category (TLUS Methodology Report: 235).
[24] General, Matthew (2012). Horse Lake First Nation 2011 TLUS Country Food Harvest Data: 16.
[25] TLUS Methodology Report: 7.

**Resources) and Current Use of Lands and Resources (Fish and Fish Habitat) LAAs and RAAs.**

The HLFN currently exercise their treaty rights in their traditional territory, an extensive area in northwestern Alberta and northeastern British Columbia that includes portions of the Current Use of Lands and Resources (Wildlife Resources) LAA and RAA and Current Use of Lands and Resources (Fish and Fish Habitat) LAA (Figure 1). The HLFN assert that the ability to exercise their rights, maintain their culture and feed their families is dependent upon healthy and diverse fish, wildlife and plant communities. HLFN community members, however, are finding it increasingly difficult to successfully hunt, fish, trap and gather earth and plant materials within northwestern Alberta and northeastern British Columbia given the pace and scope of development occurring within this region.[26] HLFN believe that the Project has the potential to further limit the exercise of HLFN treaty rights in the future.

**5. In the TLUS, is there any information relating to the exercise of asserted or aboriginal rights outside the Current Use of Lands and Resources (Wildlife Resources) and Current Use of Lands and Resources (Fish and Fish Habitat) LAAs and RAAs?**

The majority of data collected in the TLUS relate to HLFN use of lands and resources for activities located outside the Current Use of Lands and Resources (Wildlife Resources) and Current Use of Lands and Resources (Fish and Fish Habitat)LAAs and RAAs. Within HLFN traditional territory, the greatest concentration of activities is near the Horse Lake Reserve in Alberta east of Dawson Creek, and southwards on both sides of the British Columbia/Alberta border.

The greatest concentration of moose kill sites is in the area east of Dawson Creek in Alberta and south of Dawson Creek on both sides of the border. There is a smaller area of concentration of moose kill sites in the Clear Hills in Alberta. The greatest concentration of elk and deer kill sites is east and south of Dawson Creek in Alberta. The greatest concentration of bird kill sites is located east and south of Dawson Creek in Alberta.[27] Fish kill sites are depicted south of Dawson Creek on both sides of the provincial border. There are small concentrations of fish kill sites on the western ends of Lesser Slave Lake and Utikuma Lake in Alberta.[28]

There is a concentration of cultural sites depicted between Dawson Creek and Grand Prairie.[29] There are a few other cultural sites widely located south and west of Grand Prairie. The greatest intensity of plant earth collecting sites is located in Alberta east of

[26] TLUS Methodology Report: 7.
[27] HLFN Bird Kill Sites Thematic Map.
[28] HLFN Fish Kills Thematic Map.
[29] Cultural sites include birth sites, burial sites, sacred sites, cache sites, old settlements, and an 'other' category (TLUS Methodology Report: 235). HLFN Cultural Sites Thematic Map.

Dawson Creek and south of Dawson Creek on both sides of the border. There are a few other sites dispersed in other areas.[30]

The depiction of overnight sites is concentrated in the area east of Dawson Creek in Alberta, and south of Dawson Creek on both sides of the border. There are other overnight sites dispersed widely on both sides of the provincial border.[31]
The Upper Halfway River, Sikanni River and Pink Mountain areas were not included in the Study although the TLUS author states that a significant number of HLFN members reported ongoing use of these areas.[32]

[30] HLFN Plant & Earth Gathering Sites Thematic Map.
[31] HLFN Overnight Sites Thematic Map.
[32] TLUS Methodology Report: 52.

**Figure 1: Map of Horse Lake First Nation Traditional Territory (Horse Lake First Nation and British Columbia Hydro and Power Authority (2010). "Traditional Territory Map." Schedule A, Horse Lake First Nation Traditional Land Use Agreement for Site C Clean Energy Project, 27 December 2010).**

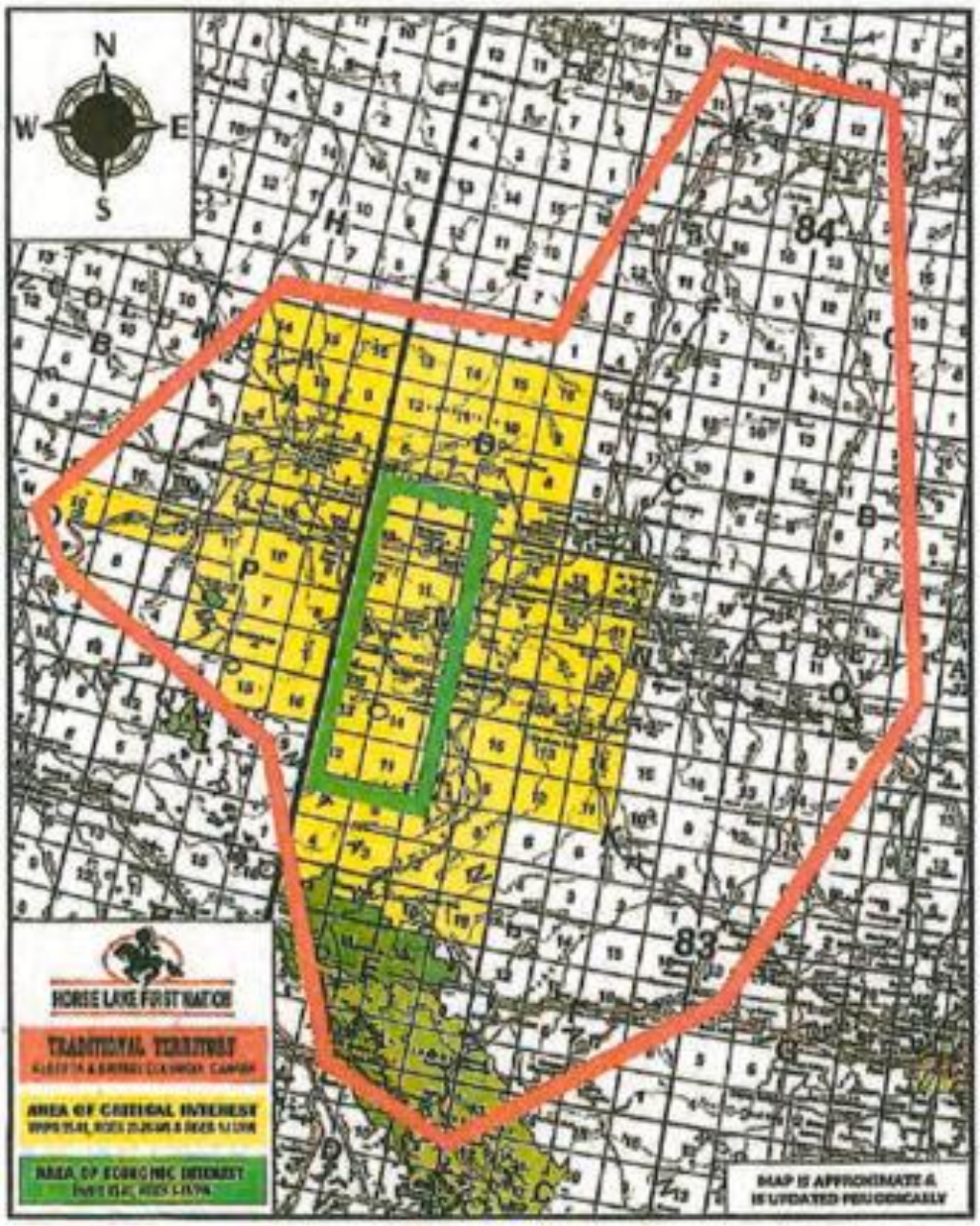
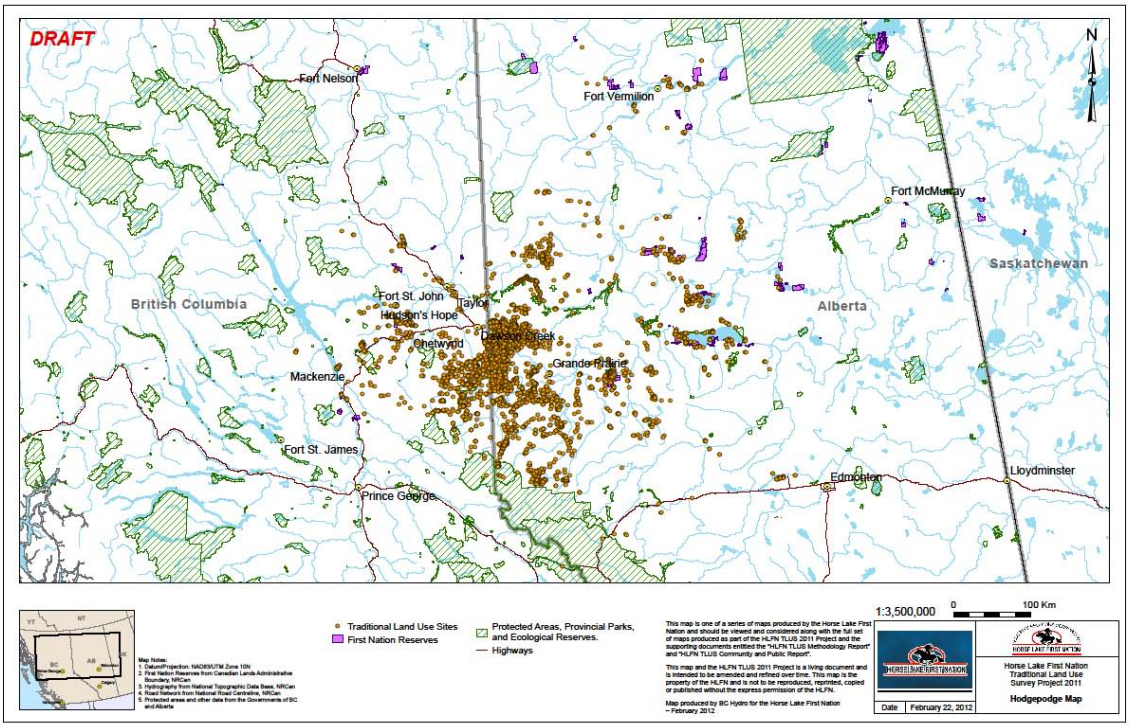


**Figure 2. Hodgepodge Map of All HLFN Traditional Use Sites Identified in the TLUS, Scale 1:3,500,000 (General, Matthew (2012). Horse Lake First Nation Traditional Land Use Survey Maps (13 Maps). Horse Lake First Nation and BC Hydro, 22 February 2012).**



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> *An ethnohistorical study that presents archival information relating to aboriginal history, land use and occupation of the central Peace River region by ancestors of the Horse Lake First Nation, currently located near Hythe, Alberta.*

Chaterlaine, Alfred (1974). Interview by Richard Lightning, Canadian Plains Research Centre. http://ourspace.uregina.ca.

> *Interviewee is chief of the Horse Lake Reserve. He describes the loss of large areas of Indian land in the area.*

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Horse Lake First Nation (2011). Written Evidence to the Enbridge Northern Gateway Project Joint Review Panel, December 21, 2011 (OF-Fac-Oil-N304-2010-01).

Horse Lake First Nation (2012). Oral presentation to Enbridge Northern Gateway Project. http://www.jlsreport.com/2012/04/20/oral-presentations-by-the-horse-lake-first-nation/.

> *Six HLFN members talk about their use of land and resources and relationships (intermarriage) with other First Nations, including those in the Peace River region of B.C.*

Napasis, Francis (1976). Interview by Richard Lightning, Canadian Plains Research Centre, 1976-09-01. http://ourspace.uregina.ca).

*Interviewee is 91 year old resident of Clear Hills Reserve. He relates the history of Reserves at Clear Hills (Eureka) and Horse Lake; and sale of the Reserve at Fairview.*

Reddekopp, G. Neil (1996). The Creation and Surrender of the Beaver and Duncan's Band's Reserves. Indian Land Claims, Alberta Aboriginal Affairs, March 1996.

*This historical study includes the creation and 1928 surrender of two Indian Reserves, Fairview and Green Island, by the Beaver of Dunvegan (now HLFN)*.

Traditions Consulting Services Inc. (2012). Response to Questions Relating to Review of HLFN Traditional Land Use Study. Report submitted to BC Hydro, June 24, 2012.

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# SITE C CLEAN ENERGY PROJECT

## VOLUME 5 APPENDIX A11 PART 4

## ABORIGINAL SUMMARY:
## HORSE LAKE FIRST NATION

***FINAL REPORT***

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# Horse Lake First Nation

As required by Section 20.8 of the EIS Guidelines, the following summary presents BC Hydro's understanding of Horse Lake First Nation's asserted or established Aboriginal rights and treaty rights, and other Aboriginal interests potentially impacted by, and concerns with respect to, the Project. The summary also provides BC Hydro's understanding of the potential adverse effects of the Project on the treaty rights and interests of Horse Lake First Nation.

## Horse Lake First Nation's Treaty Rights

Section 35(1) of the Constitution recognized and affirmed treaty rights of Aboriginal groups. Treaty 8 was entered into in 1899 and guarantees the First Nation signatories the "right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered" subject to two limitations: (i) "such regulations as may from time to time be made by the Government of the country," and (ii) "saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering, trading or other purposes."

The following Aboriginal groups listed in Table 34.1 are signatories or adherents to Treaty 8: Blueberry River First Nations, Fort Nelson First Nation, McLeod Lake Indian Band, Saulteau First Nations, Doig River First Nation, Halfway River First Nation, Prophet River First Nation, West Moberly First Nations, Athabasca Chipewyan First Nation, Beaver First Nation, Dene Tha' First Nation, Duncan's First Nation, Horse Lake First Nation, Little Red River Cree Nation, Mikisew Cree First Nation, Smith's Landing First Nation, Sturgeon Lake Cree Nation, Tallcree First Nation, Woodland Cree First Nation, Deninu K'ue First Nation, Salt River First Nation.

For a more thorough discussion of rights under Treaty 8, see Section 34.3.2.1.

## Horse Lake First Nation's Concerns with Respect to the Project

The following table presents a high-level description of the concerns identified by Horse Lake First Nation in consultation activities with BC Hydro between November 1, 2007 and November 30, 2012, including those identified in meetings, phone calls, letters, emails, reports (e.g., Traditional Land Use Studies, Community Assessments), and any submissions made during the comment periods for the EIS Guidelines.

| **Project Components and Activities** |
| --- |
| Interest in BC Hydro's plans for debris clearing, management and disposal including whether all timber, regardless of its commercial value, and woody debris would be removed from the reservoir. |

| |
|---|
| **Cumulative Effects** |
| Interest in using a pre-development, pre-industrial or pre-W.A.C. Bennett Dam baseline in order to assess the cumulative environmental effects of the Project, and to assess the cumulative implications of the Project on the exercise of section 35(1) rights. |
| **Water – Surface Water Regime** |
| Concern about potential downstream effects of the Project on water flow and water levels, including in the Peace River, Slave River, McKenzie River, Salt River and the Peace Athabasca Delta. |
| **Water- Thermal and Ice Regime** |
| Concern about the potential effects of the Project on ice flow, ice formation, ice break-ups and ice bridges, including the ice bridges at Shaftesbury, Dunvegan and Carcajou. |
| **Fish and Fish Habitat** |
| Concern about the potential effects of the Project on fish, fish habitat, and fish species composition, including in the Peace River, Halfway River and Moberly Lake and Alberta. |
| **Wildlife Resources** |
| Concern about the potential effects of the Project on wildlife, wildlife habitat and biodiversity. |
| Concern about the potential effects of the Project on ungulates and ungulate habitat, including moose, elk, deer, caribou, bison and Stone Sheep.<br><br>Specific concern with the loss of calving and fawning areas on the islands in the Peace River. |
| **Current use of Lands and Resources for Traditional Purposes** |
| Concerns about the potential effects of the Project on fishing, including access, water flow, water levels and habitat. |
| **Land and Resource Use Effects** |
| Concern about potential effects of the Project on farmland and agriculture. |
| **Treaty Rights (Hunting, Fishing and Trapping)** |
| Concern about the potential impacts of the Project on Treaty 8 rights. |
| **Aboriginal Interests – Aboriginal employment, contracting and business development** |
| Interest in contracting and procurement opportunities for local contractors and Aboriginal businesses. |
| **Existing Hydroelectric Projects on the Peace River** |
| Assertion that the W.A.C. Bennett and Peace Canyon dams impacted and/ or continue to impact the Treaty 8 First Nations, including their ability to exercise section 35(1) rights.<br><br>Asserted impacts include:<br>- Impacts on fish, wildlife and vegetation<br>- Impacts on hydrology |

These concerns are presented in an issues tracking table under Volume 1 Appendix H Aboriginal Information, Distribution and Consultation Supporting Documentation, which outlines BC Hydro's consideration and/or response to the concern or provides a reference to where the concern is considered or responded to in the EIS.

**Potential Adverse Effects of the Project on the Exercise of Horse Lake First Nation's Treaty Rights**

Based on the assessment undertaken by BC Hydro and set out in Volume 3 Section 19 Current Use of Lands and Resources for Traditional Purposes, interactions were identified between the Project and the current use of lands and resources for traditional purposes by Horse Lake First Nation in the Local Assessment Area (LAA). As a result, BC Hydro's understanding of the current use of lands and resources for traditional purposes by Horse Lake First Nation was brought forward into the effects assessment.

The effects assessment looked at the potential Project effects during the Project construction and operations phases on fishing opportunities and practices, hunting and trapping opportunities and practices, and cultural and other traditional uses of the land.

The following potential Project effects and mitigations measures were identified:

| Project Effect | Mitigation Measures |
|---|---|
| Changes in fishing opportunities and practices | ~~Consult with Aboriginal groups respecting the~~Consider developing~~ment of~~ fish habitat compensation projects that align with BC Hydro compensation programs. |
| | ~~Seek input from Aboriginal groups respecting mitigation strategies.~~ |
| | ~~Continue to consult with Aboriginal groups on clearing plans and protocols.~~ |
| | Develop a communications program to inform harvesters of planned or unplanned events related to construction activities that may affect fishing opportunities or access. |
| | Develop a communications program to inform harvesters of longer-term changes in fish community composition. |
| | Implement all mitigation measures set out in Volume 2 Section 12 Fish and Fish Habitat. |
| | Implement measures supporting the development of 3 boat launches along the Site C reservoir accessible via Highway 29 to support navigability and navigable use, and the re-establishment of recreational sites on the Site C reservoir and downstream, and to re-establish and create new use patterns and access, as set out in Volume 3 Section 26 Navigation. |

| Project Effect | Mitigation Measures |
|---|---|
| Changes in hunting and trapping opportunities and practices | ~~Consult with Aboriginal groups respecting the~~ Consider developing~~ment of~~ wildlife habitat compensation projects that align with BC Hydro compensation programs. |
| | ~~Seek input from Aboriginal groups respecting mitigation strategies, such as~~Develop mitigation measures intended ~~related~~ to decrease impact on First Nation trap lines in the Project activity zone. |
| | ~~Continue to consult with Aboriginal groups on clearing plans and protocols.~~ |
| | Develop a communications program to inform harvesters of planned or unplanned events related to construction activities that may affect hunting opportunities or access. |
| | Implement mitigation measures set out in Volume 2 Section 14 Wildlife Resources. |
| | Implement mitigation measures set out in Volume 3 Section 24 Harvest of Fish and Wildlife Resources pertaining to trapping. |
| Changes to other cultural and traditional uses of the land | Work with Aboriginal groups to ground-truth traditional land use information for specific areas within the Project activity zone prior to commencing construction. |
| | ~~Continue to consult with Aboriginal groups regarding clearing plans and protocols.~~ |
| | Develop a communications program to inform harvesters of planned or unplanned events that may affect opportunities to harvest plants, berries, and other resources. |
| | ~~Consult with Aboriginal groups respecting the~~Consider developing~~ment of~~ habitat compensation projects that align with BC Hydro compensation programs. |
| | Work with Aboriginal groups to identify permanent habitation structures used in the current use of lands and resources for traditional purposes that may be lost to inundation. Effects on cabins associated with tenured trap lines will be addressed as set out in Section 24.4.9.1 in Volume 3 Section 24 Harvest of Fish and Wildlife Resources. Where untenured cabins may be impacted by the Project, BC Hydro will work with Aboriginal individuals to determine appropriate measures that could be implemented. |
| | Work with Aboriginal groups to identify potential sites for relocation of medicinal and food plants to compensate for areas that will be inundated. |

| Project Effect | Mitigation Measures |
|---|---|
| | Use only indigenous and/or non-invasive plants and grasses in re-vegetation programs associated with the Project. |
| | Engage with Aboriginal groups around any reclamation phase that may present opportunities to restore ecological communities that support species of high traditional use value. |
| | Be prepared to ~~P~~provide support for the indigenous plant nursery owned by West Moberly and Saulteau First Nations located at Moberly Lake. The First Nations have a business plan to support propagation of a wide range of indigenous plant species for use in reclamation work. |
| | Establish a Culture and Heritage Resources Committee to provide advice and guidance on the mitigation of specific effects of the Project on culture and heritage resources. The Committee would consist of BC Hydro officials and Aboriginal members whose communities are in the immediate vicinity of the Project. |
| | Consider implementing, in consultation with Aboriginal groups and British Columbia where appropriate, the following potential initiatives:<br>• the identification and naming of key cultural sites and the potential to integrate Aboriginal names into Project operations and sites;<br>• recording of stories and history associated with key cultural sites that may be affected by the Project;<br>• the protection and documentation, including mapping, of important Aboriginal trails and sites;<br>• contribute funding to support a youth culture camp that includes transfer of knowledge around medicinal and food plants;<br>• engage with Aboriginal groups to commemorate the lost and inundated places;<br>• engage with Aboriginal groups around potential plans to undertake ceremonies prior to the commencement of construction on key elements of the Project; and<br>• develop and implement an education program respecting Aboriginal culture, history and use of lands and resources in the Project Area to be offered to all workers on the Project. |
| | Implement all mitigation measures set out in Volume 2 Section 13 Vegetation and Ecological Communities. |
| | Implement all mitigation measures set out in Volume 4 Section 32 Heritage Resources. |

| Project Effect | Mitigation Measures |
|---|---|
| | Implement measures supporting the development of new shoreline recreation sites in Volume 3 Section 25 Outdoor Recreation and Tourism. |
| | Implement measures supporting the development of 3 boat launches along the Site C reservoir accessible via Highway 29 to support navigability and navigable use, and the re-establishment of recreational sites on the Site C reservoir and downstream, and to re-establish and create new use patterns and access, as set out in Volume 3 Section 26 Navigation. |

**Key Findings: Current Use of Lands and Resources for Traditional Purposes**

Current use of lands and resources for traditional purposes - fishing

Fishing opportunities and practices of Horse Lake First Nation are expected to be adversely affected during construction and operation due to reduced access to fishing areas (including potentially increased competition with non-Aboriginal anglers), and potentially reduced success in harvest of targeted species. The transformation of the river into a reservoir would create a new and productive aquatic ecosystem. This new aquatic environment is expected to support a community of equal or greater productivity; however the composition of fish species would change. The effect would be of low magnitude for Horse Lake First Nation, as the Peace River section within the LAA is at the periphery of their use of fish resources.

Although some aspects of the traditional purpose of the activity may be altered by transferring them to another location, fishing practices of Aboriginal people are adaptable, spatially and temporally. For these reasons, a determination of significance has not been made.

Current use of lands and resources for traditional purposes – hunting and trapping

Hunting and trapping opportunities and practices of Horse Lake First Nation may be adversely affected due to temporary reductions in availability of targeted species and temporarily reduced access to hunting areas during construction. As the effect would be temporary in nature and may be accommodated in other areas of the LAA, the traditional purpose of the activity would not be undermined.

The effect would be of low magnitude for Horse Lake First Nation, as hunting practices of Aboriginal people are adaptable, spatially and temporally, and the affected areas are at the periphery of their current use hunting areas, as indicated in traditional use studies.

Therefore, a determination of significance has not been made for the current use of lands and resources for hunting and trapping.

Current use of lands and resources for traditional purposes – other cultural and traditional uses

The Project would have a residual adverse effect on other cultural and traditional uses of the land for Horse Lake First Nation. Opportunities to use special high-value places and landscapes along the Peace River for the conduct of multiple current use and cultural activities will be negatively altered within the LAA. The effect would be permanent but the magnitude would be low for Horse Lake First Nation.

Following the methods explained in Volume 1, Section 10 EA Methodology, a cumulative effects assessment was carried out to identify any cumulative interaction between potential residual effects of projects and activities located in the Current Use of Lands and Resources Regional Assessment Area (RAA) with the residual effects of the Project identified above. As a result of that assessment, BC Hydro has determined the Project is unlikely to result in a cumulative effect on the current use of lands and resources for traditional purposes by the Horse Lake First Nation.

Volume 5 Section 34 Asserted or Established Aboriginal Rights and Treaty Rights, Aboriginal Interests and Information Requirements presents BC Hydro's assessment of the potential impacts of the Project on the exercise of asserted or established Aboriginal rights and treaty rights of the 29 Aboriginal groups with which BC Hydro was instructed to consult. The assessment of the potential impact of the Project on the exercise of asserted or established Aboriginal rights and treaty rights looked at the potential impacts on the exercise of the rights to hunt, fish and trap, as set out in Treaty 8, as well as impacts to what may be described as ancillary activities, some of which may be reasonably incidental to the exercise of treaty rights to hunt, fish and trap. The following potential impacts and mitigation measures were identified:

| Impact on Exercise of Treaty Right | Mitigation Measures |
|---|---|
| **Hunting and Trapping** | |
| | ~~Consult with Aboriginal groups respecting the~~ Consider developing~~ment of~~ wildlife habitat compensation projects that align with BC Hydro compensation programs. |
| | ~~Seek input from Aboriginal groups respecting mitigation strategies, such as~~ Develop mitigation measures intended ~~related~~ to decrease impact on First Nation trap lines in the Project activity zone. |
| | Continue to consult with Aboriginal groups on clearing plans and protocols. |

| Impact on Exercise of Treaty Right | Mitigation Measures |
|---|---|
| | Develop a communications program to inform harvesters of planned or unplanned events related to construction activities that may affect hunting opportunities or access. |
| | BC Hydro will consider community-based monitoring programs, which may involve incorporation of local, community, or traditional knowledge, where potential effects and the effectiveness of mitigation measures on hunting and trapping opportunities are uncertain, provided a sound methodology with clear indicators and outcomes is delineated. BC Hydro is prepared to engage with Aboriginal groups to discuss potential community-based monitoring programs, such as programs intended to monitor the productivity and abundance of wildlife species. |
| **Fishing** | |
| | ~~Consult with Aboriginal groups respecting the~~ Consider developing~~ment of~~ fish habitat compensation projects that align with BC Hydro compensation programs. |
| | ~~Seek input from Aboriginal groups respecting mitigation strategies.~~ |
| | ~~Continue to consult with Aboriginal groups on clearing plans and protocols.~~ |
| | Develop a communications program to inform harvesters of planned or unplanned events related to construction activities that may affect fishing opportunities or access. |
| | Develop a communications program to inform harvesters of longer-term changes in fish community composition. |
| | BC Hydro will consider community-based monitoring programs, which may involve incorporation of local, community, or traditional knowledge, where potential effects and the effectiveness of mitigation measures on fishing opportunities are uncertain, provided a sound methodology with clear indicators and outcomes is delineated. BC Hydro is prepared to engage with Aboriginal groups to discuss potential community-based monitoring programs, such as programs intended to monitor the productivity and abundance of fish species. |
| | |

The assessment of the potential effects of the Project on the traditional activities of fishing, hunting, and trapping demonstrates that the Project may impact the exercise of treaty rights by the Horse Lake First Nation in the LAA. Horse Lake First Nation members will, however,

continue to have the opportunity to exercise their right to fish, hunt, and trap within the LAA, within their traditional territory, and within the wider Treaty 8 territory.

Consultation is ongoing between BC Hydro and the Horse Lake First Nation, and may yield additional information on the Horse Lake First Nation's current and reasonably anticipated future use of lands and resources that may potentially be affected by the Project. Should Horse Lake First Nation provide additional information to BC Hydro, it will be considered and incorporated in the effects assessment during the EIS review phase and prior to submission of the EIS to the Joint Review Panel.

# SITE C CLEAN ENERGY PROJECT

## VOLUME 5 APPENDIX A11 PART 5

## TLUS PUBLIC REPORT:
## HORSE LAKE FIRST NATIONS

***FINAL REPORT***

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***Prepared for BC Hydro Power and Authority***

***Prepared by Horse Lake First Nation***

January 2012

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03/29/2012

HORSE LAKE FIRST NATION

# HORSE LAKE FIRST NATION: ETHNOHISTORICAL OVERVIEW

Land Use History Project | Horse Lake First Nation

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## Executive Summary

This study presents ethnohistorical information relating to Aboriginal land use and occupation of the central Peace River region by the direct ancestors of the Horse Lake First Nation, whose current headquarters is located near Hythe, Alberta, close to the British Columbia border.

At the ancestral core of the HLFN are *Dane-zaa* family bands who hunted over the Peace River prairies. The *Dane-zaa* or Beaver were recognized as the occupants of the central and lower Peace River at the time of contact with European fur traders in the late 18th century. The first non-Aboriginal expeditions through this area reported that *Dane*-zaa people also made excursions farther up the Peace River to the Rocky Mountains, though such visits in the early 19th century were not generally for peaceful purposes. After the expansion of the fur trade to the central Peace in the early 1800s and the establishment of Fort Dunvegan in 1805, *Dane-zaa* trappers included visits to Fort Dunvegan and to other forts along the Peace River as part of their annual round. Traders' journals report *Dane-zaa* hunters coming to the fort from the north and south banks of the Peace River.

Early visitors to the central Peace River region consistently identify the area as being occupied by small, nomadic hunting bands identified as "Beaver." Observations by explorers, adventurers, and surveyors all recognize that a sparse population lived in the region and sustained themselves through hunting and trapping over an expansive area. During the active years of the fur trade in the first half of the 19th century, some Aboriginal hunters attached themselves to specific forts, such as Fort Dunvegan. They secured provisions for the traders, were outfitted by the trading company, and exchanged their furs at the post. Some local Aboriginal women intermarried with indigenous hunters brought from the east as indentured servants of the fur trade companies. Communities of Métis people developed around the forts. Some of these people are ancestors of the current Horse Lake First Nation.

Subsequent ethnographic inquiries confirm that the composition of the hunting bands could change from one season to another. Composition of such bands depended upon the availability of resources. In summer months, groups coalesced and then dispersed again for winter trapping. Group composition and territory could also change from one generation to the next. Family units hived off large groups and became associated with new territory. Some knowledge of the traditional lifestyle of the Horse Lake First Nation comes from the ethnographic report of Pliny Earle Goddard who visited the Dunvegan Beaver in 1913 and at that time recognized them as one of three main divisions of Beaver.

The Beaver of Dunvegan were reluctant to adhere to Treaty 8. In 1899, the local HBC trader noted that the Dunvegan Beaver were mostly away hunting at the time of the Commissioners' visit and would be expected to be gone for several months. Once assigned Indian Reserves, the Dunvegan Beaver were slow to move onto them. A decade after the signing of Treaty 8, the Treaty Inspector continued to describe the Beaver of Dunvegan as living primarily by hunting and trapping. Indian Affairs encouraged agriculture by granting farm equipment and livestock.

Documentation reviewed here indicates that ancestors of today's Horse Lake First Nation trapped and hunted on both sides of the Alberta/ British Columbia border. Accounts of Aboriginal trapping in the Kelly Lake area compiled in the 1980s mention families from Horse Lake who trapped around here, together with people living at Kelly Lake. Reports indicate the existence of intermarriage between Horse Lake people and those living at Kelly Lake, as well as with those belonging to other BC communities. These same reports indicate that the use of the Kelly Lake area by people from Horse Lake had been common.

# 1.0 Introduction

This report has been prepared for the Chief and Council of the Horse Lake First Nation ("HLFN") in response to their request for a study focused on HLFN land use history, based on a review of known and available published and unpublished source materials.

The present report is written so that it can either stand alone as an ethnohistorical and ethnographic document, or complement or be incorporated into a Traditional Use Study ("TUS"). A study such as this incorporates both ethnography and ethnohistory. "Ethnography" is a description of a particular culture based on observation and participation, and on interviews with members of that culture. "Ethnohistory" complements ethnography by drawing upon historical documents to reconstruct a description of Aboriginal life and events in historic times. Thus, ethnohistorical documents include: field notes, manuscripts and publications compiled by past and present ethnographers, historians and linguists; observations and reports by government and non-government individuals including explorers, missionaries and local pioneers; correspondence files of government agencies and members of the Aboriginal society, themselves; litigation files relating to Aboriginals' land disputes with governments and corporations; and, other materials such as photographs, sound- tape recordings, maps, plans, and surveyors' field books.

A TUS, also known as a Traditional Land Use Study ("TLUS") or a Traditional Land Use and Occupancy Study ("TLUOS"), provides systematic documentation of an Aboriginal community's lifeways to clarify the specific relationship existing between people and their lands, territories and resources, past and present. The ethnohistorical component of such studies, as in the present report, places land use within the context of a particular society's history. TLU studies facilitate a community's self-awareness of the history and significance of their chosen sustenance and economic activities, and therefore their identity and cultural viability. Such a study focuses more clearly the consequences of various responses to external factors of change. When used together with ethnographic data, including contemporary interviews, an ethnohistoric overview completes a comprehensive picture of land use over time. Such an approach also provides a means by which the Aboriginal community can identify and articulate areas of potential cross-cultural discord, for example, potential conflicts relating to the relationship between development and traditional Aboriginal uses of lands and waters. The ethnohistorical materials can also serve as a cross-check of the ethnographic data that is obtained in the community.

## 1.1 Study Objectives

The objective of this study is to summarize the documentary history relating to land use in the Peace River region by the Horse Lake First Nation and their ancestors. More specifically, the known and available historical record has been reviewed for information relating to the types and geographical extent of HLFN traditional land use over time, from the period of first Aboriginal – European contact in the Peace River region through to the 20$^{th}$ century.

## 1.2 Study Methodology

A considerable amount of archival and library research was undertaken in order to prepare this report. Institutions that were visited while undertaking this study, above and beyond the extensive research library and archives at the Bouchard & Kennedy Research Consultants offices in Victoria, are described below:

| | |
|---|---|
| Calgary, Alberta | Glenbow Museum and Archives;<br>Arctic Institute of North America;<br>University of Calgary Library and Special Collections;<br>Court of Queen's Bench Registry. |
| Edmonton, Alberta | Provincial Archives of Alberta;<br>University of Alberta Library and Special Collections. |
| Winnipeg, Manitoba | Hudson's Bay Company Archives, Provincial Archives of Manitoba. |
| Victoria, British Columbia | British Columbia Archives;<br>University of Victoria's McPherson Library;<br>Legislative Library;<br>British Columbia Land Title and Survey Authority. |
| Followup email/telephone inquiries | Hudson's Bay Company Archives, Winnipeg;<br>Library and Archives Canada, Ottawa:<br>Aboriginal and Northern Affairs Headquarters, Ottawa;<br>McGill University Archives, Montreal;<br>National Archives, London, England;<br>Court of Queen's Bench Registry, Judicial District of Calgary;<br>Special Collections Division of the University of Alberta Library. |

Randy Bouchard and Dorothy Kennedy together undertook the archival and library research in Calgary and Edmonton. Bouchard, alone, undertook research at the Hudson's Bay Company Archives in Winnipeg and at the Court of Queen's Bench Registry in Calgary. The services of a professional historical research firm in Ottawa were retained by Bouchard & Kennedy to obtain certain documents from Aboriginal and Northern Affairs Headquarters in Ottawa and from

Library and Archives Canada, also in Ottawa. Additionally, heritage resource consultant Sharon Keen undertook some of the Victoria-based research under the direction of Randy Bouchard who coordinated all the documentary research and who also contacted by email and by telephone the institutions listed in the chart above.

### 1.2.1 Study Limitations

This report summarizes the historical facts that are known to the authors at this time concerning the Horse Lake First Nation's land use history. Other historical facts may be found after this date that are relevant to the subject. It should be noted that this report draws exclusively on archival and library research and does not include the present-day oral history of Horse Lake First Nation members.

Importantly, ethnohistorical data may be incomplete or silent of various aspects of a people's cultural history. It may require complementary data from the members of the Aboriginal society in order for the data to be interpreted fully, particularly in areas where land use continues.

This study reflects the findings of the research conducted to date. This has been an ambitious project in terms of scope and the research and report preparations have far exceeded the budgetary limitations. Regardless, more research on issues discussed in this report is certainly possible and is recommended. Of particular note is the additional research that could be undertaken in the files of the Department of Indian Affairs. Further research is also recommended to ascertain more fully the extent of historic HLFN use of lands in British Columbia.

## 1.2 Study Area

The area discussed in this report is the central Peace River region of Alberta and British Columbia, including the area in Alberta where Canada in the early 1900s set aside Indian Reserves for the ancestors of the present Horse Lake First Nation.

## 1.3 Study Team

This report, prepared on behalf of the Horse Lake First Nation, has been researched and written by Randy Bouchard, an ethnographer, ethnohistorian and linguist, and Dr. Dorothy Kennedy, a social and cultural anthropologist, each of whom has more than 40 years of experience undertaking ethnographic, ethnohistoric and linguistic research throughout northwestern North America. Some archival research for this study has been undertaken in Victoria under Bouchard's direction by historical researcher, Sharon Keen, M.A.

# 2.0 Identity of the Horse Lake First Nation

## 2.1 Community Profile and Location

The Horse Lake First Nation's current place of contact is in the village of Hythe, Alberta. They now possess a 3,099.1-hectare (7,658-acres) HLFN Reserve land base, comprised of Clear Hills IR 152C (1,547.1 hectares; 3,835-acres) and Horse Lakes IR 152B (1,552.0 hectares; 3,823-acres).

Population statistics on this First Nation are provided in the Alberta Government's 2010 report entitled "Métis Settlements and First Nations in Alberta: Community Profiles," prepared by the Aboriginal Relations, Communications Branch, Edmonton, and available online at www.aboriginal.alberta.ca. This report relies on Aboriginal and Northern Affairs Canada's "Indian Register" statistics as of 31 December 2009. According to this source, the Horse Lake First Nation consists of a total population of 938 members. Of this 938 total, 436 or 46% are listed as living "On-reserve and Crown Land" and 502 or 54% are listed as living "Off-reserve."

## 2.2 Synonymy

Members of today's Horse Lake First Nation were collectively known in earlier years by several different names that highlighted their identity as "Beaver." Collective terms used in the historical and ethnographic literature to refer to ancestors of today's Horse Lake First Nation include the "Beaver Indians of Dunvegan,"[1] the "Beavers of Grande Prairie," and the "Dunvegan Band."[2]

The Reserve General Register Abstract Reports maintained at Aboriginal and Northern Affairs Canada provide the following description of "Band No. 445, Beaver First Nation [Horse Lake First Nation]":

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[1] *Treaty No. 8 Made June 21, 1899 and Adhesions, Reports, etc*. Reprinted from the 1899 edition in 1966 by the Queen's Printer, Ottawa (1969 Reprint). Page 16, Treaty signed 6 July 1899 with the "Beaver Indians of Dunvegan." Another transcript of this same Treaty with the Beaver Indians of Dunvegan appears in an Appendix in Charles Mair (1999). *Through the Mackenzie Basin: An Account of the Signing of Treaty No. 8 and the Scrip Commission, 1899*, with Introductions by David Leonard and Brian Calliou. The University of Alberta Press and the Edmonton & District Historical Society, Edmonton. Page 165.This 1999 publication is a facsimile reprint of the first portions of Charles Mair's classic 1908 book, *Through the Mackenzie Basin: A Narrative of the Athabasca and Peace River Treaty Expedition of 1899, With a Map of the Country Ceded and Numerous Photographs of Native Life and Scenery*.

[2] Joan Holmes & Associates (1989). The Establishment of Reserves in Treaty Eight. Report prepared for the Chief General Counsel, Department of Justice, Ottawa, for the *Attorney General of Canada vs. the Attorney General of Alberta, the Lubicon Lake Band, et al*. litigation. Page 76. Copy on file with the Headquarters Library, Aboriginal and Northern Affairs Canada, Ottawa.

> The Beaver of Horse Lake & Clear Hills Band joined Treaty #8 with headman *Natooses*—the Band was often referred to as the Beavers of Dunvegan and also the Beaver Indian Band.[3]

## 2.3 Protohistory of the Central Peace River Region

The name "Beaver Indians" or *Dane-zaa* has been used from the beginning of historical records to refer to an Athapaskan people associated with the Peace River region.[4] Yet some researchers suggest that the *Dane-zaa* migrated westward in earlier times from the Lake Athabaska region of Alberta and Saskatchewan, having themselves been pushed up along the Peace River by the westward expansion of the Cree that began in the 1700s.

Linguist and anthropologist Pliny Goddard, who in the summer of 1913 undertook linguistic and ethnographic fieldwork with Beaver-speaking communities—including *Dane-zaa* at Dunvegan—opined that it was "only a short time ago," relatively speaking, that the Cree intrusion separated the Beaver from the "Sarsi" (Sarcee), resulting in the Beaver being culturally like other Mackenzie drainage Athapaskans and the Sarcee being adapted to the Plains environment. Goddard reported the following concerning his 1913 discussions with "a Beaver Indian of Dunvegan" who told him that:

> another tribe (meaning an Athapascan-speaking one) used to live on Lesser Slave Lake and that it had died out. After that the Cree occupied the region because of the fish to be had there… [Goddard's footnote continues] I told the chief I had heard that Lesser Slave Lake was Beaver country, what did he know about it. He said, 'There used to be another tribe there (Beaver) but they died out and the Cree came in on account of the fish. It was the only place they could get fish.' I asked how long ago. The chief said, "I did not mean to say I knew it was so but that was what my grandfather told me.'[5]

Anthropologist and ethnohistorian Beryl Gillespie has discussed anthropologist Diamond Jenness' account of how well-armed Cree from Hudson's Bay expanded their territory in the 1700s, driving Athapaskan groups, especially the Sekani, westward and northward, and

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[3] Aboriginal and Northern Affairs Canada, Ottawa. Indian Lands Registry System, Reserve General Abstract Report for Band 445, Beaver First Nation [Horse Lake First Nation]. The use of the terminology "Beaver First Nation" in Aboriginal and Northern Affairs Canada's official Reserve General Abstract Reports has the potential of being confused with another "Beaver First Nation," in the vicinity of High Level, Alberta and whose Reserves are Boyer River 164 and Child Lake 164A. See: Government of Alberta (2010). Community Profile for Beaver First Nation. Page 20, in, Métis Settlements and First Nations in Alberta: Community Profiles." Prepared by the Aboriginal Relations, Communications Branch, Edmonton, and available online at www.aboriginal.alberta.ca.

[4] Gillespie 1981:167-168.

[5] Pliny Goddard (1916). The Beaver Indians. *Anthropological Papers of the American Museum of Natural History, Vol. X, Part IV*. New York. Pp. 209 and fn. 2, 210. Assuming the man who told this to Goddard was middle-aged in 1913, and assuming 25 years per generation, this suggests the man's grandfather was born in the early 1800s.

eventually displacing them from a large part of the subarctic region, including northern Alberta. According to Jenness, the Sekani, during these hostile times, gradually split from the Beaver and moved north and west in the eighteenth century, a move caused by direct invasion of the Cree and subsequently the Beaver.[6] However, Gillespie concluded that the Cree expansion hypothesis may be "an over interpretation" and that the early historical documents now available make this reconstruction incorrect for some regions and doubtful for others.[7]

Moreover, as Gillespie also concluded in her examination of the locations of territorial groups before 1821:

> The ambiguities of tribal names and unknown effects that the fur trade had in the western interior before any direct contacts make it impossible to state with any definiteness whether Athapaskan people were permanently displaced from any areas by the Cree.[8]

The westward movement of the Cree is of interest in our examination of the Horse Lake First Nation, but no evidence has been uncovered in this review to indicate that this Cree intrusion displaced the Aboriginal Beaver occupants of the central Peace River. A review of the issue can be found in the evidence of anthropologists and historians who testified in the 1980s in the Lubicon Lake Cree Band/Cree Community of Little Buffalo Lake litigation, *Chief Bernard Ominayak et al. v. Norcen Energy Resources Limited et al*. litigation in the 1980s."[9] While one side's expert opined that Cree people used a territory as far west as the Peace River, the opposing side concluded that the Cree people were not Indigenous to Northern Alberta at the commencement of the influence of the European fur trade and that the Cree's entry into Northern Alberta "was in the Cree's capacity as agents or participants of the European fur trade."[10]

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[6] Gillespie (1981:163) is referring to Diamond Jenness (1932). *The Indians of Canada*. Bulletin 65, Anthropological Series No. 15, National Museum of Canada. Queen's Printer, Ottawa. Pp. 284, 377-378, and 382-383. Jenness made similar statements in his 1937 publication, *The Sekani Indians of British Columbia*. Bulletin 84, Anthropological Series No. 20, National Museum of Canada. King's Printer, Ottawa. Pp. 5-8. See also Leonard Ugarenko (1979). The Beaver Indians and the Fur Trade on the Peace River, 1700-1850. Master's thesis, Department of History, York University, Toronto (See Maps 1, 2 and 3 in Ugarenko's thesis for his interpretation of the historical data relating to Beaver occupation; Ugarenko's Map 3 appears in the present report as 11.9).

[7] Gillespie 1981:168.

[8] Gillespie 1981:168.

[9] See James G.E. Smith (1987). The Western Woods Cree: Anthropological Myth and Historical Reality. *American Ethnologist, Vol. 14*, Part 3, Page 434. See also Affidavit of James G. E. Smith, 15 September 1982. *Chief Bernard Ominayak et al. v. Norcen Energy Resources Limited et al.* Court of Queen's Bench of Alberta, Judicial District of Calgary. No. 8201-03713. On file with the Court of Queen's Bench Registry, Calgary, Alberta.

[10] Fedirchuk and McCullough said that they reviewed the following materials: relevant journals of early explorers of Western Canada; early and relevant journals in the Hudson's Bay Company Archives at the Provincial Archives of Manitoba; secondary historical sources relating to the Western Canadian fur trade, and western migration of Indians, particularly Cree; current and accepted archaeological concepts as the relate to attempted linkages between material culture and artifacts to ethnic groups; and, archaeological reports relating to Northern Alberta. See: Affidavit of Gloria J. Fedirchuk and Edward J. McCullough, 28 June 1983. *Chief Bernard Ominayak et al. v.*

Another expert witness retained by the Province of Alberta was Leonard Ugarenko, an historical geographer who in 1979 had written a Master's thesis entitled "The Beaver Indians and the Fur Trade on the Peace River, 1700-1850."[11] Ugarenko stated that this report was based on "information obtained from unpublished Hudson's Bay Company records, cartographic records, both published and unpublished maps, and a number of published primary and secondary sources. [12] It was Ugarenko's conclusion that:

> for the period prior to 1740 and at least until 1850 the Beaver Indians constantly and effectively occupied and controlled a large geographic area around the Peace River…Contrary to the conclusions of Dr. Smith in his Affidavit dated September 15, 1982 there was no evidence of significant Cree movement into or the attempted occupation of the lands [of the Lubicon Lake Cree] in question. . .When the hostilities [with the Cree] began to subside in the 1760's the Beaver were distributed throughout the Peace River valley from the Rocky Mountain foothills to Lake Athabasca.[13]

The origins of the aggression thesis are far from clear. Gillespie points to Albert Gallatin's 1836 interpretation of explorer Alexander Mackenzie's 1792 account (discussed below) as the source for the thesis that the Cree drove the Athapaskans—including the historical Beaver—from part of their Aboriginal territories in the 1700s, but Gillespie advises that cautious evaluation is needed before accepting this conventional wisdom.[14]

Though scholars continue to debate the details of the often-hostile relationship between Cree interlopers and resident Athapaskans, the consensus of historians and others examining records of the fur trade is that at the time of the initial European inroads into the Peace River region, Beaver people occupied a significant part of the Peace River. It is also the consensus that warfare and trade coexisted in the Peace River region, for the same Cree and Chipewyan traders who acted as middlemen in the emerging fur trade were the same parties who at times were antagonistic towards the Beaver (*Dane-zaa*) and other Athapaskans residing to the west.[15]

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*Norcen Energy Resources Limited et al*. Court of Queen's Bench of Alberta, Judicial District of Calgary. No. 8201-03713. On file with the Court of Queen's Bench Registry, Calgary, Alberta.

[11] Much of the information contained in Ugarenko's 1979 thesis was submitted in the *Ominayak et al.* litigation in the form of a research report with the title "The Beaver Indians of the Peace River."

[12] Affidavit of Leonard G. Ugarenko, 22 June 1983, together with Ugarenko's 16 June 1983 research report entitled "The Beaver Indians of the Peace River." *Chief Bernard Ominayak et al. v. Norcen Energy Resources Limited et al*. Court of Queen's Bench of Alberta, Judicial District of Calgary. No. 8201-03713. On file with the Court of Queen's Bench Registry, Calgary, Alberta.

[13] Leonard Ugarenko research report, 16 June 1983, page i.

[14] Gillespie 1981:163.

[15] J.C. Yerbury (1986). *The Subarctic Indians and the Fur Trade, 1680-1860*. University of British Columbia Press: Vancouver. Pp.44, 58-59.

## 2.4 Beaver (Dane-zaa) Ancestry of the Horse Lake First Nation

Beaver-speaking members of the Horse Lake First Nation and their ancestors are known as *Dane-za*, translated as 'real people'; the Beaver language is known as *Dane-zaa záágéʔ* which translates as 'people-regular language.'[16] In recent years, *Dane-zaa* has been transcribed as "*Dune-za*", [17] but even more recently has been written as "*Dane-zaa*."[18] This term *Dane-zaa* or *Zaa-Dane* appears in the literature with several variants, including "*Tsattine*", "*Tsuten*", "*Tsa-huh*", and "*Tsa-t'quenne*".

Anthropologist Robin Ridington (who together with his first wife, Antonia Ridington) undertook ethnographic research among Beaver groups to the west of Horse Lake, explained in his 1981 article summarizing Beaver culture that the term "*dəneza*" (*Dane-za*) or 'real people' refers to "the people with whom one could establish a kinship connection, with whom one could discover a reciprocal term of relationship."[19] Hence, there is a considerable biological and social web that links those who regard themselves as the 'real people,' *Dane-zaa*.

The reference to "Beaver" is said to have been derived from the Chipewyan term for the Peace River, "*Chaw hot-e-na Dez-za* or Beaver Indian river."[20] Another source indicated that the Chipewyan of Lake Athabasca referred to the Beaver people as "*tsa-ttiné*," translated in French

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[16] Dane Wajich project, Beaver Language Materials, Virtual Museum of Canada. http://www.virtualmuseum.ca/Exhibitions/Danewajich/english/resources/language.php and http://www.virtualmuseum.ca/Exhibitions/Danewajich/english/resources/pronunciation_guide. See also Robin Ridington (1981). Beaver, In, *Handbook of North American Indians, Vol. 6 Subarctic,* Edited by June Helm. Smithsonian Institution, Washington DC. As well, see Amber Ridington and Kate Hennessy (Editors) 2007. Virtual Exhibit Catalogue: Dane Wajich—Dane-zaa Stories and Songs: Dreamers and the Land. Appendix I, pp. 376-497 in, Kate Hennessy 2010. Repatriation, Digital Technology, and Culture in a Northern Athapaskan Community. PhD dissertation in Anthropology, University of BC, Vancouver. http://hdl.handle.net/2429/27055.

[17] See, for example, Robin Ridington (1988). *Trail to Heaven: Knowledge and Narrative in a Northern Native Community*. Douglas and McIntyre, Vancouver/Toronto, p. ix; Robin Ridington 1995. "Freedom and Authority: Teachings of the Hunters." In, *Native Peoples: The Canadian Experience*. Second edition. Ed. by R. Bruce Morison and C. Roderick Wilson. Oxford University Press, Toronto, p. 232.

[18] See, for example, Robin Ridington and Jillian Ridington (2006). *When You Sing It Now, Just Like New: First Nations Poetics, Voices, and Representations.* University of Nebraska Press, Lincoln, Nebraska, p. ix. See also http://en.wikipedia.org/wiki/Beaver_First_Nation.

[19] Ridington 1981:350.

[20] J.B. Tyrrell, Editor (1934). Journal of a Journey From Cumberland House North America…Towards the Athapiscow Country and Back to York Factory, [September 13, 1790 to July 17, 1792], by Philip Turnor. In, *Journals of Samuel Hearne and Philip Turnor*. The Champlain Society, Toronto (reprinted in 1968 by Greenwood Press Publishers, New York). Page 401. While both Gillespie (1981:168) and Ridington (1981:359) cite this information from Turnor's 1790-1792 diary concerning the Chipewyan term for the Peace River, Ridington adds: "In contrast, Petitot (1888a:292) [*En Route pour la mer glaciale*. 2d. ed. Paris: Letouzey et ané] gave the Chipewyan name for Peace River as *tsa dès* 'beaver river,' suggesting that the people were named after the river" (Ridington 1981:359). See also Beryl Gillespie (1981). Territorial Groups Before 1821: Athapaskans of the Shield and the Mackenzie Drainage. In, *Handbook of North American Indians, Volume 6, Subarctic*. Edited by June Helm. Smithsonian Institution: Washington, DC. Page 168.

as '*habitants parmi les Castors*,' meaning 'dwellers among the beavers';[21] "*tsa-ttiné*" is a variant transcription of "*tsattine*," the term used by the Chipewyan to identify the *Dane-zaa*.[22] In French, the Beaver people are called *Gens de Castor*, meaning literally 'people of the beaver,' or simply *Castors*, 'beavers.'[23] In "Northern Plains Cree" (see Section 2.2.2 of the present report), the term for the Beaver people is "*amiskiwiyiniw*" meaning 'beaver person.'[24]

The Beaver language (*Dane-zaa záágéʔ*), which is classified as one of the "Northern Athapaskan" languages of the Athapaskan Language Family,[25] is spoken both in northwestern Alberta and in northeastern BC.[26] Linguists Michael Krauss and Victor Golla have pointed out that the Beaver language is one of the most poorly demarcated of the Northern Athapaskan languages and noted that there is "a vagueness about the boundary between Beaver and Slavey [Dene Tha'] in northern Alberta."[27]

Similar comments were made by linguist Patrick Moore who commented in 1979: "There is extensive but poorly known diversity among the dialects of Beaver." Moore gave the example of the Beaver dialect spoken at Boyer River, Alberta, noting that it was linguistically closer to the language spoken by the "Slavey" [Dene Tha'] than to the dialect of Beaver spoken in the vicinity of Fort St. John.[28]

Anthropologist and ethnohistorian Beryl Gillespie pointed out that:

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[21] Petitot (1876) and Hodge (1910), cited in Ridington 1981:359.

[22] Ridington 1981, 359; see F. W. Hodge, Editor, 1910. Smithsonian Institution Bureau of American Ethnology, *Bulletin 30: Handbook of American Indians North of Mexico, Part 2*. Government Printing Office, Washington DC. Page 822. This same term, "*tsattine*," is given as "*tsa-'ttinè*" meaning 'dwellers among the Beaver' (translated by Donat Savoie from original publications by Émile Petitot); see Donat Savoie (Editor). *The Amerindians of the Canadian North-West in the 19th Century, as Seen by Émile Petitot*. Mackenzie Delta Research Project, Northern Science Research Group. Vol. II, The Loucheaux Indians. Page 33.

[23] Ridington 1981:359.

[24] David H. Pentland (1979), cited as "communication to editors" in Ridington 1981:359.

[25] "Athapaskan"—also spelled "Athabascan"—is an arbitrary designation introduced in the 1830's-1840's to denote linguistically related Aboriginal groups in the interior of northwestern North America beyond the Churchill River. A number of writers have used names for the Athapaskan language family based on words meaning 'man' or 'person'; since the 1960s-1970s, this term has commonly been spelled "Dene" in Canada (Gillespie 1981:168). As for the term "Athabasca," itself, it is said to be a Cree word meaning '(where) there are plants one after the other' or 'there are reeds here and there' with reference to the Peace-Athabasca delta region near the west end of Lake Athabasca (Gillespie 1981:168; Smith 1981:269), or, a Cree term meaning "open country such as lakes with Willows and grass growing about them or swampy land without woods" (Turnor 1790-1792, in Tyrrell 1934:400).

[26] Michael Krauss and Victor Golla (1981). Northern Athapaskan Languages. In, Handbook *of North American Indians, Vol. 6, Subarctic*. Edited by June Helm. Smithsonian Institution, Washington DC. Pp. 67, 81; Robin Ridington 1981. Beaver. In, Handbook *of North American Indians, Vol. 6, Subarctic*. Edited by June Helm. Smithsonian Institution, Washington DC. Pp. 350-351.

[27] Krauss and Golla 1981:81.

[28] Patrick Moore (1979). Personal communication to the editors of Vol. 6 of the Smithsonian Institution's *Handbook of North American Indians* series. Cited in Ridington 1981:350.

> An Athapaskan people have been associated with the Peace River region and called Beaver Indians since the earliest historical documents relating to the area. There have been no major difficulties of group designations with the Peace River region, but there has been confusion between the Athapaskan-speaking Beaver Indians of the Peace River and the Beaver River Cree.[29]

Both Robin Ridington and historical geographer Leonard Ugarenko have, independently, prepared maps showing the extent of Beaver territory. Ridington's map, said to represent Beaver territory "in 1800," appears in Section 11.10 of the present report. Ugarenko's map, appearing here in Section 11.9, was prepared in 1979 and is said to represent Beaver territory "at contact," meaning the time of first European visitors to the region.

Significantly, the area occupied by the Beaver or Dane-zaa speech community extends over a large area now transected by the BC/ Alberta border. All areas where Indian Reserves were established for the ancestors of today's Horse Lake First Nation are included within Beaver territory as delineated by both Ridington and Ugarenko[30] (but see also the discussion that follows).

## 2.5 Cree Ancestry of the Horse Lake First Nation

Some intermarriage has occurred between Beaver and Cree-speaking people who now comprise the contemporary Horse Lake First Nation. While the language spoken by the Cree members of the Horse Lake First Nation and their ancestors is classified within the "Algonquian" Language Family, there is some confusion in the literature concerning both the name of the particular dialect of Cree spoken in this region of northwest Alberta and the name of the ethnic grouping of those who speak this dialect of Cree. The term "Cree" is used both in English and in French to designate all those who speak the Cree language. But the word "*Cree*," itself, is actually derived from a shortened form of the Ojibwa term for the Cree people that has been written as "*Knisteneaux*." Variants of this term, "*Knisteneaux*," first appeared in historical documents in the mid-1600s. The French Canadians are said to have immediately adopted the term and then shortened it to "*Crees*" or "*Cree*"; by the late 1700s, the English, as well, were using "Cree" in this generic sense to refer to all Cree people. [31] A further discussion of Cree dialectology can be found in Appendix B of the present report.

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[29] Gillespie 1981:167-168.

[30] Ridington 1981:351. [Map of Beaver] Territory in 1800. See also Leonard Ugarenko (1979). The Beaver Indians and the Fur Trade on the Peace River, 1700-1850. Master's thesis, Department of History, York University, Toronto. Map 3, Distribution of the Beaver at Contact. Ridington's earlier hand-drawn sketch map of "Beaver Indian Territory" that appears in his 1968 doctoral dissertation does not extend Beaver territory quite as far south, in this region of the Peace River, as his 1981 map does. See Robin Ridington (1968). The Environmental Context of Beaver Indian Behavior. PhD dissertation in Anthropology, Harvard University, Cambridge, Massachusetts. Page 10.

[31] Other transcriptions of this term include: "*Kinishtineau*"; "*Kiristinon*"; "*Kiristinous*"; and "*Kilistinous*"). See John J. Honigmann (1981). West Main Cree. In, *Handbook of North American Indians, Vol. 6, Subarctic*. Edited by June

## 2.6 Iroquois Ancestry of the Horse Lake First Nation

The people for whom Horse Lake Indian Reserves were set aside included individuals identified as Iroquois. Speakers of Iroquoian[32] languages—often just identified as "Iroquois"—came to the west in the 1790s-early 1800s when the North West Company and its short-lived rival, the XY Company, hired hundreds of "Iroquois" and other eastern First Nation hunters who worked their way westward until they reached as far as the Rocky Mountains. Many of these Iroquois hunters stayed in the west and married Cree and Métis women.[33]

Adhesion of the Joachim and Wanyandie families brought persons of Iroquois and mixed-blood ancestry into the Dunvegan Band,[34] now the Horse Lake First Nation.

Helm. Smithsonian Institution, Washington DC. Pp. 227-228. See also David G. Mandelbaum (1979). *The Plains Cree: An Ethnographic, Historical, and Comparative Study* [based on Mandelbaum's 1934-1935 fieldwork]. Canadian Plains Studies 9. Canadian Plains Research Center, University of Regina. Page 15.

[32] While there are 16 different groups that have been identified as "Iroquoian," the actual number of languages classified as "Iroquoian" is less, totalling possibly 13; very little or no data exists for some of these languages. A major division exists between a "Northern Branch" and a "Southern Branch" of Iroquoian. The "Northern Branch" of Iroquoian includes the related "Five Nations" languages known as Mohawk, Oneida, Onondaga, Cayuga and Seneca in the upper St. Lawrence and south side of Lake Ontario areas. See: Floyd G. Lounsbury 1978. Iroquoian Languages. In, *Handbook of North American Indians, Vol. 15, Northeast*. Edited by Bruce Trigger. Smithsonian Institution, Washington DC. Pp. ix, 334-336.

[33] See: Jennifer H. Brown (2001). History of the Canadian Plains until 1870. In, *Handbook of North American Indians, Vol. 13, Plains.* Edited by Raymond J. DeMallie. Smithsonian Institution, Washington DC. Page 305; Ridington 1968:146; Hugh Dempsey 1998. *Indians of the Rocky Mountain Parks.* Fifth House Publishers Ltd., Calgary, Alberta. Page 67.

[34] See G. Neil Reddekopp (1996). The Creation and Surrender of the Beaver and Duncan's Band's Reserve. Alberta Aboriginal Affairs, Indian Land Claims, Paper No. 2. Page 20.

## 3.0 First European Recognition of Aboriginal Occupation in the Peace River Region

It is of interest which Indigenous groups were encountered when the first fur trade posts were established in the Peace River region and what the lifestyle of the Aboriginal people was observed to be. As reviewed below, the scant historical literature available for the late 18th century indicates that fur traders' indirect contact with people of the central Peace River resulted in an imperfect knowledge of the extent of the territory occupied by specific Aboriginal bands. Traders nevertheless did recognize that small bands of nomadic people occupied the Peace River region, but as reviewed below, these same accounts provide little detail on the extent of any individual band's land use.

### 3.1 Early Maps

One of the first literate fur traders to be anywhere near the region was Peter Pond. We do not know for certain if Pond, an independent American fur trader and explorer, encountered any Beaver (*Dane-zaa*) people when he was among several traders who in the winter of 1778-1779 established a post on the Athabasca River approximately 60 km (about 35-40 miles) south from the western end of Lake Athabasca. [35] It is more likely that Pond did meet the *Dane-zaa* a few years later, when a trading post is said to have been established under Pond's direction above Vermilion Falls, near the present Fort Vermilion, possibly as early as 1786.[36] Again, the evidence from this period is incomplete and vague, and hence the date of the establishment of such a post is the subject of debate.

Referring to this early post on the Peace River, the well-regarded Canadian historian, H.A. Innis, wrote that "for all we know there may have been an earlier post built [near the present Fort Vermilion] in the fall of 1786,"[37] and Innis' uncertainty continued to be expressed by a later generation of historians. For example, Terry Smythe, citing explorer Alexander Mackenzie, stated that the first post built on the Peace River was "probably established" in 1788. This post,

[35] See: Charles M. Gates (1933). *Five Fur Traders of the Northwest*. The Ryerson Press, Toronto. Page 12; W.K. Lamb, Editor (1970). *The Journals and Letters of Sir Alexander Mackenzie*. Macmillan of Canada, Toronto. Page 129; Leonard Ugarenko (1979). The Beaver Indians and the Fur Trade on the Peace River, 1700-1850. Master's thesis, Department of History, York University, Toronto. Page 69. Ugarenko, citing C. Grant who wintered with Pond in 1778-1779, concluded it was "certain that Pond traded with the Beaver." But Ugarenko added that Pond did not specifically mention the Beaver by name and for that matter did not record detailed information concerning any of the Native people with whom he traded (Ugarenko 1979:69, fn.4). .

[36] Yerbury 1986:61.

[37] See H.A. Innis (1930). *Peter Pond: Fur Trader and Adventurer.* Irwin & Gordon Ltd., Toronto. Page 26. While Mackenzie, himself, stated that it was "the year 1786 when the first traders from Canada arrived on the banks of this river [the Peace River]" (Lamb 1970:253), he did not, on this occasion, associate this event with a particular site. Mackenzie said that it was "in the fall of the year 1787" that he (Alex. Mackenzie) first arrived in the Lake Athabasca area (Lamb 1970:242). This is a reference to Mackenzie's arrival at Pond's house on the Athabasca River on October 25th, 1787, to take over the "Athabasca department" (Innis 1930:17-18).

known as "Boyer's Post," was named after its builder, Charles Boyer of the North West Company. It was reportedly the "main source of provisions for Pond's Fort [on the Athabasca River]" in 1788-1789 and was located near the confluence of Boyer River with the Peace, in the vicinity of Fort Vermilion.[38] (See Section 11.1 of the present report for a further discussion of Peter Pond and his *circa* 1785 map).

Alexander Mackenzie, himself, referred in his journal to the site of Boyer's Post as the "Old Establishment" when he was proceeding up the Peace River in October 1792 and stopped at Aspin House,[39] about 48km (c. 30 miles) upriver from Boyer's Post. Mackenzie wrote in his journal, "In the summer of 1788, a small spot was cleared at the Old Establishment" and numerous vegetables were grown.[40] Likely this was the first attempt at agriculture on the Peace. Mackenzie would later provide the ambiguous comment in his journal of March 1793, while wintering at the newly-built Fort Fork on the Peace River near its confluence with the Smoky River, that it was 1786 "when the first traders from Canada" arrived on the banks of the Peace River.[41]

Exploration of the Athabasca region in general expanded in the summer of 1789 when Alexander Mackenzie travelled from Fort Chipewyan to the Mackenzie River and the Arctic Ocean by way of Great Slave Lake. A map that was likely made for Mackenzie by Aaron Arrowsmith[42] subsequent to his exploration was published in the 1801 First Edition of Mackenzie's Voyages. This map marks "Beaver Ind." in the vicinity of the "Horn Mountain River" which is today's Horn River in the Northwest Territories that enters the enlargement of the Mackenzie River known as Mills Lake, not far downriver from the Mackenzie's outlet of Great Slave Lake. But this same 1801 map leaves the Peace River area blank, omits the name "Slaves" (Slavey)

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[38] See Terry Smythe (1968). Thematic Study of the Fur Trade in the Canadian West, 1670-1870. Staff Report for the Historic Sites and Monuments Board of Canada. Agenda Paper 1968-29. Page 262 (copy on file with the Hudson's Bay Company Archives, Provincial Archives of Manitoba, Winnipeg); Historian and archivist W.K. Lamb (1970:239 fn) opined in that it was "probably in 1787" that Boyer's Post was built; historian Barry Gough accepted that 1788 as the date; Gough (1997). *First Across the Continent: Sir Alexander Mackenzie.* (The Oklahoma Western Biographies, Vol. 14), p. 110. University of Oklahoma Press: Norman, Oklahoma.

[39] Lamb 1970:239. Aspin House was later known as "Old Aspin House."

[40] Lamb 1970:242.

[41] Both W.K. Lamb and J.N. Wallace have commented on this remark of Mackenzie's. Lamb (1970:253) noted that it is not clear whether Mackenzie meant that the Peace River was first visited by traders in 1786, or whether a post of some kind was built that year, but opined "The latter seems unlikely." J.N. Wallace (1929) commented that either interpretation was possible. By the fall of 1787, Wallace stated, "we have no word of any trade on the Peace except what we may gather from Mackenzie's obscure remark in reference to 1786" and continued to express his uncertainty. See, J.N. Wallace (1929: 14, 18, 25-26). *The Wintering Partners on Peace River*. Thorburn and Abbott, Ottawa.

[42] Personal communication from map historian and author Derek Hayes, Victoria, BC, to Randy Bouchard, August 2011. This map is reproduced in Lamb 1970, facing p. 67, as "A Map of America, between Latitudes 40 and 70 North, and Longitudes 45 and 180 West, Exhibiting Mackenzie's Track from Montreal to Fort Chipewyan & from thence to the North Sea in 1789, & to the West Pacific Ocean in 1793."

entirely, and instead adds to the map the names "Inland Ind[ians]" and "Strongbow Indians."[43] Mackenzie in his journal of this expedition notes that an Indian from Yellowknife told him that the region of the "Horn Mountain[s]" (west from Great Slave Lake) and Horn River was the "Land of the Beaver Indians," [44] As Gillespie points out in her discussion of the difficulties of nomenclature, it cannot be assumed that the people of the Horn Mountains/Horn River were the contemporary *Dane-zaa* (Beaver), for Mackenzie makes reference in his journal to both "Slave" (Slavey) and "Beaver" (as well as Dogrib) in the Mackenzie Valley area which is associated historically with the Slavey.[45] Mackenzie would later write in 1806 with respect to the Aboriginal people of the forks of the Mackenzie and Liard rivers: "They have been called Beaver Indians by some in this country but they are Dogrib (or Slave),"[46] another remark that highlights the problem of nomenclature as used in the early journals.

There is no doubt, however, that Alexander Mackenzie did meet *Dane-zaa* (Beaver) people. What is not so certain is when and where it was that he first met them. Mackenzie had stated in a 17 March 1788 letter written from Lac La Loche[47] that he "found that all the Beaver Indians had been here prior to my arrival which I was very sorry for, having a great desire to see them."[48] While no further details were provided in this letter, Mackenzie later wrote in his journal that "When this country was formerly invaded by the Knisteneaux [Cree]," [49] they "found the Beaver Indians inhabiting the land about Portage La Loche."[50] This is the famous portage, also known as Methye Portage, located between Lac La Loche and the Clearwater River. It crosses the height of land which separates the watersheds of the Churchill River, emptying into Hudson Bay, and the Mackenzie River, emptying into the Arctic Ocean. [51]

A clear association of Beaver people with the Peace River was made in 1790-1792 by Philip Turnor, surveyor for the Hudson's Bay Company, and Peter Fidler, assistant surveyor. Turnor and Fidler at this time led a mapping expedition into the Athabasca country.[52] This expedition

[43] This present report does not purport to offer an opinion on the relationship between Mackenzie's "Beaver" and the contemporary "Slavey" in this region.

[44] Lamb 1970:177, 227.

[45] Gillespie 1981:167; Lamb 1970:182.

[46] Mackenzie 1806, in Yerbury 1986:79.

[47] Lac La Loche, also known as Methye Lake, is located in northwest Saskatchewan, south from the eastern portion of Lake Athabasca.

[48] Alexander Mackenzie to Roderic McKenzie [Mackenzie], 18 March 1788, in, Lamb 1970:432-433.

[49] As previously noted, "*Knisteneaux*" is the Ojibwa term for the Cree people. See Honigmann 1981:227-228; Mandelbaum 1979:15.

[50] Lamb 1970:238.

[51] Lamb 1970:127.

[52] For Turnor's 1790-1792 journal, see J.B. Tyrrell, Editor (1934). Journal of a Journey From Cumberland House North America…Towards the Athapiscow Country and Back to York Factory, [September 13, 1790 to July 17, 1792], by Philip Turnor. Pp. 327-491, in, *Journals of Samuel Hearne and Philip Turnor*. The Champlain Society, Toronto (reprinted in 1968 by Greenwood Press Publishers, New York).

made a circuit of Lake Athabasca. Turnor and Fidler made numerous calculations of longitudes and latitudes during this trip, although Turnor did not actually draft maps in the field; rather, he waited to do so until he returned to London in 1792. [53] Fidler did make many sketches in the field, however, including 16 sketches illustrating most of the shoreline of Lake Athabasca.[54] (See Section 11.2 of the present report for a further discussion of Philip Turnor and his 1792 map)

Thus, concerning the earliest exploration of the Peace River area we can conclude the following about Aboriginal land use:

- Pond's investigations of the Peace River in the mid-1780s are largely unknown, although he associates the Peace River with Beaver Indians;
- Mackenzie`s 1789 information about the "Land of the Beaver Indians" is internally inconsistent. His placement of "Beaver" people in the Horn River/Horn Mountains area cannot be accepted on face value. He does not indicate the identify of the occupants of the central Peace River;
- Both Turnor's map and his 1790-1792 journal indicate that his information on the Peace River and its Aboriginal inhabitants came from "Canadian and Indian" sources and that they associated the Peace River generally with the Beaver people.

[53] Turnor, who had been retained as a surveyor by the Hudson's Bay Company in 1788, hired Peter Fidler as his assistant in 1790. See Richard I. Ruggles (1991). *A Country So Interesting: The Hudson's Bay Company and Two Centuries of Mapping 1670-1870.* McGill-Queen's University Press, Montreal & Kingston. Pp. 18-19, 52-53.

[54] Ruggles 1991:53,197.

## 4.0 Alexander Mackenzie Encounters Aboriginal People in the Central Peace

Alexander Mackenzie's journal of his epic 1792-1793 expedition is significant for a review of the HLFN's ancestors' historical land use of the central Peace River region for he was the first to visit the central Peace River and comment on the Indigenous use and occupation of the area. His description of his experiences and observations are common to the history of the Aboriginal people of the region. Mackenzie observed bands of hunters, some of whom were led by men distinguished from others as leaders. He equipped them with supplies for their "winter hunting," indicating that they were trappers participating in the fur trade from at least the earliest days of his stay among them. Concerning the extent of Beaver occupation, Mackenzie's information indicates that Beaver hunters encountered near Dunvegan were familiar with travel west to the Rocky Mountains.

### 4.1 Mackenzie's Travels

It is pertinent to our examination of Horse Lake First Nation land use history to review where Mackenzie encountered Aboriginal people identified as Beaver.

Mackenzie set out from Fort Chipewyan on Lake Athabasca on 10 October 1792.[55] He arrived on the 19th of October at the "Old Establishment,"[56] i.e. Boyer's Post that had been built *circa* 1788 on the north bank of Peace River, just above the mouth of the Boyer River.[57] On the 20th of October he reached the "New Establishment," the newly-built post known as Aspin House located about 48 km (30 miles) upriver from Boyer's Post. Mackenzie noted at this point in his journal that during his previous five years in this region, he had yet to meet a single Aboriginal person from the area he now reached.[58]

There was "only one chief with his people" at Aspin House when Mackenzie arrived there on 20 October 1792, but by the 21st-22nd, the "other two" chiefs and their bands arrived, numbering "forty-two hunters." Only "the war chief and fifteen men" had not yet arrived. Mackenzie wrote that "about three hundred" Indigenous people, including sixty hunters, would be looking to Aspin House for trade and supplies.[59] Concerning their appearance, Mackenzie observed that these Aboriginal people had adopted the dress of their "former enemies, the Knisteneaux [Cree]."[60] Mackenzie continued up the Peace River on his way to Fort Fork, situated on the southeast side of the Peace River about 10 km (approximately 6 miles) upriver from its

[55] Lamb 1970:237.

[56] Lamb 1970:239.

[57] Smythe 1968:262.

[58] Lamb 1970:239.

[59] Lamb 1970:240.

[60] Lamb 1970:240.

confluence with the Smoky River, which Mackenzie referred to as the "Eastern Branch" of the Peace River. Although little had been built on the Fort Fork site by the time of Mackenzie's arrival on 1 November 1792, it would be his home through the winter of 1792-1793, before his voyage up the Peace River and to the Pacific Ocean. [61]

It was Mackenzie who first recorded the story associated with "Peace Point," the name that fur traders applied to a place on the lower Peace River, commemorating a peace agreement between the Cree and the Beaver (*Dane-zaa*). Peace Point is located approximately 420 km (about 262 miles) east of the Alberta/BC border and about 90 Km (approximately 56 miles) south of the Northwest Territories/Alberta border. Arriving at "Peace Point" on 13 October 1792, Mackenzie wrote the following in his journal, as it was explained to him by his interpreter:

> When this country was formerly invaded by the Knisteneaux [Cree], they found the Beaver Indians inhabiting the land about Portage la Loche [Methye Portage, south from the eastern end of Lake Athabasca]; and the adjoining tribes were those whom they called slaves [Slavey]. They drove both these tribes before them; when the latter proceeded down the river from the Lake of the Hills [Lake Athabasca], in consequence of which that part of it obtained the name of the Slave River. The former [the Beaver] proceeded up the river [Peace River]; and which the Knisteneaux made peace with them, this place [Peace Point] was settled to be the boundary.[62]

Historian Beryl Gillespie astutely noted in her review of this same passage in Mackenzie's journal that this "boundary" concept is European and "probably does not reflect an Indian perception of a peace-making event."[63] Land use boundaries between local groups were not firmly fixed within speech Athabaskan communities, yet this period of inter-tribal hostility between speakers of Beaver and Cree may have promoted a stronger sense of territorial boundaries between antagonistic groups in competition for scarce European trade resources.

Mackenzie at this same time pointed out that "the real name of the [Peace] river and point" was actually "that of the land which was the object of contention," [64] although it was not until August of 1793, on his return from the expedition to the Pacific, that he provided this Aboriginal term,

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[61] Lamb 1970:241. Mackenzie had, in the summer of 1792, sent a party of men here to what became the Fort Fork site to build a fort where he would be able to winter, while searching for a route to the Pacific Ocean.

[62] Lamb 1970:238. Elsewhere in his journal, Mackenzie referred to the Peace River as "*Unjigah*" (Lamb 1970:400) which is the same term that historians David Leonard and Beverly Whalen transcribed as "*Unchaga*" in a footnote to O.C. Edwards' journal that was kept in his capacity as physician for the Treaty 8 Commission of 1900. Leonard and Whalen wrote, with reference to the area known today as Peace Point on the lower Peace River, that: "…the name of the [Peace] river changed from (in Cree) "*Tsadu*" to "*Unchaga*," or (in English) from 'Beaver' to 'Peace'." See David Leonard and Beverly Whalen (2002). *On the North Trail: the Treaty 8 Diary of O.C. Edwards*. Published by the Alberta Records Publication Board, Historical Society of Alberta. Page 78, fn.91.

[63] Gillespie 1981:163.

[64] Lamb 1970:238.

"*Unjigah*," [65] in his journal. In later describing the height of land separating the source of the Fraser River from the source of the Peace, Mackenzie referred to the "Unjigah, or Peace River."[66] He also identified the "Unjigah, or Peace River" on the 1801 "Map of Mackenzie's Track from Fort Chipewyan to the Pacific Ocean in 1793" that accompanied his published journal. [67] As historian Derek Hayes has pointed out in his new book on Alexander Mackenzie, the explorer's map from his expedition shows the location of the Rocky Mountains "reasonably correctly, but the source of the Peace River is known only from native reports, and includes a fictitious 'Lake of the Plains'."[68] Mackenzie also recognized a row of mountains that he identified as the "Beaver Mountains" lying to the north of the Peace River.[69]

Historians have addressed the issue of why the Beaver (*Dane-zaa*) and Cree achieved this pact and concluded that severe depopulation among the Cree resulting from a 1781-82 smallpox epidemic that approached from the southeast likely contributed to their desire for peace.[70] Apparently this same epidemic did not reach the Beaver people.[71] Nevertheless, at the time of Alexander Mackenzie's expedition to the Peace River, it is likely that the *Dane-zaa* had some indirect contact with Europeans, for Cree and Chipewyan middlemen traded European goods to more western bands,[72] and also carried on hostile relations with these same neighbours. Alexander Mackenzie noted early in 1793 while he was wintering at Fort Fork that the Beaver had guns beginning in 1782, and that they paid dearly for goods of European manufacture.[73] Yet by 1793, Mackenzie wrote, the Beaver had "more or less, imbibed the customs and manners of the Knisteneaux [Cree]."[74] The number of Beaver people together with their western neighbours, identified by Mackenzie as "Rocky Mountain Indians," [75] "did not exceed a hundred and fifty

[65] Clearly "*Unjigah*" is the same term that historians David Leonard and Beverly Whalen transcribed as "*Unchaga*" in a footnote to O.C. Edwards' journal that was kept in his capacity as physician for the Treaty 8 Commission of 1900. Leonard and Whalen wrote, with reference to the area known today as Peace Point on the lower Peace River, that: "…the name of the [Peace] river changed from (in Cree) "*Tsadu*" to "*Unchaga*," or (in Englsih) from 'Beaver' to 'Peace.'

[66] Lamb 1970:400.

[67] This map is reprinted in Lamb 1970, between pp. 66-67.

[68] Derek Hayes. 2001. *First Crossing: Alexander Mackenzie, his Expedition across North America and the Opening of the Continent*. Douglas and McIntyre: Vancouver.

[69] Hayes 2001:159, map.

[70] Yerbury 1986:61.

[71] Arthur J. Ray (1974). *Indians and the Fur Trade*. University of Toronto Press, Toronto. Pp. 105-109.

[72] Ugarenko 1979:66.

[73] Lamb 1970:253.

[74] Lamb 1970:253.

[75] Editor Kaye Lamb (1970:250) opined in a footnote that: "By the 'Rocky Mountain Indians' Mackenzie meant the Western Beaver Indians; by 'Beaver Indians' he meant the 'Eastern Beaver…'." (A further discussion of these "Rocky Mountain Indians" continues below).

men, capable of bearing arms; two thirds of whom were Beaver.[76] The Beaver differed slightly from the Rocky Mountain Indians in their dress, these latter people being less influenced by the Cree at that time.

Arriving at the Fort Fork site on 1 November 1792, Mackenzie wrote in his journal that no sooner had he pitched his tent than he "summoned the Indians together" and "gave each of them about four inches of Brazil tobacco, a dram of spirits, and lighted the pipe." He admonished them for their "previous misconduct" and said he wanted to "inquire into the truth of it." Then he presented them with a "quantity of rum" which he urged them to use "with discretion" and "added some tobacco, as a token of peace." Over the next several days, Mackenzie equipped these Aboriginal people "for their winter hunting."[77]

Considering the months that Mackenzie spent at Fort Fork, his observations on the Indigenous people are sparse, but nonetheless helpful to understanding Aboriginal land use at this time. Mackenzie identified the Indigenous people of this region as "Beaver and Rocky Mountain Indians." While they co-existed peacefully at the time of Mackenzie's visit in the winter of 1792-1793, the Beaver Indians informed him that this relationship had not been peaceful in the past, and that some tension still existed between the two groups. About two thirds of the 150 Aboriginal men who Mackenzie described as "capable of bearing arms"—meaning they were neither too young nor too old—"call themselves Beaver Indians."[78] The journal is not clear that they all lived in the one camp near Fort Forks, for in recounting their numbers, Mackenzie referred to them as "the Beaver and the Rocky Mountain Indians, who traded with us in this river."[79] Mackenzie's journal indicates that the Aboriginal camp at Fort Forks consisted of numerous lodges, and that the occupants of one lodge were destitute, for "according to custom" they had given away all their belongings after the death of one of their near relatives.[80]

In January 1793, while at Fort Fork, Mackenzie was told by two men who identified themselves as "Rocky Mountain Indians" that their designation was contrary to the fur traders' own use of the name. They also told Mackenzie that their traditional home was around Fort Forks, that "the Beaver Indians had greatly encroached upon them and would soon force them to retire to the foot of these mountains [Rocky Mountains]." They also said they were the only real residents of the area west to the Rocky Mountains.[81] From these people the explorer learned the course of the river and the existence of the Fraser River beyond the mountains. As Hayes points out in his review of this encounter, it was Mackenzie's "first hint of the existence of the Fraser River" and

[76] Lamb 1970:253.

[77] Lamb 1970:243.

[78] Lamb 1970:253.

[79] Lamb 1970:253.

[80] Lamb 1970:251-252.

[81] Lamb 1970:249-250.

was information that guided him later to take the southern branch at the point where the Peace divided.[82]

Mackenzie wrote that although "the Beaver Indians made their peace with the Knisteneaux [Cree], at Peace Point," other Cree who had not made peace with the Beaver continued to harass them and, if they missed the Beaver during their war excursions, these other Cree continued westward "wreaking their vengeance on those [Indians] of the Rocky Mountain, who being without arms, became an easy prey to their blind and savage fury."[83]

It is clear that the Aboriginal people Mackenzie met in the vicinity of Fort Forks were hunters and that their range was considerable. Speaking of "Deer Mountain" –the Whitemud Hills situated about 100 km (approximately 62 miles) northwest of the Forks of the Smoky and Peace Rivers—Mackenzie stated that the Indigenous people hunted beaver in this direction, and that for a change of diet they also hunted the plentiful deer that could be found here.[84] Aboriginal hunters connected with Fort Forks brought Mackenzie "plenty of furs" in the winter of 1792-1793. The scant snow in January "was particularly favourable for hunting the beaver" and permitted these animals to be more easily "traced from their lodges to their lurking-places."[85] At other times, the Fort Fork Aboriginal hunters reported, they travelled to Lesser Slave Lake [about 112 Km (70 miles) southeast of Fort Fork] to hunt. Mackenzie described this lake as "well known to the Knisteneaux [Cree], who are among the inhabitants of the plains on the banks of the Saskatchewine [Saskatchewan] river."[86]

In preparation for a heavier snowfall, the hunters in late January 1793 spent time making snowshoes, although Mackenzie does not mention if the anticipated hunt was for beaver or other species.[87] A change in hunting technology had occurred in the six years that fur traders had come to the Peace River, and according to Mackenzie the Aboriginals' use of bows was now nominal, while the use of snares continued.[88] Mackenzie wrote: "These Indians are excellent hunters"[89] although in his private correspondence he spoke of his disappointment in the poor returns of the winter of 1792-1793.[90]

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[82] Hayes 2001:160.

[83] Lamb 1970:253.

[84] Lamb 1970:242-243.

[85] Lamb 1970:250.

[86] Lamb 1970:249, fn.2. Mackenzie added that when these Cree people "used to come to make war in this country" they came in their canoes to Lesser Slave Lake, left them there, and followed a "beaten path" which was their "war-road" all the way to the forks of the Peace and Smoky Rivers (Lamb 1970:249, fn.3). This "war-road" is shown on Mackenzie's map that appears between pages 238-239 of Lamb's edition.

[87] Lamb 1970:251.

[88] Lamb 1970:253.

[89] Lamb 1970:254.

[90] Lamb 1970:452.

Concerning the animals available to the Aboriginal people in this region of the Peace, Mackenzie mentioned beaver, deer, "rein deer," moose, elk and buffalo. By the term "rein-deer," he likely meant caribou, [91] but Mackenzie was told they had mostly left the country some years earlier after the local habitat changed and the animals "retired to the long range of high lands that, at a considerable distance, run parallel with this river," likely a reference to the Rocky Mountain foothills. Elk and buffalo now roamed this country about the Forks, Mackenzie noted. [92] Farther up the Peace, he saw the tracks of grizzly bear and commented that the Indigenous people hunted them, but only when hunting in parties of three or four men.[93]

On the 9th of May 1793 Mackenzie began his ascent of the Peace River, accompanied by a party of ten men.[94] Over the next month, until Mackenzie reached the Rocky Mountain portage, his daily journal records the beauty and abundance of the countryside along with the occasional encounter with an Aboriginal camp. Among Mackenzie's party of ten were two young Aboriginal men who served as hunters and interpreters, along with his assistant and six Canadians.[95] So on 11th May 1793, when they came across "a chief of the Beaver Indians on an hunting party" a few miles west from the confluence of the Saddle (Burnt) River with the Peace, the young guides conversed readily with them, indicating that the area was occupied by *Dane-zaa* people. According to Mackenzie's editor, Kaye Lamb, the camp of this hunting party "cannot have been far from the point where Fort Dunvegan, the best-known of the trading posts on the Peace River, was built by the North West Company in 1805." (It was in the Dunvegan area that Indian Reserves would be set aside for ancestors of the Horse Lake First Nation; see Section 9.0 of the present report). Mackenzie's own hunters stayed overnight with this hunting party, and the following evening, some of these Beaver hunters camped overnight with Mackenzie, giving Mackenzie the opportunity to learn something about the country he was soon to pass through. The trip to the Rocky Mountains, he was told, would take ten days.[96] It is significant that these Dunvegan hunters were familiar with lands to the west and knew the length of travel in this direction to the Rocky Mountains.

On the evening of 12 May 1793, Mackenzie and his party camped on an island just upriver from the confluence of the Montagneuse River with the Peace, about 60 km (37 miles) downstream from the BC/ Alberta border. Mackenzie reported there was an Aboriginal camp "at some distance" from this spot. He commented that "the greater part of this band" were "Rocky

[91] Lamb 1970:413, fn.2 also concluded that by Mackenzie's "rein-deer" was a reference to caribou, for Mackenzie mentioned the animal eating "a short curling moss," a species which "grows on the rocks," as lichen, the caribou's food, certainly does. Mackenzie noted that this animal provided both food and clothing.

[92] Lamb 1970:255-256.

[93] Lamb 1970:262.

[94] Lamb 1970:258.

[95] Lamb 1970:257.

[96] Lamb 1970:259-260; Mackenzie at this time identified the Saddle (Burnt) River by its Native (Cree) name, "*Quiscatina Sepy*" and provided the translation 'River with the High Banks.'

Mountain Indians,"[97] a group who had both hostile relations and intermarried with those identified as Beaver. These particular people were not familiar with a route to the Pacific Ocean that Mackenzie sought after, and knew nothing of the country beyond the first mountain, seemingly a reference to the Rockies. An old man who Mackenzie had met on an earlier occasion was not present, although Mackenzie reported the knowledge that this individual had acquired during a war expedition to the west side of the "Rocky mountains."[98]

Proceeding up the Peace River from the Montagneuse River mouth, Mackenzie wrote that he observed on one of the islands in the Peace a large grizzly den, which he referred to as a "*watee*," and added, "The Indians entertain great apprehension of this kind of bear." [99] Mackenzie and his party camped on the night of the 13th of May in the vicinity of the mouth of the Clear River,[100] which is about 13 miles (approximately 21 miles) down the Peace from the Alberta/BC border.

Mackenzie observed few signs of Aboriginal occupation as he proceeded up the Peace River from the Clear River mouth. While in the vicinity of the Alces River mouth on May 15th, he referred to "the elk and the buffalo, who were feeding in great numbers, and unmolested by the hunter." [101] He also talked about the plentiful elk and buffalo, as well as beavers, on 16 May when he was in the vicinity of the Pine and Moberly Rivers; so plentiful was the game, Mackenzie commented that same day, that, "The country is so crowded with animals as to have the appearance, in some places, of a stall-yard, from the state of the ground, and the quantity of dung which is scattered over it."[102] On 18 May, when Mackenzie was in the vicinity of Hudson's Hope, he described landing on an island where there were eight Indian lodges "from last year." He also noted that "The natives had prepared bark here for five canoes" and had "stripped off the bark of trees, to get to the interior rind [cambium layer] which forms a part of their food. [103]

Mackenzie retraced his trail through this country in August 1793 on his return from the Pacific. Along the route he commented on seeing evidence of the Aboriginal people's occupation of the mountains. Upstream from Peace River Canyon he found a hunting camp used only a few days prior to his arrival. He surmised that the inhabitants had left in an alarmed state, for three of their canoes and paddles had been left on the beach.[104] He met no Aboriginal people until the 24th of August, near Fort Fork, where he encountered only two unidentified lodges whose inhabitants,

[97] Lamb 1970:260.

[98] Lamb 1970:261.

[99] Lamb 1970:262. "*Watee*" is the term transcribed in LeClaire and Cardinal's *Cree Dictionar*y (2006:224,285) as *wâti* and translated as 'lair; den.'

[100] Lamb 1970:261.

[101] Lamb 1970:264.

[102] Lamb 1970:264.

[103] Lamb 1970:265.

[104] Lamb 1970:404.

Mackenzie reported, "were astonished to see us, as if we had been the first white men whom they had ever beheld." [105]

Once Mackenzie arrived back at Fort Forks on 24 August 1793, his chronicles ended. The expedition that had begun in the winter of 1792-1793 had introduced Mackenzie to *Dane-zaa* and Rocky Mountain people residing along the central Peace River, and as reviewed above, he reported in his journals snippets of information about their lifeways. More comprehensive is Mackenzie's description of the Cree entitled "Some Account of the Knisteneaux [Cree] Indians" included in his "General History of the Fur Trade," a manuscript published along with Mackenzie's journals in Lamb's 1970 edition of *The Journals and Letters of Sir Alexander Mackenzie.* Concerning Cree economic pursuits, Mackenzie stated:

> The profession of the men is war and hunting, and the more active scene of their duty is the field of battle, and the chase in the woods. They also spear fish, but the management of the news is left to the women. The females of this nation . . . dress the leather, make the clothes and shoes, weave the nets, collect wood, erect the tents, fetch water, perform every culinary service. . . [106]

What is clear from Mackenzie's journal is that both the Beaver and the Cree were highly mobile people. Typically, the fur traders would encounter a small band of people, only to find them gone from the area several months later, as Mackenzie witnessed between his winter sojourn at Fort Forks and his return there in August.

In sum, historical documents contain the following observations about Aboriginal land use at the end of this period of first exploration of the central Peace River:

- *Dane-zaa* people continue to form small, nomadic hunting bands
- Downriver *Dane-zaa* bands begin to show cultural influence from the Cree
- Increased Cree intrusion into the central Peace River region
- Relations between *Dane-zaa* and Cree bands continue to be hostile
- *Dane-zaa* people participating in the commercial fur trade.

[105] Lamb 1970:406-407.

[106] Lamb 1970:135.

## 5.0 Aboriginal Culture of the Dane-zaa

Very little ethnographic research has been undertaken among the *Dane-zaa* people. Robin Ridington's summary of "Beaver" published in the *Handbook of North American Indians, Vol. 6 Subarctic,* nevertheless provides an overview of the Aboriginal culture as reported by Native people interviewed long after Mackenzie's visit.[107] Included among work consulted by Ridington is the early research of anthropologist Pliny Earle Goddard's, whose report on "The Beaver Indians," published by the American Museum of Natural History in 1916, was compiled from fieldwork that he undertook between June and September of 1913 at several places along the Peace River, including Dunvegan, Vermilion and Fort St. John.[108] Goddard seldom differentiates the lifestyle of the three groups and for the most part presents traditions and customs that were common to the people he encountered.

### 5.1 Pliny Earle Goddard's Investigations among the Dunvegan Beaver and Neighbours

In a 1914 article, anthropologist Pliny Earle Goddard recounts his travels along the Peace River and provides a few observations on the Aboriginal people of the area, including the Dunvegan Beaver. He writes of the Aboriginal people's historic role in transporting goods after a road was pushed through to Peace River Crossing from Lesser Slave Lake in 1879, and he tells of the changes that were occurring to the indigenous culture. Speaking of the resilience of the trading practices despite a change in transportation, Goddard stated:

> The trading customs remained unchanged. Each fall the trading post supplied the Indians with powder, shot and balls, traps, tea and tobacco. They were usually given on credit...When winter set in the Indians went out to their trapping grounds. The man of the family established a line of traps and snares fifteen or twenty miles long and went back and forth over this line throughout the winter. When he found a beaver house he chiseled through it, having first made an enclosure so the beaver could not escape. The skins obtained in this way were brought to the trading post in the spring. On Arrival, the Indian received a present of tea and tobacco and in later years, flour. When he began trading, his 'debt' was covered, then he bought provisions, calicoes, blankets, and whatever his heart desired. All trading was done on a basis of "made beaver," a mere term used in trade and indicating at the present time on the Peace River an arbitrary value of thirty-three and a third cents. During the summer it was easy to live on the rabbits caught in snares by the

[107] Robin Ridington (1981). Beaver, Pp. 350-371, *Handbook of North American Indians, Vol. 6 Subarctic,* Edited by June Helm. Smithsonian Institution, Washington DC.

[108] Pliny Earle Goddard (1916). The Beaver Indians, *Anthropological Papers of the American Museum of Natural History, Vol. X, Part IV.* The American Museum of Natural History, New York. Pp. 202-293.

> women. One or two moose hunts supplied a quantity of more nourishing food, some of which was put aside for winter.[109]

Goddard also provides information on factors of change that altered the lifestyle of the Aboriginal people of the central Peace River whom he was travelling to meet in the late summer of 1913:

> ....the empty stomachs of Europe cried for more wheat. When the easily plowed and accessible lands of Manitoba and Saskatchewan had been sparely settled and pioneers had moved on to Grand Prairie, south of Peace River....[110]

Passing through Edmonton on his way to the Peace River, Goddard expressed dismay at the extent of real estate sales in the Dunvegan and Peace Crossing areas being advertised on real estate agents' windows. According to advertisements he saw in 1913, "Dunvegan, one of the earlier trading posts, had already become a city with many streets and buildings; Peace River Crossing was a flourishing city."[111]

Staying a few days at Dunvegan allowed Goddard to meet some local Beaver people. A photograph that appears in the article shows an encampment of about ten tipis. The caption reads: "Camp of Dunvegan band of Beaver Indians. Here can be seen the last stages of the hunting life, which is now giving way to agriculture because of the inroads of white civilization."[112] He further writes:

> A week's stay was made at Dunvegan, some miles from which place a band of Beaver live on the reserve. Near them are several prosperous agriculture settlements. Dunvegan itself has not as yet responded to the efforts of the real estate agents at Edmonton. Its white population varies from three to five depending upon the movements of the mail-carriers.[113]

### 5.1.2 Cultural Summary

The indigenous lifestyle of the Dunvegan Beaver that Goddard believed to be impacted by encroaching agriculture is reported in his 1916 monograph, "The Beaver Indians."[114] He presents an ethnographic summary of traditional culture, providing a brief description of shelter, means of

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[109] Pliny Earle Goddard (1914). Along Peace River. *America Museum Journal, October – November 1914,* pp.255-256.

[110] Goddard 1914:255.

[111] Goddard 1914:255.

[112] Goddard 1914:256.

[113] Goddard 1914:258.

[114] Pliny Goddard (1916). The Beaver Indians. *Anthropological Papers of the American Museum of Natural History, Vol. X, Part IV*. New York.

transportation, food, clothing, industrial arts, social organization, burial customs, religion, and mythology.

At the time of Goddard's visit to Dunvegan, the Beaver of the area evidently continued a semi-nomadic lifestyle. Their encampment consisted of tipi dwellings that could be deconstructed and moved to another location where a new set of poles could be cut for the tripod foundation. He notes that the style of tipi shelter common to the Beaver was formerly covered with the skins of caribou or moose. Temporary camps consisted of brush windbreaks and rough shelters made of sapling trees tied together at the top.[115]

Goddard noted that the subject of "Transportation" was a significant one because of the "great distances and sparse population of the north."[116] He commented that each family or larger band visited the same localities seasonally each year and therefore kept food caches at several locations. Horses were introduced recently, according to Goddard, and more often in the summer goods were packed by means of dogs or carried by the people themselves. In winter, they used a toboggan pulled by dogs, a custom that Goddard found continuing at the time of his travels.[117]

Storage containers used by the *Dane-zaa* to pack food and objects was also well suited to a mobile lifestyle. Bags of rawhide, and skins with the hair left on, could be made from the legskins of caribou or the head skins of moose. Goddard reported that the Beaver people have traditionally been meat eaters; vegetable foods were limited to berries and a few roots. Rabbits and beaver were significant to the Aboriginal diet and Goddard reported on how they were harvested. Buffalo or bison were available prior to Goddard's visit though he comments on how they would have been acquired communally.[118] It should be noted that when adventurer William Butler visited Dunvegan more than a decade earlier, he also reported on bison hunting and remarked that he had learned that eighty buffalo were killed in a single day in the vicinity of Dunvegan. The hunters ran them into the snowdrifts, and then despatched them with knives.[119]

The availability of caribou to the Beaver is also commented on by Goddard. He stated that the distribution of this animal was not common and that they were available to the Fort Vermilion people in the Caribou Mountains, with the inference that they were not available to the people farther south. He does not mention caribou specifically with reference to the Dunvegan Beaver. Alexander Mackenzie had nevertheless been told that the once common "rein-deer" –by which he likely meant caribou-- had mostly left the country some years earlier after the local habitat changed and the animals "retired to the long range of high lands that, at a considerable distance,

[115] Goddard 1916:212.

[116] Goddard 1916:212.

[117] Goddard 1916:212-213.

[118] Goddard 1914:213.

[119] William F. Butler (1904). *The Wild Northland, Being the Story of a Winter Journey, With Dog, Across Northern North America.* A.S. Barnes and Company, New York. Pp . 1904:207-208.

run parallel with this river." [120] Goddard said the people about Vermilion shot caribou, killing them while the animal was swimming.[121] More important to the Dunvegan people have been moose. The natural habitat of the Peace contained swamps, timber lands, and islands (for calving), all well suited to thriving moose populations. Hunting moose was generally a solitary occupation and Goddard described the uncertainty of the harvest.[122] When game harvests failed, the Beaver people went fishing, especially in lakes south and east of the Peace River, but also in those lakes and slough in the country north and west of Peace River where some fish could be found.[123] Goddard reports ice fishing and the use of traps, barricades and seines (from the fibre of an unidentified shrub) for fishing.[124] This information was confirmed by Ridington who described fish as "emergency rations."[125]

Goddard also reported on the Aboriginal social organization of the Beaver, which he described as "meagre and loose," with reference to the size of the band and the permanence of the affiliation. This topic was investigated more thoroughly by Ridington.[126] In discussing the loose territorial affiliation of Dane-zaa family bands, Ridington presented information from Goddard and also from people interviewed in the 1960s.[127] He determined that *Dane*-zaa bands were neither permanent political or territorial units.[128] The composition of such groups changed over time, a significant finding when examining the history of land use by members of the Horse lake First Nation. In examining the possible regional population in former times, anthropologist Robin Ridington calculated that the area's extreme variation in climate and the regular cycles of game population, along with an inadequate supply of resources, necessitated a low human population density.[129] Thus, the availability of food determined the size of the group. In the summer and fall seasons when food was available, people could congregate. But in the winter, the groups dispersed.

The composition of a band could change from one generation to the next. Ridington points out that when an inmarrying group became too large to survive during periods of scarcity, the group would divide into constitute groups of siblings and the development cycle would begin anew.[130]

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[120] Mackenzie's editor Lamb 1970:413, fn.2 concluded that Mackenzie's "rein-deer" was a reference to caribou, for Mackenzie mentioned the animal eating "a short curling moss," a species which "grows on the rocks," as lichen, the caribou's food, certainly does. Mackenzie noted that this animal provided both food and clothing.

[121] Goddard 1916:214.

[122] Goddard 1916:215.

[123] Goddard 1916:216; Ridington 1981:353.

[124] Goddard 1916:216.

[125] Ridington 1981:351.

[126] Ridington 1968:65.

[127] Ridington 1968.

[128] Ridington 1981:250.

[129] Ridington 1968.

[130] Ridington 1968:65.

When segmentation took place, Ridington noted, "the new groups retain[ed] a sense of relatedness and continue to come together during the summer."[131]

It is apparent that the identification of bands and their association with territory in the central Peace River has changed over time. Still, the historical data reviewed in this present report are clear that Aboriginal people occupied the central Peace River region and were recognized as Beaver people prior to the time of their adhesion to Treaty 8.

[131] Ridington 1968:65.

## 6.0 Expansion of the Peace River Region Fur Trade in the Early 1800's

Information on Aboriginal land use in the central Peace River region is also contained in the records of the fur trade that developed there after the expedition of Alexander Mackenzie and the establishment of a chain of depots that linked the trapping areas of the north. Historian J.C. Yerbury points out in his book *The Subarctic Indians and the Fur Trade* that "the effects of the fur trade on the economy and on the social and spatial arrangements of Canadian Athapaskan populations, during the Early Fur Trade Period were significant."[132] A listing of fur trade establishments in the Athabasca region compiled by Parks Canada Historian Terry Smythe indicates that many such posts had been built for either trade or for provisioning before the establishment of Fort Dunvegan in 1805. [133] Appendix A in the present study, based primarily on Smythe's 1968 report, provides a chronological listing of such trade establishments, beginning *circa* 1788 and extending from the vicinity of Fort Vermilion to the area around Hudson's Hope. Of particular concern to this present report is the establishment of Fort Dunvegan.

### 6.1 Attraction of Indigenous Bands to Trading Posts

Initially, trading posts were created along the Peace River to provide pemmican for supporting the traders' wintering parties on Lake Athabasca and to provision outgoing canoes heading east with the annual returns.[134]

Each post drew in localized bands comprised of small trapping "parties" led by a company-appointed "chief." As new posts became established, or relocated, they became the focus of local Aboriginal traders, known as "homeguards," who provisioned the posts and carried out labour for credit. Traders recognized trading "chiefs" by bestowing upon them a set of European clothing and gifts of gunpowder and trade goods, and the intense competition resulted in new intertribal trade rivalries.[135] As historians such as Yerbury have discussed, the fur trade journals indicate that trading relationships between the Europeans and the Aboriginal people expanded and became mutually-dependent, as the former relied upon the Indigenous populations for provisioning and for furs, and the Aboriginal hunters grew accustomed to trade goods, especially firearms and ammunition, along with tea, tobacco and flour.

Once armed by the fur traders, the Beaver (*Dane-zaa*) people held their own against the Cree population—now somewhat depleted by smallpox—but the Chipewyan from the northeast became antagonistic towards the Beaver, especially those on the lower Peace River,[136] while the

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[132] J.C. Yerbury (1986). *The Subarctic Indians and the Fur Trade, 1680-1860*. University of British Columbia Press, Vancouver. Page 67.

[133] Terry Smythe (1968). Thematic Study of the Fur Trade in the Canadian West, 1670-1870. Staff Report for the Historic Sites and Monuments Board of Canada. Agenda Paper 1968-29 (copy on file with the Hudson's Bay Company Archives, Provincial Archives of Manitoba, Winnipeg).

[134] Yerbury 1986:69.

[135] Yerbury 1986:69.

[136] Yerbury 1986:61, 67.

Beaver of the mid-Peace carried out raids on the Sekani of the Rocky Mountains to the west, beyond Hudson's Hope.[137] Conflict between people identified as Beaver and other Aboriginals trading at the Rocky Mountain Portage House near present-day Hudson's Hope is remarked upon in the 1805-1806 journal kept at this post by John Stuart.[138] Some Aboriginal people are reported to have avoided the Peace River, for fear of harassment by as the Beaver of both the "[Smoky River] forks and Fort Vermillion," at least in 1805.[139] Hence, in the early years of the 19th century, a division existed between the people of the central and upper Peace River though the former people were frequenting the upstream area. At the same time, Cree war parties continued to move into the Peace River from the west end of Lesser Slave Lake by way of a route described earlier by Mackenzie as the "Knistineaux [Cree] war-road," a "beaten path" leading all the way north to the confluence of the Peace and Smoky Rivers.[140]

In the early 19th century, *Dane-zaa* hunters residing in the central Peace region had competition for the harvesting fur bearing animals from Iroquois hunters brought to the region by the North West Company, who controlled the fur trade *circa*1800. Most of the trade returns in the 1800-1804 period were secured from Iroquois hunters[141] As Yerbury points out, initially the Beaver (*Dane-zaa*) were suspicious of these eastern Aboriginals and blamed them for a number of their people dying from some disorder.[142]

Fur trade correspondence from this time indicates that the traders recognized the Beaver as the Aboriginal people who used an expansive area from at least Fort Vermilion upstream to the Rocky Mountains. Based on information gained from his time at Mansfield House on the Peace River, near the mouth of Boyer River,[143] in the vicinity of Fort Vermilion, the HBC's Thomas Swain, who had established Mansfield House in 1802,[144] wrote in January 1803:

> In short the NW [North West] Company has done all that laid in there [their] power to stop us from Building here [in the Fort Vermilion area] and they do not scruple to tell us that we have no buissness [business] in this part of the Country. The Beaver

[137] Lamb 1966:178.

[138] John Stuart (1805-1806). Journal at the Rocky Mountain December the Twentieth 1805. BC Archives, Victoria. A/B/40/St9.1A/1.

[139] W. Kaye Lamb, Editor (1966). *The Letters and Journals of Simon Fraser, 1806 – 1808*. The Macmillan Company of Canada Ltd., Toronto. Pp. 15-16. Presumably Fraser refers to the *Dane-zaa* people of Fort Fork, at the confluence of the Smoky and Peace Rivers, and the Beaver people of Fort Vermilion.

[140] Lamb 1970: 249, fn. 3. This "Knistenaux [Cree] war-road," which is shown on Mackenzie's map appearing between pages 238-239 of Lamb's edition, appears in the present report as Section 11.3.

[141] Yerbury 1986:70.

[142] Yerbury 1986:72.

[143] Yerbury 1986:67.

[144] E.E. Rich, Editor (1938). *Journal of Occurrences in the Athabasca Department by George Simpson 1820 and 1821, and Report*. Published by the Champlain Society for the Hudson's Bay Company Society. Appendix A, Posts and Districts, Page 470; see also Smythe 1968:262.

> Indians…[are] a brave bold Nation, although not above two hundred men in number from the age of 15 Years to 70—which is scattered from the entrance of Peace River to the Rocky Mountain[s] in which space the NW Company has 5 Settlements…[145]

As part of the North West Company's continued fur trade expansion on the Peace River, Archibald Norman McLeod in 1805 established Fort Dunvegan[146] on the north side of the Peace River (in Tp.8, R.4, W5), as a principal fur trading and provisioning post. One of Fort Dunvegan's main advantages in 1805 was its proximity to the buffalo ranges.[147] Fort Dunvegan was operated by the NWC from 1805 to 1821, at which time the Hudson's Bay Company took over its operation. The Post was closed between 1825-1828, then reopened and continued operations until 1918 when it was closed.[148]

The competition for furs was intense throughout the early 1800s, with each company trying to undercut the other and create trade monopolies with the local bands, creating a tense situation that resulted in a general decline in returns. There was also intense competition between various groups of Indigenous trappers. Among the hunters at St. Mary's Post, which was established by the HBC *circa* 1818 near the Smoky River/Peace River forks to be in direct competition with the NWC's Fort Dunvegan about 60 miles (approximately 100 Km) farther upriver,[149] were Saulteaux hunters who had accompanied the fur trade during the early 1800s, and some of whom had intermarried with the Beaver. [150] Since the price of goods offered to the Iroquois and

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[145] Thomas Swain (1803). Mansfield House (Fort Vermilion) Journal, 1802-03. Entry for 10 January 180s. Hudson's Bay Company Archives, Provincial Archives of Manitoba, Winnipeg. B.224/a/1. Typescript in the Fort Dunvegan Search File, HBCA.

[146] This post was named "Dunvegan" after the name of the seat of the McLeod family on the Isle of Skye. See Fort Dunvegan Post History, Hudson's Bay Company Archives, Provincial Archives of Manitoba, Winnipeg. Elsewhere it is noted that "Dunvegan" means 'fortress; stronghold.' See Daniel Francis and Michael Payne (1993). *A Narrative History of Fort Dunvegan*. Prepared for the Fort Dunvegan Historical Society and Alberta Community Development. Page 6.

[147] Smythe 1968:273-274.

[148] Smythe 1968:273-274; see also Fort Dunvegan Post History, HBCA.

[149] Smythe 1968:269-270; HBC Post History for Fort St. Mary's, HBCA, Winnipeg; HBC Search File for Fort Dunvegan, HBCA, Winnipeg.

[150] Yerbury 1986:85. "Saulteaux," (also spelled "Saulteau") meaning 'people of the rapids'( i.e. Sault St. Marie, Ontario), is a term that was used by French Canadian traders to refer to a Plains Ojibwa group of western Manitoba and eastern Saskatchewan, the Saulteaux of Lake Winnipeg, and also a Southeastern Ojibwa group from Sault Sainte Marie, Ontario. See: E.S. Rogers (1978). Southeastern Ojibwa. In, *Handbook of North American Indians, Vol. 15, Northeast.* Edited by Bruce Trigger. Smithsonian Institution, Washington DC. Pp. 768-770; Jack H. Steinberg (1981). Saulteaux of Lake Winnipeg. In, *Handbook of North American Indians, Volume 6, Subarctic*. Edited by June Helm. Smithsonian Institution, Washington DC. Pp. 254-255; Patricia C. Albers (2001). Plains Ojibwa. In, *Handbook of North American Indians, Vol. 13, Plains*. Edited by Raymond J. DeMallie. Smithsonian Institution, Washington DC. Page 659. A more recent migration of Saulteau took place over an approximately 10-year period around 1900 when a Plains Ojibwa group travelled from Manitoba to the Moberly Lake area. See Douglas Hudson (1992). The Two Mountains That Sit Together: An Ethno-Historical Overview. Report prepared on

Saulteaux was half that paid by the Beaver, historian Yerbury suggests that some of these earliest intermarriages may have been the Aboriginal people's attempt to manipulate the price structure.[151] The presence of Saulteaux at the Forks of the Peace River provided intelligence on local affairs, including the fact that the Cree from Lesser Slave Lake said they had been persuaded by the HBC men to make war upon the "Mountain Beaver Indians" during the summer of 1818.[152]

By the early 1820s, the Hudson's Bay Company had gained a strong presence in the Peace River and Fort Dunvegan had become a major trading centre. Another post established farther up the Peace, near the mouth of the Beatton River at Fort St. John, in September 1820 was set up to secure "the hunts of the free Iroquois in the neighbourhood of the Rocky Mountains" whose trade had been previously lost to the North West Company due to the HBC's inability to provide sufficient trade goods.[153] At Dunvegan, the HBC was also outfitting the local *Dane-zaa*, including the band headed by Pouce Coupe, a *Dane-zaa* man whose residency south of the Peace River gave his name to the prairie where he lived, and eventually the town that grew up there.

The historical record provides support for the conclusion in the ethnographic literature (see section 5.0) that hunters travelled widely to compensate for fluctuations in the availability of resources. The life of hunters and trappers was precarious, dependent upon the success of the hunt. For example, weather conditions in the spring of 1821 created great difficulties when a late frost alerted the animals to approaching hunters. Governor Simpson reported in May 1821 that many *Dane-zaa* people had died of starvation. Moreover, wrote Simpson:

> …our Fort Hunter Baptiste Bisson,[154] who is without exception the best large animal hunter in North America lived entirely on parchment for several weeks, and whole families of Indians existed solely on singed Beaver Skins; the North West Co. were at Dunvagon & Vermillion compelled to kill many of their Horses,

behalf of the Treaty 8 Tribal Association for the BC Ministry of Energy, Mines & Petroleum. Pp. 1, 67-70, and Appendix G. See also Art Napoleon, Editor (1998). *Bushland Spirit: Our Elders Speak*. Twin Sisters Publishing Co., Moberly Lake, BC. Pp. 3 and 23-33 .

[151] Yerbury 1986:85.

[152] Yerbury 1986:85-86.

[153] Letter from George Simpson to Duncan Finlayson, 29 September 1820. In, Rich 1938:61-62.

[154] Baptiste Bisson was one of the voyageurs who travelled with Alexander Mackenzie on his trip to the Pacific in 1793. See Sir Alexander Mackenzie Historical Society (1984). *Peace River Remembers.* Peace River, Alberta. Page 94. Cited in Reddekopp 1996:15, fn. 73. Baptiste Bisson was later employed by the North West Company as a Hunter, then went to the Hudson's Bay Company in 1818, was at Peace River 1818-1819, in the Athabasca District 1819-1820, and again at Peace River 1810-1821. See E.E. Rich, Editor (1938). *Journal of Occurrences in the Athabasca Department by George Simpson 1820 and 1821, and Report*. Published by the Champlain Society for the Hudson's Bay Company Society. Page 64, fn.2.

> and the few seed potatoes that were reserved at St. Mary's have been consumed…[155]

Though the returns of the Peace River disappointed George Simpson in 1821, he commented that the HBC's opening of Fort St. Mary's at the confluence of the Peace and Smoky Rivers looked promising for "the adjacent Woods and plains abound with Buffalo and Deer, and valuable Furred Animals are numerous...".[156] The HBC introduced agriculture to their Peace River posts at this time and the Company's Governor, George Simpson, encouraged the Company servants to plants vegetable gardens to stave off further bouts of starvation, as the North West Company had done at their Peace River establishments. [157] There is no indication that the local Beaver people adopted the practice along with the company servants who were taking up land in the vicinity of Fort Dunvegan. Simpson noted in May 1821 that a community of Métis people had emerged in the environs of Fort Dunvegan (which at that time was still a North West Company fort). Concerning these Métis people, Simpson wrote:

> There are a number of Free Canadians and Iroquois in this neighbourhood, discharged Servants of the North West Company (indeed the greater part of the Iroquois Servants of both Compys. are free during the Winter) these Men and their Meitiff [Métis] progeny are generally more expert in hunting the Buffalo and Deer than the Natives and make considerable quantities of Provisions and Furs…[158]

It was important for the traders to know the identity of the hunters with whom they traded—the fur trade correspondence from the early 1800s helps establish the range of people identified as Beaver at this time. George Simpson noted that neither the thirty to fifty Aboriginal fur hunters in the District, nor the Free Canadians and Iroquois, were particularly loyal to the NWC, but both expected a constant supply of trade goods that the HBC had difficulty providing. [159] Simpson noted in this same letter/report that *Dane-zaa* hunters also visited the HBC's Colvile House situated farther down the Peace,[160] as well as establishments belonging to the North West Company.[161] *Dane-zaa* people also traded at the HBC's post set up on the Moberly River—known at that time as the "Beaver River"—upstream from the NWC's Fort St. John, an area also

[155] Letter from George Simpson to George Leith, North West Company, Fort Chipewyan, 19 May 1821. In, Rich 1938:338. Simpson in September 1820 had described Baptiste Bisson as the best hunter in the Peace River District. See: George Simpson to Duncan Finlayson, Peace River District, 29 September 1820, in Rich 1938:64.

[156] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:379.

[157] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:379.

[158] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:380-381.

[159] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:381-382.

[160] Colvile House was established by the HBC in 1818 on the north bank of the Peace River, just above the mouth of the Mikkwa River. See Smythe 1968:261.

[161] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:382-385.

hunted by Iroquois Free Traders.[162] Noting that "The Natives of Peace River are the Beaver Indians" who in 1821 comprised about 130 to 150 hunters, Simpson added there were also in the District about 20 to 30 hunters who were "emigrant Soataux [Saulteaux] from the plains."[163]

Simpson stated at this same time that the Beaver (*Dane-zaa*) people did not intermarry with Europeans, and added:

> To Europeans they are kind and hospitable, and they boast that no white Man has ever fallen by the hands of any of their Tribe: they seldom or never intermarry with Neighbouring Tribes and it is against their Religious tenets to have connexion with the Civilized, so that here are no Beaver Indian half breeds, and that in some measure accounts for their indifference to the North West Coy., who are allied and have Meitiff [Métis] progeny with all the other Tribes in North America.[164]

It was nevertheless recommended by Simpson that, "Connubial alliances are the best security we can have of the goodwill of the Natives...".[165]

Simpson, as noted above, stated in 1821 that the Beaver Indians "seldom or never intermarry with Neighbouring Tribes." However, records from St. Mary's Post, established by the HBC *circa* 1818 near the Smoky River/Peace River forks to be in direct competition with the NWC's Fort Dunvegan,[166] indicate there were at that time marriages between Beaver and Saulteaux. The records also indicate marriages between Beaver woman and the fur traders.[167]

In the early 1820s, Chief Trader William McIntosh kept the Fort Dunvegan post journal and recorded the daily affairs of the District, as observed and reported at this fort, situated on the Peace River. While the merger between the two trading companies had occurred in 1821, competition for the remaining furs resulted in trouble among the local Aboriginal bands. Trade and provisioning continued around the Smoky River hunting grounds of the Beaver man known as Pouce Coupe.[168] Aboriginal men from the east and other Free traders also hunted in these parts.[169]

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[162] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:384.

[163] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:387.

[164] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:388.

[165] Simpson to Governor & Committee, 18 May 1821. In, Rich 1938:392.

[166] Smythe 1968:269-270; HBC Post History for Fort St. Mary's, HBCA, Winnipeg; HBC Search File for Fort Dunvegan, HBCA, Winnipeg.

[167] St. Mary's Post Journal, 1818-1819. HBCA B.190/a/1, folios 19-19d. Cited in Yerbury 1986:85.

[168] Fort Dunvegan Post Journal 1822/23. Hudson's Bay Company Archives, Provincial Archives of Manitoba, Winnipeg. B.56/a/1, 14 October 1822, folio 9.

[169] Fort Dunvegan Post Journal 1822/23. HBCA, B.56/a/1, 31 October 1822, f. 10.

Reports from farther up the Peace River at "St. Johns" Post (Fort St. John) in August 1822 indicated that the *Dane-zaa* and Sekani (referred to at this time as "Slaves") "were ungovernable and in a state of open War fury." [170] Later that same day, the traders at Dunvegan received corroboration of the situation.[171] Some of the accounts of unrest among the Aboriginal people come from the journal kept at St. Johns Post that the region's profitability was in question and this likely contributed to the level of discord in the Aboriginal bands. The Peace River region's Chief Traders, William Macintosh of Fort Dunvegan and Colin Campbell of Fort Vermilion, commented that the upper and central Peace were depleted of game from the very first of the post-merger records of 1822. Fort Dunvegan was characterized as "formerly a plentiful place …", while the Fort Vermilion District Report for 1822 noted "the exausted [sic] state of the country in large animals."[172] By December 1833, John Charles, Chief Factor for the Peace-Athabasca District, wrote:

> Peace River in Respect of Large Animals, is not the same Country it was in Days long Since gone by, there is no Buffalo in that Quarter now. And the exertion of the Beaver Indians...on their circumscribed Grounds with the encouragement held out by us for the Provisions and Leather has I believe thinned the Moose Deer considerably.[173]

Recognizing the decrease in fur returns, Governor George Simpson decided to close St. Johns post and build a new establishment near the mouth of the Moberly River.[174] He based his decision on the recommendations by both Hugh Faries of St. Johns Post and William Macintosh of Fort Dunvegan, in the hope that with such a move fur returns would increase and cost could be reduced. [175] The local St. Johns Post Aboriginal community nevertheless opposed the closure of St. Johns and, in part, as repercussion for the HBC's proposal to transfer the trade farther up the Peace River, murdered the company clerk and four other men in early November 1823. [176]

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[170] Fort Dunvegan Post Journal 1822/23. HBCA, B.56/a/1, 5 August 1822, f.5.

[171] Fort Dunvegan Post Journal 1822/23. HBCA, B.56/a/1, 5 August 1822, f.5.

[172] Theresa Ferguson (1993). *Wood Bison and the Early Fur Trade: the Uncovered Past: Roots of Northern Alberta Societies.* Eds. Patricia McCormack and R. Geoffrey Ironside. Circumpolar Research Series No. 3, Canadian Circumpolar Institute. University of Alberta, Edmonton. P. 71.

[173] John Charles to Governor and Committee December 1833, cited in Ferguson 1993:72.

[174] Smythe 1968:276, but see also David Burley, J. Scott Hamilton and Knut Fladmark (1996). *Prophecy of the Swan: the Upper Peace River Fur Trade of 1794-1823*. University of British Columbia Press, Vancouver. Pp.29-30.

[175] Simpson to Edward Smith, 8 February 1823. HBCA, D. 4/87, folios 95-101. Cite in Burley, Hamilton and Fladmark 1996:126, fn. 2.

[176] For a discussion of this incident, see Burley, Hamilton and Fladmark 1996:126-138. The events of the murders are also well covered in a paper compiled by Finola Finlay in 1993 as a course requirement at Northern Lights College. Ms. Finlay reviewed an extensive collection of fur trade documents from the 1820s. See Finola Finlay (1993). History and Mythology: the Murders at Fort St. John. Northern Lights College, Fort St. John, BC. On file with the North Peace Museum and Archives, Fort St. John.

At Dunvegan there was growing discontent among the Aboriginal hunters and the Company personnel. Hugh Faries, who had arrived in late September 1824 to take charge of Dunvegan, stated that he had been instructed to "endeavour to establish Peace & tranquility with the natives as they appear latterly to be something hostilely inclined towards the whites." [177]

Faries' journal kept for the HBC provides a record of the Aboriginal people arriving at Fort Dunvegan to trade between the fall of 1824 and the spring of 1825. The journal identifies numerous "parties" who travelled in small, independent bands in search of fur-bearing animals and game. Many of these Aboriginal people were specifically identified as "Beaver Indians" They provisioned the Fort with moose. Though the journals do not provide details on where they hunted, the Beaver hunters are reported coming from both the north and south side of the Peace River:

> [9 October 1824]…some Beaver Indian men & women [came to the Fort and provided] the fresh meat of three Moose Deer…[on this same day] Two Beaver Indians arrived from the Southern side of the river [Peace River]…
>
> [15 October 1824]…a party of Indians arrived the Grands Oreilles ['Big Ears'] [underlined in original] party...the most of them are sick, we hear of nothing but sickness amongst them from all quarters. Two Beaver Indians also arrived from the opposite side of the River [Peace River], say they have nothing, all sick. Gladue [underlined in original] a freeman & family also arrived...
>
> [16 October 1824]…Old Racquette & party arrived they are as poor as the others...
>
> [17 October 1824]… La Glace ['Ice'] [underlined in original] an Indian of this place arrived from the opposite side, says there are a party encamped party there, on their way to the Fort…
>
> [18 October 1824]… Wapoose [underlined in original] a Beaver Indian arrived from below...
>
> [19 October 1824]… a party of Indians arrived from the other side in expectation of getting their winter supplies & will now remain idle about the Fort until such time as the Canoe arrives…
>
> [22 October 1824]… some of the Indians the Grand Diablo ['Big Devil'] [underlined in original] Party took their departure, Old Gladue & family also…
>
> [23 October 1824]… several Indians arrived, Farro [underlined in original] & party consisting of seven or eight men...[Faries also mentions the arrival of] Old Ignace an Iroquois... ...[178]

[177] Fort Dunvegan Post Journal 1824/25. HBCA, B.56/a/2, 1 October 1824, f. 1.

[178] Fort Dunvegan Post Journal 1824/25. HBCA, B.56/a/2, hand-numbered folios 2-5.

> [1 November 1824: ...three Beaver Indians, viz Bras Cassé [?], Bull & Canoe [?] [all 3 names underlined in original]...
>
> [18 November 1824]:…The Grand Diablo [underlined in original] one of my Hunters arrived…
>
> [11 February 1825]: ...the Little Garcon ('Little Boy') [underlined in original] a Beaver Indian [who is with Dunvegan Fort hunters]....
>
> [12 February 1825]: ...[Faries refers to the death of ] the Little Head [underlined in original] a Rocky Mountain Indian Chief....
>
> [18 February 1825]: ...The Bras Capé [?] [underlined in original] a Beaver Indian [arrived]....
>
> [24 February 1825]:...three Rocky Mountain Indians belonging to La Raquettes [underlined in original] party arrived...
>
> [19 March 1825]:...Four Rocky Mountain Indians arrived...
>
> [27 March 1825]:...A young Beaver Indian arrived from the Big Ears party…one of the Party [,] the Fox's eldest son [,] died some time ago…
>
> [29 March 1825]:…The old Rein Deer a Rocky Mountain Indian arrived...
>
> [19 April 1825]:…Several Beaver Indians arrived—The Big Ears [underlined in original] Party, he being a Chief [underlined in original] & himself & band having exerted themselves pretty well this Winter...
>
> [21 April 1825]:…[Faries refers to] Chastellain [underlined in original] a Young Beaver Indian...
>
> [22 April 1825]:…Engaged two Beaver Indians as summer Hunters…[179]

The journals indicate that Beaver hunters were employed by Fort Dunvegan and that both Beaver and Rocky Mountain people visited the post. No Cree people were reported to have visited Fort Dunvegan at this same time, 1824-1825.

Fort Dunvegan closed in 1825 and remained shut for three years. During this time, Colin Campbell, writing from Fort Vermilion on the lower Peace River, remarked that no post would be built farther up the river, for the murderers of the men at Fort St. John were being harboured by the "Upper Indians." The Company carried out its threat to close the central and upper Peace River posts if the Beaver people did not help find those who killed the HBC men.[180] In 1826,

[179] Fort Dunvegan Post Journal 1824/25. HBCA, B.56/a/2, stamped folios 4-13.

[180] Colin Campbell, 4 October 1826, Fort Vermilion. Cited in Finlay 1993.

once Fort Dunvegan had closed, the Aboriginal people of the upper Peace took their furs and provisions east as far as the Notikewin River[181] to where the Fort Vermillion post would send men with goods to trade with them.[182] With the temporary closure of the other Peace River posts, hunting and trapping activities became focused around Fort Vermilion and Aboriginal families who had previously wintered farther up the Peace began to congregate around this Fort.[183]

Once Dunvegan reopened in 1828, the majority of the Beaver chose to trade there, partly as a result of pressure on the fur resources from Cree and Chipewyan groups in the eastern portions of their hunting territories. Again a community of hunters traded at Dunvegan. Significantly, an increase in a multi-national population–mostly men—around Fort Dunvegan that serviced the industry developed along with competition in the region's fur trade. (Studies on the effects of the fur trade on Aboriginal societies include the works of Arthur S. Ray).[184]

In sum, historical documents contain the following observations concerning *Dane*-zaa Aboriginal land use in the Peace region between the 1790s-1820s:

- *Dane-zaa* participation in the fur trade at centralized trading posts
- Aboriginal bands' continuation of nomadic lifestyle for harvesting seasonal resources
- Increased pressure on fur and game resources
- Emergence of communities of people of mixed ancestry brought to the region by the fur trade

## 6.2 Aboriginal Hunting Bands, Métis and Freemen, 1830's-1840's

The population of the Peace River as reported in the HBC post journals has been reviewed by demographer Gertrude Nicks[185] and by historical geographer Leonard Ugarenko,[186] both of

[181] The Notikewin River originates in the Clear Hills of Alberta, about 45 Km (28 miles) northwest from Horse Lake First Nation's IR 152C, and flows northeast and eastward, emptying into the southwest side of the Peace River about 50 Km (31 miles) northeast from the town of Manning, Alberta. "Notikewin" is derived from the Cree term "*nôtinikewin*" which means 'battle.' See Nancy LeClaire and George Cardinal (2006). *Alberta Elders' Cree Dictionary*. Edited by Earle Waugh. The University of Alberta Press and Duval House Publishing, Edmonton, Alberta. Page 256. Thus it is not surprising that documents and maps from the 1870s through the early 1900s identify this same river as "Battle River."

[182] Gertrude Nicks (1980). Demographic Anthropology of Native Populations in Western Canada, 1800 – 1975. PhD dissertation in anthropology, University of Alberta, Edmonton. P. 20.

[183] Ugarenko 1979:42.

[184] See Arthur Ray (1974). *Indians in the Fur Trade*. University of Toronto Press, Toronto; Arthur Ray (1988). The Hudson's Bay Company and Native People. Pp. 335-350 in, *Handbook of North American Indians, Volume 4, History of Indian – White Relations*, edited by Wilcomb E. Washburn . Smithsonian Institution, Washington, DC; Arthur Ray (1990). *The Canadian Fur Trade in the Industrial Age*. University of Toronto Press, Toronto.

[185] Gertrude Nicks (1980). Demographic Anthropology of Native Populations in Western Canada, 1800 – 1975. PhD dissertation in anthropology, University of Alberta, Edmonton.

whom show that the decade of the 1830s was a difficult one for the *Dane-zaa* hunting bands, as members of other First Nations and Métis hunters entered the area and competed for the same resources. Both scholars observed a decline in population among the Dunvegan and "upper" (farther up the Peace) people due to sickness and death during the winter of 1827-1828, a trend that continued into the next decade. Census records from the 1830s indicate that Iroquois as well as Salteaux hunters had moved with their families from the plains to the Peace River. It is clear from the HBC's Fort Dunvegan journals of the 1820s-1830s that the basic economic unit among the Aboriginal people at this time continued to be the family and the hunting band, differentiated by the Fort's Chief Trader Colin Campbell as independent parties each led by a named headman.

By the early 1830s, most of the buffalo (wood bison) were gone from the Fort Dunvegan region, although the decline of these animals had actually begun in the early 1820s. The 1821-1822 Fort Chipewyan District Report noted that the buffalo "have migrated toward the Mountains [Rocky Mountains]" and that the "Slave [Sekani] Indians that resort to St. John's report they had no buffalo in their Country formerly—which is in and along the Mountains [Rocky Mountains], but now they are plenty.[187] However, a particularly severe winter in 1829-1830 with a very large snowfall made it difficult for the buffalo to forage and easy for predators to pursue and kill them.[188] Chief Trader Colin Campbell wrote in the 1828-1830 Dunvegan Journal, in February 1830 that the Fort hunters were killing more buffalo than he could use. Because these buffalo were "not fat enough to make dried Provisions," Campbell added, "the meat will be lost." He knew there would "be no doubt a great number wantonly killed," even though he did his "best by persuasion to prevent it."[189] Notwithstanding, buffalo were rarely seen around Dunvegan after the winter of 1829-1830. [190]

With the demise of the buffalo *circa* 1830, the main sources for the prodigious amounts of meat required for Fort Dunvegan became moose and elk, and to a lesser extent, bear. Records show that Post hunters produced 30,000-40,000 pounds of meat each year. But moose were more difficult to hunt, and it was not unusual for Fort Dunvegan to be lacking meat during the winter. Moreover, the increasing numbers of Freemen and Native hunters and trappers on the Peace not only increased the need for provisions but also increased the incidence of starvation.[191]

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[186] Leonard Ugarenko (1979). The Beaver Indians and the Fur Trade on the Peace River, 1700-1850. Master's thesis, Department of History, York University.

[187] HBCA B.39/e/4, folio7d. Cited in Daniel Francis and Michael Payne (1993). *A Narrative History of Fort Dunvegan*. Prepared for the Fort Dunvegan Historical Society and Alberta Community Development. Page 14, fn. 40.

[188] Francis and Payne 1993:14.

[189] Dunvegan Journal, 1828-1830. Provincial Archives of Alberta, Edmonton. 74.1/120, page 5. Cited in Francis and Payne 1993:14, fn. 41.

[190] Dunvegan Journal, 1828-1830. Provincial Archives of Alberta, Edmonton. 74.1/120, page 5. Cited in Francis and Payne 1993:14, fn. 41.

[191] Francis and Payne 1993:14.

During the 1830s, as had been the case in the 1820s and earlier, the Fort Dunvegan journals consistently recognized the local Aboriginal population collectively as "Beaver Indians."[192] These same people were also identified as "Beaver Indians" in earlier accounts. For example, Daniel Harmon of the North West Company wrote on 10 October 1808, when he first arrived at Dunvegan, that "a band of Beaver Indians" had encamped who were "waiting our arrival, in order to obtain the articles which they need." Harmon at the same time also noted there were "a number of Iroquois hunters" around Fort Dunvegan.[193]

Accounts of the Beaver population were provided on several occasions in the 1830s by Colin Campbell. On 11 April 1835 at Fort Dunvegan he recorded a census of 424 Beaver Indian individuals, comprised of 70 men, 109 women, 25 male adults, 111 male children and 109 female children; at the same time Campbell recorded a local Dunvegan population of 50 Freemen and Iroquois, consisting of 14 men, 10 women, 3 male adults, 12 male children and 11 female children. [194] A year later, Campbell provided the figure of 432 as his "best account" of the local population of "Beaver Indians" who came to Dunvegan. This total of 432 was comprised of "76 men, 10 young men or lads, 114 women, 120 male children, [and] 112 female children." To this Campbell added a local population figure of 50 Freemen, comprising "11 men, 1 lad, 12 women, 14 m. children, [and] 11 f.m. children."[195]

Another census of the Beaver was provided by Campbell in April of 1837 when he enumerated a population of 446, comprised of 75 men, 10 young men, 116 women, 125 boys, and 120 girls. He also enumerated 48 Freemen, comprising 10 men, 1 young man, 12 women, 15 boys and 10 girls.[196] In May 1838, Campbell enumerated 386 Beaver Indians (73 men, 105 women, 113 male children, and 95 female children) and 42 "Half Breed Freemen" (9 men, 11 women, 12 male children, and 10 female children).[197]

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[192] See the Fort Dunvegan Post Journal references previously cited in Section 6.2, as well as the following: Extracts from Dunvegan/Peace River/Journal of Occurrences 1834/35, by Chief Trader Colin Campbell. HBCA B.56/a/3; Extracts from Dunvegan Journal 1835/36, by Chief Trader Colin Campbell. HBCA B.56/a/4; Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5; and, Extracts from Dunvegan Journal 1837 & 38, by Chief Trader Colin Campbell. HBCA B.56/a/6. See also the discussion that follows.

[193] Daniel W. Harmon (1820). *Journal of Voyages and Travels in the Interior of North America*. Andover. Page 175. Typescript in the Fort Dunvegan Search File, HBCA.

[194] Extracts from Dunvegan/Peace River/Journal of Occurrences 1834/35, by Chief Trader Colin Campbell. HBCA B.56/a/3, folio 2d.

[195] Extracts from Dunvegan Journal 1835/36, by Chief Trader Colin Campbell. HBCA B.56/a/4, folio 4d, entry for 30 April 1836.

[196] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, folio 3d, entry for 4 April 1837.

[197] Extracts from Dunvegan Journal 1837 & 38, by Chief Trader Colin Campbell. HBCA B.56/a/6, folio 5, entry for 7 May 1838, "Indian Population at Dunvegan."

Research undertaken to date indicates that references to the presence of Cree people in the Fort Dunvegan area began to appear in the HBC's Post journals only in the mid-1830s.[198] The first reference to the Cree in the HBC's Dunvegan Post journals, as far as it has been possible to determine, was on September 1st, 1836. Colin Campbell on this date wrote that he had been informed that "a number of Plains Crees" totalling "22 tents" were "on the way at Smoky River to come & pay a visit to the Beaver Indians."[199] Since the Cree and the Beaver had a history of acrimonious relations, Campbell on September 4th, 1836 sent Baptiste Boisson[200] to intercept the Cree and "to try & persuade them to return to their own country." At the same time, Campbell reported that because he had to go to Fort Chipewyan, he was leaving Baptiste Lafleur, [201] a company interpreter, in charge of Fort Dunvegan.[202]

It is very likely that Campbell's 1 September 1836 transcription of the name Baptiste "Boisson" is a reference to Baptiste Bisson, who, as previously noted, was one of the voyageurs who had travelled with Alexander Mackenzie on his trip to the Pacific in 1793. [203] Baptiste Bisson, described as a "Canadian half-breed," was later employed by the North West Company as a Hunter, then went to the Hudson's Bay Company in 1818, was at Peace River in 1818-1819, in the Athabasca District 1819-1820, and again at Peace River in 1820-1821.[204] Governor George Simpson in May 1821 had described Baptiste Bisson as a Fort Hunter who was "without

[198] No references to the Cree were found during a review of the HBC's 1820's Fort Dunvegan journals that was undertaken by the senior author of the present report in the first week of July 2011 at the Hudson's Bay Company Archives in Winnipeg.

[199] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, folios 1d-2.

[200] See Sir Alexander Mackenzie Historical Society (1984). *Peace River Remembers.* Peace River, Alberta. Page 94. Cited in Reddekopp 1996:15, fn. 73. Baptiste Bisson was later employed by the North West Company as a Hunter, then went to the Hudson's Bay Company in 1818, was at Peace River 1818-1819, in the Athabasca District 1819-1820, and again at Peace River 1810-1821. See E.E. Rich, Editor (1938). *Journal of Occurrences in the Athabasca Department by George Simpson 1820 and 1821, and Report*. Published by the Champlain Society for the Hudson's Bay Company Society. Page 64, fn.2. Governor George Simpson in May 1821 has described Baptiste Bisson as a Fort Hunter who was "without exception the best large animal hunter in North America." See Letter from George Simpson to George Leith, North West Company, Fort Chipewyan, 19 May 1821, in, Rich 1938:338. Simpson in September 1820 had described Baptiste Bisson as the best hunter in the Peace River District. See Letter from George Simpson to Duncan Finlayson, Peace River District, 29 September 1820, in, Rich 1938:64.

[201] Presumably the name that Campbell wrote as "Baptiste Lafleur" is Jean-Baptiste Lafleur, who, historians Daniel Frances and Michael Payne have pointed out, was a North West Company employee who was an interpreter at Dunvegan in 1806, then returned to Lower Canada for about 20 years before coming back to Dunvegan *circa* 1827 to work as an interpreter for the Hudson's Bay Company until he died in 1877. See Daniel Frances and Michael Payne. *A Narrative History of Fort Dunvegan*. Prepared for the Fort Dunvegan Historical Society and Alberta Community Development. Watson & Dwyer Publishing Ltd. Page 68.

[202] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, f. 2.

[203] See Sir Alexander Mackenzie Historical Society (1984). *Peace River Remembers.* Peace River, Alberta. Page 94. Cited in Reddekopp 1996:15, fn. 73.

[204] See E.E. Rich, Editor (1938). *Journal of Occurrences in the Athabasca Department by George Simpson 1820 and 1821, and Report*. Published by the Champlain Society for the Hudson's Bay Company Society. Page 64, fn.2.

exception the best large animal hunter in North America."[205] Earlier, in September 1820, Simpson had described Baptiste Bisson as the best hunter in the Peace River District.[206]

When Campbell returned to Fort Dunvegan (from his trip to Fort Chipewyan), he wrote on 24 October 1836 that he found there were a number of Cree among the Beaver who had congregated at the fort to get their winter supplies for trapping and hunting. This was a situation that caused Campbell considerable alarm:

> …all the Beaver Indians waiting to get their Fall supplies, and a number of the Plains Crees with them—these strangers have been the cause of our Indians not being so industrious as they otherwise would have been in making Provisions and their having set fire to the country wherever they passed will ultimately prevent our Fort Hunters from supplying us amply with Fresh Meat. Although the Indians are when face to face on good terms, they are very suspicious of each other & our Beaver Indians dread a treacherous blow from the Crees…[207]

A few days later, Campbell reported that the Cree set off for Lesser Slave Lake "where they will be supplied with their wants."[208] But next summer they were back. Campbell wrote in June 1837 that the Beaver were "in continual alarm on account of the dread they are in from an attack from the Plain[s] Crees" and consequently many of the Beaver left for Fort Vermilion;[209] this echoed the same situation that Campbell had described in February 1837.[210] The unexpected Cree presence in 1836 together with poor weather conditions that year disrupted the hunt and, as pointed out by historians Daniel Francis and Michael Payne on the basis of their review of HBC Fort Dunvegan documents, resulted in a 50% drop in the Dunvegan fur trade in 1836.[211] Clearly this Cree presence had been disruptive. Campbell wrote in November 1836 that he was hiring Baptiste Bisson, together with one of his sons as well as his son-in-law, to hunt for the Fort that winter (1836-37). And Campbell added that "owing to the Crees having exhausted the best part of the country for larger animals, we are not likely to be amply supplied with Fresh Meat."[212]

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[205] George Simpson to George Leith, North West Company, Fort Chipewyan, 19 May 1821, in, Rich 1938:338.

[206] George Simpson to Duncan Finlayson, Peace River District, 29 September 1820, in, Rich 1938:64.

[207] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, f. 2.

[208] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, folio 2, entry for 29 October 1836.

[209] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, folio 1d, entry for 8 June 1837.

[210] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, folio 3.

[211] See Daniel Francis and Michael Payne (1993). *A Narrative History of Fort Dunvegan*. Prepared for the Fort Dunvegan Historical Society and Alberta Community Development. Page 17.

[212] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, folios 2-2d, entry for 2 November 1836.

Saskatchewan River Freemen then living around Jasper House also entered the Peace River to hunt in the mid-1830s. Colin Campbell reported that he tried to dissuade these Freemen from going north of the Peace River, but that they proceeded regardless of his admonishment or the fact that beaver were out of season.[213] Less than two weeks later these same Freemen passed through Fort Dunvegan on their way back to Jasper House:

> Having fallen in with our Fort Hunters who most forcibly forbid them to proceed. The freemen not daring to incur the displeasure of the Beaver Indians have given up their project & are now on their way back to their own country, about Jasper House.[214]

Two months later, in November 1837, the *Dane-zaa* were still complaining about the intrusion of these Freemen upon their hunting grounds, a grievance exacerbated by "starvation & sickness" among the bands living in the vicinity of Fort Dunvegan.[215] Starvation and sickness were also recorded at Dunvegan in January 1838. [216] Possibly these two references to "sickness" were a reference to influenza, as scholars have determined that there was a major outbreak of influenza in the Peace River area in 1837. This disease had been brought in by the Athabasca fur brigades and spread up the Peace.[217] Reports of smallpox in "the Saskatchewan District" in the spring of 1838 further distressed the Indigenous people in the Fort Dunvegan region. Campbell, too, was anxious, for his vaccine was found to be ineffective against the disease.[218] Though the Dunvegan journal does not state that smallpox came to the Peace River that year, Campbell's May 1838

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[213] Extracts from Dunvegan Journal 1837 & 38, by Chief Trader Colin Campbell. HBCA B.56/a/6, folio 1, entry for 12 May 1837.

[214] Extracts from Dunvegan Journal 1837 & 38, by Chief Trader Colin Campbell. HBCA B.56/a/6, folio 1d, entry for 25 May 1837. It is interesting to note that Campbell at this time referred to the area in the general vicinity of Jasper House as the Iroquois' "own country." While the Iroquois originally came from the east with the early fur traders, they were (as previously noted) identified around Fort Dunvegan in 1808 by Daniel Harmon. By the 1820s, and likely earlier, they had also established a presence around Jasper House. Reverend George Grant, who accompanied Sandford Fleming's Railway Survey in 1872 and kept his own journal, mentioned that while Fleming's expedition was on its way to Edmonton from Jasper, they fell in with a couple of men who advised them that they were members of a "small colony" of Iroquois who had settled fifty years back on the Smoky River (the headwaters of which emanate from the Rockies not too far from Jasper House). See Reverend George M. Grant (1925). *Ocean to Ocean: Sandford Fleming's Expedition through Canada in 1872*. Toronto: the Radisson Society of Canada Ltd. P. 237.

[215] Extracts from Dunvegan Journal 1837 & 38, by Chief Trader Colin Campbell. HBCA B.56/a/6, folio 3d, entry for 20 November 1837.

[216] Dunvegan Correspondence Book, HBCA, B.56/b/1. Cited in Leonard Ugarenko (1979). The Beaver Indians and the Fur Trade on the Peace River, 1700-1850. Master's thesis, Department of History, York University, Toronto. Page 44.

[217] Arthur J. Ray (1976). Diffusion of Diseases in the Western Interior of Canada, 1830-1850. *The Geographical Review, 66*. Page 146. Cited in Leonard Ugarenko (1979). The Beaver Indians and the Fur Trade on the Peace River, 1700-1850. Master's thesis, Department of History, York University, Toronto. Page 44.

[218] Extracts from Dunvegan Journal 1837 & 38, by Chief Trader Colin Campbell. HBCA B.56/a/6, folios 4-4d, entries for 31 March and 15 April 1838.

census of 386 Beaver Indians and 42 Freemen[219] indicates that the population had suffered significantly since the 1837 enumeration (446 Beaver Indians and 48 Freemen).[220] Ugarenko commented, based on his review of these data, that it is possible that the "Saskatchewan Freemen" brought smallpox to the area in 1838-1839.[221] It is also possible that this population decrease was as a result of the above-mentioned 1837 influenza outbreak. Similarly, it is not possible to determine whether the 13 Aboriginal deaths recorded at Dunvegan in the spring of 1838 [222] were the consequence of influenza, or the result of smallpox. Notwithstanding, Ugarenko concluded there were no deaths recorded among the Beaver due to major epidemics after 1838-1839. [223]

Trade at Fort Dunvegan fell off in 1839, likely as a result of sickness among the local bands. [224] Two years later, Colin Campbell lamented that the Indigenous people suffered widespread starvation, which again affected the Fort Dunvegan's annual returns. [225] In 1841, in an attempt to conserve declining beaver stocks, the HBC introduced a quota system and offered premiums to the local Aboriginals for bringing in furs other than beaver.[226] As a result, the beaver returns plummeted at Dunvegan and elsewhere.[227]

By the 1840s, Fort Dunvegan regularly reported complaints of declining meat supplies, as the demands for meat and leather were beginning to exhaust the game resources of this region. These demands required supplementing the diet at the Post with smaller animals such as rabbits and birds and fish, but these could not make up for the shortage of meat. Colin Campbell told Governor Simpson in 1841 that the situation at that time was a "sad affair" for the Beaver Indians, because "the moose are now too rare for them to depend upon and there are no Buffaloe in this country for some years back." This was compounded by the "entire disappearance of the Lynx and Rabbits."[228]

Starvation continued to plague the Beaver people in the 1840s. Clerk Francis Butcher noted the following in the 1842-1843 Dunvegan Post Journal:

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[219] Extracts from Dunvegan Journal 1837 & 38, by Chief Trader Colin Campbell. HBCA B.56/a/6, folio 5, entry for 7 May 1838, "Indian Population at Dunvegan."

[220] Extracts from Dunvegan /Peace River/Journal 1836/37, by Chief Trader Colin Campbell. HBCA B.56/a/5, folio 3d, entry for 4 April 1837.

[221] Ugarenko 1979:44.

[222] Dunvegan Journal for 1838-1839 [13 October 1838-6 May 1839]. HBCA B.56/a/7, folio 1, entry for 13 October 1838. See also Ugarenko 1979:44.

[223] Ugarenko 1979:44.

[224] HBCA B.56/b/1, folio 5, cited in Francis and Payne 1993:17, fn.52.

[225] HBCA D.5/6, folio 11d, cited in Francis and Payne 1993:17, fn.53.

[226] Arthur J. Ray (1975). Some Conservation Schemes of the Hudson's Bay Company, 1821-50. *Journal of Historical Geography* 1:1, pp. 64-65. Cited in Francis and Payne 1993:17.

[227] Francis and Payne 1993:17.

[228] HBCA D.5/6, folio 111d, cited in Francis and Payne 1993:15, fn.44.

> [2 February 1842] …Lalonde arrived from the Grande Prairie, he fell in with Tranquille and a large band of Indians there [are] seven lodges in all…the Indians having their traps in every direction..
>
> [16 February 1842]…arrived the wives of Tranquille, Brulé and Pouce Coupé with a lad. They are sent by their husbands to ask for something to eat being by their account at the last extremity from famine and beg that I will exchange them an ox for a horse…
>
> [17 February 1842]…Magaze has already killed and eaten three of his horses…
>
> [24 February 1842]…arrived Pouce Coupé and three women. They bring Tranquille's sick wife with them with the intention she should remain at the Fort, her husband not being able to hunt…
>
> [16 March 1842]…Pouce Coupé arrived from Tranquille whose little daughter is dead…he begs as a favour we will send for the body to bury at the fort…
>
> [24 March 1842]…arrived Azillay[229] from Tranquille's…
>
> [2 April 1842]…Tranquille's sick wife died and was buried this morning…
>
> [7 April 1842]…Blondin arrived with the meat of a doe moose killed by Tranquille and Tranquille is starving and Blondin was obliged to give him the meat…
>
> [17 June 1842]…Tranquille's party owe their lives to their fortunately have their horses with them of which they killed them… [230]

In addition to the depletion of game, the Aboriginal people of the Dunvegan district were becoming dependent upon the HBC for food.[231] When Eden Colvile, the Associate Governor of Rupert's Land, passed up the Peace in the summer of 1849, he commented that at Dunvegan "animals are getting scarcer" and added, "Forty Indians are said to have died of starvation during the winter." [232]

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[229] "Azillay" has been identified as the eldest son of the widely known and respected Beaver leader Tranquille who died in 1893 and was said to be 100 year old at that time; Tranquille was buried at the St. Charles Mission at Dunvegan. See David Leonard (2008). *The Grande Prairie of the Great Northland: The Evolution of a County 1805-1951*. Published by the County of Grande Prairie, Alberta. Pp. 11-12.

[230] Dunvegan Post Journal for 1842-1843. HBCA B.56/a/11. Cited in David Leonard (2000). *Delayed Frontier: The Peace River Country to 1909*. Detselig Enterprises and the Edmonton & District Historical Society, Edmonton. Pp.54-57.

[231] Daniel Francis and Michael Payne (1993). *A Narrative History of Fort Dunvegan.* Prepared for the Fort Dunvegan Historical Society and Alberta Community Development. P. 142.

[232] HBCA D.5/25, folio 528, cited in Francis and Payne 1993:15, fn.46.

## 6.3 Impact of the Fur Trade on Aboriginal People's Land Use in the Fort Dunvegan Area

Historians Daniel Francis and Michael Payne in *A Narrative History of Fort Dunvegan* conclude that the fur trade had a "profound impact on the native peoples of the Peace River Country, encouraging changes in their culture which ranged from the trivial to the pervasive."[233] It is their view that the fur trade depleted the game resources while at the same time caused the indigenous hunters to spend more time gathering furs to trade. They note that an effect of the fur trade was the formation of a trading band, which they describe as a group composed of at least two residential groups. They also opine that the failure of Fort Dunvegan can be attributed to depopulation of the region and the *Dane-zaa's* preference to trade elsewhere.[234] Though research undertaken to date for this present study cannot yet confirm these observations, the primary evidence reviewed here does support the following conclusions concerning land use in the first half of the 19th century:

- Buffalo gone by early 1830s
- Moose becomes the primary species taken
- Increased Cree presence in the Peace River area affecting game populations
- Very slight improvement in *Dane-zaa*/Cree relations
- Freemen (Iroquois) living among the *Dane-zaa* and occasionally competing with the *Dane-zaa* as hunters
- European diseases and starvation affect local Aboriginal populations in the 1830s and 1840s
- Declining meat supplies and decreasing fur returns in the 1840s
- *Dane-zaa* continuing a semi-nomadic lifestyle that brought them to Dunvegan at certain times for trade

## 6.4 Observations on Aboriginal Land Use, 1860s-1870s

Ancestors of the Horse Lake First Nation were continuing to practice an Aboriginal life style of hunting, foraging, trapping and trading their furs at Fort Dunvegan in the 1860s when non-Aboriginal newcomers arrived on the Peace River in search of gold and furs. One such newcomer was the legendary "Twelve-Foot Davis"[235] who in 1865 established a fur-trading post

[233] Daniel Francis and Michael Payne (1993). *A Narrative History of Fort Dunvegan.* Prepared for the Fort Dunvegan Historical Society and Alberta Community Development. P. 141.

[234] Francis and Payne 1993:144.

[235] "Twelve-Foot Davis" was born in Vermont *circa* 1818-1820 as Henry Fuller Davis, and died in 1900. The name "Twelve-Foot Davis" came from his days in British Columbia's Cariboo Gold Rush, which he participated in after taking part in the 1849 California Gold Rush. Fuller in 1861 staked a claim in the Willow Creek area of the Cariboo; the claim measured 12 feet in length and from it Fuller made $15,000.00, earning him the nickname "Twelve-Foot Davis." See Leonard 2000:124-125. See also David Leonard and Beverly Whalen (2002). *On the North Trail: the Treaty 8 Diary of O.C. Edwards*. Published by the Alberta Records Publication Board, Historical Society of Alberta. P.5, fn.6; p.59, fn. 73.

on the opposite side of the Peace River from the Hudson's Bay Company's Fort Dunvegan.[236] Others who came to the Peace and worked in competition with the HBC included Dan Carey, William Cust and the Elmore brothers. Historians Daniel Francis and Michale Payne as well as David Leonard have pointed out that by the mid-1870s the Elmore brothers had seven posts from St. Johns to below Vermilion, and collectively the non-HBC fur traders were doing about as much business as the HBC.[237] There was intense competition along the Peace River. These free traders challenged the HBC by bringing in horses for trade, along with "luxury items" such as candy and colourful apparel. Other challenges to the HBC included the free traders' lack of respect for the HBC's long-standing practice of prohibiting the use of liquor in the fur trade. [238]

The Indigenous trappers and hunters who provided furs to the traders were Beaver, Cree and Iroquois, and even though camps of each people remained discrete at this time, there was some overlapping land use. *Dane-zaa* hunters continued trading at Fort Dunvegan in the 1860s, as well.

Significant observations on Aboriginal land use in this region are provided in the journals and reports of various survey expeditions of the 1870s, including the journal of Charles Horetzky of the Canadian Pacific Railway Exploration Survey, led by Sandford Fleming in 1872. Horetsky walked up the south bank of the Peace River from Dunvegan to Fort St. John, where he attempted to find Beaver guides to show him the route up the Pine River to McLeod Lake. Being late in the season, no one would agree to his request.[239]

The 1872 expedition's botanist, John Macoun, also mentioned Beaver people in his report. Though he remarked with reference to the extent of the local plains that the Aboriginal people had a very indefinite sense of distance, he did note that the Beaver hunted the area of the portage between Lesser Slave Lake and the Peace River, and as far west as the Rocky Mountains. They also hunted a sixty-mile wide plain opposite from Dunvegan, presumably meaning Grande Prairie.[240]

Reverend George Grant accompanied Sandford Fleming's Railway Survey in 1872. Grant's journal provides mention of Iroquois in the central Peace Region at this time. On the way to Edmonton from Jasper the expedition fell in with a couple of men who advised them that they were members of a "small colony" of Iroquois who had settled fifty years back on the Smoky River.[241]

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[236] HBCA B.39/b/20 Journal of John McAulay, 1872. Cited in Leonard 2000:125, fn. 4.

[237] Francis and Payne 1993:22-25; Leonard 2000:125, 129, 151. See also David Leonard 2008: 8.

[238] Leonard 2000:150-151.

[239] Sandford Fleming, editor (1874). Report of Charles Horetzky to Sandford Fleming, 15 March 1873. *Canadian Pacific Railway. Report of Progress on the Explorations and Surveys up to January 1874.* Ottawa. P. 48.

[240] Report by John Macoun, 1 May 1873. Appendix C, in, Fleming 1874: 70.

[241] Reverend George M. Grant (1925). *Ocean to Ocean: Sandford Fleming's Expedition through Canada in 1872*. Toronto: the Radisson Society of Canada Ltd. P. 237.

A Cree presence on the Peace was noted by Alfred Selwyn, Director of the Geological Survey of Canada, during his 1875 expedition.[242] He observed on August 16, 1875 the location of a "Cree camp" on the Peace River and marked the location on the map of the expedition route accompanying his report. The map indicates the camp's location on either side of a creek entering the north bank of the Peace River roughly midway between Dunvegan and the HBC post at the Forks of the Peace and Smoky rivers, [243] seemingly near the place now known as "Early Gardens." Selwyn described the camp seen in mid-August as having "a large number of Indian lodges; they belong to a party of Crees and Half-breeds who had come here, from Edmonton and Jasper House, to hunt and pick berries." Their trip to the Peace River over a good horse trail took ten days and Selwyn reported that these people came here annually. [244] It appears that Selwyn and party spoke with members of this same Cree camp again on 23 August on his way back up the river. He heard their complaints of hunger—berries and bear meat comprised their food.[245]

The "large number" of Cree lodges observed by Selwyn appears to reflect the autumn congregation at the berry fields. Journals kept by members of the Geological Survey indicate that more commonly Indigenous people encountered during the expedition were observed travelling in small independent groups. Beaver were observed distinctly from Cree.

### 6.4.1 The Observation of George M. Dawson

The presence of Cree in the central Peace River region was increasing in the 1870s, a fact observed by other members of the Geological Survey of Canada who passed through this area in 1879, including the now-famed geologist and ethnographer, George Dawson. While Selwyn noted that the Beaver (and Sekani) people did not go below Fort Dunvegan,[246] Dawson defined *Dane-zaa* occupation as extending west to east from the Rocky Mountains to the Smoky River (see the discussion that follows).

George Dawson explored the upper Peace River Basin in 1879 during the course of a seven-month expedition undertaken on behalf of the Geological Survey of Canada. [247] In late July

[242] Alfred Selwyn (1877). The Report on Exploration in British Columbia Geological Survey of Canada, Reports of Explorations and Surveys, 1875-76. Published by the Authority of Parliament, 1877. Pp. 56-57, map.

[243] Map entitled Sketch Survey of route from Quesnel Mouth by Stewart and McLeod's Lakes to the Junction of the Smoky River and Peace River to Illustrate the report of A.R.C. Selwyn (1875), in Selwyn 1877.

[244] Selwyn 1877: 56-57.

[245] Selwyn 1877: 60.

[246] Selwyn 1877: 60.

[247] See George M. Dawson (1881). Report on an Exploration from Port Simpson on the Pacific Coast, to Edmonton on the Saskatchewan, Embracing a Portion of the Northern Part of British Columbia and the Peace River Country, 1879. In, *Geological and Natural History Survey of Canada. Report of Progress for 1879-80*. Dawson Brothers, Montreal. See also Sheets I and III of Dawson's "Map of Part of British Columbia and the North West Territory, from the Pacific Ocean to Fort Edmonton" which accompanies Dawson's 1879 report, as published in 1881.

1879, Dawson and some members of his expedition, which included more than 100 horses and mules for riding and packing, [248] approached the Peace region via Pine Pass. Dawson wrote at this time that "the Beaver Indians hunt westward toward the sources of the Pine River."[249] Reaching the "Lower Forks" (East Pine) area of the Pine River, where they camped on the night of August 7th-8th 1879, Dawson's party then proceeded up "Coal Brook" (Coldstream Creek) and camped on the night of August 9th – 10th at the summit between the headwaters of "Coal Creek" and the headwaters of "Buffalo Creek" (Tremblay Creek). Following down this latter creek, they camped on the night of August 10th – 11th in the vicinity of what is known today as Arras, south from the confluence of Tremblay Creek with the "Mud River" (Kiskatinaw River). [250]

It was in the vicinity of his campsite near Arras that Dawson noted "recent horse tracks and signs that the valley [of Tremblay Creek] has been visited by Indians within a few weeks." Dawson's 1879 map shows an "Indian trail" following an west-east direction along the north side of what is known today as Arras and connecting eventually with what is now called the town of Dawson Creek, [251] by way of "Dawsons Brook" (Dawson Creek, itself). The present-day BC Railway seems to follow this "Indian trail," at least in the section between Arras and Dawson Creek. However, the route that Dawson followed was parallel to but south from this "Indian trail". Dawson's campsite on the night of 11th-12th August 1879 was on the plateau at a spot approximately midway between Arras and Dawson Creek, identified by Dawson as latitude 55 degrees 46 minutes 54 seconds. [252] What is now known as the Pouce Coupe River was identified by Dawson on August 12th 1879 as the "D'Echafaud ['scaffold'] River", and the country around this as the "Pouce Coupée Prairie." [253]

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Portions of these maps appear in the present report as part of Section 11.4. As well, see George M. Dawson Diaries (1849-1901). McGill University Archives, Montreal, Quebec. M.G. 1022. Microfilm No. 270.

[248] George Dawson to Anna Harrington, 6 July 1879. In, Lois Winslow-Spragge (1993). *No Ordinary Man: George Mercer Dawson.* Edited by Bradley Lockner. Natural Heritage/Natural History Inc., Toronto, Ontario. Page 135.

[249] Dawson 1881:45B. The Beaver presence in this region was also noted by mountaineer/explorer Samuel Prescott Fay in his 1914 expedition along the eastern flanks of the northern Rockies. Fay commented in his Journal entry for 11 October 1914, when he was in the vicinity of Sukunka Falls, east and slightly south from Pine Pass, "This is really the Beaver Indian country…". See Charles Helm & Mike Murtha (Editors). *The Forgotten Explorer: Samuel Prescott Fay's 1914 Expedition to the Northern Rockies*. Rocky Mountain Books, Surrey, British Columbia. Page 116.

[250] Dawson 1881:45B-48B.

[251] According to a 1921 report by Dominion Land Surveyor L. Brenot, the town of Dawson Creek was "started up" *circa* 1921, at which time it consisted of a "post office, two general stores, a butcher shop and a rooming house." See L. Brenot (1922). *Report [1921] on Part of Distr. Of Pouce Coupe and Grande Prairie*. Department of the Interior, Topographical Surveys Branch, Ottawa. Page 20.

[252] Dawson 1881:48B-49B and Map (Section 11.4 in the present report).

[253] Dawson 1881:49B and Map (Section 11.4). The Errata Sheet for this publication corrects the transcription from "Pouce Coupé" to "Pouce Coupée." The well-known local fur trader "Twelve-Foot Davis" is reported to have stated in a February 1889 *Edmonton Bulletin* newspaper article that he recalled there were 25 families of "Beaver Indians" at "Pouce Coupee's Prairie" in 1877, but by 1889 "Pouce-Pee" (identified Twelve-Foot Davis as a "Beaver Indian") was the only one left. At this time, "Pouce-Pee" was reportedly trading at the Hudson's Bay Company Post at

Dawson and his party travelled for several miles on August 12th 1879 through what Dawson described as "park-like country" just west from what is now the town of Dawson Creek, when they caught sight of a couple of Aboriginal people Dawson described as "timid Beaver Indians." According to Dawson, these people ran away as fast as they could. Two of Dawson's men followed them to "their camp" nearby, then brought a number of these Aboriginal men, women and children—who were said to be "curious and hungry"—back to Dawson's camp which on the night of August 12th-13th, 1879, was northeast from today's Dawson Creek. Dawson gave the latitude of their campsite as 55 degrees 53 minutes 34 seconds, which appears on his map to be very close to the Alberta border, about 18 Km (11 miles) from the center of the town of Dawson Creek, and in the vicinity of the confluence of Henderson Creek with the Pouce Coupe River. While Dawson's published report did not provide the location of these Aboriginal people's camp,[254] he did identify these people as "Beavers," [255] (i.e. *Dane-zaa*) and noted "these were the first people we had seen besides our own party since leaving the Parsnip River twenty-four days previously."[256]

On the 13th of August 1879, Dawson wrote that not far from their previous night's camping spot they found "a trail which we had learned from the Indians would lead us to Dunvegan." What Dawson's map shows is that the route he had been following connected—in an area that today would be within the northern portion of the town of Dawson Creek—with the above-mentioned west-east "Indian trail" whose route Dawson had been paralleling. From this connecting point, one trail is shown heading to the south, down through what is today the town of Pouce Coupe, and still further south past the southern end of Swan Lake. Another trail is shown heading to the northeast and then following north along the Pouce Coupe River (Dawson's "D'Echafaud River") before heading east along what is likely Henderson Creek, a very short distance north from Dawson's camping spot of the 12th – 13th of August. [257]

Dawson remarked on 13 August 1879 that not far from their previous night's camping spot they found "a trail which we had learned from the Indians would lead us to Dunvegan." [258] What Dawson's map shows is that the route he had been following connected, in an area that today would be within the northern portion of the town of Dawson Creek, with the above-mentioned west-east "Indian trail" whose route Dawson had been paralleling. From this connecting point, one trail is shown heading to the south, down through what is today the town of Pouce Coupe,

Grande Prairie. See J.G. McGregor (1952). *The Land of Twelve-Foot Davis: A History of the Peace River Country*. Institute of Applied Art, Edmonton. Pp. 160, 212.

[254] Dawson 1881: 48B-49B. Dawson's unpublished diary entry states only that this Aboriginal camp was "not far off." See Dawson 1849-1901:Entry for 12 August 1879.

[255] Dawson 1881: 49B. In his unpublished diary, Dawson referred to these people as "Beaver Indians" (underlined in original); see Dawson 1849-1901: Entry for 12 August 1879.

[256] Dawson 1881: 48B-49B and Map (Section 11.4).

[257] Dawson 1881: 50B and Map (Section 11.4).

[258] Dawson 1881: 50B and Map (Section 11.4). Dawson did not provide the ethnic identification of these Aboriginal people, either in his published report or in his diary.

and still further south past the southern end of Swan Lake. Another trail is shown heading to the northeast and then following north along the Pouce Coupe River (Dawson's "D'Echafaud River") before heading east towards Fort Dunvegan along what is likely Henderson Creek, a very short distance north from Dawson's camping spot of the 12th – 13th of August. [259]

The trail that Dawson was following was described as "a very indistinct one and evidently not much used." Thus Dawson was pleased when one of "two Indian lads" who had appeared at his camp on the evening of the 13th of August, and stayed overnight, offered to guide him to Fort Dunvegan. Dawson's camp on the 13th was on the north side of Henderson Creek, about 24 Km (15 miles) east from this creek's confluence with the "D'Echafaud [Pouce Coupe] River." [260]

On the 16th of August, Dawson reached Fort Dunvegan and immediately organized two smaller expeditionary parties. He sent his assistant, R.G. McConnell, "to penetrate as far to the northward as possible," accompanied by Rev. Gordon, together with a packer, a Beaver Indian as guide, and an Aboriginal person of mixed blood to act as interpreter to the guide. [261]

At this point in his published report, Dawson provided the following description of the "Country of the Beaver Indians":

> Both Beaver and Cree are now found on this part of the Peace River, though the country really belongs to the former. The extent of the Beaver territory is as follows:—Northward to the Battle River,[262] eastward to the Smoky and Simonette Rivers, southward to Grand Coup Plat, a tributary of the Smoky, westward to the Portage of the Mountain of Rocks [Rocky Mountain Portage] on the Peace River, where they mingle with the Siccanies. On Pine River and other south-western streams, the Beaver country extends to the mountains. The Beavers are now a small and weak people. The Crees are encroaching on them from the east side of Smoky River, while a band of Iroquois hunters and half-breeds has taken

[259] Dawson 1881: 50B and Map. This same trail, the one leading to Fort Dunvegan from the Pouce Coupe River/Henderson Creek confluence, is also shown on a map prepared by the Alberta/British Columbia Boundary Commission. See: Office of the Surveyor General, Ottawa (1925). *Report of the Commission Appointed to Delimit the Boundary between the Provinces of Alberta and British Columbia: Parts III-A and III-B, 1918-1924*. Atlas, Part III, Sheet 47.

[260] Dawson 1881: 50B and Map (Section 11.4). See also Dawson 1849-1901:Entries for 13-14 August 1879. Dawson did not provide the ethnic identification of these "two Indian lads," either in his published report or in his diary.

[261] Dawson 1881: 51B-52B.

[262] What Dawson refers to as the "Battle River" is known today as the Notikewin River which originates in the Clear Hills of Alberta, about 45 Km (28 miles) northwest from Horse Lake First Nation's IR 152C, and flows northeast and eastward, emptying into the southwest side of the Peace River about 50 Km (31 miles) northeast from the town of Manning, Alberta. "Notikewin" is derived from the Cree term "*nôtinikewin*" which means 'battle.' See Nancy LeClaire and George Cardinal (2006). *Alberta Elders' Cree Dictionary*. Edited by Earle Waugh. The University of Alberta Press and Duval House Publishing, Edmonton, Alberta. Page 256.

> possession of a considerable part of the southern country, between Dunvegan and Jasper House. [263]

The published report suggests Dawson wrote this above-noted description of the "Country of the Beaver Indians" on the 16th of August 1879. However, the information from which this account was prepared appears in Dawson's unpublished diary on a page that is between the entries for September 5th and 6th, 1879, by which time Dawson and his party, as well as other small expeditions within his larger overall survey party, had travelled considerably throughout the areas mentioned. This unpublished description of the "Limits of Beaver Indians" (underlined in original) is as follows:

> To N near Battle R. to E, from [?] Smoky River & Moose R [east from southerly portion of Smoky River], To S to the Grande Coup Plat, to West, the Rocky Mountains portage, or thereabouts on the Peace. Mix there with Siccanies. On Pine R to the Mountains. The Crees are expanding across Smoky R to westward, & the Iroquois now own a considerable stretch of the Southern country.[264]

> To N near Battle R. to E, from [?] Smoky River & Moose R [east from southerly portion of Smoky River], To S to the Grande Coup Plat, to West, the Rocky Mountains portage, or thereabouts on the Peace. Mix there with Siccanies. On Pine R to the Mountains. The Crees are expanding across Smoky R to westward, & the Iroquois now own a considerable stretch of the Southern country.[265]

Additional information about the southern extent of Beaver territory in this region is provided on the map accompanying Dawson's 1881 report of his 1879 expedition; on this map, Dawson wrote the following words adjacent to the southern portion of the Smoky River: "The Smoky River is reported to receive three important tributaries from the west, above [south from] this point—the Grand Coup Plat, the Porcupine and the Sheep." [266] One of these three rivers/creeks, the "Grand Coup Plat" (also spelled "Grande Coup Plat" by Dawson), as noted above, was said to mark the southernmost limit of Beaver territory, both in Dawson's published and unpublished accounts.[267] Elsewhere in Dawson's diary, these same three "large tributaries" of the Smoky River, "above the Biche [Wapiti River] on the same side" are also mentioned, and in the same order (i.e. Grand Coup Plat, Porcupine, and Sheep).[268] But, as will be discussed below, the actual north-south order of these three southern tributaries of the Smoky River on its west side is: Porcupine River; Sheep Creek; and, Jack Pine (Jackpine) River.

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[263] Dawson 1881: 51B.

[264] Dawson 1849-1901: Page between the entries for September 5th and 6th 1879.

[265] Dawson 1849-1901: Page between the entries for September 5th and 6th 1879.

[266] Dawson 1881: Map (Section 11.4).

[267] Dawson 1881:51B; 1849-1901: Page between entries for September 5th and 6th 1879.

[268] Dawson 1849-1901: Page between entries for 4th and 5th September 1879.

While both Dawson's published account of Beaver (*Dane-zaa*) territory as well as his unpublished description both mention the "Grand Coup Plat" as the southernmost limit of the Beaver, the listing on Dawson's map and on another page of his diary suggest that the "Grand Coup Plat" may not be the farthest south of these three tributaries. Additional clarification is not provided on Dawson's 1881 map, as it provides no detail for the upper Smoky River. However, the location of the most northerly of these three tributaries, the Porcupine River, is identified elsewhere, almost three decades later, on a 1908 Interior Department map entitled *Northern Alberta, Peace River District*, as is the location of the next tributary to the south, Sheep Creek. This same 1908 map identifies the most southerly of the three tributaries entering the Smoky River from its west side as the Jack Pine (Jackpine) River.[269] This suggests that Dawson's "Grand Coup Plat"—identified by him in 1879 and 1881 as the most southerly extent of Beaver territory—must be the Jack Pine (Jackpine) River. This same river, the Jack Pine (Jackpine), is also mentioned in mountaineer/explorer Samuel Prescott Fay's journal of his 1914 expedition along the eastern flanks of the northern Rockies, where the Jack Pine River is identified as "a west tributary of the Smoky River."[270]

A similar southern territorial limit of Beaver (*Dane-zaa*) territory is marked on the "Map shewing the Distribution of the Indian Tribes of British Columbia" (Section 11.4 in the present report) that was published in 1884 and based on work that George Dawson and W. F. Tolmie had undertaken with various tribes throughout British Columbia between 1875-1883. Dawson, alone, was responsible for the northeasterly portion of this map, which clearly shows "Cree Indians Encroaching Westward," from Smoky River to the west, and immediately to the west of this, identifies "A Band of Iroquois Immigrants Now Hunt Between Jasper House & Dunvegan." On this 1884 map, the southern limit of Beaver territory is shown extending about 30 miles (approximately 48 km) farther southeast along the Rocky Mountain summit from the Jack Pine (Jackpine) Creek headwaters[271] which Dawson had identified several years earlier as the southern limit of Beaver territory, as discussed above.

This same approximate southerly boundary (as shown on the 1884 map) is also indicated on anthropologist and linguist Franz Boas' 1890 "Linguistic Map of British Columbia" (Map in Section 11.5 of the present report) where this information, identified as a language boundary, is

[269] James White (1908). [Map of] *Northern Alberta, Peace River District*. Published by the Department of the Interior, Ottawa. Copy held by the BC Land Title & Survey Authority, Victoria. Maps and Plans Vault, 53 Tray 1 Original Maps.

[270] See Charles Helm and Mike Murtha (Editors) (2009). *The Forgotten Explorer: Samuel Prescott Fay's 1914 Expedition to the Northern Rockies*. Rocky Mountain Books, Surrey, British Columbia. Page 33 and fn. 66, p. 276. Yet another west tributary of the Smoky River is identified both on the 1908 Interior Department Map and in Fay's 1914 expedition; it is the Muddy Water River situated approximately midway between the Jack Pine (Jackpine) River and Sheep Creek (White 1908; Helm and Murtha 2009, p. 35).

[271] See W.F. Tolmie and G.M. Dawson (1884). "Map shewing the Distribution of the Indian Tribes of British Columbia." In, *Comparative Vocabularies of the Indian Tribes of British Columbia, With a Map Illustrating Distribution*. Dawson Brothers, Montreal (Section 11.4 in the present report).

also attributed to George Dawson,[272] and on A.G. Morice's 1892 map;[273] it is very likely that the Beaver territorial information on Morice's map also came from George Dawson.

R.G. McConnell's expedition northward from Dunvegan, according to his notes published in Dawson's report, began on 17 August 1879. His party followed a trail to "Hay Lake" (about a mile and a half in length by three-quarters of a mile in width") where they camped on August 18th. Hay Lake was so named, McConnell wrote, because the marshes around it provided "a large quantity of wild hay." [274] This small lake, located about 20 Km (12 miles) north from Dunvegan is near where, in 1905, an approximately 25-mile square Indian Reserve would be set aside for the "Beaver Band" (from whom members of today's Horse Lake First Nation are descended).

The next day, 19 August, after travelling along the trail north and slightly west from Hay Lake for a distance of "about four miles," McConnell and his party arrived at "Lac des Isles" ('Lake of Islands'; known today as George Lake, about 36 Km [22 miles] north from Dunvegan) where he commented that this lake does, in fact, contain "numerous islands." [275] McConnell continued in a generally northeastward direction up the valley through which "Muddy Creek" (Hines Creek) flows, then crossed over the White Mud Hills, and after two more days reached "Battle River" (Notikewin River) where he and his party met a Cree hunter. [276]

While McConnell was heading to the north, Dawson on 18 August 1879 set off from Dunvegan, heading southward with a packer and guide and "three British Columbian Indians." [277] Concerning the country he was about to explore, Dawson wrote:

> Several trails run southward from Dunvegan toward Grande Prairie and the head waters of the Smoky River, and the Indians travel through in this direction to Jasper House on the upper Athabasca. Many little hunting trails and dim tracks ramify from the main trails in all directions, in conducting us among which our guide was

[272] See Franz Boas (1890, published in 1891). Linguistic Map of British Columbia. Plate XIX in, Second General Report on the Indians of British Columbia. *Sixtieth Annual Report of the British Association for the Advancement of Science for 1890.* Page 552 (Section 11.5 in the present report).

[273] See A.G. Morice (1892). Map of Part of British Columbia Shewing the Habitat of the Western Déné Tribes, Together With Portions of the Territory of Surrounding Races. [In] Are the Carrier Sociology and Mythology Indigenous or Exotic? *Transactions of the Royal Society of Canada for 1892, Section II, Plate II* (Section 11.6 in the present report).

[274] McConnell 1879, in Dawson1881:58B and Map (Section 11.4).

[275] This same lake would be referred to as "Island Lake" by James Macoun in the course of his 1903 survey that included this same region of the Peace and was undertaken for the Geological Survey of Canada, as discussed in Section 8.1 of the present report. See James Macoun (1904). *Report on the Peace River Region* [15 December 1903]. Published by the Geological Survey of Canada by S.E. Dawson, King's Printer: Ottawa. Page 9E.

[276] McConnell 1879, in Dawson1881:59B-60B and Map (Section 11.6).

[277] Dawson 1881: 52B.

> of great service as long as we confined ourselves to the part of the country with which he was familiar.[278]

Following one of these trails southwards, Dawson and his party camped on the night of August18th near the north end of "*Ka-toot*" Lake (identified as Kakut Lake on present-day maps) which, he noted, is 22 miles south from Dunvegan and drains southeastwards towards the Bad Heart River ("or *Ma-atz-i-ti he-sī-pī* of the Crees") which in turn flows eastward to the Smoky River. [279] Elsewhere, Dawson transcribed the Cree name for the Smoky River as "*Ka-ska-pa-tē-oo Sī-ī*" whose meaning, he pointed out, is the "same as in English," and he gave the Cree term for the Little Smoky River as "*Ka-ska-pa-tē-oo Sī-pī-sīs*." Dawson transcribed "*Wa-was-ke-soo Sī-pī* " as the Cree term for the Wapiti River, and noted that it means, literally, 'elk river.' [280]

Dawson and his party on August 19th 1879 entered the Grande Prairie region, which Dawson described as a "pretty park-like country" [281] and whose limits he defined as follows:

> The so-called Grande Prairie is a tract of country about forty miles in extreme length in a north-east and south-west direction, and where widest over twenty miles in width. It has an area of about 230,000 acres, and is included between the…Smoky, the Wapiti and Beaver Lodge Rivers. It is drained by the *Kles-kun* stream flowing eastward to the Smoky River, by the Bear River which which crosses it from north-west to south-east, and at its western extremity by the Beaver Lodge [River]. *Kles-kun* and Bear Lakes, about three and six miles in length respectively, besides many smaller sheets of water, occur on the prairie. [282]

During the course of his travels on the 19th of August, Dawson commented on the presence of "A few old buffalo bones, & the ground scored with their tracks." Dawson added that Louis Campbell, his mixed-blood guide, "says that the Indians tell that all [the buffalo were] killed by a

[278] Dawson 1881: 52B and Map (Section 11.4). Elsewhere Dawson commented that, "The Baptiste, Little Smoky, Simonette & Main Smoky are said to lead almost together in the mountains [Rocky Mountains], afterwards diverging." See Dawson 1849-1901: Page between entries for 16 and 17 September; Dawson 1881: Map (Section 11.4).

[279] Dawson 1881:53B and Map (Section 11.4).

[280] Dawson 1849-1901: Page entitled "Names of Places" appearing between the entries for 15 and 16 September 1879; see also Dawson 1881: Map (Section 11.4). Confirmation of several of these Cree terms and their translations, as provided by Dawson in 1879, is provided in a recent Cree dictionary; see LeClaire and Cardinal 2006. Concerning Dawson's "*Ka-ska-pa-tē-oo Sī-pī* ", this dictionary at page 425 gives the Cree term *kaskâpahtew* meaning 'in the smoke', and at p. 406 gives the Cree term *sîpîy* meaning 'river'; concerning Dawson's "*Wa-was-ke-soo Sī-pī* ", the dictionary at p. 296 gives *wâwâskesiw* as the Cree term for 'elk.'

[281] See Dawson 1849-1901: Entry for 19 August 1879.

[282] Dawson 1881: 53B and Map (Section 11.4).

very severe winter many years ago, when about 5 ' of snow fell."[283] Details about traces of buffalo—and their extinction—are provided in Dawson's published account:

> Buffalo trails [in the Grand Prairie region] still score the sod in all directions, and are deeply hollowed out where a number converge toward the crossing of a river or lake, or some such place. The saucer-shaped 'wallows' of the buffalo and scattered bones are also numerous, though the animal is now no more seen here. The Indians state that the extinction of the buffalo was not entirely due to the introduction of fire-arms and the active hunting carried on for the supply of the Hudson Bay forts, but that all remaining were killed many years ago by an excessively severe winter when the snow was over the buffaloes' backs. It may be mentioned in this place that the Beaver Indians report having seen in the summer of 1879 six woodland buffaloes, of which they killed one, in the vicinity of the Pouce Coupée prairie. [284]

Additional information about the six buffalo seen by the Beaver in 1879 is provided in Dawson's notes, where he states:

> Buffalo.[underlined in original] Informed on good authority that six buffalo seen by the Beaver Indians at a little prairie near Pine River,[285] this summer, one was killed & the remainder hunted [?] out the woods with dogs, which did not return, & were supposed to have been been killed by the buffalo. The chief of the Indians did not want any more of the [?] buffalo killed, hoping that they would increase. Said that wood buffalo still abundant between Athabasca & Great Slave Lake (Inquire further).[286]

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[283] See Dawson 1849-1901: Entry for 19 August 1879. Very likely the severe snowstorm mentioned here is the one that occurred in the winter of 1829-1830, as discussed in Section 8.0 of the present report. And this was likely also the same snowstorm that adventurer William Butler referred to during his travels along the Peace River in the winter of 1872-1873. Butler was told at that time, while he was visiting Fort Dunvegan, that, "During one winter of exceptionally deep snow, eighty buffaloes were killed in a single day in the vicinity of Dunvegan. The Indians ran them into the snowdrifts, and then despatched them with knives." See William F. Butler (1904). *The Wild Northland, Being the Story of a Winter Journey, With Dog, Across Northern North America*. A.S. Barnes and Company, New York. Pp. 207-208.

[284] Dawson 1881: 54B.

[285] Presumably Dawson's mention of "a little prairie near Pine River" here in his notes is a reference to the same area that he describes in his published account as "the vicinity of the Pouce Coupée prairie," although these two areas are about 65 Km (approximately 40 miles) apart.

[286] Dawson 1849-1901: Page between entries for 5 and 6 September 1879. Tales of the last of the buffalo were later recalled as legendary events. Butler reported in 1873 that a man named "*Chimeroo*," a *Dane-zaa* Aboriginal from the Fort St. John area, was said to have killed the last buffalo in those parts. See Butler 1904:225. Possibly Butler was referring to the same "last-buffalo" incident that Dawson described a few years later.

Dawson and his party camped, on the 19th of August, northwest of what he identified as "*Kles-kun*" Lake, at a latitude he gave as 55 $^{0}$ 20' 28". However, the details of Dawson's map are such that it is not possible to determine if his "*Kles-kun*" Lake is a reference to Clairmont Lake or to adjacent Ferguson Lake, both of which are just north of today's city of Grande Prairie. [287]

After travelling on the 19th and 20th through the "greatest service berry [Saskatoon berry] country" that he had ever seen, Dawson and his party camped on the night of August 20th on the south side of the Bear River ("*Sus-za-ka* of the Beavers" [Bear Creek]), north from its confluence with the Fish River ("*Klo-es-sa-ka*" [Fish Creek]) and not far from the northwest end of Bear Lake ("*Sus-mi-gi*") near today's city of Grande Prairie. [288] Dawson wrote, with reference to the Grand Prairie area, that:

> Both Cree and Beaver Indians often come long distances for the berry gathering at Grande Prairie, and after having secured and dried a sufficient quantity of fruit, scatter again in small bands into the more remote parts of the country for the autumn hunt. [289]

Dawson on the 21st of August came across a lake "east of the mt." [290] (the "Isle de Montagne or *Sis-tin* of the Beavers") [291] that is called Saskatoon Hill on present-day maps. He indicated that the lake was aptly called "Service-berry Lake" (Saskatoon Lake, on today's maps) and was "greatly resorted to by the Beaver Indians when gathering berries." [292]

Alfred Selwyn, several years earlier, noted that Saskatoon berries grew abundantly on south-facing hills in the area between Dunvegan and Smoky River.[293] Describing the preparation of berries for storage, he noted that the people:

> pound up the cherries, stones and all, and make cakes of them, which are dried in the sun, and either eaten fresh or stored for winter use; the kernels in the cherries give a pleasant taste of bitter almonds.[294]

Another prairie where Aboriginal people were harvesting large quantities of Saskatoon berries in the 1870s was situated about 70 miles (112 Km) up the Peace River from Fort Dunvegan. Botanist John Macoun said that the Beaver people referred to this place as "Mosquito Prairie." The location seems to be near the Alberta/BC border, but it is impossible from the description given to be precise. The berries growing here were said to be large and very sweet, and Macoun

[287] Dawson 1881: Map (Section 11.4).

[288] Dawson 1881: 53B and Map (Section 11.4); Dawson 1849-1901: Entries for 19 and 20 August 1879.

[289] Dawson 1881: 53B-54B and Map (Section 11.4).

[290] Dawson 1849-1901: Entry for 21 August 1879.

[291] Dawson 1881: 54B and Map (Section 11.4).

[292] Dawson 1849-1901: Entry for 21 August 1879; see also Dawson 1881: Map (Section 11.4).

[293] Selwyn 1877:60.

[294] Selwyn 1877:60.

stated that they "are used in many ways, but the Indian women seem to prefer making them into square cakes and drying them."[295]

On the night of the 21st of August, Dawson camped at a location just south from Saskatoon Hill. The next day, August 22nd, he briefly examined the Beaverlodge River ("Beaver Lodge River or *Uz-i-pa*"). Then he proceeded to an area due south from Bear Lake, where "Black Jack's Trail to Jasper House" crossed the Wapiti River (which he referred to as the "Elk or La Biche River"), and camped, on the night of the 22nd , along the north side of the Wapiti River. This campsite was southeast from today's city of Grande Prairie, in the vicinity of Spring Creek's confluence with the Wapiti River. [296]

The next morning, August 23rd, Dawson and his party travelled eastward along the north side of the Wapiti River, crossing this river in the vicinity of what Dawson referred to in his notes as "Mountain Creek." (This same creek is called "Big Mountain Creek" on Dawson's map, where it is shown entering into the south side of the Wapiti River in an area that would today be south from the city of Grande Prairie). It was in this vicinity that Dawson's party found a cottonwood canoe cached near the Wapiti River. From here they headed due south, following a trail that ran more or less parallel to "[Big] Mountain Creek." Dawson's map indicates they travelled approximately 15-20 miles south from the Wapiti River before camping that night about a mile or so west from the Smoky River, at a latitude of 54 $^{0}$ 53' 4 " north. [297] Dawson and his party followed a trail on the morning of 24 August that led from this camp to the Smoky River and had been used by the father of his guide, Louis Campbell, who was with a hunting party that had been there in the spring. Dawson was hoping hoped to use this canoe to descend the Smoky to the Peace. But when he could not find this cached canoe here on the Smoky, Dawson returned back north to the small cached cottonwood canoe they had found on the Wapiti River the previous day. They camped on the south side of the Wapiti on the night of the 24th, just downstream from the confluence of "[Big] Mountain Creek."[298]

On August 25th, after directing his packer as well as his guide Louis Campbell and one of the Aboriginals in his party to take the pack animals back to Fort Dunvegan, Dawson together with "Louis" and "Jason" (two of the three "British Columbia Indians" who were travelling with Dawson) set off in a canoe down the Wapiti and Smoky Rivers to the Peace. Dawson commented: "We knew that the Indians hunting in this part of the country not unfrequently ran down the Smoky River in canoes…". They camped on the evening of 25 August on the east side of the Smoky River, at a location that appears to have been not far from where today's Highway 43 crosses the Smoky River, east from the city of Grande Prairie. [299] On the evening of 26

[295] Macoun 1873, in Fleming 1874:84.

[296] Dawson 1849-1901: Entry for 22 August 1879; see also Dawson 1881: Map (Section 11.4).

[297] Dawson 1849-1901: Entry for 23 August 1879; see also Dawson 1881: 55B and Map (Section 11.4).

[298] Dawson 1849-1901: Entry for 24 August 1879; see also Dawson 1881: 55B-56B and Map (Section 11.4).

[299] Dawson 1849-1901: Entry for 25 August 1879; see also Dawson 1881: 56B and Map (Section 11.4).

August, they camped on the north side of the Smoky River, a few miles east from where the Bad Heart River enters the Smoky. [300]

Travelling by canoe on August 27th past the confluence of the Little Smoky River with the Smoky River, Dawson commented on what he referred to as "boccanes," a term said to refer to places where "smouldering combustion" occurs. Dawson stated that it is these "boccanes" that give the Smoky River its name, and he observed there was a thin column of smoke issuing from one of them when he passed by it that day. [301]

Dawson camped on August 27th "a few miles from mouth of Smoky River, on a sandy flat." On August 28th, Dawson reached the Hudson's Bay Company post at the forks of the Smoky River and the Peace River and, it appears, camped here overnight on this date, although he noted that the Post, itself, was deserted at this time.[302] Dawson on August 29th met up with Louis, his guide, and others, together with horses and pack animals, in the general vicinity of the Peace River/Smoky River confluence. They cached the canoe and travelled by horse back to Fort Dunvegan, following a trail that more-or-less paralleled the Peace River but was, as Dawson stated, "a considerable distance" north from it. On the evening of 29 August, they camped at a small lake identified by Dawson as "Lac des Femmes" ['lake of women'].[303] This same lake, located near the northern end of what is today Duncan's IR 151A, just south of Highway 2, was known as "Old Wives Lake" in the 1880s and later.[304]

Dawson and his party arrived back at Fort Dunvegan on the afternoon of 30 August. [305] He spent several days here, where one of his tasks was to organize four additional expeditions. [306] On the

[300] Dawson 1849-1901: Entry for 26 August 1879; see also Dawson 1881: 56B and Map (Section 11.4).

[301] Dawson 1849-1901: Entry for 27 August 1879; see also Dawson 1881: 56B-57B and Map (Section 11.4). Similar information about the origin of the name for the Smoky River had been provided many years earlier by David Thompson of the North West Company who was in this general area of the Smoky River/Peace River confluence between November 1802-March 1804. Recalling his early times with the North West Company, Thompson stated, many years later: "…the Smoke [Smoky] River is so named from the volumes of dark smoke sent from the Coal Mines [coal deposits] there on fire, and which have been burning beyond the memory of the oldest Indian of that River." See William E. Moreau, Editor (2009). *The Writings of David Thompson, Volume I: The Travels, 1850 Version*. Montreal & Kingston, Seattle, and Toronto: McGill-Queen's University Press, University of Washington Press, and the Champlain Society, in association with the Centre for Rupert's Land Studies at the University of Winnipeg, Manitoba. Pp. 185-186, 277.

[302] Dawson 1849-1901: Entry for 28 August 1879 [although the entry for 28 August is mistakenly dated as a second entry for August 27th].

[303] Dawson 1849-1901: Entry for 29 August 1879; Dawson 1881:Map (Section 11.4).

[304] See: James M. Macoun (1904). *Report on the Peace River Region* [15 December 1903]. Published by the Geological Survey of Canada by S.E. Dawson, King's Printer: Ottawa. Pp. 6E-7E; David Leonard (2000). *Delayed Frontier: The Peace River Country to 1909*. Detselig Enterprises and the Edmonton & District Historical Society, Edmonton. Pp. 68, 72, 84, 109, 184-187; David Leonard and Beverly Whalen, Editors (2002). *On the North Trail: The Treaty 8 Diary of O.C. Edwards*. Published by the Alberta Records Publication Board, Historical Society of Alberta. Pp. 44, 47, 48.

[305] Dawson 1849-1901:Entries for 29 and 30 August 1879; Dawson 1881:Map (Section 11.4).

5th of September, Dawson set out with his own group, heading south via the same trail he had used to go to the Grande Prairie area in August. He and his party camped on the night of 5 September on the "Ghost River" (Spirit River), [307] about 12 miles (20 Km) south from Dunvegan. While Dawson did not comment on Aboriginals in the vicinity of Spirit River at this time, there were a number of both "Beaver Band [Horse Lake First Nation]" and "Duncan's Band [Duncan's First Nation]" members identified at the Spirit River settlement *circa* 1900 [308] (see Section 8.1 of the present report).

On the night of 6 September, Dawson's party camped a short distance up the Bad Heart River from its confluence with the Smoky River, then proceeded the next day in a southerly direction along the west side of the Smoky River, camping on 7 September near where the stream from "*Kles-kun*" Lake enters into the Smoky. They camped on 8 September at the confluence of the Simonette River with the Smoky.[309] From here, Dawson's party on 9 September crossed the Simonette River and followed a trail which led in a northeasterly direction towards what Dawson referred to as the "Cree settlement" (at Sturgeon Lake). There was also another trail, Dawson wrote; it led in a southerly direction towards Jasper House, following between the Smoky River and the Simonette River. Continuing along the trail that led to the northeast, Dawson's party eventually reached Sturgeon Lake (identified on Dawson's map as "*Ke-me-sis*" Lake), camping at this lake's north end on 13 September and at the "Cree settlement" on its southeast end, on 14 September. This settlement, Dawson added, consisted of "two log houses, with several little garden patches." [310] Subsequently Dawson identified the name for Sturgeon Lake, "*Ke-me-sis*," as a Cree term, and provided the name for the settlement here as "*Pus-kwat-sī-nas*" which he stated was a Cree term translated as 'little bare hill." [311]

### 6.4.2 The Observations of William Butler in the Fort Dunvegan Area

Another visitor to this region in the 1870s was William Butler, an astute, educated adventurer from England who kept a fascinating and informative journal of his travels along the Peace River in the winter of 1872-1873. While at Fort Vermilion in March 1873, Butler commented on hills named after the presence of reindeer and buffalo, located respectively one day's journey to the north and to the south of the Fort.[312] Butler's "Reindeer Hills" are likely the Caribou Mountains

[306] Dawson 1849-1901:Entries for 31 August and 1-4 September.

[307] Dawson 1849-1901:Entry for 5 September; Dawson 1881:Map (Section 11.4).

[308] See G. Neil Reddekopp (1996). The Creation and Surrender of the Beaver and Duncan's Band's Reserve. Alberta Aboriginal Affairs, Indian Land Claims, Paper No. 2. Pp. 21, 109-115.

[309] Dawson 1849-1901:Entries for 6th, 7th, and 8th September; Dawson 1881:Map (Section 11.4).

[310] Dawson 1849-1901:Entries for 9-14 September; Dawson 1881:Map (Section 11.4).

[311] Dawson 1849-1901:Page between entries for 15 and 16 September; Dawson 1881:Map (Section 11.4).

[312] See William F. Butler (1904). *The Wild Northland, Being the Story of a Winter Journey, With Dog, Across Northern North America.* A.S. Barnes and Company, New York. Page 165.

in northern Alberta. His "Buffalo Hills" are now called the Buffalo Head Hills, situated to the east of the Peace River, south of Fort Vermilion. Butler added, however, that he saw neither reindeer nor buffalo, no were either of these animals part of the subsistence of Fort Vermilion when he was there. Instead, the Peace River, Butler observed, was the "land of the moose."[313] When Butler was visiting Dunvegan several weeks later, he was told that numerous "wood-buffalo" were present in this region in former times, but their ultimate demise was due to a winter of "exceptionally deep snow." Butler wrote that "eighty buffaloes were killed in a single day in the vicinity of were said to have died in a single day in the vicinity of Dunvegan. The Indians ran them into the snowdrifts, and then despatched them with knives[314] (presumably the winter that Butler was referring to was that of 1829-1830 which has previously been discussed).

From Fort Vermilion, Butler headed up the Peace River, travelling southeast overland to save some distance in traversing what he was told would be "twelve long winter days' travel" to Fort Dunvegan. Once on a trail leading to the "Buffalo Hills," Butler announced that he was:

> …now in the country of the Beaver Indians…a tribe once numerous on the river which bears its present name of Peace from the stubborn resistance offered by them to the all-conquering Crees—a resistance which induced that warlike tribe to make peace on the banks of the river, and to leave at rest the beaver-hunters of the Unchagah.[315]

Yet, Butler added, few Beaver people remained, as their numbers had steadily decreased. Butler wrote that in 1873, "in the whole length of 900 miles from beyond the mountains [Rocky Mountains] to the Lake Athabasca, scarce 200 families [of Beaver people] lie scattered over the high prairies and undulating forest belts of the Peace River.[316] It was at this point in his journal that Butler pointed out, "No men in this land of hunters hunt better than the Beavers." To this he added, "It is not uncommon for a single Indian to render from his winter trapping 200 marten skins, and not less that 20,000 beavers are annually killed by the tribe [Beaver Indians] on the waters of the Peace River." [317]

On the third day after leaving Fort Vermilion, travelling overland and not along the Peace River, Butler's party encountered five "wigwams" (teepees) of Beaver Indians with their leader "*At-tal-loo*" camped near some beaver lodges. "*At-tal-loo*" spoke of his band's misfortune that winter and the death of six members, despite moose being plentiful. The remaining women of the camp outnumbered the men. Butler reported that another man in the camp was named "*Twa-poos*," though Butler traded his tea for marten skins only with "*At-tal-loo*."[318]

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[313] Butler 1904:165.

[314] Butler 1904:207-208.

[315] Butler 1904:169.

[316] Butler 1904:170.

[317] Butler 1904:171-172.

[318] Butler 1904:172-173.

Soon after this encounter, Butler left the "Little Buffalo River" and reached the Peace River. Later that same evening, likely in the vicinity of Carcajou, Butler reached the 8 x 12 hut belonging to a Cree man which that night sheltered 19 people and their dogs, comprising "a Cree and his wife, an Assineboine and his wife, eight or ten children, and any number of Swampy [Cree][319] and Ojibbeway [Ojibwa], and half-breeds." [320]

After spending the night here, Butler's party proceeded up the Peace River, and Butler observed that they were still one hundred and fifty miles from Dunvegan. Carrying on, they encountered "a camp of Crees" comprising three tents and located on the south shore of the Peace River (The precise location is unknown, other than the camp being situated downstream from Fort Dunvegan). With these people Butler traded tea for moose briskets, tongues and noses, and while among them observed the community's morning personal care and their distinctive Métis and Cree-style dress adorned with ribbons and porcupine quills.[321]

Butler didn't report anyone living at the mouth of the Smoky River when he passed along here at daybreak on the 1st of April 1873. [322] Finally, reaching Fort Dunvegan on the evening of April 1st, Butler found a lively community of mixed ancestry, people he identified as "Swampy [Cree] and Half-breed and Ojibbeway [Ojibwa] Métis." [323]

Butler's party left Fort Dunvegan at about midnight on the 3rd of April. They continued up the Peace River, travelling on the frozen river's surface, and now guided by one of the Fort Dunvegan residents who Butler identified as "a Scotch half-breed" named William Kalder who spoke French as well as "his Indian tongue." [324] At daybreak on the 4th of April, Butler met a young Aboriginal man out hunting moose. This was the time of year, Butler wrote:

> when the Indians leave their winter hunting-grounds and make a journey to the forts with the produce of their season's toil. They come, a motley throng; men, women and children; dogs, sleds and hand-toboggans, bearing the precious freight of fur to the trading-post, bringing in the harvest of marten-skins from the vast field of the desert wilds.[325]

Such a cavalcade passed Butler's party on April 4th. Among their belongings were the furs of marten that had been caught in dead-fall traps, the construction of which Butler described as being like a guillotine. The hunter checked his trapline weekly, Butler wrote,[326] sometimes

[319] See Appendix B of the present report for a discussion of the divisions of Cree. Presumably Butler assumed that these people were "Swampy Cree" due to his familiarity with them farther to the east.

[320] Butler 1904:174.

[321] Butler 1904:175-177.

[322] Butler 1904:184.

[323] Butler 1904:186-187.

[324] Butler 1904:194.

[325] Butler 1904:195-196.

[326] Butler 1904:197.

harvesting 200 marten a season.[327] Concerning the proficiency of the Beaver hunters, in general, Butler said, "No men in this land of hunters hunt better than the Beavers."[328]

Butler described the activities of the Aboriginal cavalcade he met on 4 April 1873, as follows:

> Day by day the party moves along till the fort is reached. Then comes the trade. The fifty or a hundred marten-skins are handed over: the debt of the past year is cancelled, partly or wholly; and advances are taken for the coming season.[329]

Animals found in the Peace River region and "valuable to the Indian for their flesh," Butler stated, included beaver, bear and moose. But it was primarily moose that fed the "forts and the Indians along the entire [Peace] river." Butler wrote that "About 100 full-grown moose" had been consumed at each of the four trading posts he had visited that winter along the Peace. Four times that number were said to be consumed each year by the Aboriginal people, yet the stocks remained high. About 2,000 moose hides came out of Athabasca District annually, Butler estimated, adding that "to-day [1873] there are probably as many moose in Peace River as there were fifty years ago [1820s]." [330]

Local knowledge and local experience were crucial for hunting moose, pointed out Butler who learned some of this information while among the people of the Peace River.[331] To hunt successfully, Butler opined, required years of study. As an example of the skill, Butler included in his memoir a vivid account of "*Twa-poos*" or 'Three Thumbs,' hunting moose:

> In the morning "*Twa-poos*," or Three Thumbs, sets forth to look for a moose; he hits the trail and follows it; every now and again he examines the broken willow-tops or the hoof marks, when experience tells him that the moose has been feeding here during the early night. *Twa-poos* quits the trail, bending in deep circle to leeward; stealthily he returns to the trail, and as stealthily bends away again from it. He makes as it were the semicircles of the letter B, supposing the perpendicular line to indicate the trail of the moose; at each return to it he examines attentively the willows, and judges his proximity to the game.
>
> At last he is so near that he knows for an absolute certainty that the moose is lying in a thicket a little distance ahead. Now comes the moment of caution. He divests himself of every article of clothing which might cause the slightest noise in the forest; even his moccasins are laid aside; and then, on a pointed toe which a ballet girl might envy, he goes forward for the last stalk. Every bush is

[327] Butler 1904:171.

[328] Butler 1904:171.

[329] Butler 1904:199.

[330] Butler 1904:203-204.

[331] Butler 1904:204-206.

> now scrutinized, every thicket examined. See! He stops all at once! You who follow him look, and look in vain; you can see nothing. He laughs to himself, and point s to yon willow covert. No, there is nothing there. He noiselessly cocks his gun. You look again and again, but can see nothing; then *Twa-poos* suddenly stretches out his hand and breaks a little dry twig from an overhanging branch. In an instant, right in front, thirty or forty yards away, an immense dark-haired animal rises up from the willows. He gives one look in your direction, and that look is his *last*. *Twa-poos* has fired, and the moose is either dead in his thicket or within a few hundred yards of it.[332]

In sum, historical documents contain the following observations concerning Aboriginal land use in this region of the Peace River in the period 1860s-1870s:

- *Dane-zaa* (Beaver) and an increasing number of Cree, as well as growing communities of Métis people, lived on the Peace River
- Aboriginal people continued to subsist on moose and berries and continued to trade their furs at Fort Dunvegan for tea and tobacco and other goods, moving seasonally between hunting areas and Dunvegan
- Métis people engaged in trapping/hunting and farming
- New fur traders provide alternatives to local Aboriginals' reliance on trade with the Hudson's Bay Company
- Journals and maps made by exploration parties and adventurers travelling throughout the region provide information concerning Aboriginal settlements and land use.

[332] Butler 1904:205-206.

## 7.0 Treaty 8

Historians generally agree that Canada had two reasons for entering into Treaties:

> 1) to extinguish aboriginal title to the land and open the territory "for settlement, immigration, trade, travel, mining, lumbering and such other purposes as to Her Majesty may seem meet"; and
>
> 2) to ensure the extension of its [Canada's] authority into the district and prevent conflicts between the Aboriginal residents and the newcomers.[333]

Within this context, as Neil Reddekopp and Patricia Bartko have pointed out, [334] Treaty 8 can claim historical primacy or even uniqueness in several ways:

- Treaty 8 was the first of Canada's northern treaties
- Treaty 8 was the first treaty which envisaged the setting aside of lands in severalty for individual families as a potential alternative to creating Indian Reserves held in common by all members of a particular First Nation
- Treaty 8 was the only treaty to take in land both south and north of 60 $^{0}$ North Latitude
- Treaty 8 was the first treaty where negotiation of a treaty took place concurrently with a process for the distribution of Métis scrip [335]

Among the "conflicts" that provided reasons for Canada to enter into Treaty 8 was the discovery of gold in the Klondike area of the Yukon in 1896 which precipitated a rush of miners through the Peace River region in 1897-1898. These "Klondikers," as they came to be known, followed routes to the Yukon that took them through Dunvegan, Peace River Landing, and along the north

[333] Robert Irwin (1999-2000). "The Successful Pursuance of that Humane and Generous Policy;' Treaty 8 and the Introduction of Indian Policy to the Peace-Athabasca Country. Pp.30-53, in Treaty 8 Revisited: Selected Papers on the 1999 Centennial Conference. Edited by Duff Crerar and Jaroslav Petryshyn. *Lobstick: An Interdisciplinary Journal* .Vol. 1, No. 1 (Special Premier Edition, Winter 1999-2000). Published by Grande Prairie Regional College, Grande Prairie, Alberta.

[334] See G. Neil Reddekopp and Patricia Bartko. (1999-2000). "Distinction Without A Difference? Treaty and Scrip in 1899." In, Treaty 8 Revisited: Selected Papers on the 1999 Centennial Conference. Edited by Duff Crerar and Jaroslav Petryshyn. *Lobstick: An Interdisciplinary Journal*. Vol. 1, No. 1 (Special Premier Edition). Published by Grande Prairie Regional College, Grande Prairie, Alberta. Pp. 213-214.

[335] The term "scrip," widely used in North America during the nineteenth century, refers to a negotiable certificate issued by various governments indicating the rights of a holder to receive payment later in the form of cash, goods or land. See Gerhard J. Ens (1999-2000). Taking Treaty 8 Scrip, 1899-1900. In, Treaty 8 Revisited: Selected Papers on the 1999 Centennial Conference. Edited by Duff Crerar and Jaroslav Petryshyn. *Lobstick: An Interdisciplinary Journal* . Vol. 1, No. 1 (Special Premier Edition). Published by Grande Prairie Regional College, Grande Prairie, Alberta. Page 229. See also: The Métis Association of Alberta and Joe Sawchuk, Patricia Sawchuk and Theresa Ferguson (1981). *Métis Land Rights in Alberta: a Political History*. Métis Association of Alberta, Edmonton. Page 87.

side of the Peace all the way from Peace River Landing to Fort St. John.[336] There were a significant number of these "Klondikers" who passed through the Dunvegan area. For example, an entry in the Dunvegan Post Journal of 26 March 1898 noted that "over 200 sleds" of Klondikers had come by here over the past few days.[337] A description of the Indigenous population in the vicinity of Dunvegan in 1898 was provided by one of these Klondikers, a man named Barney Maurice who wrote that having left from Edmonton for the Klondike in late May 1898, he proceeded on horseback to the Athabasca River then followed an Indian trail across the Swan Hills and reached Lesser Slave Lake. From here Maurice went to Peace River Landing at the forks of the Smoky and Peace Rivers, then travelled along the north side of the Peace to Dunvegan. Not far from Peace River Landing, Maurice referred to passing "a lot of halfbreed farmers," a reference to the "Shaftesbury" settlement of non-Aboriginal and Métis farmers begun in the mid-1880s about 24 Km (15 miles) upriver from Peace River Landing.[338] When he reached Dunvegan, Maurice described the Aboriginal people here as "mostly Beaver Indians, although there were a few Crees," and added, "Almost all of them were hunters and trappers and lived in teepees."[339] At this point in Maurice`s narrative, he mentions that when he came back down the Peace River to Dunvegan the following winter (of 1898-1899), he saw a little shack here that was half full of dried moose meat and saw "Indian women packing the meat into canvass bags and stamping it down with their feet in order to have it pressed flat and tight."[340]

As historian Dennis Madill has pointed out, the Commissioner of the North West Mounted Police, L.W. Herchmer, had advised the federal government in December 1897 that a treaty should be made with those Aboriginals who might resist the Klondikers:

> I have the honour to draw your attention to the advisability of the Government taking some immediate steps towards arranging with the Indians not under Treaty, occupying the proposed line of route from Edmonton to Pelly River. These Indians although few in number, are said to be very turbulent, and are liable to give very serious trouble when isolated parties of miners and travellers interfere with what they consider their vested rights.[341]

[336] See the map entitled "Klondikers' Routes in Peace River Country" that appears at page 40 in Dennis Madill (1981). *British Columbia Indian Treaties in Historical Perspective*. Report prepared for and published by the Research Branch, Corporate Policy, Indian and Northern Affairs Canada, Ottawa.

[337] Dunvegan Post Journal 1895-1900. Hudson's Bay Company Archives, Provincial Archives of Manitoba, Winnipeg. B.56/a/16. Entry for 26 March 1898.

[338] See Leonard 2000:183-193.

[339] V. Maurice (1947). *Fifty Years in Peace River Country and Short Story of the Alaska Highway*. Published by the Author, High Prairie, Alberta. Pp. 19-22.

[340] Maurice 1947:23-24.

[341] L.W. Herchmer to the Comptroller of the North West Mounted Police, 2 December 1897. Library and Archives Canada (LAC), Ottawa. RG 10, Vol. 3848, File 75,236-1. Cited in Madill 1981:41.

This and other pre-treaty correspondence of the Department of Indian Affairs, historian Richard Daniel has noted, reflected "a strong emphasis on the need for peace and friendship between the native people and settlers and miners."[342]

"Conflicts" between Aboriginal residents and newcomers into the Peace region were mentioned in a 27 June 1898 Minute of Council where it was noted that "the Beaver Indians of the Peace and Nelson Rivers, as well as the Sicannies and Nihannies Indians, were inclined to be troublesome."[343] This same information was included within Privy Council Order-in-Council 2749 of 6 December 1898 which established the Commission for Treaty 8. [344]

These "troubles" were caused by "occasional squatters" making their way into the Peace River District, according to the Deputy Superintendent General of Indian Affairs' 1899 Annual Report:

> While under ordinary circumstances the prospect of any considerable influx might have remained indefinitely remote, the discovery of gold in the Klondike region [of the Yukon] quickly changed the aspect of the situation. Parties of white men in quest of a road to the gold fields began to traverse the [Peace River] country, and there was not only the possibility ahead of such travel being greatly increased, but that the district itself would soon become the field of prospectors who might at any time make some discovery which would be followed by a rush of miners to the spot.[345]

The 27 June 1898 Minute of Council also noted that the Department of Indian Affairs "possesses so limited a knowledge of the conditions of the country, and of the nature and extent of the claims likely to be put forward by its Indian inhabitants, that the Minister considers that the Commissioners [i.e. the Commissioners appointed for Treaty 8] should be given discretionary power both as to the annuities to be paid to and the reservations of land to be set apart for the Indians." This Minute of Council also noted that the Treaty Commissioners must understand it was of the "utmost importance" that they obtain from the Aboriginal people to be treated with, their "acquiescence in the relinquishment of the aboriginal title." [346]

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[342] See Richard Daniel (1977). Indian Rights and Hinterland Resources: The Case of Northern Alberta. M.A. thesis in Sociology, University of Alberta, Edmonton. Page 56.

[343] Minute of Council No. 1703, 27 June 1898. Copy in British Columbia Archives, Victoria. GR 444, Box 64, File 198/98.

[344] Privy Council Order-in-Council No. 2749, 6 December 1898. Copy in BCA, Victoria. GR 444, Box 64, File 198/98.

[345] J.A.S. Smart (1900). Letter/report of 31 December 1899 from J.A.S. Smart, Deputy Superintendent General of Indian Affairs, to the Superintendent General of Indian Affairs, Ottawa. In, Report of the Department of Indian Affairs for the Year Ended June 30, 1899. Page xviii. *Canada, Sessional Papers, Vol. 11, Fifth Session of the Eighth Parliament of the Dominion of Canada, Session 1900*.

[346] Minute of Council No. 1703, 27 June 1898. Copy in BCA, Victoria. GR 444, Box 64, File 198/98.

One of the terms of Treaty 8, in addition to a term allowing Her Majesty the Queen to set aside Indian Reserves "for such bands as desire reserves," was a term that stated:

> [The Queen] agrees with the said Indians that they shall have right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered as heretofore described, subject to such regulations as may from time to time be made by the Government of the country, acting under the authority of Her Majesty, and saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering, trading or other purposes.[347]

Charles Mair, one of the secretaries of the "Half-breed Scrip Commission" whose duties began where the work on Treaty 8 ended, wrote that the Treaty Commissioners were to have arrived at Lesser Slave Lake on 8 June 1899 and then proceed to other places within the Treaty 8 area. Delays altered the schedule, however, and the Commissioners did not reach Lesser Slave Lake until 19th June. After this, the party divided and one group proceeded to Peace River, while the other headed to Fort St. John.[348] However, Mair noted, because the Commissioners were delayed, they sent word to Fort St. John that the Beaver should "stay where they were until they could be met." [349]

The two Commissioners who proceeded to Fort St. John, by way of Dunvegan, were James Ross, Minister of Public Works in the Territorial Government, and J.A. McKenna, then private secretary to the Superintendent-General of Indian Affairs. [350] Ross and McKenna left for Dunvegan on 22 June 1899. But when they were within 25 miles of Fort St. John, Ross and McKenna turned back, as they received a letter from the HBC agent stating that the Fort St. John Beaver had left for their hunting-grounds and thus there was "no hope of their coming together again that season." [351]

Mair at this point in his narrative states that Commissioners Ross and McKenna then "returned to Fort Dunvegan, and took the adhesion of some Beaver Indians, after which they left for Lower Peace River." However, Mair provides no details [352] of the Treaty Commissioners' meeting(s)

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[347] *Treaty No. 8 Made June 21, 1899 and Adhesions, Reports, etc*. Reprinted from the 1899 edition in 1966 by the Queen's Printer, Ottawa (1969 Reprint). Pp. 12-13.

[348] Charles Mair (1999). *Through the Mackenzie Basin: An Account of the Signing of Treaty No. 8 and the Scrip Commission, 1899*, with Introductions by David Leonard and Brian Calliou. The University of Alberta Press and the Edmonton & District Historical Society, Edmonton. Pp. 64-67. This 1999 publication is a facsimile reprint of portions of Charles Mair's classic 1908 book, *Through the Mackenzie Basin: A Narrative of the Athabasca and Peace River Treaty Expedition of 1899, With a Map of the Country Ceded and Numerous Photographs of Native Life and Scenery*.

[349] Mair 1999: 64-67.

[350] Mair 1999: 25.

[351] Mair 1999: 64-65.

[352] Mair 1999: 65.

with the "Beaver Band at Dunvegan"—ancestors of today's Horse Lake First Nation—that led to their adherence to Treaty 8 on 6 July 1899. [353] Nor is much additional information provided in the Fort Dunvegan Post Journal. On 6 June 1899, trader George Harvey reported that "Lazare arrived from Peace River Landing with letter from Mr. MacDonald requesting to send wagons [sic] down for Goods to meet the Treaty here. The Treaty Commissioners will see only about 5 or 6 men here. The rest do not want treaty, and are all out on the hunt for some months. [354] The entry for 5 July 1899 only states, "Treaty Commissioners reached here today"; and the entry for 6 July only remarks that, "Beaver Indians that are here signed the Treaty today, and the Commissioners left here at 4 P.M. for Peace River Landing." [355] A different date is given in the official "Report of Commissioners for Treaty No. 8," dated 22 September 1899, the Commissioners stated that they "…met the Beaver Indians of Dunvegan on the 21st day of June [sic] and secured their adhesion to the treaty." [356] This is wrong. Clearly the date was not the "21st of June" but rather the 6th of July, as discussed above. [357] This error was not corrected, either, when this report of the Commissioners was published in the *Canada Sessional Papers* in 1900.[358]

The wording of Treaty 8 between Canada and the "Beaver Indians of Dunvegan" under the leadership of "Headman *Natooses,*" signed on July 6th, 1899 at Dunvegan, was as follows:

> The Beaver Indians of Dunvegan having met on the sixth day of July, in the present year 1899, Her Majesty's Commissioners, the Honourable James Hamilton Ross and James Andrew Joseph McKenna, Esquire, and having had explained to then [them][359] the terms of the Treaty unto which the Chief and Headmen of the Indians of Lesser Slave Lake and adjacent country set their hands on the twenty-first day of June, in the year herein first above written, do join in the cession made by the said Treaty, and agree to

[353] Treaty 8, 1969:16.

[354] Dunvegan Post Journal June 1895-June 1900. HBCA B.56/a/ page 44/43, which faces right and follows page 44. Entries for 6 June 1899.

[355] Dunvegan Post Journal June 1895-June 1900. HBCA B.56/a/16. Entries for 5 and 6 July 1899.

[356] See Report of Commissioners for Treaty No. 8, 22 September 1899, by Indian Treaty Commissioners David Laird, J.H. Ross and J.A.J. McKenna. In, Treaty 8, 1969:8.

[357] David Leonard has also noted this error. See Mair 1999: Editor's Note to Appendices:153.

[358] David Laird, J.H. Ross, and J.A.J. McKenna, 22 September 1899. Report of Commissioners for Treaty 8, in, Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1899. In, *Canada, Sessional Papers, Vol. 11, Fifth Session of the Eighth Parliament of the Dominion of Canada, Session 1900.* Page xxxviii.

[359] This typographical error, "then," was corrected to "them" in the wording of the same Treaty as it was printed at page xlvi of the Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1899, published in *Canada, Sessional Papers, Vol. 11, Fifth Session of the Eighth Parliament of the Dominion of Canada, Session 1900.*

> adhere to the terms thereof in consideration of the undertakings made therein.[360]

The total number of "Beaver Indians of Dunvegan" who were paid "Annuity and Gratuity Moneys" at this time was 34, comprised of the Headman, "*Natooses*," and 33 others.[361] An official map of the "Territory ceded under treaty No. 8, and the Indian tribes therein" was published in the 30 June 1900 Indian Affairs Annual Report [362] (this map is reproduced in the present report at 11.7).

Mair's account of the Treaty Commission's expedition made a number of observations about the Peace River area, among them his observation in June 1899 that, "All along the trail [along the north side of the Peace River between the Smoky River and Dunvegan] were old buffalo paths and wallows," which, he added, they actually saw "everywhere we went on land, showing how numerous these animals [buffalo] were in times past. [363] As well, Mair noted that the Peace River was known as the "  *ig  ah*, its majestic and proper name, or the *Tsa-hoo-dene-desay* [in the Beaver language]—'The Beaver Indian River'—or the *Amiskoo eëinnu Sepe* of the Crees, which has the same meaning." Mair also pointed out that the term "Peace River" came from the peace pact made between the "warring tribes" of the region.[364]

Historian David Leonard states in his Introduction to the 1999 reprint of Charles Mair's 1908 publication that Mair's book was special, as it was written by "a first-hand witness to some of the most significant events in the history of Northwest Canada." Still, as Leonard adds, Mair's work

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[360] Treaty 8, 1969:16. This Treaty was ratified by the Government of Canada on 20 February 1900. See Treaty 8, 1969:19.

[361] See: Statement of Indians paid Annuity and Gratuity Moneys in Treaty No. 8, during 1899. In, Report of Commissioners for Treaty 8, 22 September 1899. Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1899. *Canada, Sessional Papers, Vol. 11, Fifth Session of the Eighth Parliament of the Dominion of Canada, Session 1900.* Page xl. See also Treaty Annuity Paylist for Beaver Band Paid at Dunvegan 6th July 1899. Library and Archives Canada, Ottawa. RG 10, Volume 9432.

[362] See: Department of Indian Affairs (1900). Map showing the Territory ceded under treaty No. 8, and the Indian tribes therein. In, Report of Commissioner for Treaty No. 8, 11 December 1900. Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1900. *Canada, Sessional Papers, Vol. 11, First Session of the Ninth Parliament of the Dominion of Canada, Session 1901.*

[363] Mair 1999:83.

[364] Mair 1999:88. As has been previously discussed (see Section 7 of the present report), what Mair transcribes here as "  *igah*" is the same term that Alexander Mackenzie had earlier written as "*Unjigah*" (Lamb 1970:400) which is also the same term that historians David Leonard and Beverly Whalen transcribe as "*Unchaga*" in a footnote to O.C. Edwards' journal that was kept in his capacity as physician for the Treaty 8 Commission of 1900. Leonard and Whalen wrote, with reference to the area known today as Peace Point on the lower Peace River, that: "…the name of the [Peace] river changed from (in Cree) "*Tsadu*" to "*Unchaga*," or (in English) from 'Beaver' to 'Peace'." See David Leonard and Beverly Whalen (2002). *On the North Trail: the Treaty 8 Diary of O.C. Edwards*. Published by the Alberta Records Publication Board, Historical Society of Alberta. Page 78, fn.91

is presented from the perspective of "a strong apologist for the British Empire, whose reputation and expressed world view could warrant his designation as the Rudyard Kipling of Canada." [365]

Another perspective has been provided by historian Richard Daniel. Summarizing Treaty 8 in his 1977 thesis, "Indian Rights and Hinterland Resources: The Case of Northern Alberta," Daniel stated that this treaty:

> was the primary instrument with which the Indians of the area and the government of Canada attempted to reach an agreement on the sharing of the land and other resources and with which Indian rights are still measured to a very considerable extent, especially by the Indian people themselves.[366]

Brian Calliou provides a contemporary Indigenous perspective to the evaluation of Mair's book in his Introduction to the 1999 reprint. Calliou, a member of a Treaty 8 First Nation, notes that Treaty 8 "sets out the relationship between First Nations of the territory and the Canadian state" and adds that First Nations generally declare that this relationship with the Crown of Canada is "nation to nation." Citing participants' statements in a June 1998 Calgary workshop sponsored by the Canadian Institute of Resources Law and the Arctic Institute of North America, Calliou points out that: "Through the knowledge of the elders, Treaty 8 First Nations view the treaty as sacred, whereby solemn promises were made to share the land and resources in a peaceful manner." [367]

[365] David Leonard (1999). Charles Mair and the Settlement of 1899, in, Mair 1999: xv-xvi.

[366] Daniel 1977: v.

[367] Brian Calliou (1999). Prelude to Expansion: The Treaty 8 Commissions, in, Mair 1999: xlii, xliv, xlvii.

## 8.0 Post-Treaty Settlement

Government surveys such those undertaken by the Geological Survey of Canada in 1875 and 1879 (as previously discussed) had recognized the Peace River region's wealth of natural resources and this, in part, had prompted the Canadian Government to enter into Treaty 8 with the local Aboriginals. Several years after the 1899 adhesion of the "Beaver Indians of Dunvegan" to Treaty 8, James Macoun[368] of the Geological Survey of Canada undertook a survey of the region in 1903 to assess its agricultural potential, visiting farms and making inquiries about the success of emerging farming operations. His report and also the reports of H.A. Conroy, the Inspector for Treaty 8, describe increasing numbers of settlers engaged in farming, living alongside Aboriginal hunters and trappers and former Hudson's Bay Company servants, generally identified as Métis.

### 8.1 Observations on Aboriginal and Métis Settlement in the Dunvegan Region

James Macoun compiled a Report on the Peace River Region for the Geological Survey of Canada providing information obtained during a 1903 survey. Macoun's map of the region prepared during the expedition appears in the present report as Section 11.8.

After arriving at Peace River Landing, Macoun hired a pack-train for his trip around the central Peace River. [369] Macoun commented that there were two small grist-mills and two small saw-mills in the summer of 1893 at the place he called "The Settlement" [370] (i.e. the Shaftesbury Settlement).[371]

In the plateau area between Peace River Landing and Dunvegan, Macoun reported, agriculture had been undertaken only at three places: "Old Wives Lake,"[372] located near the northern end of what is today Duncan's First Nation IR 151A, just south of Highway 2; the east end of "Bear Lake," today's Cardinal Lake, northwest from Grimshaw; and "the waterhole," the place known today as Waterhole, adjacent to Highway 2, about 16 Km (10 miles) northeast from Dunvegan. Macoun wrote that the Anglican missionary, J.G. Brick, had tried to farm at "Old Wives Lake" between 1884 and 1889. However, Macoun was told that, due to frost, Reverend Brick had

[368] As historian David Leonard has noted, James Macoun was the son of John Macoun [who had first come to the Peace River country in 1872 as a botanist with the Canadian Pacific Railway Exploration Survey]. See David Leonard (2008). *The Grande Prairie of the Great Northland: The Evolution of a County 1805-1951*. Published by the County of Grande Prairie, Alberta. Page 21.

[369] James M. Macoun (1904). *Report on the Peace River Region* [15 December 1903]. Published by the Geological Survey of Canada by S.E. Dawson, King's Printer: Ottawa. Page [4E].

[370] Macoun 1904:5E.

[371] As previously noted, Shaftesbury was the name of a settlement of non-Aboriginal and Métis farmers begun in the mid-1880s about 24 Km (15 miles) upriver from Peace River Landing. See Leonard 2000:183-193.

[372] Macoun 1904:6E-7E. As previously discussed (see Section 8.0 of the present report), this is the same lake that George Dawson and his party referred to as "Lac des Femmes" ('lake of women') when the camped here on 29 August 1879. See Dawson 1849-1901: Entry for 29 August 1879; Dawson 1881:Map (Section 11.4).

harvested only three of six crops during the six years spent here.[373] Macoun reported that a small patch of potatoes had been planted in 1903 at "Bear Lake" [374] (Cardinal Lake) which was at that time joined to the Shaftesbury settlement by two wagon trails, one at either end of the lake.[375] According to Macoun, farming on a small scale had been attempted at the place called "the waterhole," first by settlers and afterwards by the Hudson's Bay Company. [376]

Macoun followed the trail from the Shaftesbury Settlement to Dunvegan in early July 1903, stopping along the way at "Old Wives Lake" which he described as being "about one mile long and a third of a mile wide" and "surrounded by a marsh where a great quantity of good hay can be made in the autumn." He added that about two miles south from Old Wives Lake "there is a large spring known as Cold spring" which gushes from a small depression. [377]

From Old Wives Lake, James Macoun and his party travelled north on 9 July 1903 to "Bear Lake" (Cardinal Lake). From the northeast end of this lake, Macoun wrote, there was a "well-travelled Indian trail" running north to the Whitemud River, and he and his party followed this trail, along which he noted there was a "good bridge" crossing of "Bear Creek" (Cardinal Creek). Macoun observed "regular Indian camping places" amongst "patches of prairie" while he was passing through the wooded region north from Cardinal Lake and south from the Whitemud Hills. He stated that none of this prairie was more than "ten to twenty acres" in extent around these camping places. On the higher land were aspen and willow; on the lower ground were spruce, tamarack and balsam-poplar.[378] Macoun provided no information concerning the ethnicity of the Aboriginals in this particular area north from Cardinal Lake.

While in this same general area, Macoun referred to the trail between Dunvegan and "Battle River" (Notikewin River),[379] which is shown on the map accompanying his report.[380] However, a trail that Macoun referred to that connected "Bear Lake" (Cardinal Lake) to a place on the

[373] Macoun 1904:11E.

[374] Macoun 1904:11E.

[375] Macoun 1904:7E.

[376] Macoun 1904:11E.

[377] Macoun 1904:7E.

[378] Macoun 1904:7E-8E.

[379] What Macoun refers to as the "Battle River" is known today as the Notikewin River which originates in the Clear Hills of Alberta, about 45 Km (28 miles) northwest from Horse Lake First Nation's IR 152C, and flows northeast and eastward, emptying into the southwest side of the Peace River about 50 Km (31 miles) northeast from the town of Manning, Alberta. "Notikewin" is derived from the Cree term "*nôtinikewin*" which means 'battle.' See Nancy LeClaire and George Cardinal (2006). *Alberta Elders' Cree Dictionary*. Edited by Earle Waugh. The University of Alberta Press and Duval House Publishing, Edmonton, Alberta. Page 256.

[380] This same Dunvegan- to-"Battle River" trail is also shown on one of the maps that accompany Dawson's 1881 published report, as a party led by one of Dawson's colleagues, R.C. McConnell, explored this same region in the summer of 1879 (see Section 11.4 of the present study).

Whitemud River where this river was transacted by the Dunvegan- to-"Battle River" trail, is not shown on the map, due to what Macoun described as an oversight. [381]

Turning south on the Dunvegan- to-"Battle River" trail, Macoun observed birch groves and forests of jack pine with understory of high bush cranberry. He noted that, "About a mile north of the 22nd base line, where the trail crosses a large bend of MacAllister creek [Jack Creek, emptying into Hines Creek]," there is "a large hay meadow, the only large one seen north of Island Lake [George Lake] [382]." Between "Island Lake" and Hay Lake,[383] Macoun continued, the trail passed:

> through woods and across swamps and marsh for about three miles, when it emerges on a beautiful piece of country, much the finest seen on the north side of the Peace river and unexcelled anywhere in the region examined in 1903.[384]

Macoun and his party members continued southward on this trail and crossed the Peace River at Dunvegan on August 1st, 1903. Throughout August and into early September of 1903, Macoun explored the region south of the Peace River. He began these explorations by following the 15-mile (25 Km) long wagon road that connected Dunvegan with Spirit River. [385] There were "about twenty homesteads" at the Spirit River settlement in August 1903, most of which had cattle and horses. Macoun estimated there were in total about 200 acres under cultivation in the Spirit River region, although none of the homesteads had yet been surveyed. Every one of these homesteads was visited by Macoun in August 1903. [386]

While Macoun did not comment on the ethnicity of the Spirit River residents, this information is available from the 1901 Canada Census. Historian David Leonard has reviewed this 1901 census

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[381] Macoun 1904:8E.

[382] "Island Lake," known today as George Lake, is located about 36 km (22 miles) north from Dunvegan ; the same lake was identified in 1879 by R.G. McConnell, a member of George Dawson's expedition, when McConnell described how he and his party arrived at "Lac des Isles" ('Lake of Islands'). See the discussion of McConnell's expedition throughout this same area of the Peace in Section 6.4 of the present report.

[383] Years earlier, when R.G. McConnell and his party on 18 August 1879 had camped at Hay Lake, located about 20 Km [12 miles] north from Dunvegan, McConnell commented that this lake was so named because it provided "a large quantity of wild hay." See Section .9.0 of the present study. It was near Hay Lake that in 1905, a 25-mile square Indian Reserve would be set aside for the "Beaver Band" (from whom members of today's Horse Lake First Nation are descended).

[384] Macoun 1904:9E.

[385] Macoun 1904:13E-14E. Spirit River as a modern settlement had begun in 1888 when the Hudson's Bay Company established a ranch here to provide beef, dairy products and transport to settlers and to the North West Mounted Police, should a detachment be stationed here. A ranch was operated here at Spirit River between 1888 and 1895-96, at which time it was closed after several years running at a loss. Those who operated the Spirit River ranch for the HBC included Charles Bremner, John Laronde, E. Eastman, and James Kirkness. See Spirit River Ranch Post History. HBCA.

[386] Macoun 1904:13E.

data and notes that of the 59 people enumerated at Spirit River at that time, 51 claimed Cree as their mother tongue.[387] Based on his review of the 1901 Census data, Leonard concluded that there had been some sort of "settlement" at Spirit River since the early 1870's.[388] Leaving Spirit River on the 3rd of August 1903, Macoun went by "Indian trail" along an 8 km (5 mile) route to "Rat Creek,"[389] through a forest of spruce and poplar that supplied the logs for the Spirit River homes.[390] He commented, while proceeding farther to the west, after camping at a place about 8 miles (13 Km) west of "Rat Creek," that the trail he was then following was now situated to the north of what had been shown on earlier maps,[391] thus indicating that trail locations were subject to change in this area.

Macoun continued along the trail [392] and subsequently spent three days "thoroughly examining the Pouce Coupé prairie," most of which, he noted, lies west of the boundary with British Columbia. [393] He wrote that the most open part, almost entirely prairie, "is directly west of the junction of Bear and Pouce Coupé creeks," [394] adding that this open area "is cut by a creek[395] in

[387] See David Leonard (2005). *The Last Great West: the Agricultural Settlement of the Peace River Country to 1914*. Detselig Enterprises Ltd., Calgary, Alberta. Page 60.

[388] Leonard 2005:60.

[389] If Macoun's distance estimate is correct, what he referred to as "Rat Creek," encountered while travelling west from the Spirit River settlement, would have been one of the southeasterly branches of what is known today as Howard Creek. Howard Creek empties into the south side of the Peace River approximately 5 miles (8 Km) west from Dunvegan—more specifically, west from the south side of the Peace, opposite Dunvegan. See Macoun 1904:Map of part of the Country between the Peace and Athabaska Rivers. Macoun's "Rat Creek" is referred to as "Rat River" by Dawson on his 1881 map.

[390] Macoun 1904:16E

[391] Macoun 1904:17E.

[392] This same trail that Macoun followed—connecting Fort Dunvegan with the Pouce Coupe River/Henderson Creek confluence by way of Spirit Creek—had been followed, but in the opposite direction, by George Dawson in 1879 (see Dawson 1881:50B-51B and Map) , and was subsequently shown, in part, on a map prepared by the Alberta/British Columbia Boundary Commission. See: Office of the Surveyor General, Ottawa (1925). *Report of the Commission Appointed to Delimit the Boundary between the Provinces of Alberta and British Columbia: Parts III-A and III-B, 1918-1924*. Atlas, Part III, Sheet 47.

[393] Macoun 1904:18E. Surveying of the BC/Alberta boundary did not begin until 1913. See: Office of the Surveyor General, Ottawa (1917). *Report of the Commission Appointed to Delimit the Boundary between the Provinces of Alberta and British Columbia: Part, From 1913 to 1916.*

[394] Macoun 1904:17E-18E and Map. Macoun's use of the term "Bear Creek" here is problematic. It is the present authors' opinion (having reviewed Macoun's written account and map as well as other historical accounts and maps, together with present-day maps) that the Bear River that flows in a southeast direction into La Glace Lake then flows from La Glace Lake into Bear Lake and from Bear Lake flows in a southeast direction through the present-day city of Grande Prairie and into the Wapiti River, cannot be the same "Bear Creek" that Macoun refers to on pages 17E-18E of his 1904 report. Rather, the "Bear Creek" he refers to on these pages is very likely Henderson Creek, even though Macoun does not indicate any creek here on this map (he indicates only the trail that follows alongside this creek). The Bear River that flows through Grande Prairie does not originate far enough to the northwest for it to have a confluence with the Pouce Coupe River. As noted above, this same route, but in the opposite direction, had been followed by Dawson in 1879. What is problematic is that Macoun at page 23E seems to use term "Bear Creek"

which is the only water in this part of the prairie [Pouce Coupé prairie]." [396] At the "Pouce Coupé prairie" Macoun and his colleague met both Métis and Aboriginal people who were picking and drying Saskatoon berries, and who told them that the season for berry harvesting here was a week earlier than at Spirit River and Dunvegan.[397]

After exploring the area south from the "Pouce Coupé prairie" to as far as the southern end of Swan Lake on the BC/Alberta border, Macoun followed a trail for three days to the Grande Prairie region. He spent a week carefully examining this region "from every point of view." [398] Macoun approached the Grande Prairie region from the west, entering the prairie "about ten miles northwest of Bear lake" and camping on the night of 13 August 1903 near the head of "Fish Creek" (Colquhoun Creek). [399] The next day, Macoun commented that "the Indian trail we had been following joined one of them from Spirit river to Saskatoon lake near Bear creek [Bear River]." Small farms had already been established around Saskatoon Lake, Macoun observed.[400] A trail led from Saskatoon Lake to "Beaver Lodge Creek," i.e. Beaverlodge River, which Macoun also identifies as "Beaver Lodge River" on his accompanying map. [401] At this point in his report, Macoun wrote that 20-25 settlers "went to Grande prairie during the winter and spring of 1903, but none remained." He said he spoke with a number of them that month (August 1903) but could not get a clear answer as to why none of them stayed. [402] Farther along, Macoun noted there was trail to Kleskun Lake, another place said to be of low agricultural value, and a wagon road that follows ridges and high ground from Grande Prairie (in the vicinity of Kleskun [Saskatoon] Lake) to Spirit Lake. Macoun's map shows this wagon road extending from Spirit Lake to Dunvegan and from Dunvegan to Peace River Landing.[403]

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to refer to what is today Bear River (as described above), which Dawson in 1879 (Dawson 1881:53B and Map) had also identified as Bear River. In any case, it has not been possible to resolve this apparent contradiction.

[395] Macoun 1904:18E.

[396] This creek, which is named after George Dawson, was identified on Dawson's 1879 map as "Dawson's Brook". See Dawson 1881:Map.

[397] Macoun 1904:18E-19E

[398] Macoun 1904:19E-21E.

[399] George Dawson and his party had camped in this same general area on the night of 20 August 1879. Dawson referred to this same creek as "Fish River" and showed its location on his map. See Dawson 1881: 53B and Map; Dawson 1849-1901: Entries for 19 and 20 August 1879. While Dawson's map identifies the location of "Fish River," James Macoun's map does not, even though Macoun's narrative's mention of what he calls "Fish Creek" is clearly a reference to this same creek, Colquhoun Creek. See Macoun 1904:22E and Map.

[400] Macoun 1904:22E.

[401] Macoun 1904:23E and Map.

[402] Macoun 1904:23E.

[403] Macoun 1904:25E and Map.

After following this wagon road to Spirit River, Macoun and his colleague on August 27th travelled eastward to Burnt River.[404] They crossed Burnt River and while heading farther to the east, toward Smoky River, Macoun noted the existence of prairie areas known as "Grizzly Prairie" and/or "Fox Prairie," which names, he added, may refer to one and the same prairie. Macoun said this was "as good a tract of country as any we have passed through during the summer, if not the best." It extended from the trail to the Birch Hills, and was described by Macoun as "ideal cattle country." The trail, Macoun wrote, passed to the north of "Egg Lake" (presumably, Kakut Lake on today's maps). Macoun crossed the Smoky River at a strong rapid about 16 Km (10 miles) down the Smoky from its confluence with the Little Smoky, where they found an old canoe.[405] The crossing was easy but the land from this river to "Stinking Lake" (Winagami Lake on today's maps) was a route more easily travelled in the winter, for it was broken with innumerable marshes and ponds, once habitat for beaver, an animal now extinct from the area, according to old hunters Macoun interviewed at Lesser Slave Lake. [406] Macoun gained further intelligence on the Peace River region from missionaries and others at Lesser Slave Lake. [407]

Up until 1911, the steady stream of settlers to the Peace River country came by way of Lesser Slave Lake, across the lake to Grouard at its western end, and then overland ninety miles by wagon road to Peace River Crossing. By July 1910, however, the transcontinental railway had expanded as far west as Edson, Alberta, and the people of Grand Prairie urged the government to expand the lines to take advantage of the agricultural resources of the Peace River. The promise of a railway encouraged further settlement. While the outbreak of World War 1 temporarily halted ambitious plans for development, several years later land needed for soldiers returning from the war bought increased pressures on the Peace River region, [408] including lands that had been reserved for the Horse Lake First Nation.

## 8.2 Development of a Mixed Economy

Published Annual Reports of officials associated with Treaty 8 and its administration provide information on the economic activities of the Horse Lake First Nations' ancestors at the time of and after they adhered to Treaty 8.

The Commissioners observed that, at the time of Treaty 8, their main difficulty in getting the bands to adhere was the apprehension that hunting and fishing privileges were to be curtailed. Promises of ammunition and twine mollified the Aboriginal people's fears that new laws would unreasonably restrict their ability to make a living by traditional pursuits. The Commissioners

[404] Macoun 1904:25E-26E. Macoun's accompanying map shows this same creek as "Riviere au Brulé" (meaning 'burnt creek'); present-day maps refer to it either as Saddle Creek or as Burnt Creek.

[405] Macoun 1904:26E-27E and Map.

[406] Macoun 1904:27E and Map.

[407] Macoun 1904:27E-28E.

[408] James G. MacGregor (1981). *A History of Alberta*. Edmonton: Hurtig Publishers.

solemnly agreed that such laws would protect the fish and game without impinging upon the Indigenous people's hunting and fishing.[409]

While Dunvegan Band members (ancestors of today HLFN) continued an Aboriginal subsistence pattern in the first several years after Treaty, despite the influx of settlers, they became increasingly in supplementing their hunting and trapping with agricultural pursuits. H.A. Conroy, the Inspector for Treaty 8, reported in 1902 that the Aboriginal people throughout the Treaty 8 Inspectorate "had a very successful hunting season."[410] Similar information, but this time specific to the Dunvegan Band, was reported by Conroy in 1903, at which time he stated that these Aboriginal people "apparently had a very successful year in their hunting and trapping."[411] However, after Conroy's visit with members of the Dunvegan Band in the summer of 1904, he reported:

> …Now that the white man is going into their country, they want to build houses and cultivate their ground and want tools to work with—carpenter's tools and gardening implements—as they say they wish to raise a few potatoes, which would add considerably to their comfort. They are perfectly satisfied to live in the old way, but now, since game is not over-abundant, they will have to think about tilling the land…[412]

> …reached Dunvegan on June 7 [1906], the day appointed for payment. The Beavers were settled with at this point. The band seemed to be very well satisfied at having their reserves surveyed and now are going to build houses; they have asked for garden tools and tool chest, and I think quite a number mean business and intend building houses on the reserve. Like almost all the rest of the

[409] David Laird, J.H. Ross, and J.A.J. McKenna, 22 September 1899. Report of Commissioners for Treaty 8, in, Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1899, p. xxxvi. *Canada, Sessional Papers, Vol. 11, Fifth Session of the Eighth Parliament of the Dominion of Canada, Session 1900.*

[410] H.A. Conroy, Inspector for Treaty 8, 1 October 1902. Report of Commissioners for Treaty 8, in, Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1902. *Canada, Sessional Papers, Vol. 11, Third Session of the Ninth Parliament of the Dominion of Canada, Session 1903.* P. 178.

[411] H.A. Conroy, Inspector for Treaty 8, 5 October 1903. Report of Commissioners for Treaty 8, in, Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1903. *Canada, Sessional Papers, Vol. 11, Fourth Session of the Ninth Parliament of the Dominion of Canada, Session 1904.* P. 235.

[412] H.A. Conroy, Inspector for Treaty 8, October 12, 1904. Report of Commissioners for Treaty 8, in, Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1904. *Canada, Sessional Papers, Vol. 11, First Session of the Tenth Parliament of the Dominion of Canada, Session 1905.* P. 200.

> Indians, they have used good judgment in selecting their reserve.[413]

In the first report of the Lesser Slave Lake Agency, dated October 1, 1908, Indian Agent W.B.L. Donald wrote with respect to the Dunvegan band:

> …This reserve is situated on the north side of the Peace River, twenty miles from Dunvegan, and contains 12,000 acres. A small part is timbered, but it is largely open country, and is excellent for farming and pasturage.
>
> Population. –at the last annual payment there were 114 Indians in this band.
>
> Occupations. –these Indians live by fishing and hunting.
>
> Stock.—they are the owners of some good horses.
>
> Buildings.—a few members of this band are now building log houses…[414]

Treaty Inspector H.A. Conroy's report submitted at about that same time also noted that the Dunvegan people carried on their traditional pursuits of hunting and trapping:

> know practically nothing of agriculture and are purely hunting Indians. They certainly have the finest piece of country to hunt over that it has been my pleasure to see. They are complaining that the fur-bearing and food animals are disappearing. I believe that the time is not too far distant when we shall have to assist them with farm implements and encourage them to make their living by agricultural pursuits. The country is excellent for stock raising. These Indians, as a rule, have very few shacks and, like the Indians of St. Johns [Fort St. John], move from place to place. I think it will be hard to get them to settle down to any industrial pursuits. [415]

A hard winter hit the Dunvegan band in 1907-1908, according to Inspector Conroy. The people reported it was one of the hardest they had experienced for many years. There was a scarcity of fur-bearing animals and "no moose of any account." Compounding the problem of the lack of

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[413] H.A. Conroy, Inspector for Treaty 8, December 7, 1907. Report of Commissioners for Treaty 8, in, Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1907. *Canada, Sessional Papers, Vol. 14, Fourth Session of the Tenth Parliament of the Dominion of Canada, Session 1907-1908, Vol. XLII.* P. 181.

[414] W.B.L. Donald, Report of Lesser Slave Lake Agency. 1 October 1908. Annual Report of the Department of Indian Affairs for the Year Ended March 31, 1909. *Canada, Sessional Papers, Vol. 17, Second Session of the Eleventh Parliament of the Dominion of Canada, Session 1910. Vol. XLIV*. P. 181

[415] H.A. Conroy. Supplementary Report of Inspector for Treaty No. 8, 19 February 1909. *Canada, Sessional Papers, Vol. 17, Second Session of the Eleventh Parliament of the Dominion of Canada, Session 1910. Vol. XLIV*. P. 199.

game was the lack of fish, as there were said to be "no fishing lakes, so that when the hunt fails, they [were] at a great loss, as they have no fish to depend upon for a living." [416]

In 1911, less than half of the total population of 130-140 was living on IR 152. [417] Members of the Dunvegan band continued to practise a hunting and trapping lifestyle.

[416] H.A. Conroy, Inspector for Treaty 8, December 30, 1909. Report of Commissioners for Treaty 8, in, Annual Report of the Department of Indian Affairs for the Year Ended March 31, 1910. *Canada, Sessional Papers, Vol. 19, Third Session of the Eleventh Parliament of the Dominion of Canada, Session 1911, Vol. XLV.* P. 185-186.

[417] W.B.L. Donald, Report of Lesser Slave Lake Agency, 1 April 1911. Inspector for Treaty 8, December 30, 1909. Report of Commissioners for Treaty 8, in, Annual Report of the Department of Indian Affairs for the Year Ended March 31, 1911. *Canada, Sessional Papers, Vol. 20,First Session of the Twelfth Parliament of the Dominion of Canada, Session 1911-1912, Vol. XLVI,* P. 175.

## 9.0 Establishment of Indian Reserves for the Horse Lake First Nation

The following section discusses how Indian Reserves were proposed and surveyed in the early 1900s for ancestors of today's Horse Lake First Nation. Members of the HLFN in earlier years have been referred to as: "Beaver Indians of Dunvegan"; "Dunvegan Band"; "Beaver Indian Band"; "Beavers of Grande Prairie"; and, "Beaver of Horse Lake & Clear Hills Band." Also discussed here, briefly, are some of the circumstances by which two of these same Indian Reserves were purportedly surrendered in 1928-1929.

### 9.1 Background to Establishment of HLFN Indian Reserves

Indian Commissioner David Laird in a 5 February 1900 letter to Indian Affairs urged that, further to the terms of Treaty 8, Indian Reserves be established quickly in order to avoid complications involving non-Aboriginal settlers' claims. [418] Treaty 8 Commissioner J.A. Macrae[419] was subsequently instructed by J.A. J. McKenna [420] to "visit the bands wanting land and, without encouraging the immediate selection of reserves, to have those Indians who strongly wanted them stake land in preparation for an official survey." [421] Later that year, Sergeant G.D. Butler of the North West Mounted Police's Peace River Landing detachment wrote to David Laird, Indian Commissioner, on 2 November 1900, transmitting the land selections of Duncan Testawich and his band (today's Duncan's First Nation).[422] However, this 2 November 1900 letter of Butler's concerning Duncan Testawich's Band did not contain information about where members of the neighbouring "Dunvegan Band"—ancestors of today's Horse Lake First Nation—wanted their Indian Reserve lands to be set aside.

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[418] Letter of 5 February 1900 from Indian Commissioner David Laird to J.D. McLean, Secretary of Indian Affairs, Ottawa. Cited in Bennett McCardle and Richard Daniel (1976). Research Papers on the Implementation of Treaty Eight, 1899-1940. Prepared for Treaty and Aboriginal Rights Research of the Indian Association of Alberta. While this letter is cited as fn. 36 on pp. 14 and 100 of McCardle and Daniel 1976, these authors do not provide the actual source of this document.

[419] J.A. Macrae was an Ottawa Indian Affairs official who in 1899 had been appointed as Special Commissioner for 1900, to obtain the adhesion of those Aboriginal groups who did not sign on with Treaty 8 in 1899. See Charles Mair (1999). *Through the Mackenzie Basin: An Account of the Signing of Treaty No. 8 and the Scrip Commission, 1899*, with Introductions by David Leonard and Brian Calliou. The University of Alberta Press and the Edmonton & District Historical Society, Edmonton. Page 66. This 1999 publication is a facsimile reprint of portions of Charles Mair's classic 1908 book, *Through the Mackenzie Basin: A Narrative of the Athabasca and Peace River Treaty Expedition of 1899, With a Map of the Country Ceded and Numerous Photographs of Native Life and Scenery*.

[420] At the time he was appointed as one of the 1899 Treaty 8 Commissioners, J.A.J. McKenna was Private Secretary to the Superintendent General of Indian Affairs. See Mair 1999:25.

[421] Letter of 20 February 1900 from J.A.J. McKenna to the Deputy Superintendent General of Indian Affairs. Library and Archives Canada (LAC), Ottawa. RG 10, Vol. 7777, File 27131. Cited in McCardle and Daniel 1976:14, fn.37.

[422] See David Leonard (1995). *Delayed Frontier: The Peace River Country to 1909*. Detselig Enterprises Ltd. and the Edmonton & District Historical Society, Calgary, Alberta (reprinted in 2000). Pp. 183-193.

As Neill Reddekopp has pointed out, Indian Reserves for the Beaver/Dunvegan Band were not surveyed in 1901, nor were they surveyed in 1902, even though the Indian Department surveyor, A.W. Ponton, had stated in January 1902 that "the Indians of [the Peace River] district should have their lands secured to them in advance of settlement." [423] Senior officials in the Indian Affairs Department at that time, however, were of the opinion that there was not any significant move of settlers into this portion of the Peace River district that was being frustrated by the failure to set aside Indian Reserve lands. [424] Consequently, surveys in this region were not included in the Department's survey programme for 1902. [425] Nor were they included for 1903,[426] by which time conflicts that the Indian Department surveyor had predicted between settlers and the local Aboriginal people, began to appear. [427]

Sergeant Butler of the NWMP, who had been required to intervene in local disputes between settlers and members of the Duncan's Band (downriver from the Beaver/Dunvegan Band), suggested that Indian Reserves be surveyed in this region before the end of the summer of 1904.[428] But because Butler's request was made in late July 2004, Indian Commissioner David Laird concluded it was too late to arrange for surveys that year and suggested instead that they be undertaken in 1905. [429] The Indian Department then committed to have the surveys done in that year, 1905. [430]

## 9.2 Survey of HLFN Indian Reserves, 1905-1959

The Indian Department in Ottawa issued instructions to surveyor J. Lestock Reid in February 1905 to survey "the reserves or reserves that may be required at or near Peace River." At the

[423] Memo of Surveyor A.W. Ponton, 30 January 1902. LAC, RG 10, Vol. 3960, File 141977-7. Cited in G. Neil Reddekopp (1996). The Creation and Surrender of the Beaver and Duncan's Band's Reserve. Alberta Aboriginal Affairs, Indian Land Claims, Paper No. 2. Page 24, fn. 125.

[424] Letter of 13 February 1902 from J.A.J. McKenna to J.D. McLean, Secretary of Indian Affairs. LAC, RG 10, Vol. 3960, File 141977-7. Cited in Reddekopp 1996:25, fn.127.

[425] Letter of 17 March 1902 from A.W. Ponton to J.D. McLean. LAC, RG 10, Vol. 3960, File 141977-7. Cited in Reddekopp 1996:25, fn.128.

[426] Letter of 17 March 1902 from A.W. Ponton to J.D. McLean. LAC, RG 10, Vol. 3960, File 141977-7. Cited in Reddekopp 1996:25, fn.128.

[427] Reddekopp 1996:26.

[428] Letter of 28 July 1904 from Sergeant G.D. Butler, Peace River Landing detachment of the North West Mounted Police, to Indian Commissioner David Laird. Aboriginal and Northern Affairs Canada, Ottawa. File 777/30-7-151, Vol. 1. Cited in Reddekopp 1996:26, fn.132.

[429] Letter of 19 August 1904 from Indian Commissioner David Laird to J.D. McLean, Secretary of Indian Affairs. Aboriginal and Northern Affairs Canada, Ottawa. File 777/30-7-151, Vol. 1. Cited in Reddekopp 1996:26, fn.133.

[430] Letter of 3 September 1904 from J.D. McLean to David Laird. Aboriginal and Northern Affairs Canada, Ottawa. File 777/30-7-151, Vol. 1. Cited in Reddekopp 1996:26, fn.134.

same time the Department instructed Reid to survey Indian Reserves, they advised him to ensure that "the Indians are not deprived of any land that is justly or properly theirs." [431]

Reid began his surveys in April 1905. During this month he surveyed eight parcels of land for "Duncan Testawit's [Testawich's] Band," but before Reid was to survey two more reserves for the Duncan's Band, he was visited by the Chief and Headman of the Dunvegan (Beaver) Band who requested that he survey their lands. [432] Writing from "Old Wives Lake"[433] on 26 April 1905, Reid stated:

> …
>
> The Chief of the Dunvegan Band "Neepee No. 14" and the Head Man "Natoosis No. 1" [434] came to my camp on Sunday last and desired I would come and survey their lands. As I heard they were laying claim to a very large tract of county and warning settlers from settling thereon I will go over to them about 25 miles from here on completing this work as I think under the circumstances [?] ___ [?] would desire the survey to be made.
>
> I found there are three or four Indians of the Dunvegan Band settled along the River among the Peace River Crossing Band and at their request this land was surveyed for them there. [435]
>
> …

[431] Letter of 10 February 1905 from J.D. McLean, Secretary of Indian Affairs, Ottawa, to surveyor J. Lestock Reid. Aboriginal and Northern Affairs Canada, File 777/30-7-151, Vol. 1, cited in Reddekopp 1996:27, fn.'s 135 and 138.

[432] Letter of 26 April 1905 from J. Lestock Reid to Frank Pedley, Deputy Superintendent General of Indian Affairs, Ottawa. Aboriginal and Northern Affairs Canada, File 777/30-8, Vol. 1. A photocopy of this letter appears as Document 34 in Joan Holmes & Associates (1989). The Establishment of Reserves in Treaty Eight. Report prepared for the Chief General Counsel, Department of Justice, Ottawa, for the *Attorney General of Canada vs. the Attorney General of Alberta, the Lubicon Lake Band, et al*. litigation. Page 76. Copy on file with the Headquarters Library, Aboriginal and Northern Affairs Canada, Ottawa. The photocopy of this document in the 1989 Holmes report clearly indicates the date of this Reid-to-Pedley letter as April the 26th, as does the typescript (at pp. 71-72 and 76) and the document index (at p. 6). Notwithstanding, the date is given as April "25th" in Reddekopp (1996:28, fn. 143; repeated at p. 31, fn. 161, p. 32, fn. 167, and p. 39, fn. 199), and in the Indian Claims Commission 1999 report (page 11, fn. 32), citing Reddekopp 1996.

[433] This small lake, known in earlier times as "Lac des Femmes ['Lake of Women']," is located near the northern end of what is today Duncan's IR 151A, just south of Highway 2. See Dawson 1849-1901: Entry for 29 August 1879; Dawson 1881: Map (Copy in Section 11.4 of the present report).

[434] This information about "Neepee" and "Natoosis" is confirmed in the 1905 Treaty 8 Annuity List for the "Beaver Band Paid at Dunvegan"; number 1 on this list is "Natoosis (Head Man)" and number 14 on this list is "Neepee (Chief)." See LAC, RG 10, Vol. 9438. Indian Affairs, Treaty Annuity Paylists, Treaties 4, 6, 7, and 8, 1905. Treaty No. 8, Beaver Band paid at Dunvegan, June 7th , 1905. "Neepee" (also known as "L'eau," 'water') had been recognized as Chief of the Beaver/Dunvegan Band since 1900. See Beaver [Dunvegan] Band Annuity Paylist, 1900. Genealogical Research Unit, Department of Indian Affairs. Cited in Reddekopp 1996:13, fn. 58.

[435] Reid to Pedley, 26 April 1905. Aboriginal and Northern Affairs Canada, File 777/30-8, Vol. 1.

Acknowledging this 26 April 1905 letter, Indian Commissioner Laird on June 6th 1905 told Surveyor Reid, in reference to the Dunvegan Band members living among Duncan Testawich's Band : "I do not like members of the Dunvegan Band receiving land among the Peace River Crossing Band [Duncan's Band], but I suppose it could not well be avoided."[436] In fact, the Treaty 8 Annuity Paylists show that by June 1905, five families totalling twelve people had transferred from the Dunvegan/Beaver Band to the Duncan's Band.[437]

While Laird also stated in his 6 June 1905 letter to Reid that "The Dunvegan Band's Reserve should be surveyed as soon as possible, as settlers may be squatting [there] this summer,"[438] the documentary record indicates that Reid had already surveyed, between May 4th – 11th, 1905, an approximately 25 square mile Indian Reserve south and southeast from Hay Lake, located about 20 Km (12 miles) north from Dunvegan.[439] This reserve was known as "Beaver Indian Reserve No. 152,"[440] and was set aside in common for members of the Beaver/Dunvegan Band.[441]

Reid also surveyed between 4-11 May 1905 a 260 acre Indian Reserve at Green Island Flat, on the north shore of the Peace River about 10 Km (approximately 6 miles) downriver from Dunvegan.[442] This reserve was known as "Beaver Indian Reserve 152A."[443] The fact that this reserve was established "at the request of Chief Neepee" and was intended for him[444]--or more

[436] Letter of 6 June 1905 from Indian Commissioner Harold Laird to Surveyor J. Lestock Reid. LAC, RG 10, Vol. 3569, File 84, Part 21.

[437] Indian Affairs, Treaty Annuity Paylists, Treaties 4, 6, 7, and 8, 1905. Treaty No. 8, Duncan Tustawits Band paid at Peace River Landing, 9 June 1905. LAC, RG 10, Vol. 9438.

[438] Laird to Reid, 6 June 1905. LAC, RG 10, Vol. 3569, File 84, Part 21.

[439] Excerpt from J. Lestock Reid's 1905 Diary. LAC, RG 10, Vol. 4005, File 240050-3. Cited in Reddekopp 1996:32, fn. 169. We have not seen this diary, itself, but in a subsequent document that we have seen (Privy Council Order-in-Council 917, 3 May 1907. LAC RG 2, Vol. 929, File 166D), the size of this reserve is said to be 24 square miles.

[440] Canadian Land Survey Records (CLSR), Plan 856A, Micro Plan 11. Beaver Indian Reserve No. 152 (identified as Document 33 in the Holmes & Associates 1989 report; also cited in Reddekopp 1996:32, fn. 169).

[441] Reddekopp 1996:36.

[442] Reddekopp 1996:32, citing at fn. 169 an excerpt from Reid's 1905 diary, and also citing, at fn. 170, a 15 January 1906 letter from Reid to Frank Pedley, Deputy Superintendent General of Indian Affairs. Lac, RG 10, Volume 4005, File 240050-3.

[443] CLSR, Plan T1696, Micro Plan 1087. Plan of No. 152A Indian Reserve, Green Island Flat, For Beaver Indians, Dunvegan (Neepee Chief) Treaty No. 8. Document 32 in the Holmes & Associates 1989 report; see also Reddekopp 1996:32, fn. 169.

[444] Reddekopp 1996:32, citing at fn. 169 an excerpt from Reid's 1905 diary, and also citing, at fn. 170, a 15 January 1906 letter from Reid to Frank Pedley, Deputy Superintendent General of Indian Affairs. LAC, RG 10, Volume 4005, File 240050-3.

specifically, for Chief Neepee and his wife, as was later stated[445]--suggests IR 152A was an Indian Reserve in severalty. But Reddekopp considered the status of IR 152A to be "questionable"[446] and stated:

> In terms of the intention of Chief Neepee, it is unclear whether he wished to live separate from the remainder of the Beaver Band, a suggestion which his status might make unusual. The amount of land surveyed does not correspond to the amount to which the Neepee family would be entitled under Treaty 8's severalty provision.[447] There is no Privy Council Order to reveal information about the nature of the land, as none was passed prior to the 1928 surrenders. [448]

Surveyor Reid in January 1906 forwarded his final report for the 1905 surveys and his completed survey plans to the Department of Indian Affairs in Ottawa. [449] In July 1906, these materials (comprised of 10 surveys of IR's for the Duncan's Band and 2 for the Dunvegan/Beaver Band) were sent to the Department of the Interior for confirmation.[450] The Surveyor General indicated, after reviewing all the survey plans, that 3 of them, including the lands surveyed for the Beaver/Dunvegan Band's Chief Neepee, had not been connected to existing survey plans. Notwithstanding, he stated there was no reason not to proceed with confirmation of the 9 other Indian Reserves.[451] This was accomplished through Privy Council Order-in-Council 917, dated 3 May 1907. Among the various reserves confirmed by Order-in-Council 917 "for the said Indians" was "Beaver Reserve number 152, near Dunvegan, containing Twenty four square miles."[452]

The documentary record reviewed to date confirms Neil Reddekopp's conclusion that:

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[445] Letter of 14 February 1912 from J.D. McLean, Assistant Deputy and Secretary, Indian Affairs, Ottawa, to Harold Laird, Assistant Indian Agent, Grouard. Aboriginal and Northern Affairs Canada, File 777/30-8-152, Vol. 1. Document 65 in the Holmes & Associates 1989 report.

[446] Reddekopp 1996:42.

[447] Here Reddekopp inserts a footnote (No. 209 in his report) which relies on Reid's 15 January 1906 letter to Pedley (LAC, RG 10, Volume 4005, File 240050-3).

[448] Reddekopp 1996:42.

[449] Letter of 15 January 1906 from J. Lestock Reid to Frank Pedley, Deputy Superintendent General of Indian Affairs. Lac, RG 10, Volume 4005, File 240050-3. Cited in Reddekopp 1996:34, fn. 178.

[450] Letter of 13 July 1906 from J.D. McLean, Secretary of Indian Affairs to P.G. Keyes, Secretary of the Department of the Interior. Aboriginal and Northern Affairs Canada, File 777/30-8, Vol. 1. Cited in Reddekopp 1996:34, fn. 179.

[451] Letter of 26 September 1906 from Surveyor General E.Deville to the Deputy Minister of the Interior. LAC, RG 15, Vol. 970, File 34571A. Cited in Reddekopp 1996:34, fn. 180.

[452] Privy Council Order-in-Council 917, dated 3 May 1907 and published in the Canada Gazette on 29 June 1907, page 3163. LAC, RG 2, Vol. 929, File 1666D. (Document 40 in the Holmes & Associates 1989 report).

> No action was taken prior to 1928 to confirm the Green Island Flat Reserve, nor does there appear to have been any request from Indian Affairs to do so subsequent to the original 1906 request. [453]

In chronological order, the next Indian Reserve that was set aside for ancestors of today's Horse Lake First Nation was Horse Lakes IR 152B. While this IR was not officially confirmed until 1920, its origins go back to *circa* 1900 and earlier, during which times various source materials indicate that HLFN ancestors were associated not only with the vicinity of Dunvegan but also with the Grande Prairie region. For example, a White settler who observed the Treaty 8 Annuity payments at Dunvegan in June 1905 recalled seeing there "more than fifty teepees of Indians from Grande Prairie, Spirit River, and north of Dunvegan."[454] Several years earlier, as has been noted above, "Neepee" had been recognized as Chief of the Beaver/Dunvegan Band since 1900.[455] This same 1900 Annuity paylist also identifies "Chatelain" [456] who, in another document, was recognized as the Chief of the Beaver Indians at Beaverlodge. [457] Still another source has identified the family of "Chattelain (spelled a variety of ways, including Shettler)" as "the largest Beaver family" in the Grande Prairie region *circa* 1900.[458] The Beaver/ Dunvegan Band Annuity Paylist for 1901 identifies "La Glace" [459] ['ice'] who is mentioned elsewhere as the Chief of the Beaver Indians at La Glace.[460] References to Beaver Indian men known as "La Glace" and "Chastellain" ("Chatelaine") can also be found in the 1824-1825 Fort Dunvegan Post Journal.[461] Historian David Leonard has written that around 1900, the family of "La Glace" was "the most enduring" Beaver family in the Grande Prairie region.[462]

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[453] Reddekopp 1996:35.

[454] Margaret Loggie 1955-1956. Interview of Campbell Benson, Moberly Lake, British Columbia, September 1955 and June 1956. Loggie Papers, Interviews with Pioneers. Glenbow Archives, Calgary. D971.23.L832, file 36.

[455] Beaver [Dunvegan] Band Annuity Paylist, 1900. Genealogical Research Unit, Aboriginal and Northern Affairs Canada. Cited in Reddekopp 1996:19, fn. 96.

[456] Beaver [Dunvegan] Band Annuity Paylist, 1900. Genealogical Research Unit, Aboriginal and Northern Affairs Canada. Cited in Reddekopp 1996:19, fn. 96.

[457] Margaret Loggie 1956. Interview of St. Pierre Ferguson [born in 1876], Rycroft, Alberta, May and July 1956. Loggie Papers, Interviews with Pioneers. Glenbow Archives, Calgary. D971.23.L832, file 36. See also Reddekopp 1996:19, fn. 97.

[458] See David Leonard (2008). *The Grande Prairie of the Great Northland: The Evolution of a County 1805-1951*. Published by the County of Grande Prairie, Alberta. Page 15.

[459] Beaver [Dunvegan] Band Annuity Paylist, 1901. Genealogical Research Unit, Aboriginal and Northern Affairs Canada (cited in Reddekopp 1996:19, fn. 96.

[460] Margaret Loggie 1956. Interview of St. Pierre Ferguson [born 1876], Rycroft, Alberta, May and July 1956. Loggie Papers, Interviews with Pioneers. Glenbow Archives, Calgary. D971.23.L832, file 36. See also Reddekopp 1996:19, fn. 97.

[461] For "La Glace," see Fort Dunvegan Post Journal 1824/25. Hudson's Bay Company Archives (HBCA), Provincial Archives of Manitoba, Winnipeg. B.56/a/2, hand-numbered folios 2-5, entry for 17 October 1824. For "Chastellain," ("Chatelaine"), see this same journal, stamped folios 4-13, entry for 21 April 1825.

[462] Leonard 2008: 15.

A review of the published and unpublished literature confirms Reddekopp's statement that:

> While the 1905 surveys [for the Dunvegan/Beaver Band] took place for the most part in anticipation of imminent non-Indian settlement, the setting aside of land at Horse Lake took place in direct competition to the same process. [463]

There was a "boom" in settlement in the Grande Prairie region approximately between 1909-1912. Land surveying had begun in earnest around Grande Prairie in 1909; by 1911, the first Dominion Land Office had opened in Grande Prairie, and by the end of 1912, most lands suitable for farming in this region had been opened for homesteads. [464] It was in 1911 that a "Beaver Reserve" in the "Grande Prairie district" was first discussed. [465] This year, 1911, was also the first year that Annuity payments were made for Beaver Indians in the vicinity of Grande Prairie.[466] Indian Agent Harold Laird reported on 30 October 1911 that:

> Judging from the extent of the Beaver Reserve [No. 152], north of Dunvegan, land must have been surveyed [in 1905] for the whole number of Indians enrolled in the Dunvegan Band. None of the Beaver Indians of Grand[e] Prairie were consulted, so they claim, when this Reserve was surveyed. These Indians, although they came to Dunvegan, when Treaty was first made, to meet the Treaty Commissioners, live and always have lived on Grand[e]e Prairie. They therefore have requested that a small Reserve be set aside for themselves, convenient to their hunting grounds, to which they can come and go without interfering with the settlers, by whom the land on Grand[e] Prairie is being rapidly taken up.[467]

Accompanying this 30 October 1911 is a list of "Dunvegan [Beaver] Band Reserve, No. 152, Indians who received land in 1904 [sic]"; members with the following Band numbers were said to be living "at Grand Prairie" in "1912" [sic]: [468]

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[463] Reddekopp 1996:22, 43.

[464] See: David Leonard and Victoria Lemieux (2003). *The Lure of the Peace River Country 1872-1914*. Detseling Enterprises and Grande Prairie Museum. Pp. 36-37; Leonard 2008:33-52, 74-75.

[465] Reddekopp 1996:43; see also excerpts from a letter of 30 October 1911 from Assistant Indian Agent Harold Laird, Grouard, to the Secretary of the Department of Indian Affairs, Ottawa. Aboriginal and Northern Affairs Canada, File 777/30-8-152. Vol. 1 (Document No. 57 in the Holmes & Associates 1989 report).

[466] Reddekopp 1996:22, 43.

[467] Excerpts from letter of 30 October 1911 from Assistant Indian Agent Harold Laird, Lesser Slave Lake Agency, Grouard, to J.D. McLean, the Assistant Deputy and Secretary of the Department of Indian Affairs, Ottawa. Aboriginal and Northern Affairs Canada, File 777/30-8-152. Vol. 1 (Document No. 57 in the Holmes & Associates 1989 report).

[468] Appendix [No. 1 of 2] to letter excerpts of 30 October 1911 from Laird to the Secretary of Indian Affairs. AANC, File 777/30-8-152. Vol. 1. The dates given in this first attachment to these 30 October 1911 letter excerpts are puzzling: it was 1905, and not "1904," that the Dunvegan/Beaver Band Reserve No. 152 was first surveyed;

| | | | | |
|---|---|---|---|---|
| No. 6 | Louis Toussaint | Lives at Grand Prairie | | |
| No. 17 | Chatlas [“Chatelaine”] [469] | “ | “ | |
| No. 30 | Arnoochie Josette | “ | “ | “ |
| No. 32 | Ass-sin-ill | “ | “ | “ |
| No. 47 | Paul Davies [Davis] | “ | “ | “ |
| No. 48 | Old Davies [Davis] | “ | “ | “ |
| No. 49 | Arnochie Chickeway | “ | “ | “ |
| No. 50 | Pierre Chatlas [“Chatelaine”] | “ | “ | |
| No. 51 | La Glace | “ | “ | “ |
| No. 55 | Madeline | “ | “ | “ |
| No. 56 | La Ma Chea | “ | “ | “ [470] |

Following this is a second list, identified as “Reserve No. 152, Dunvegan Band, who have not received land”;

| | | | | |
|---|---|---|---|---|
| No. 33 | Arkisstay | “ | “ | “ |
| No. 37 | Pierre Wanizanche | “ | “ | “ |
| No. 42 | Mary Tranquille | “ | “ | “ |
| No. 46 | Baptiste Davies [Davis] | | “ | “ |
| No. 54 | Alexander Sicconnee | “ | “ | “ |
| No. 59 | Half Chatlas [“Chatelaine”] | | “ | “ [471] |

Assistant Indian Agent Laird provided more details on this situation of the Grande Prairie Beaver people and their need for a separate Indian Reserve in his letter of 20 November 1911:

> …in my report on the 1911 [Annuity] Payments, in this Agency, reference is made to a request for a Reserve by the Beaver Indians, of the Dunvegan Band, living in Grand[sic] Prairie.

moreover, it is unusual to see the date “1912” on an attachment to an October 30th 1911 letter. Research undertaken to date has not resolved these apparent contradictions.

[469] As noted in a local history publication, “The name Chatlas is today known as Chatelaine.” See: Pioneer Book Committee (1973). *Pioneer Round-Up, A History of Albright, Denmitt, Goodfare, Hythe, Lymburn, Valhalla*. Published by the Pioneer Historical Society of Hythe and Area. Page 431.

[470] Appendix [No. 2 of 2] to letter excerpts of 30 October 1911 from Laird to the Secretary of Indian Affairs. AANC, File 777/30-8-152. Vol. 1.

[471] Appendix [No. 2 of 2] to letter excerpts of 30 October 1911 from Laird to the Secretary of Indian Affairs. AANC, File 777/30-8-152. Vol. 1.

> These Indians, although they came to Dunvegan, when Treaty was made in 1899, live and have always lived on Grand Prairie. They claim that they were not consulted when Beaver Reserve, No. 152, north of Dunvegan, was surveyed and that they did not even know of it until some time after the survey was made. Their hunting grounds, which lie to the south and west of Grand Prairie, are over one hundred miles from the above mentioned Reserve at the nearest point.
>
> For the above reasons, they request that a small Reserve be set aside for themselves on Grand Prairie, convenient to their hunting grounds. They exceed in number the Indians living north of Dunvegan, as enclosed lists show, but they do not ask for land in proportion to their number but only for a few sections, to which they can come and go without interfering with the settlers on the Prairie, by whom the land is being rapidly taken up.
>
> The location desired by these Indians, if their request is granted, is at Horse Lake, almost at the extreme west of Grand Prairie, and is situated as near as I could ascertain, in Township Number 73 or 74, Range 12, west of the 6th Meridian. This land, I understand, was subdivided last summer, but has not yet been thrown open [for homesteaders]. As the land has been surveyed, a Reserve could easily be located without the expense of sending a surveyor from the Department.
>
> The above mentioned Indians of Grand Prairie have elected one of their number, Chatlas, No. 17, Dunvegan [Beaver] Band,[472] as their Headman or Councillor and ask that his election be approved of. [473]

The list, totalling 81 people, accompanying this November 20th letter is entitled "Beaver Band, Dunvegan, Indians living on Grand Prairie" and contains the same names of the Indian people identified as living at Grande Prairie in the two lists accompanying the 30 October letter.[474]

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[472] Presumably there exists a second copy of this same letter, as Reddekopp (1996:43, fn. 212) ,who cites the same source, "DIAND File 77[777]/30-8-152B, Volume 1," identifies "Antoine Chatelain, Number 17" as the man elected as Headman. "Chatelain" is another spelling of the name "Chatlas." While we have seen the document (No. 59) referred to in the Holmes & Associates 1989 report, we have not seen the version of the same document cited in Reddekopp's 1996 report.

[473] Letter of 20 November 1911 from Assistant Indian Agent Harold Laird, Lesser Slave Lake Agency, Grouard, to J.D. McLean, the Assistant Deputy and Secretary of the Department of Indian Affairs, Ottawa. Aboriginal and Northern Affairs Canada, File 777/30-8-152B, Vol. 1 (Document No. 59 in the Holmes & Associates 1989 report).

[474] "Beaver Band, Dunvegan, Indians living on Grand[e] Prairie." List accompanying Letter of 20 November 1911 from Assistant Indian Agent Harold Laird, Lesser Slave Lake Agency, Grouard, to the Secretary of the Department of Indian Affairs, Ottawa. Aboriginal and Northern Affairs Canada, File 777/30-8-152B, Vol. 1 (Document No. 59 in the Holmes & Associates 1989 report).

Further to this request for another Indian Reserve, Assistant Deputy and Secretary of Indian Affairs J.D. McLean reminded Indian Agent Harold Laird on 14 February 1912 that when IR's 152 and 152A were being surveyed by Reid in 1905, as requested by "the Chief at Dunvegan, Neepee, and the Head Man, Natoosis," he (Reid) did not report that there were any objections raised to the surveys. Notwithstanding, McLean continued:

> The Department would be willing to ask for a small reserve as stated in your [Laird's] letter of Nov. 20, last [1911]. It is, however, desired that you shall make a careful census of the Dunvegan Band in order to ascertain whether there is a greater area of land still due them under the terms of the treaty No. 8.[475]
>
> If there is such area still due them you may select it for the Beaver Indians of Grand Prairie. If this area is not sufficient you will require to arrange with the Dunvegan Band as a whole to surrender a portion from Reserve No. 152 equal to that required at Grand Prairie.
>
> Any preliminary arrangement to surrender a portion of the said Reserve No. 152 should be reduced to writing and signed by the Chief and Head Man and forwarded to the Department with your full report on the whole matter. In the meantime you may select temporarily such area at Grand Prairie as you may think necessary..[sic] You will require to explain to the Indians that the tract so selected is held temporarily and until the necessary surrender of a portion of Reserve No. 152 in exchange has been effected.
>
> …[476]

Assistant Deputy and Secretary J.D. McLean provided instructions to surveyor J.K. McClean on March 18th, 1912. Among the Indian Reserves to be surveyed that season was "a Reserve at Horse Lake, probably in projected townships 73 and 74, Rg. 12, W-6.M." [477] A followup letter of

[475] It is noted by Reddekopp that a 1909 review had suggested "that the Beaver Band was entitled to about 1,000 additional acres of reserve." See letter of Frank Pedley, Deputy Superintendent General of Indian Affairs, Ottawa, to Mr. Oliver [Frank Oliver, Minister of the Interior, Ottawa]. LAC, RG 15, Vol. 970, File 34571A. Cited in Reddekopp 1996:45, fn. 220.

[476] Letter of 14 February 1912 from J.D. McLean, Assistant Deputy and Secretary of the Department of Indian Affairs, Ottawa to Harold Laird, Assistant Indian Agent, Lesser Slave Lake Agency, Grouard. Aboriginal and Northern Affairs Canada, File 777/30-8-152, Vol. 1 (Document No. 65 in the Holmes & Associates 1989 report). Both the photocopy of this document that appears in the 1989 Holmes report as well as the document's description in the Document Index to this report (at p. 11) identify its source as "File 777/30-8-152, Vol. 1," whereas the same document as cited in the Reddekopp report (at p. 45, fn. 218) is described as "File 777/30-8-152B, Vol. 1." As we have seen only a photocopy of the original document, and this photocopy has the source identification added by hand, by a researcher, we cannot say with certainty which identification (152 or 152B) is correct.

[477] Letter of instructions of 18 March 1912 from Assistant Deputy and Secretary J.D. McLean, Indian Affairs, Ottawa, to Dominion Land Surveyor J.K. McClean. LAC, RG 10, Vol. 4019, File 279,393-8 (Document No. 66 in the 1989 Holmes & Associates report). on March 18th, 1912

instructions, also including this Indian Reserve to be surveyed at Horse Lake, was sent to Surveyor McLean on April 1st, 1913.[478] However, surveyor McLean died suddenly on 25 May 1913 [479] and it was necessary to appoint another Dominion surveyor, I.J. Steele, to replace J.K. McLean[480] and to provide Steele with a copy of J.K. McLean's survey instructions.[481] In these 11 June 1913 instructions, Steele was told:

> …please lay out the Indian Reserve or Indian Reserves required at Grand Prairie. A letter relating to this matter will be sent you hereafter to the care of the said Indian Agent [of the Lesser Slave Lake Agency], Dr. Donald, who will hold in until your return.
>
> …
>
> Before commencing the survey of an Indian Reserve, you should call a meeting of the Council or headmen of the Band and ascertain from them where they desire their reserve or reserves. Their request should be acceded to if reasonably possible; you should give them advice on this subject if they should appear to require it. [482]

However, the delay caused by surveyor McLean's death, the re-issuing of instructions to the replacement surveyor, and logistical issues that came up during the course of his fieldwork meant that Steele was not able to undertake the Horse Lake IR survey in 1913. [483] Steele's diary indicates that he met with Harold Laird, Assistant Indian Agent for the Lesser Slave Lake Indian Agency, on the 16th of September 1913 at Grande Prairie[484] and was advised by Laird to select the proposed reserve at Horse Lake by quarter section, subject to confirmation by survey the next year (1914)." [485] Laird had been in this same general area a month earlier in connection with his

[478] Letter of instructions of 1 April 1913 from J.D. McLean to surveyor J.K. McClean. LAC, RG 10, Vol. 4019, File 279, 393-9. This appears in the Holmes 1989 report as Document 86, and is cited in the Reddekopp report at page 46, fn. 222 (where there is a typo which identifies the Indian Affairs Volume number as "299393-9" rather than 279,393-9).

[479] Letter of 25 May 1913from H.W. Fairchild [assistant to surveyor J.K. Maclean] to Frank Pedley, Deputy Superintendent General of Indian Affairs to Secretary of Indian Affairs. LAC, RG 10, Vol. 4019, File 299393-9 [279, 393-9], cited in Reddekopp 1996:46, fn. 223.

[480] Letter of 10 June from Pedley to J.D. Maclean. LAC, RG 10, Vol. 4019, File 299393-9 [279, 393-9], cited in Reddekopp 1996:46, fn. 224.

[481] Letter of instructions of 11 June 1913 from J.D. McLean to Dominion surveyor I.J. Steele. LAC, RG 10, Vol. 4019, File 279,393-9. Document 92 in the Holmes 1998 report; also cited in Reddekopp 1996:46, fn. 225.

[482] Letter of instructions of 11 June 1913 from J.D. McLean to Dominion surveyor I.J. Steele. LAC, RG 10, Vol. 4019, File 279,393-9. Document 92 in the Holmes 1998 report; also cited in Reddekopp 1996:46, fn. 225.

[483] I.J. Steele to J.D. McClean, 8 July 1913. LAC, RG 10, Vol. 4019, File 299393-9 [279,393-9]. Cited in Reddekopp 1996:46, fn. 226.

[484] Excerpts from Steele's Diary for 1913. LAC, RG 10, Vol. 4019, File 299393-9 [279,393-9]. Cited in Reddekopp 1996:47, fn. 229.

[485] Steele to J.D. McLean, 18 September 1913. LAC, RG 10, Vol. 4019, File 299393-9 [279,393-9]. Cited in Reddekopp 1996:46, fn. 228.

annual tour to make the Treaty 8 Annuity payments for the Lesser Slave Lake Agency. His official journal for this trip notes that on 20 August 1913, at Lake Saskatoon, he made Annuity payments to a total of 89 "Beaver Indians of Grande Prairie." [486]

Steele was replaced in 1914 by another Dominion surveyor, Donald Robertson, who was instructed by J.D. McLean to meet Harold Laird at Peace River Crossing, if possible, on 27 June 1914 to discuss the land entitlement and land selections of "those members of the Dunvegan [Beaver] Band" residing in the general vicinity of Grande Prairie and to set out an Indian Reserve for them within the area of Township 73, Ranges 11 and 12, West of the 6th Meridian.[487] It was not until the 1st of July 1914 that Robertson was able to meet with Laird at Peace River Crossing. [488] The Horse Lake IR survey was completed on 4 September 1914 [489] by Robertson who described the land there as "well suited for grazing land and is also suitable for mixed farming." [490] Reddekopp opined that it was by "some inventive accounting"[491] that the "Beaver Indians of the Dunvegan Band" by this time were, according to Robertson, "still entitled to an additional 3,708 acres," based on their 1913 Treaty pay list of 151 members and the fact that they had already received 15,620 acres. But the actual area selected was 4,032 acres, comprised of Sections 23, 24, 25, 26, and 35 in Township 73, Range 12, W.6, as well as section 19 and the S.1/2 of Section 22, Township 73, Range 11, W.6. Robertson added that: "Although this brings the total slightly in excess of 19,328 acres the excess can easily by accounted for by ponds and marshes." Robertson also reported that:

> The only land improvements made by the Indians in this locality are on the S. ½ Section 22, Township 73, range 11, W. 6, although several log houses have been built in township73, range 13, W. 6.[492]

A second, less-detailed letter was also written by Robertson to J.D. McLean on this same date, 18 March 1915, describing in a more general way the Indian Reserves that Robertson had

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[486] Letter/report of 3 November 1913 by Assistant Indian Agent Harold Laird, Lesser Slave Lake Agency, Grouard, to the Secretary of the Department of Indian Affairs, Ottawa. LAC, RG 10, Vol. 6920, file 777/28-3 pt. 1. Pp. 7-8, and accompanying diary, p. 7.

[487] Letter of instructions from J.D. McLean to Surveyor Donald F. Robertson, 27 May 1914. LAC, RG 10, Vol. 4065, File 412, 286-3. Document 107 in the 1998 Holmes report; also cited in Reddekopp 1996:47, fn. 230.

[488] Excerpts from Donald F. Robertson's 1914 Diary. LAC, RG 10, Vol. 4065, File 412, 786-3. Cited in Reddekopp 1996:47, fn. 231.

[489] Donald F. Robertson, Field Notes of Portion of Horse Lakes Indian Reserve in Tp. 73, Ranges 11 and 12, W6M. Balance surveyed by W.G. MacFarlane DLS, 1914 [no additional source information provided]. Cited in Reddekopp 1996:47, fn. 234.

[490] Robertson to J.D. McLean, 18 March 1915. Aboriginal and Northern Affairs Canada. File 777/30-8-152B, Vol. 1. Document 120 in the 1989 Holmes report; cited in Reddekopp 1996:47, fn. 235.

[491] Reddekopp 1996:47.

[492] Robertson to J.D. McLean, 18 March 1915. Aboriginal and Northern Affairs Canada. File 777/30-8-152B, Vol. 1. Document 120 in the 1989 Holmes report; cited in Reddekopp 1996:47-48, fn.'s 235 and 236.

surveyed in the 1914 season both in Alberta and British Columbia. Included in this second letter was Robertson's statement that a reserve had been selected "for those Beaver Indians of the Dunvegan band who have been living in the district west of Grande Prairie," to which he added, "This completes the area to which the Dunvegan band is entitled." [493]

Robertson's survey notwithstanding, a problem arose because a quarter section of land within the overall lands selected in the Horse Lakes area had been homesteaded in September 1915, and therefore, according to the Department of the Interior, this particular quarter section (SE19-73-11-W6M) was not available for selection. [494] Indian Affairs' response in April 1916 to the Department of the Interior was that:

> …as the special ¼ section in question has been used by the Indians for wintering their horses for many, many year, it is thought that in justice to the Indians the homestead entry of Mr. C.J. Smith on the S.E. ¼ of the said section 19 should be cancelled.
>
> Although the lands have been selected in separate Blocks as indicated by you, they have been selected in accordance with the provisions of Treaty No. 8 which gives the Indians the privilege of accepting lands in severalty and as the lands have been selected at the expressed wish of the Indians interested it is not desirable to interfere with their selection unless it is unavoidable. [495]

Correspondence on this particular subject between the Interior and Indian Affairs Departments continued over the next few months.[496] By January 1917, an additional 6 quarter sections within 73-11-W6M had been homesteaded. [497] During these same few months, Indian Affairs pointed out that when Robertson surveyed this area in 1914, he referred to the local Aboriginals' improvements to, and use of, these lands, yet he indicated no evidence of homestead selections.[498] Indian Affairs also forwarded a letter from Felix Laglace[499] of the Beaver Band,

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[493] Robertson to J.D. McLean, 18 March 1915. Aboriginal and Northern Affairs Canada. LAC, RG 10, Vol. 4065, File 412,786-3. Document 118 in the 1989 Holmes report.

[494] Letter of 10 March 1916 from N.O. Cote, Controller of the Lands Patent Branch, Department of the Interior, to W.W. Cory, Deputy Minister of the Department of the Interior. LAC, RG 15, Vol. 1116, File 3169382. Cited in Reddekopp 1996:49, fn. 244.

[495] Letter of J.D. McLean to N.O. Cote, 5 April 1916. Aboriginal and Northern Affairs Canada. File 777/30-8-152B, Vol. 1. Document 134 in the 1989 Holmes report; cited in Reddekopp 1996:50, fn. 246.

[496] Reddekopp 1996:50-51.

[497] N.O. Cote to Mr. Hume, 15 January 1917. LAC, RG 15, Vol. 1116, File 3169382. Cited in Reddekopp 1996:51, fn. 250.

[498] J.D. McLean to N.O. Cote, 10 October 1916. LAC, RG 15, Vol. 1116, File 3169382. Cited in Reddekopp 1996:51, fn. 252.

[499] Although Reddekopp (1996:51, fn. 253) refers to this man as "Felix Laglace" in the text of his report and "Phillip Laglace" in the footnote to this text, we have not seen the referred-to Laglace document, ourselves. It seems likely, however, that the person in question was Felix Laglace, as a local history reports that the town of La Glace was named after "Felix La Glace's father" who was known as "Chief of the Beaver Indians." This same local

claiming that Robertson had surveyed two of the disputed quarter sections (E1/2-22-73-W6M) in response to Laglace's telling him that he had occupied them for more than 10 years and had built a house and stable on the land. [500] After further correspondence between the Interior Department and Indian Affairs, a compromise proposed by the local Indian Agent[501] was worked out in January 1917, by which alternate lands would we selected to replace the 3 quarter-sections on which improvements had been made, and by which homestead entries on the other 4 quarter-sections would be cancelled. [502] This January 1917 compromise notwithstanding, there then followed two years of delays, including missed meetings and an error in sending relevant documents to High Prairie, rather than Grande Prairie. [503]

But even by early 1919 the Horse Lake Indian Reserve issue was not resolved. J.D. McLean wrote to acting Indian Agent Harold Laird on 27 March 1919, reminding him that the Interior Department was "very desirous" of having this matter "settled with the least possible delay." McLean also reminded Laird:

> to be careful to ascertain that none of the Indians interested have been previously assigned land as members of other bands.
>
> The names (and their band numbers) of the Indians for whom the proposed reserve is to be made should be forwarded with your report. The allotment of 640 acres for each family of five, that is to say 128 acres for each individual should not be exceeded. [504]

McLean on 9 May 1919, as discussed below, would provide a different figure for Indian Reserve allotment. What Treaty 8 stated with respect to this subject was the following:

> And Her Majesty the Queen hereby agrees and undertakes to lay aside reserves, the same not to exceed in all one square mile [640

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history adds: "Mr. La Glace's [Felix Laglace's] father died at La Glace. His [Felix Laglace's] mother came with him to Horse Lake…". ." See: Pioneer Book Committee (1973). *Pioneer Round-Up, A History of Albright, Denmitt, Goodfare, Hythe, Lymburn, Valhalla*. Published by the Pioneer Historical Society of Hythe and Area. Page 431. It has not been possible, on the basis of research undertaken to date, to determine the relationship between Felix Laglace's father and the "Glace" (La Glace) referred to in a February 1839 entry in the Dunvegan Post Journal for 1838-1839: "people arrive from Glace's [underlined in original] Party, he himself is reported to be at death's door, and has been ailing a long time." See Fort Dunvegan Post Journal 1838/39. HBCA, B.56/a/7, 24 February 1839, folio 14.

[500] J.D. McLean to N.O. Cote, 7 November 1916, forwarding letter of 31 May 1916 from Phillip [Felix] LaGlace to Indian Agent Harold Laird. LAC, RG 15, Vol. 1116, File 3169382. Cited in Reddekopp 1996:51, fn. 253.

[501] F. Nelson, Assistant Secretary, Department of the Interior, to the Secretary of Indian Affairs, 12 January 1918 [1917]. LAC, RG 15, Vol. 1116, File 3169382. Cited in Reddekopp 1996:52, fn. 257.

[502] F. Nelson to the Dominion Lands Agent, High Prairie [sic], 26 January 1917. LAC, RG 15, Vol. 1116, File 3169382. Cited in Reddekopp 1996:52, fn. 258.

[503] Reddekopp 1996:53.

[504] J.D. McLean to Harold Laird, 27 March 1919. Aboriginal and Northern Affairs Canada. File 777/30-8-152B, Vol. 1. Document 147 in the Holmes 1989 report.

> acres] for each family of five for such number of families as may elect to reside on reserves, or in that proportion for larger or smaller families; and for such families or individual Indians as my prefer to live apart from band reserves, Her Majesty undertakes to provide land in severalty to the extent of 160 acres to each Indian…[505]

Thus, McLean on 27 March 1919 was providing the official calculation for lands held in common, as distinct from lands held in severalty.

Responding to McLean's 27 March 1919 letter, Laird on 12 April 1919 stated that he could not see any reason to provide the names of the Aboriginal people who were settled on this Reserve, or should have been settled on this Reserve, when it was surveyed, as he believed this information was already provided in Surveyor Robertson's report. Laird also said it was impracticable to visit the Grande Prairie area at this time of year.[506] McLean acquiesced, but emphasized:

> …it is especially desired that a greater area be not included in the Reserve then that to which the number of Indians in the Band entitles them to under the terms of the Treaty which, as you are aware, is 160 acres for each family of five or in that proportion, that is to say 32 acres for each individual… [507]

McLean's land allotment figure of "160 acres for each family of five" in this 9 May 1919 letter is the official calculation for lands in severalty, whereas his 27 March 1919 figure of "640 acres [one square mile] for each family of five," as discussed above, is the official calculation for lands held in common.

When "Horse Lakes Indian Reserve No. 152-B" was finally confirmed in 1920, it was said to be "for the Indians." The 29 April 1920 Privy Council Order-in-Council No. 936 set aside:

> …certain lands in Township 73, Range 11, and Township 73, Range 12, both West of the 6th Meridian, in the Province of Alberta, comprising an area of 4042.4 acres, for the purpose of a permanent reserve for the Indians to be known as the Horse Lakes Indian Reserve No. 152-B…[508]

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[505] *Treaty No. 8 Made June 21, 1899 and Adhesions, Reports, etc*. Reprinted from the 1899 edition in 1966 by the Queen's Printer, Ottawa (1969 Reprint). Pp. 12-13.

[506] Harold Laird to J.D. McLean, 12 April 1919. Aboriginal and Northern Affairs Canada. File 777/30-8-152B, Vol. 1. Document 147 in the Holmes 1989 report.

[507] J.D. McLean to Harold Laird, 9 May 1919. Aboriginal and Northern Affairs Canada. File 777/30-8-152B, Vol. 1. Document 149 in the Holmes 1989 report.

[508] Privy Council Order-in-Council 936, 29 April 1920. LAC, RG 2, Vol. 1245, File 88F. Document 151 in the Holmes 1989 report; also cited in Reddekopp 1996:53, fn. 265.

The creation of a fourth Indian Reserve for ancestors of today's Horse Lake First Nation, Clear Hills IR 152C, is tied to the purported surrender in 1928-1929 of their first Reserve, Beaver IR 152. In fact, as has been discussed above, the matter of "surrender" had been mentioned with reference to IR 152 as early as 1911-1912.

Late in 1911, the "Beaver Indians of the Dunvegan Band" living in Grande Prairie had requested that an Indian Reserve be set aside for them. J.D. McLean, the Assistant Deputy and Secretary of Indian Affairs in Ottawa, told Indian Agent Harold Laird of the Lesser Slave Lake Agency in February 1912 that he would permit the setting aside of a separate Reserve for land that the Grande Prairie Indians wished to have, but only after a careful census was made and it was determined that the "Dunvegan Band" as a whole was entitled to more Indian Reserve land under the terms of Treaty 8. McClean stated in a February 1912 letter to Laird:

> If there is such area still due them [the Dunvegan /Beaver Band as a whole] you may select it for the Beaver Indians of Grand Prairie. If this area is not sufficient you will require to arrange with the Dunvegan Band as a whole to surrender a portion from Reserve No. 152 equal to that required at Grand Prairie.
>
> Any preliminary arrangement to surrender a portion of the said Reserve No. 152 should be reduced to writing and signed by the Chief and Head Man and forwarded to the Department with your full report on the whole matter. In the meantime you may select temporarily such area at Grand Prairie as you may think necessary..[sic] You will require to explain to the Indians that the tract so selected is held temporarily and until the necessary surrender of a portion of Reserve No. 152 in exchange has been effected.
>
> …[509]

However, as has also been discussed above, an Indian Reserve for these Grande Prairie Aboriginals was eventually surveyed in 1914 in the Horse Lakes area and was finally confirmed in 1920 by Privy Council Order-in-Council No. 936 as the "Horse Lakes Indian Reserve No. 152-B."

Neil Reddekopp has described how the pressure of development in the Peace region meant that, "As early as 1906, the Department of Indian Affairs was fending off enquiries about rumours of reserve land in the Peace River valley which would soon be place on the market." By June 1915,

[509] Letter of 14 February 1912 from J.D. McLean, Assistant Deputy and Secretary of the Department of Indian Affairs, Ottawa to Harold Laird, Assistant Indian Agent, Lesser Slave Lake Agency, Grouard. Aboriginal and Northern Affairs Canada, File 777/30-8-152, Vol. 1 (Document No. 65 in the Holmes & Associates 1989 report). Both the photocopy of this document that appears in the 1989 Holmes report as well as the document's description in the Document Index to this report (at p. 11) identify its source as "File 777/30-8-152, Vol. 1," whereas the same document as cited in the Reddekopp report (at p. 45, fn. 218) is described as "File 777/30-8-152B, Vol. 1." As we have seen only a photocopy of the original document, and this photocopy has the source identification added by hand, by a researcher, we cannot say with certainty which identification ("152" or "152B") is correct.

the Surveyor General of the Department of the Interior expressed his opinion the Beaver/Dunvegan Band should exchange IR 152 "for land further north where they spent most of their time." When an acting local Indian Agent in February 1916 tried to have a meeting of the Band members living on IR 152, to discuss a surrender, he discovered they had "already left for their hunting grounds." Later in 1916 he was able to report the Band members living on IR 152 had no interest in surrendering any part of their Reserve.[510]

Additional pressures for Indian Reserve surrender were to come from the government's desire to find homesteads for veterans returning from the First World War. The Secretary of the Peace River Unionist Association in June 1919 proposed that all the Indian Reserves that had been set aside for the Beaver/ Dunvegan Band as well as those for the Duncan's Band "except IR 152A [Beaver/Dunvegan Band] and IR 151 [Duncan's Band] be made available for the purpose of soldier settlement." [511] This followed a May 1919 suggestion to the Department of the Interior by a Member of Parliament that "sparsely inhabited Indian Reserves in northern Alberta" which contained good faming land be thrown open for settlement. And by September 1919, the Superintendent General of Indian Affairs forwarded to the Minister of the Interior a petition from returned soldiers living in northern Alberta that IR 152 be thrown open for settlement. [512]

By April 1922, 300 settlers in the region had applied for a grazing lease on IR 152, stating that the Dunvegan/Beaver Band did not use the land and were willing to lease it. When the Indian Agent was instructed to look into this, he responded in May 1922 that members of the Beaver/Dunvegan Band were willing "to surrender IR 152 for sale." [513] By 1927, it had been agreed that as part of the proposed "surrender" of IR 152, six sections of land would be set aside near Clear Hills, about 70 km (44 miles) to the north, and on 16 May 1928, a Privy Council Order-in-Council transferred 3,840 acres from the Interior Department to Indian Affairs. [514] Some of the funds to be obtained from the "sale" of IR 152 were to be used to purchase the proposed IR in the Clear Hills area,[515] which was to be "occupied by hunting members of the Beaver Band." [516] Privy Council Order-in-Council 1929-83 of 19 January 1929 approved the purported surrender of IR's 152 and 152A. [517]

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[510] Reddekopp 1996:53-56.

[511] Reddekopp 1996:56.

[512] Reddekopp 1996:61-62.

[513] Reddekopp 1996:65-66.

[514] Reddekopp 1996:68-72.

[515] Reddekopp 1996:78.

[516] Reddekopp 1996:80.

[517] Reddekopp 1996:82. Because IR 152A had not been officially confirmed by Order in Council when it was originally surveyed in 1905, it subsequently became necessary to pass an Order in Council in 1932 transferring administration of this already purportedly-surrendered I R (152A) from the Interior Department to Indian Affairs. See Reddekopp 1996:92-93.

One of the terms upon which members of the Beaver/Dunvegan Band had agreed to "surrender" IR 152 was that a 320-acre parcel at Hay Lake, located about 20 Km (12 miles) north from Dunvegan, and adjacent to the northern of IR 152, be set aside "as a stopping place when Band members were travelling between the remaining Horse Lake Reserve and the proposed Reserve at Clear Hills."[518] This remaining portion of IR 152 was purportedly surrendered in 1948 and confirmed on 10 February 1949 by Privy Council Order-in-Council 1949-616.[519]

As for IR 152C, it was not until July 1959 that it was finally confirmed as an Indian Reserve for the "Beaver Band of Indians of Horse Lake and Clear Hills."[520]

[518] Reddekopp 1996:78.

[519] Reddekopp 1996:94-95.

[520] Reddekopp 1996:97-98.

## 10.0 Transborder (Alberta/British Columbia) Land use by the Horse Lake First Nation's Ancestors

This section discusses the evolution of game laws in Alberta and BC, some of the trapping problems that developed between Aboriginal and White people, and the establishment of exclusively-Indian hunting reserves. This is followed by a review of some information concerning today's Horse Lake First Nation's ancestors' use of trapping areas in both Alberta and BC.

### 10.1 Evolution of Game Laws and Proposals for Setting Aside Hunting and Trapping Reserves Exclusively for Aboriginals in Alberta and British Columbia

Alberta's first game laws, under the *Alberta Game Acts* of 1906 and 1907, did not apply to persons hunting for domestic purposes (e.g., food, clothing, etc.) north of the 55th parallel,[521] which is only about 10 miles (16 Km) south from Grande Prairie. As historian Richard Daniel has discussed:

> The fact that these laws did not explicitly recognize the federal government's jurisdiction over Indians by excluding Indians south of the fifty-fifth parallel from the provisions of the legislation, touched off a dispute between the federal and provincial governments.[522]

The *Indian Act* had been amended in 1906 to ensure that game laws in the Prairie Provinces and in the North West Territories would not apply to Aboriginal people without the consent of the Superintendent General of Indian Affairs. Ottawa was reluctant to uphold its legal position, however, and instead by 1912 adopted a policy of recognizing provincial legislative authority in exchange for certain concessions in favour of Aboriginal people, such as leniency in the enforcement of regulations. But the Province of Alberta refused to grant any "official" privileges to Aboriginals. In cases where the federal government argued that a particular regulation might cause undue hardships for northern Alberta Native peoples, exemptions were given to all northern residents without recognition of any special rights of Aboriginals.[523]

Competition from White trappers occurred in the north following World War I. This became a serious threat to the Indian peoples' livelihood and continued to be a problem in the following decades. Among the factors relating to this White competition were the increasing accessibility of Northern Alberta and the increasing attractiveness of trapping due to high fur prices.[524] White competition also adversely affected Aboriginal trapping by making necessary the imposition of

[521] Richard Charles Daniel (1977). Indian Rights and Hinterland Resources: The Case of Northern Alberta. M.A. thesis, Department of Sociology, University of Alberta, Edmonton. Pages 162-164.

[522] Daniel 1977:163-164.

[523] Daniel 1977:163-164.

[524] Daniel 1977:164-165.

greater government restrictions; these regulations applied to both Natives and non-Natives. One such regulation was the Province of Alberta's tax on furs, effective 1 November 1920. [525]

By 1922, some northern Alberta Indian Bands were requesting exclusive hunting and trapping Reserves. Two prominent White northerners championed this proposal: James K. Cornwall, a trader and transportation promoter, and Bishop G. Breynat, a missionary. Cornwall wrote an *Edmonton Bulletin* article on 14 November 1922 in which he described the seriousness of the trapping/hunting situation and recommended that Indians receive "large hunting reserves." [526] Indian Affairs officials were generally quite aware that the only viable solution to this problem would be restriction of trapping by Whites or "at least the creation of large preserves within which Indians would have exclusive rights." [527] The Alberta Provincial government was initially receptive to the Federal government's request for some form of protection for Indigenous trappers. In March 1923, the Alberta Minister of agriculture informed the Minister of the Department of the Interior that the Game Act had been amended to give Alberta the power to set aside "…areas in which the Indians would have rights over those of white trappers, and in which we could possibly limit the catch of white trappers." [528]

The Interior Department met with the Alberta Agriculture Department in 1923, following which Indian Affairs provided the province of Alberta with a proposal for the establishment of seven hunting and trapping preserves or "special reserves" of at least 2,500 square miles each for the exclusive use of Indigenous groups in northern Alberta. [529] At the same time, Native trappers in northern Alberta were becoming increasingly agitated. Moreover, in 1923-1924 the Federal and Alberta governments were discussing terms for the transfer of control of natural resources to the province. Thus, the Federal government would soon lose its major source of bargaining power—control of natural resources. [530]

It was in this context that in April 1927, the Acting Agent of the Lesser Slave Lake Indian Agency, responding to a request from the Deputy Superintendent General of Indian Affairs, provided a list and map entitled "Proposed Hunting and Trapping Reserves for the Indians of the Lesser Slave Lake Agency, Alberta. These Reserves Include Their Present Hunting Grounds."[531] There were at this time eight proposed "Hunting and Trapping Reserves"—seven in Alberta and

[525] Daniel 1977:168-169.

[526] Daniel 1977:170-171. See also René Fumoleau (1975). *As Long As This Land Shall Last: A History of Treaty 8 and Treaty 11, 1870-1939*. McLelland and Stewart Limited, Toronto. Pp. 237-238.

[527] Daniel 1977:171-172.

[528] Letter of George Hoadley, Alberta Agriculture Minister, to George Stewart, Minister of the Department of the Interior, 6 March 1923. LAC, RG 10, Vol. 6732, File 420-2B. Cited in Daniel 1977:172, fn. 92.

[529] Daniel 1977:172.

[530] Daniel 1977:172-174.

[531] Letter of Harold Laird, Acting Indian Agent, Lesser Slave Lake Indian Agency, Grouard, Alberta, to Duncan Campbell Scott, Deputy Superintendent General of Indian Affairs, Ottawa, 5 April 1927. Proposed Hunting and Trapping Reserves for the Indians of the Lesser Slave Lake Agency, Alberta. These Reserves Include Their Present Hunting Grounds [including map]. LAC, RG 10, Vol. 6732, file 420-2B [typescript]. See also Daniel 1977:174-175.

one in British Columbia[532] —ranging in size from about 2,500 square miles (6,500 square km) to approximately 15,000 square miles (39,000 square km),[533] and covering much of the Treaty 8 areas of both Alberta and British Columbia.

Ancestors of today's Horse Lake First Nation were included within "Group 8" of the April 1927 proposed "Hunting and Trapping Reserves" within areas of Alberta whose boundaries were defined as follows:

> Group 8. Grande Prairie Band—
>
> South from Township 75 to the 16th Base Line.
> West from Range 4. W. 6th M. to the British Columbia Boundary.
>
> Duncan's Band—
>
> Dunvegan Band—
>
> South from the 24th Base Line to the Peace River,
> West from the Peace River to the British Columbia Boundary. [534]

The Province of Alberta expressed interest in this proposal, although they objected to what they believed to be the "excessively large" areas of these proposed "Hunting and Trapping Reserves." Alberta also insisted that if such "preserves" were created, Aboriginals should not be permitted to trap outside of them. [535] Notwithstanding, the momentum of the proposal for such Hunting and Trapping Reserves in northern Alberta gained further impetus when, at a January 1928 Conference in Ottawa of "Dominion and Provincial Game Officials," the following resolution put forward by the Department of Indian Affairs was adopted unanimously:

> THEREFORE BE IT RESOLVED that this conference approves a policy of setting aside, as far as practicable, in unsettled regions, certain suitable and reasonable areas whereon Indians only may be allowed to trap."[536]

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[532] Laird to Scott, 5 April 1927. Proposed Hunting and Trapping Reserves…[typescript and map]. LAC, RG 10, Vol. 6732, file 420-2B.

[533] Daniel 1977:175. See also Donald Wetherell and Irene Kmet (2000). *Alberta's North, A History, 1890-1950*. University of Alberta Press and the Canadian Circumpolar Institute Press, Edmonton, Alberta. Page 376.

[534] Laird to Scott, 5 April 1927. Proposed Hunting and Trapping Reserves…[typescript and map]. LAC, RG 10, Vol. 6732, file 420-2B. "Group 7" in this same document comprised a very large area within British Columbia to be set aside for the "Moberly Lake," "Hudson's Hope," and "St. John's" Indian Bands. The boundaries for this "Group 7" area were defined: "on the North by the Parallel of Latitude $58^0$ . On the East by the Provincial Boundary. On the South and West by the Height of Land, running Northwest, a little to the East of Finlay Forks." While this 1927 proposal did not contemplate transboundary (Alberta/BC) "Hunting and Trapping Reserves," a 1934 proposal did, as is discussed below.

[535] Daniel 1977:175.

[536] Letter of 28 January 1928 from the Secretary to [the Dominion/Provincial] Conference, Department of the Interior, Ottawa, to T.R.L. MacInnes, Secretary of the Department of Indian Affairs, Ottawa, enclosing a Resolution

Province of Alberta officials were still professing agreement in principle to the concept of hunting/trapping reserves when the Federal and Provincial governments signed agreements to transfer natural resources to provincial control in 1929 and 1930. But Alberta also wanted the size of the proposed reserves decreased. Additionally, Alberta wanted traplines registered for Whites and Métis, and wanted Aboriginals to have trapping rights only on the game preserves, so they would not be able to restrict other development. [537]

In 1934, a transboundary Hunting Reserve—between Alberta/BC and Alberta/North West Territories—was proposed "exclusively for the use of Treaty Indians at Hay Lakes and Upper Hay River, which location is in the Northwest corner of the Province of Alberta." [538] This proposed transboundary Hunting Reserve was for the First Nation known today as the Dene Tha.' The Lesser Slave Lake Indian Agent, Napoleon L'Heureux, in a 12 September 1934 letter to the Deputy Superintendent General of Indian Affairs in Ottawa, defined the boundaries of this proposed transboundary Hunting Reserve as follows:

> The South boundary to be a line running from East to West by 58 degrees 30 minutes latitude, the West boundary by 122 degrees longitude, the North boundary to be as far North in the North-West Territories as the Administration may grant and the East boundary by 118 degrees longitude. [539]

Thus, according to L'Heureux's figures, this proposed transboundary Hunting Reserve of approximately 32,000 square miles in size would extend approximately 75 miles (120 Km) westward into BC from the BC/Alberta border, and about 105 miles (168 Km) southward into BC from the BC/North West Territories border.

The responding 27 September 1934 letter of M. Christianson, Inspector of Indian Agencies for Alberta, was not encouraging. He stated it was "questionable whether the area mentioned in the Agent's [L'Heureux's] letter could be set aside, being approximately 140 miles in breadth and 227 miles in length . . .making it necessary for us to deal with three different governments." As well, Christianson pointed out that on the basis of information he had gathered, the Dene Tha' "hunt mostly along the border of Alberta and go into British Columbia, and some of them may,

"regarding the setting aside of trapping reserves for Indians" as well as a "Statement Submitted by the Representative of the Department of Indian Affairs at the Conference of Dominion and Provincial Game Officials Held at Ottawa, January 24, 25, 26, 1928, With Respect to the Need of Setting Aside Special Hunting Reserves for Indians." LAC, RG 10, Vol. 6731, File 420-1-2. See also Daniel 1977:175-176.

[537] Daniel 1977:176-177.

[538] Letter of M. Christianson, Inspector of Indian Agencies, Alberta Inspectorate, to the Secretary [A.F. MacKenzie], Department of Indian Affairs, Ottawa, 27 September 1934. LAC, RG 10, Vol. 6733, File 420-2X. A copy of this letter also exists in: BCA, GR 1085, Box 2, File 8, Hay Lakes Indians, 1932-1934.

[539] Letter of Lesser Slave Lake Agency Indian Agent Napoleon L'Heureux to Dr. H.W. McGill, Deputy Superintendent General of Indian Affairs, 12 September 1934. LAC, RG 10, Volume 6733, File 420-2X.

at times, go into the North West Territories." It was Christianson's recommendation that the Indian Department take up the matter individually with the three governments in question. [540]

In January 1935, BC Game Warden J.S. Clark reported that although he was not in agreement with the proposal for such a large Hunting Reserve to be set aside exclusively for the Dene Tha' ("Hay Lake Indians"), he was sympathetic to their situation, which was that of a northwest Alberta-based Indian Band who traditionally hunted and trapped in the northeastern corner of BC and in portions of the southern North West Territories. Clark added:

> The Game Commissioner [of BC] has given permission for these Indian's of Hay Lakes to be properly registered in British Columbia, which entitles them to the same privileges as other British Columbia trappers. During my patrol to that district in December 1932, I received Ten applications from the Hay Lake Indian's for registration of trap-lines in British Columbia under most advantageous conditions and I am doing by best to give the protection from poachers . . .[541]

BC trapline records confirm that beginning in the 1930s and continuing into the 1940s and later, there were literally dozens of Alberta-based Dene Tha' First Nations people with BC-registered traplines in northeastern BC.

This 1934 proposal for a transboundary Hunting/Trapping Reserve exclusively for one First Nation, together with the 1927 proposal for Hunting/Trapping Reserves on each side of the Alberta/BC border for a number of First Nations, should also be considered in the context of the evolution of trapline regulations in both Provinces. Traplines were first registered officially in British Columbia under the authority of the *British Columbia Game Act*, through Order-in-Council 909, gazetted on 27 August 1925. [542] About a year later, BC Police Headquarters on 2 September 1926 issued "General Order No. 43" to all detachments throughout the Province. This Order contained specific instructions concerning how to register traplines, including, at page 2, a statement that: "All Indian Agents in the Province are being supplied with forms of application for the registration of trap lines, and are being instructed by the Indian Commissioner for British Columbia fully in regard to these applications…".[543] On the other side of the border, Alberta officials had, as early as 1934, indicated their desire to require all Indian people in Northern Alberta to register their trap lines,[544] and in 1939 the plan was finally implemented.[545] By 1939, however, Province

[540] Letter of M. Christianson, Inspector of Indian Agencies, Alberta, to the Secretary of Indian Affairs, Ottawa, 27 September 1934. LAC, RG 10, Vol. 6733, File 420-2X.

[541] "Re: Game Reserve for Hay Lake Indian's [sic] in British Columbia." Report by Game Warden J.S. Clark to the Officer [T. Van Dyk] Commanding "D" Game Division, Prince George, 18 January 1935. BCA, GR 1085, Box 2, File 8, Hay Lakes Indians, 1932-1934.

[542] A copy of this 27 August 1925 *BC Gazette* Notice can be found in the British Columbia Archives (BCA), Victoria. GR 1085, Box 2, File 9.

[543] BC Police General Order No. 43, September 2nd, 1926, Victoria. BCA, GR 1085, Box 2, File 9.

[544] Memo of H.W. McGill, Director, Indian Affairs, Ottawa, 23 February 1934. LAC, RG 10, Vol. 6731, File 420-1. Cited in Daniel 1977:183, fn. 122.

of Alberta officials were indicating that their policy was now to show no preference towards Indian trappers in the allocation of trapping areas. For this and other reasons it was not until the early 1940s that the registration of traplines was extended to most regions of northern Alberta.[546]

The problem in obtaining trapline applications for Aboriginals in 1939, Indian Agent Napoleon L'Heureux pointed out, was that "the majority of trappers are already on their trapping grounds from where they will not return until Christmas, and some, not until next Spring." Hence, L'Heureux recommended that the ration-issuers be authorized "to take the applications for the registrations of Indian traplines" because "their [the ration-issuers'] knowledge of the country and their association with us [Indian Affairs] would help to insure that the Indians' interests are not neglected."[547] The Inspector of Indian Agencies, C.P. Schmidt, recognized a further problem in obtaining the applications: the regulations required that a description be given of the trapline or area used. Fearing that Band members would be competing with non-Aboriginals for the same lines, or areas, and that the Treaty Indians would be driven off their ancestral lands, Schmidt suggested that the Lesser Slave Lake Agency be given large tracts of land in the areas required by the various Indigenous groups for trapping. Apparently Alberta's Game Commissioner concurred and recommended that land be designated for Bands, and not individuals. Schmidt thought that given adequate time, the Lesser Slave Lake Agency could arrange with the trappers to visit their hunting grounds and blaze their lines, although he was unsure of the feasibility of working out a system that would be entirely fair to the Aboriginal trappers.[548]

## 10.2 Documented use of Horse Lake Trapping and Hunting in areas in BC

A preliminary review of trapline documents for northeastern BC from the mid-1920s to mid-1930s indicates that Horse Lake people did not register their traplines in BC. This is in contrast to the previously-described situation in this same approximate time period farther north along the Alberta/ BC border (See Section 10.1). There were, however, several Métis men who lived in areas of Alberta close to the border and had registered traplines in BC. The relationship of these specific trappers to Horse Lake people is not clear.

Information on the extent of trapping by members of the Horse Lake First Nation comes also from reports of their neighbours. Some of this information comes from the community of Kelly Lake, BC, a Métis settlement established in the early 1900s primarily by people from Lac Ste.

[545] Letter of C.P. Schmidt to H.W. McGill, 9 March 1940. LAC, RG 10, Vol. 6733, File 420-2, vol. 5. Cited in Daniel 1977:183, fn. 123. See also Wetherell and Kmet 2000:383.

[546] Letter of D.B. Mullen to C. Camsell, 9 February 1940. LAC, RG 10, Vol. 6733, File 420-2-2, vol. 1. Cited in Daniel 1977:183, fn. 124. See also Wetherell and Kmet 2000:383-384.

[547] Letter of Lesser Slave Lake Agency Indian Agent Napoleon L'Heureux to C.P. Schmidt, Inspector of Indian Agencies, 30 October 1939. LAC, RG 10, Vol. 6733, File 420-2-2-1.

[548] Letter of C.P. Schmidt, Inspector of Indian Agencies, to the Secretary of the Indian Affairs Branch, 10 November 1939. LAC, RG 10, Vol. 6733, File 420-2-2- 1.

Anne, Alberta. These people migrated to Kelly Lake by way of the Grande Prairie area.[549] Dave Gray of Kelly Lake reported in a 1982 history of the Monkman Pass area: "The Beaver people from the reserve at Horse Lake also used to come here to trap in those days." Additionally, Annie Gladue stated, "The Beavers [from Horse Lake] used to live here [around Kelly Lake] more than they did in Horse Lake!" Mrs. Gladue pointed out, however, that the Horse Lake people had "fled" Kelly Lake because of something they had seen in the lake, and "would not come near it at all."[550]

The report entitled "Land Use and Occupancy System of the Métis Trappers of Kelly Lake, British Columbia" contains information about the HLFN's use and occupancy in former years of northeast BC. The study specifically identifies the "Noskiye" or Horseman family from HLFN being associated as participants in one of the "trapping communities" operating in the Monkman Pass/Tumbler Ridge area. Concerning "Noskiye," Mrs. Gladue and Mr. Gray said that the name was originally "Cree-Métis," and became "Horseman," a Beaver family name from Horse Lake.[551]

Robinson and Hocking at page 21 of *The Monkman Pass* booklet state that "Chatelin" (which is the same name also spelled sometimes as "Chatlas") is the name of one of the Horse Lake families who came into the Kelly Lake community. As previously discussed in the present report, this name, "Chatelaine," or variants of its spelling, appears in the Hudson's Bay Company journals from the 1820s-1890s, in association with ancestors of the Horse Lake First Nation.

These Horse Lake families, together with the Kelly Lake people, trapped in an area that anthropologist Michael Robinson described as "the trapping heartland". This area was centred on Flatbed and Kinuseo creeks. Robinson also noted this "trapping heartland" was "admirably suited to both human occupation and the maintenance of a strong bush economy." It maintained five trapping communities, all located within what Robinson called the Kelly Lake Trapping Region: Five Cabins, Monkman Cabins, Hambler Cabins, Callahaison Flats, and Poona 'Tik See Pee. [552] As noted at page 31 of Robinson's 1983 report, the man known as Noskiye was associated with the "Callahaison Flats" area (near confluence of Hamber Creek and Flatbread Creek).[553] Independent confirmation that Noskiye trapped in the Callahaison Flats area and was

[549] Michael Robinson and Dave Hocking (1982). *The Monkman Pass and Trail: A Brief History*. Published by Petro-Canada Coal Division: Calgary, Alberta. P.19; Gerry Andrews (1985). *Métis Outpost: Memories of the First School Master at the Métis Settlement of Kelly Lake, BC, 1923-1925*. Published by Gerry Andrews: Victoria. Pp. 10-11. Independent confirmation of this information appears also in: Arcas Heritage Consultants [Arnoud Stryd] (1982). Monkman Coal Project Infrastructure, Stages I and II, Heritage Impact Assessment for Monkman Rail Spur. Report prepared for Petro-Canada, Calgary, Alberta. Permit No. 82-15. On file with the BC Archaeology Branch, Victoria. P.11, 14.

[550] Robinson and Hocking 1982: 40.

[551] Michael Robinson (1983). The Land Use and Occupancy System of the Métis Trappers of Kelly Lake, British Columbia. Report prepared for Petro-Canada's Coal Division, Monkman Coal Project Infrastructure, Stage 3, Heritage Resource Impact Management Study. On File with the BC Archaeology Branch, Victoria. P.31.

[552] Robinson 1983:4, 22-23.

[553] Robinson 1984:31.

part of this community appears also in archaeologist Arnoud Stryd's 1982 report. He states that the Noskiye family were among those trappers using cabins at Callahaison Flats from the 1920s [?] until the 1940s.[554]

Robinson also reported:

> None of the five trapping communities which are the subject of this report are currently (1981-1983) utilized, or have been utilized since the 1960s.[555]

Notwithstanding, Dave Gray of Kelly Lake, who had a trapline within the "heartland" in the Onion Lake and Wapiti Lake area, provided Robinson with fur harvest statistics for the years 1943 through 1981.[556] Moreover, Robinson and Hocking state in their 1982 booklet, "Trapping is still a very important social and economic activity in Kelly Lake, with upwards of thirty men continuing to work on lines registered originally in the early 1930s…"[557] The 1982 Arcas study also points out that people from Kelly Lake were still hunting and trapping in the Monkman Coal project area in the early 1980s.[558] In addition to the heartland being prime trapping country, Monkman Pass was identified as a good area for moose and the Five Cabins area as good for both moose and elk.[559]

Another individual from Horse Lake, Philip Davis (also spelled "Phillip"), said to have been born around the late 1880's, [560] moved from Horse Lake to BC as a young man. He subsequently married Madeline Desjarlais, a woman of mixed Cree-Saulteau ancestry whose father was living around Moberly Lake.[561] Confirmation of this information appears in a report

[554] Arcas Heritage Consultants [Arnoud Stryd] (1982): 17.

[555] Robinson 1983:7.

[556] Robinson and Hocking 1982:56, 60-61.

[557] Robinson and Hocking 1982:54.

[558] Arcas Heritage Consultants [Arnoud Stryd] (1982): 6.

[559] Robinson 1983:27, 36.

[560] See Douglas Hudson (1992). The Two Mountains That Sit Together: An Ethno-Historical Overview. Report prepared on behalf of the Treaty 8 Tribal Association for the BC Ministry of Energy, Mines & Petroleum. P 98, fn.16. See also Art Napoleon, Editor (1998). *Bushland Spirit: Our Elders Speak*. Twin Sisters Publishing Co., Moberly Lake, BC. Pp. 3 and 23-33

[561] Interview of Phillip Davis by Lee J. Phillips, March 1973, In, Dorthea Calverley. History is Where You Stand: A History of the Peace. http://www.calverley.ca . Tape 018, Interview 18.035.

prepared by anthropologist Douglas Hudson for the Treaty 8 Tribal Association. [562] Phillip Davis reported in the March 1973 interview that he took treaty at Dunvegan.[563]

The name "Pouce Coupé" has long been associated with the Grande Prairie area and with parts of BC, especially the area of the town to which his name has been given. In the early 1820s, a man named Pouce Coupé was outfitted by traders at Fort Dunvegan. He was said to be trapping in Smoky River hunting grounds.[564] Later, in 1889, a reporter with the *Edmonton Bulletin* newspaper wrote that according to the well-known fur trader, "Twelve-Foot Davis," there were once twenty-five families of "Beaver Indians" at "Pouce Coupee's Prairie" in 1877. By 1889, the man known as "Pouce-Pee" (identified as a "Beaver Indian") was said to be the only one left. At this time, "Pouce-Pee" was reportedly living in BC and trading at the Hudson's Bay Company Post at Grande Prairie.[565]

[562] Douglas Hudson (1992). The Two Mountains That Sit Together: An Ethno-Historical Overview. Report prepared on behalf of the Treaty 8 Tribal Association for the BC Ministry of Energy, Mines & Petroleum. Pp. 22, fn6. See also Art Napoleon, Editor (1998). *Bushland Spirit: Our Elders Speak*. Twin Sisters Publishing Co., Moberly Lake, BC. Pp. 3 and 23-33. Napoleon provides Mrs Davis' own account of her father, a direct descendant of the Saulteaux group who migrated to the Moberly Lakes area around 1900.

[563] Interview of Phillip Davis by Lee J. Phillips, March 1973, In, Dorthea Calverley. History is Where You Stand: A History of the Peace. http://www.calverley.ca . Tape 018, Interview 18.035.

[564] Fort Dunvegan Post Journal 1822/23. Hudson's Bay Company Archives, Provincial Archives of Manitoba, Winnipeg. B.56/a/1, 14 October 1822, folio 9.

[565] J.G. McGregor 1952. *The Land of Twelve-Foot Davis*. Edmonton, Institute of Applied Art. Pp. 160, 212.

# 11.0 Atlas of Historical Maps

## 11.1 Peter Pond

A map prepared from Aboriginal reports by Peter Pond in 1785 illustrates his understanding –or lack of understanding—of geography and tribal distribution prior to the establishment of Boyer's Post c.1788. Pond's information was that "Beaver Indians" resided up the "River of Peace."[566] Another version of this map was prepared by Pond for presentation to the Empress of Russia in July 1787; this map places the name "Beaver Inds." to the north of the Peace, leaving room on the south side of the river for a number which was keyed to a list of annotations . [567] A detail from this map appears in this report on page 75.

Concerning discrepancies among the versions of Pond's map, historian Barry Gough remarked, "Pond changed various details of his map to suit circumstances." [568] Surveyor and historian J.N. Wallace described how a map prepared by Ezra Stiles in 1790, purporting to show Pond's travels, shows a site "on the southeasterly bank of [the] Peace river and apparently…about seventy miles northwest of Pond's House [on the Athabasca River]." Yet Wallace concluded: "This seems to be the only evidence, if indeed it is evidence, that Pond was ever on [the] Peace river." [569] It was also Lamb's opinion that "evidence that Pond ascended the Peace River is inconclusive." [570] Thus the extent and accuracy of Pond's investigations of the Peace River area remain largely unknown; consequently, his evidence of occupation must be used cautiously.

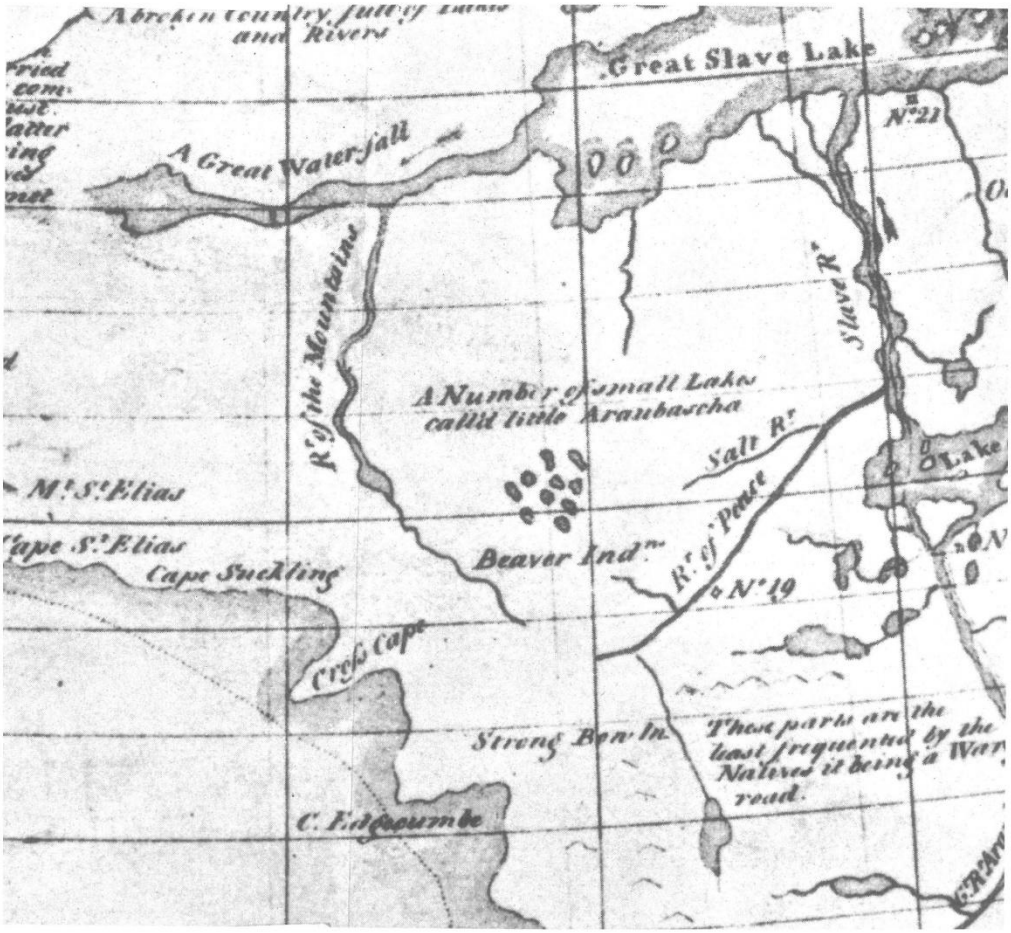
[566] Derek Hayes (1999). *Historical Atlas of British Columbia and the Pacific Northwest: Maps of Exploration.* Cavendish Books: Vancouver. Map. 102: Map of Western Canada presented to Lieutenant-Governor of Canada, Lord Hamilton, in 1785. Page 64.

[567] Portion of a map of north-western America prepared by Peter Pond for presentation to the Empress of Russia, July 1787. Reproduced in Lamb 1970: Facing p.13. A section of this map appears on the following page of the present report.

[568] Gough 1997:65.

[569] See J.N. Wallace (1929). The Wintering Partners on Peace River, From the Earliest Records to the Union in 1821. Thorburn and Abbott, Ottawa. Pp. 12-13.

[570] Lamb 1970:243.


Great Slave Lake
A Great Waterfall
N°21
R.s of the Mountains
Slave R.
A Number of small Lakes
calld little Araubascha
Salt R.
Lake
Mt. St. Elias
Cape St. Elias
Cape Suckling
Beaver Ind.s
R.s of Peace
N°19
Cross Cape
Strong Bow In.
These parts are the
least frequented by the
Natives it being a War
road.
C. Edgecumbe

## 11.2 Philip Turnor

Hudson's Bay Company surveyor Philip Turnor and his assistant Peter Fidler in 1790-1792 made a clear association of the Beaver people (*Dane-zaa*) with the Peace River.[571] While Turnor and Fidler made numerous calculations of longitudes and latitudes during this trip, Turnor did not actually draft maps until he returned to London in 1792.[572] Fidler did make many sketches in the field, however, including 16 sketches illustrating most of the shoreline of Lake Athabasca. [573]

Philip Turnor's journal indicates that he did not ascend the Peace River and consequently there is no encounter with Dane-*zaa* on the Peace River. He did, nevertheless, explore the Slave River and on 5 July 1791 noted the location where the Peace River enters the Slave River. Moreover, Turner associated the Peace River with the Beaver people:

> it [the Peace River] is said to come from the stony Mountain [Rocky Mountains] its called by the Chepawyans the Chaw hot-e-na Dez-za or Beaver Indian river up which the Canadians have two settlements which are the Support of this Country its there they get all their dried provision for their journeys…[574]

One of the maps prepared by Turnor indicates "Beaver Indian Country" along both sides of the lower portions of the Peace River, which he describes as "Beaver Indian river, by the Canadians called the Peace river." Turnor likely drafted this map in the latter months of 1792. The original of this map is in the Hudson's Bay Company Archives, Winnipeg , where it is catalogued as G.2/13 and entitled "Chart of Lakes and Rivers in North America by Philip Turnor those Shaded are from Actual Survey's the others from Canadian and Indian information." [575]

The version of this 1792 map appearing on pages 78 and 79 of the present report was published in 1935 in historian Lawrence Burpee's *The Search for the Western Sea*. This published version has been redrawn from the HBCA original and has been re-titled as "Hudson's Bay Country by Turner. 1790" [*sic*]. [576]

This 1935 redrawn version of the original 1792 map clearly indicates by means of an "x" placed on both sides of the Peace River at its split confluence with the Slave River, that this is information from "Canadian and Indian" sources. Additionally, notations on the map include the

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[571] For Turnor's 1790-1792 journal, see J.B. Tyrrell, Editor (1934). Journal of a Journey From Cumberland House North America…Towards the Athapiscow Country and Back to York Factory, [September 13, 1790 to July 17, 1792], by Philip Turnor. Pp. 327-491, in, *Journals of Samuel Hearne and Philip Turnor*. The Champlain Society, Toronto (reprinted in 1968 by Greenwood Press Publishers, New York).

[572] Turnor, who had been retained as a surveyor by the Hudson's Bay Company in 1788, hired Peter Fidler as his assistant in 1790. See Richard I. Ruggles (1991). *A Country So Interesting: The Hudson's Bay Company And Two Centuries of Mapping 1670-1870.* McGill-Queen's University Press, Montreal & Kingston. Pp. 18-19, 52-53.

[573] Ruggles 1991:53,197.

[574] Tyrrell 1934:401.

[575] Ruggles 1991:53,197.

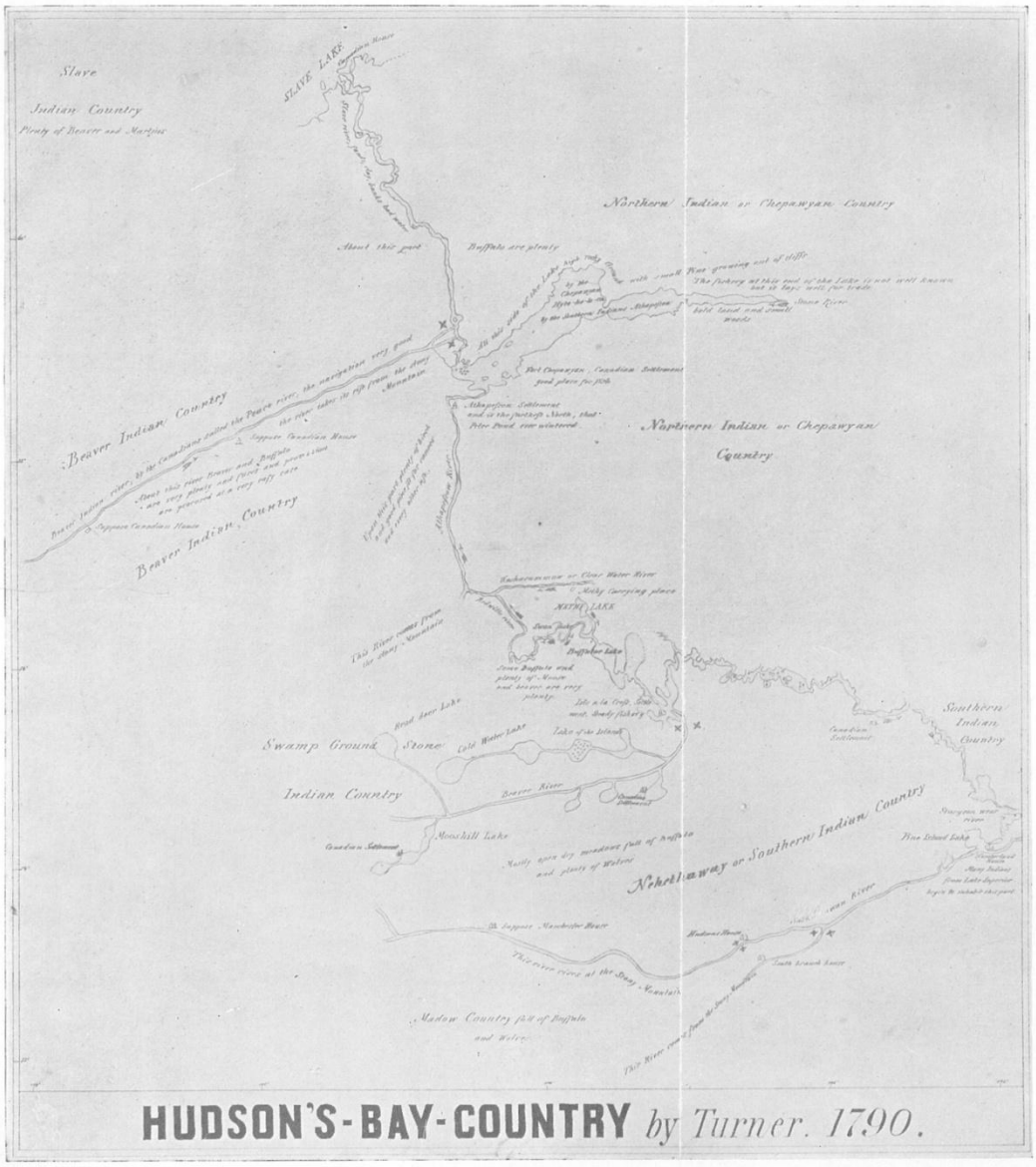
[576] Burpee 1935:1:Map between pp. 170-171.

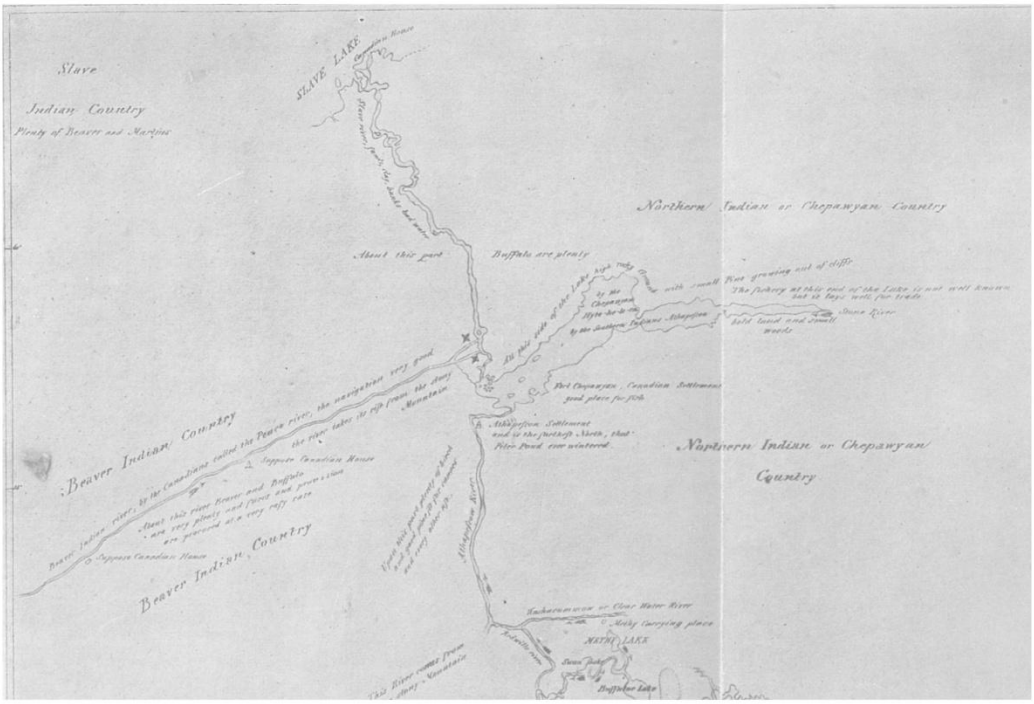
statement, with reference to the Peace River, that "about this river Beaver and Buffalo are very plenty…". Also, locations of a "Supposed Canadian House" [trading post] are indicated at two different places on the lower Peace River. [577]

Turnor shows the "Nehethaway or Southern Indians Country," meaning Cree, situated a considerable distance to the south. [578]

[577] Burpee 1935:1:Map between pp. 170-171.

[578] Burpee 1935:1:Map between pp. 170-171.


Slave
Indian Country
SLAVE LAKE
Northern Indian or Chepawyan Country
Beaver Indian Country
Northern Indian or Chepawyan
Country
Beaver Indian Country
NATH LAKE
Swamp Ground
Stone
Indian Country
Beaver River
Moushill Lake
Southern
Indian
Country
Nehethaway or Southern Indian Country
Meadow Country full of Buffalo
and Water
HUDSON'S-BAY-COUNTRY by Turner. 1790.


Slave
Indian Country
Plenty of Beaver and Martins
SLAVE LAKE
Northern Indian or Chepawyan Country
About this part
Buffalo are plenty
Beaver Indian Country
Beaver Indian Country
Northern Indian or Chepawyan
Country
NATHY LAKE

## 11.3 Alexander Mackenzie

A map likely prepared by Aaron Arrowsmith in the early 1800s, based on the explorations of Mackenzie and others,[579] identifies the Aboriginal people around the confluence of the Peace River with the Smoky River as "*Tza-Dene* or Beaver Ind." The term "*Tza-Dene*" is a variant transcription of "*tsattine*," the term used by the Chipewyan to identify the *Dane-zaa*.[580] While this map is not dated, it was likely prepared *circa* 1804, and it is almost certain that Arrowsmith produced a similar map for Mackenzie that was published in Mackenzie's 1801 *Voyages*.[581] A detail of Alexander Mackenzie's map can be found on page 82 of this present report.

There are at least 3 known versions of this map:

1) First is the map likely by Aaron Arrowsmith (*circa* 1804): *A Map of America, between Latitudes 40 and 70 North, and Longitudes 45 and 180 West, Exhibiting the Principal Trading Stations of the North West Company*. Original held by The National Archives, London, England. Privy Council I, Unbound Papers #3997. This is the copy that is reproduced here (p.82). A similar copy is held by the Hudson's Bay Company Archives, G.4/14;

2) A second, better-known version is reproduced in Lamb's 1970 edition of Mackenzie's 1801 *Voyages*, facing page 67, and has the title *A Map of America, between Latitudes 40 and 70 North, and Longitudes 45 and 180 West, Exhibiting Mackenzie's Track from Montreal to Fort Chipewyan & from thence to the North Sea in 1789, & to the West Pacific Ocean in 1793*. The lesser-known map (from the National Archives in England) has almost the same features on it, but differs from the better-known version in that it has a different title (as given above) and contains some additional identification of Aboriginal groups;

3) A third version of this map comprises the portion that was subsequently published in London in 1817 as part of a pamphlet with the lengthy title: *Notice respecting The Boundary between His Ma esty's Possessions in North America and the nited States; with a Map of America, between Latitudes 40 $^{o}$ and 70$^{0}$ North, and Longitudes 80$^{0}$ and 150$^{0}$ West; exhibiting The Principal Trading Stations of the North-West Company; and intended to accompany the narrative of occurrences in the Indian countries of North*

[579] Personal communication from map historian and author Derek Hayes, White Rock, BC, to Randy Bouchard, Victoria BC, August 2011.

[580] Ridington 1981, 359; see also F. W. Hodge, Editor, 1910. Smithsonian Institution Bureau of American Ethnology, Bulletin 30: *Handbook of American Indians North of Mexico, Part 2.* Government Printing Office, Washington DC. Page 822. This same term, "*tsattine*," is given as "*tsa-ttinè*" and translated as `dwellers among the Beaver` (citing Petitot 1888:360-363) in: Donat Savoie (Editor). *The Amerindians of the Canadian North-West in the 19th Century, as Seen by Émile Petitot*. Mackenzie Delta Research Project, Northern Science Research Group. Vol. II, The Loucheaux Indians. Page 33.

[581] Personal communication from Hayes to Bouchard, August 2011.

> *America, connected with the Earl of Selkirk, the Hudson's Bay and the North-West Companies*. HBCA Library, PP 2029. While this pamphlet and map were published anonymously, their author is said to have been Simon McGillivray, a partner of the North West Company. [582]

On the version of the c.1804 map reproduced here, the words "*Tza-Dene* or Beaver Ind." are written adjacent to "Fork Fort," near the confluence of the Smoky River with the Peace, as well as in the area north from Lesser Slave Lake. This same map also shows the "Rocky Mountain Indians" in the Parsnip River valley of the Rocky Mountain Trench.

The location of the Cree on this map is indicated by the designation "Nahathaway Indians" [583] which is written in a southeasterly direction from an area of the Peace River not far upriver from its confluence with the "Loon River" (Wabasca River).

[582] See James V. Walker (2010), Henry S. Tanner and Cartographic Expression of American Expansionism in the 1820s. *Oregon Historical Quarterly, Vol*. 111, No. 4:418, 440; see also Frederick Merk (1967). *The Oregon Question: Essays in Anglo-American Diplomacy and Politics*. The Belknap Press of Harvard University Press, Cambridge, Massachusetts. Pp. 60-65.

[583] "Nahathaway" is the term that the Western Woods Cree use to refer to themselves. See: James G.E. Smith 1981. Western Woods Cree. In, *Handbook of North American Indians, Vol. 6, Subarctic*. Edited by June Helm. Smithsonian Institution, Washington DC. Pp. 267-268.

Fort Chepawyan
N.W. Depot
CHEPAWYANS
AND
NAHATHAWAY
INDS.
TZA-DENE
OR
BEAVER IND.
Buffalo
Isle a la Crosse
N.W. Depot
Slave Lake
Lesser
Beaver Lake
NAHATHAWAY IND.
Lake Manito
Fort Augustus
Fort George
Hudsons Ho.
BLACKFOOT
INDIANS
FALL
INDIANS
STONE IN.
Red Deers River
Mount McGillivray
One of the Sources of the Athabaska River
Wholdyachuck L.
High Rocks
Salt Springs
Rocky Hills
Old Establishment
New Establishment
Cajigah or Peace R.
Slave River
Nethy Lake
Rapids & Shoals
Egg L.
Primos Lake
Black Bear Lake
Pine Id.
Shoals & Rapids
Beaver R.
Green L.
Prog L.
Meadow L.
Turtle L.
Battle River
Buffalo L.
Beaver Hills
Rocky Mountain
Height of Land
Burnwood
Carrying Place
Rapid
INDIANS
NATION
SNAKE INS.
KOOTANAC
INDIANS
Beaver Lake
Island L.
Red Deer Lake
Coreal Hill
Fort Dar

## 11.4 George Dawson

George Dawson's Language Map, entitled "Map shewing the Distribution of the Indian Tribes of British Columbia," was published in 1884 and based on work that George Dawson and W. F. Tolmie had undertaken with various tribes throughout British Columbia between 1875-1883. [584] In red letters on this map are the words "Beaver Indians" and "Nehiyawok or Cree Indians," along with the following statement written south to north in the area of Smoky River: "Cree Indians Encroaching Westward." To the west, Dawson wrote: "A Band of Iroquois Immigrants Now Hunt Between Jaspar House and Dunvegan."

The 1870s-1880s extent of the "Cree Indians Encroaching Westward" is reflected in several other maps of this time period. For example, a south-to-north linguistic "boundary"—extending from the general vicinity of the headwaters of the Smoky River and its tributaries to the confluence of the Smoky and Peace Rivers and then northwards along the west side of the Peace River—is also shown on Franz Boas' 1890 "Linguistic Map of British Columbia" (see Section 11.5) where this "boundary" information is attributed to George Dawson. This same linguistic "boundary" is shown on A.G. Morice's 1892 map (see Section 11.6); it is very likely that the information also came from George Dawson.

Similar information about the Beaver/Cree "boundary" was also provided at the time of the Treaty 8 Commissions of 1899-1900. O.C. Edwards, physician for the Treaty 8 Commission of 1900, wrote in his journal: "The Peace River is the great dividing line between the Crees and the Beavers." [585] Moreover, the official Treaty 8 map, printed in 1900 and published in the *Canada Sessional Papers* in 1901, with reference to the same south-to-north region mentioned above (i.e. from the Smoky River headwaters and north as far as Fort Vermilion), indicates, generally, "Beavers" along the west side of the Smoky and Peace Rivers, and "Crees" along the east side. This same map indicates "Iroquois" in the immediate vicinity of Jasper House.

As has been discussed (see Section 6.4.1), Dawson's 1884 map extends the southernmost boundary of the Beaver or *Dane-zaa* approximately 30 miles (48 km) farther southeast along the Rocky Mountain summit than is defined in his 1879 journal notes and his 1881 publication.

[584] W.F. Tolmie and G.M. Dawson 1883 (published 1884). "Map shewing the Distribution of the Indian Tribes of British Columbia." In, *Comparative Vocabularies of the Indian Tribes of British Columbia, With a Map Illustrating Distribution*. Dawson Brothers, Montreal.

[585] See David Leonard and Beverly Whalen (2002). *On the North Trail: the Treaty 8 Diary of O.C. Edwards*. Published by the Alberta Records Publication Board, Historical Society of Alberta. Page 55.

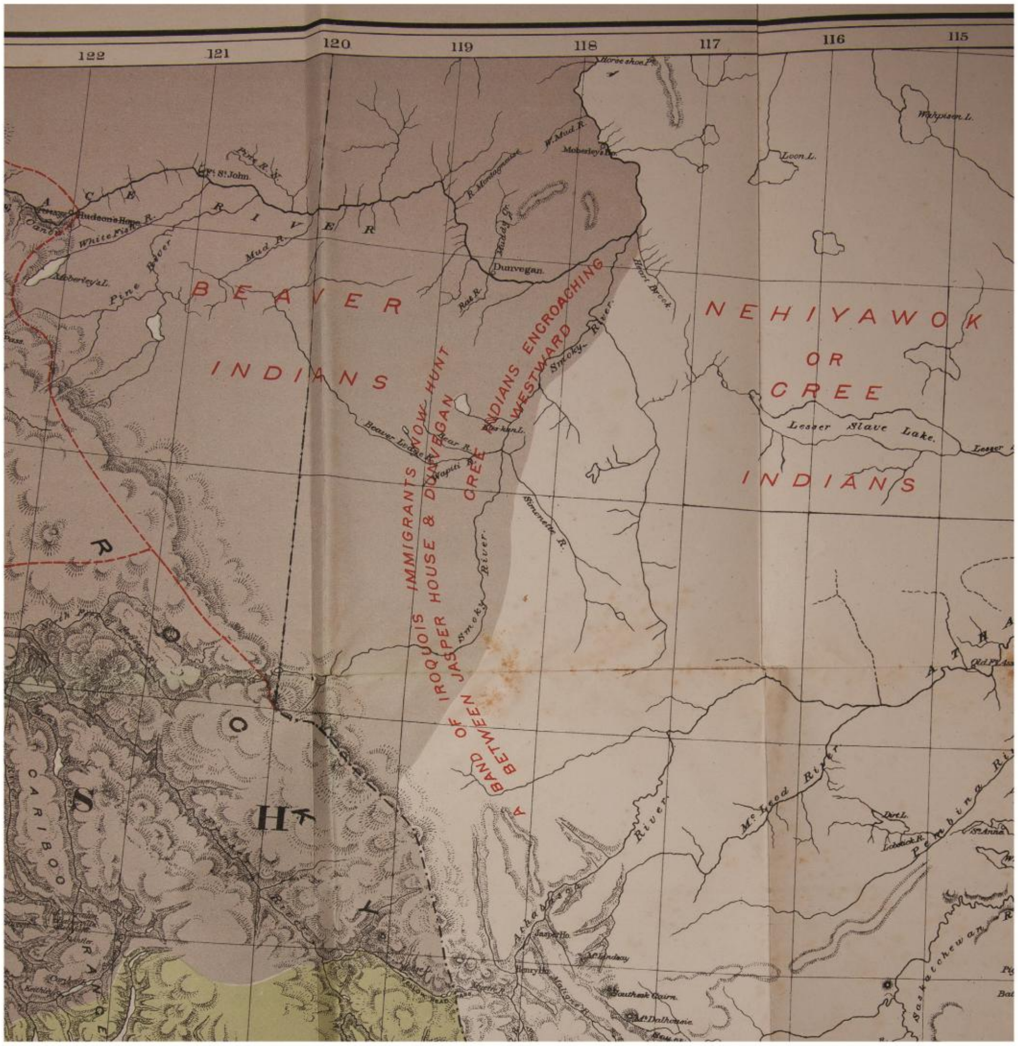

122
121
120
119
118
117
116
115
Horse shoe Pt.
Wapisew L.
Loon L.
W. Mud R.
Moberley's Pt.
Ft. St. John.
Pine R. N.
R. Montagneuse
Hudson's Hope
White Fish R.
R I V E R
Mud R.
Moberley's L.
Pine Beaver
Dunvegan.
Rat R.
Heart Brook
B E A V E R
I N D I A N S
N E H I Y A W O K
O R
C R E E
I N D I A N S
Lesser Slave Lake.
Beaver Lodge R.
Bear R.
Wapiti R.
CREE INDIANS ENCROACHING WESTWARD
Smoky River.
A BAND OF IROQUOIS IMMIGRANTS BETWEEN JASPER HOUSE & DUNVEGAN NOW HUNT
Simonette R.
Smoky River.
R O C K Y
C A R I B O O
R A N G E
A T H A
Old Ft. Ass.
Mc Leod River
River
Dirt L.
Lobstick R.
Pembina Ri
St. Anne
Athabasca
Jasper Ho.
Mt. Lindsay
Henry Ho.
Maligne R.
Southesk Cairn.
Mt. Dalhousie
Saskatchewan R.

**Plate II (Detail 1 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

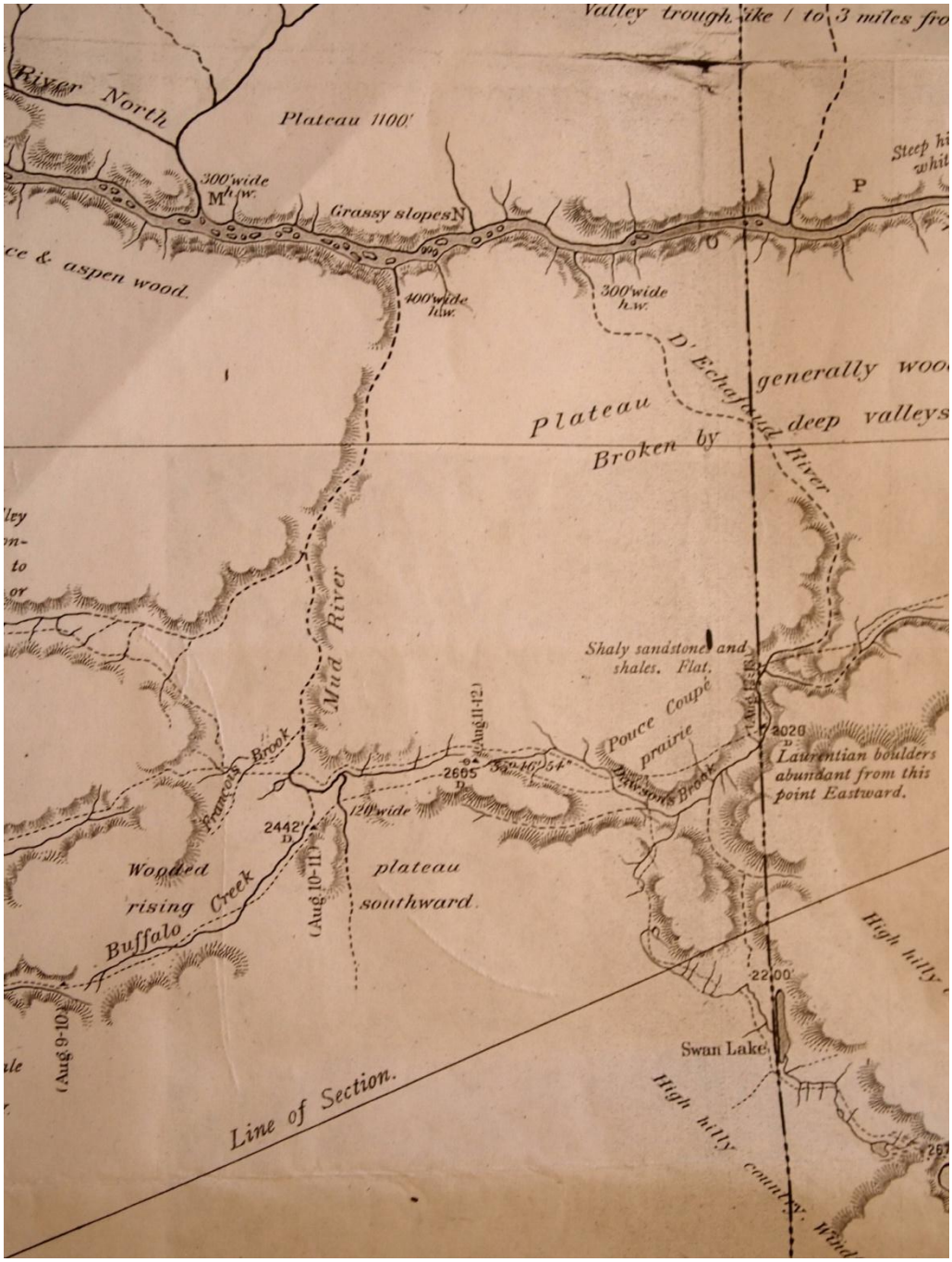



**Plate II (Detail 2 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

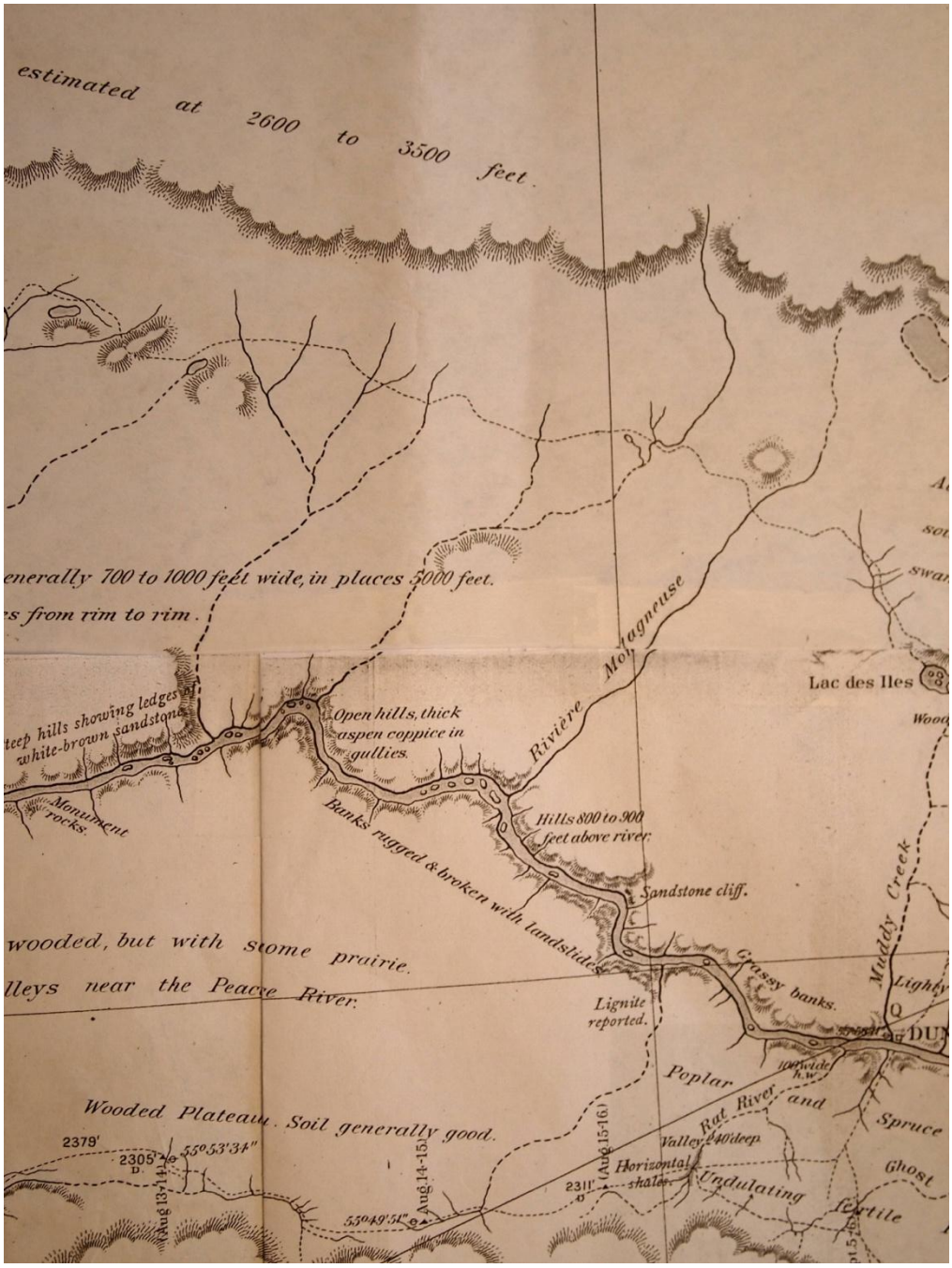



**Plate II (Detail 3 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

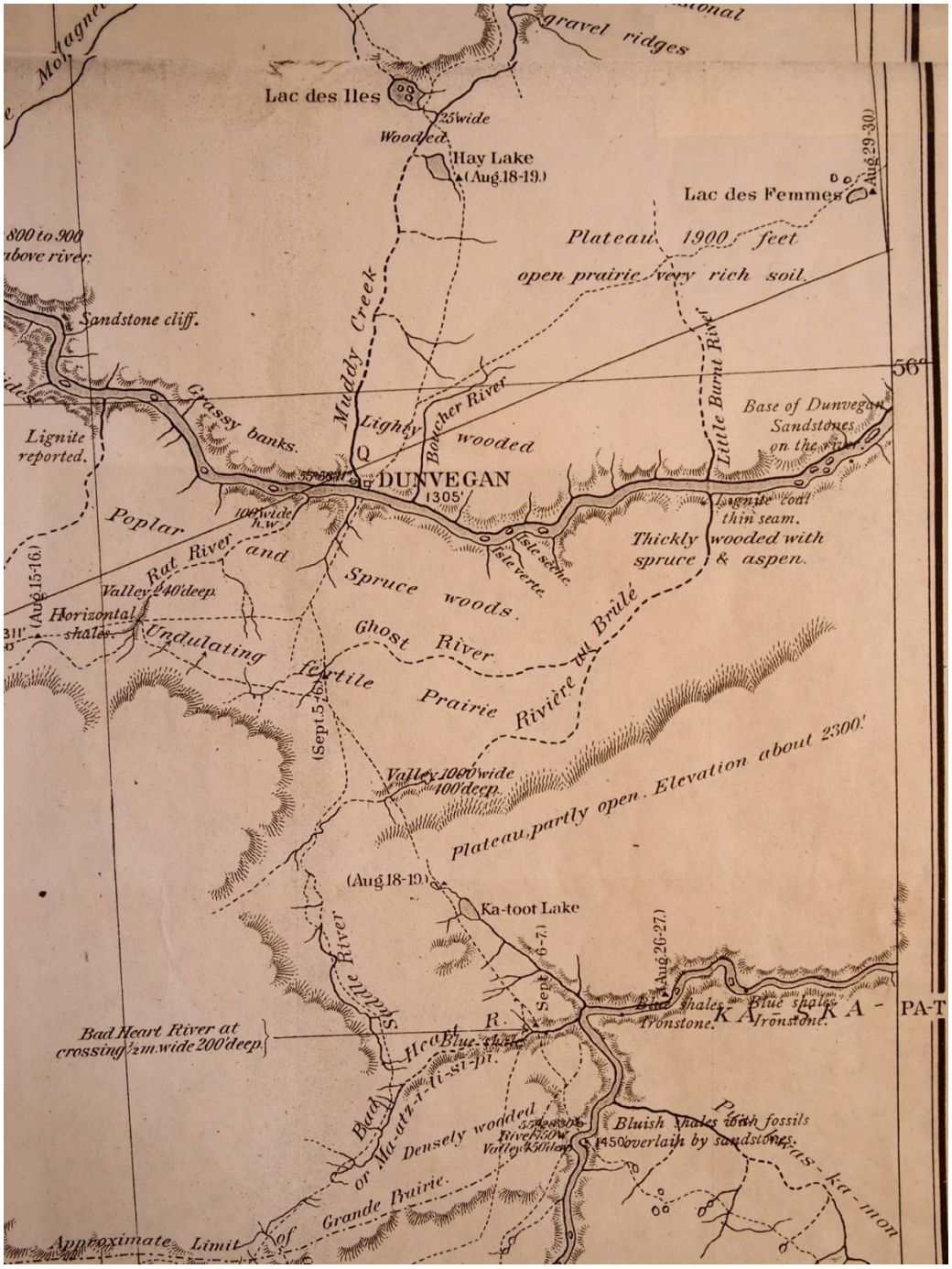



**Plate II (Detail 4 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

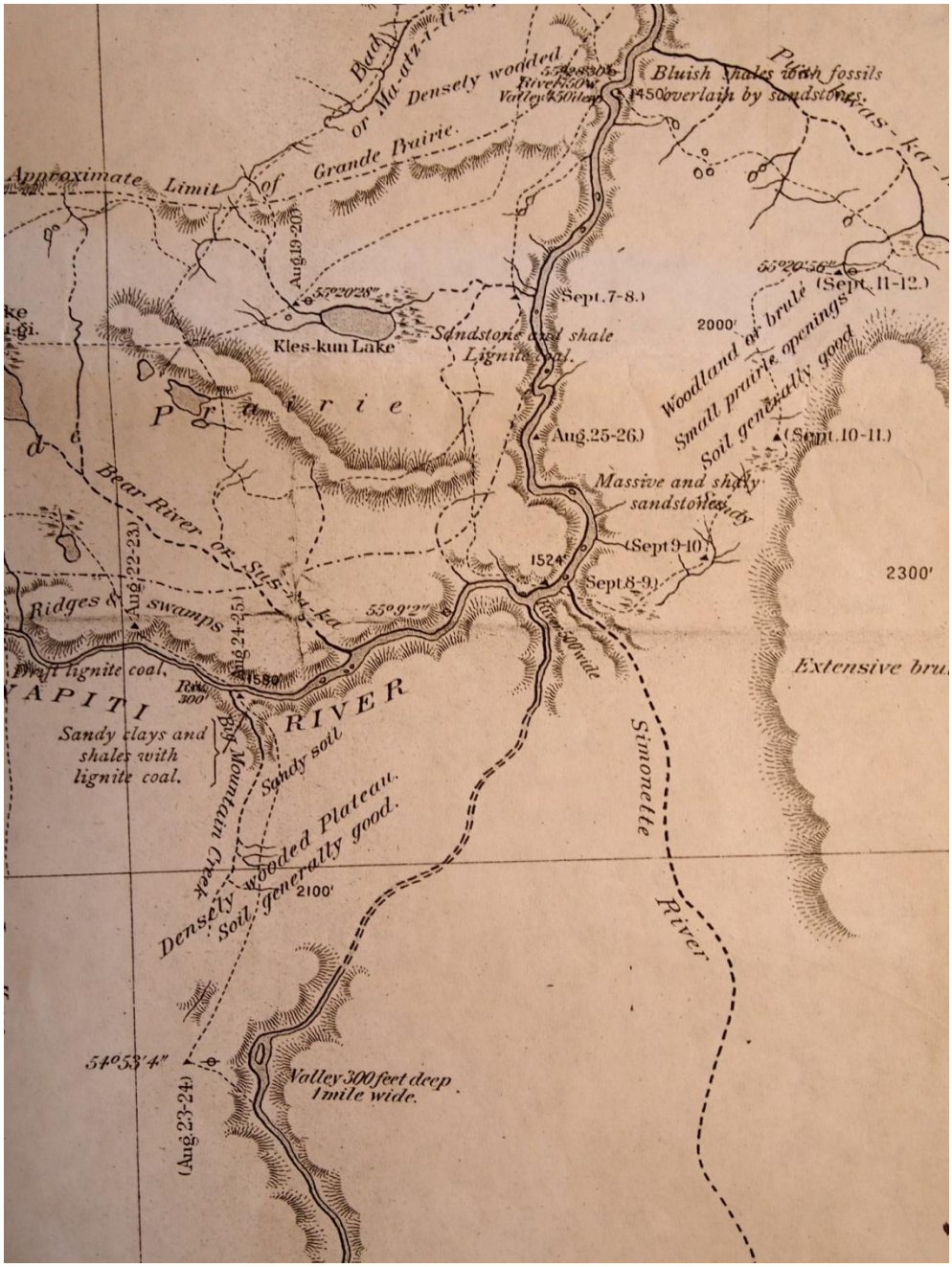



**Plate II (Detail 5 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

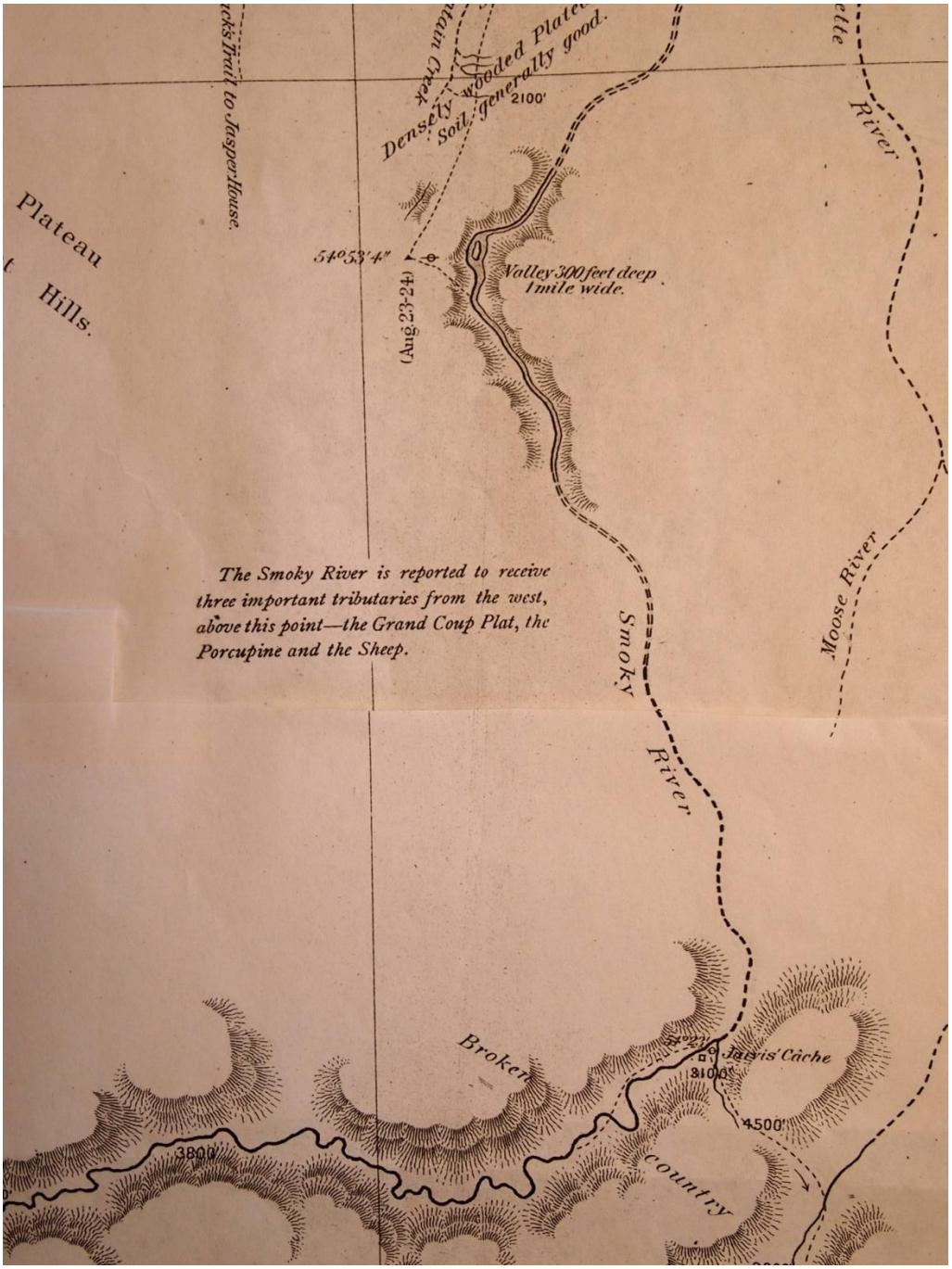



**Plate II (Detail 6 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

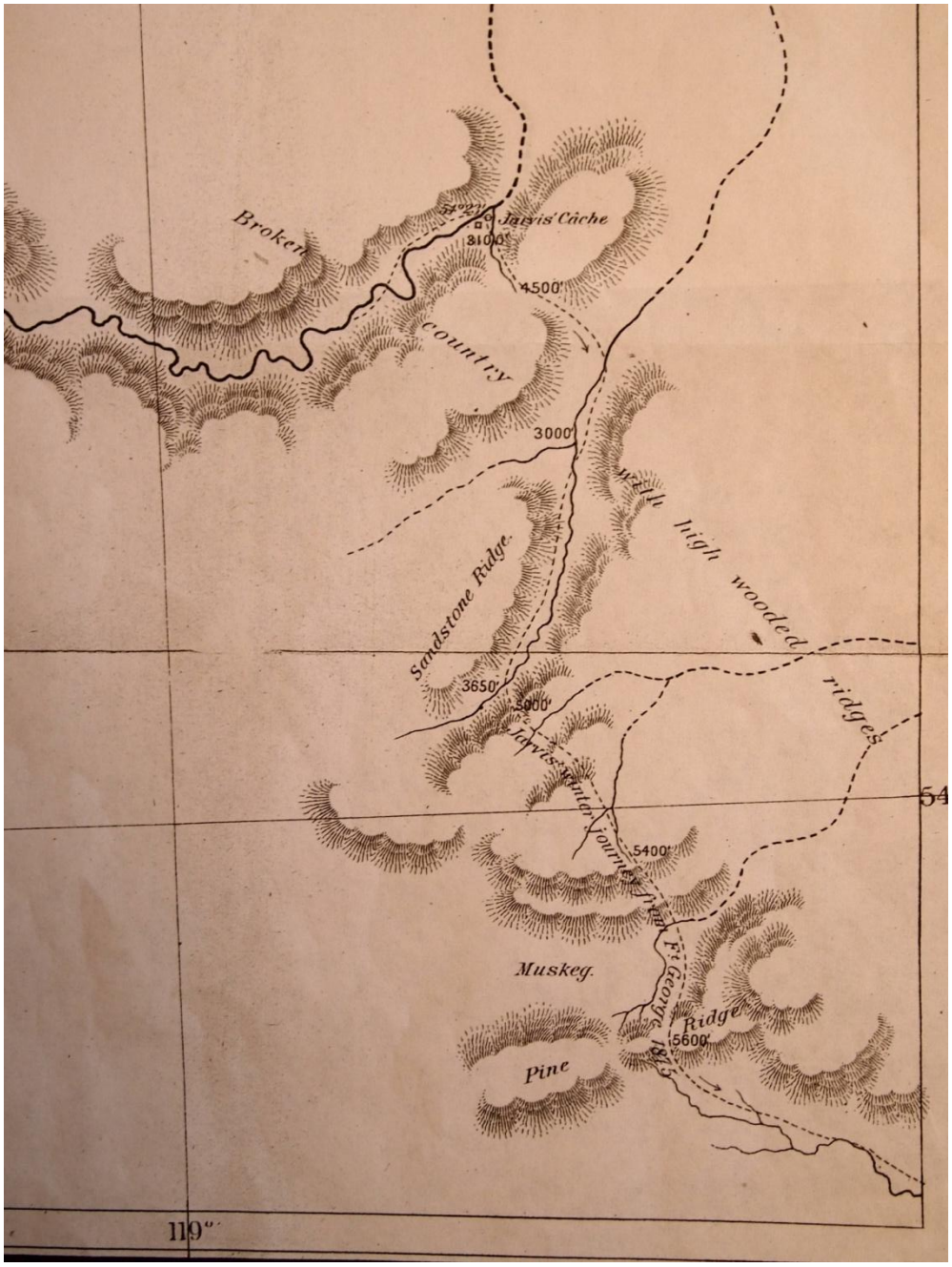



**Plate II (Detail 7 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

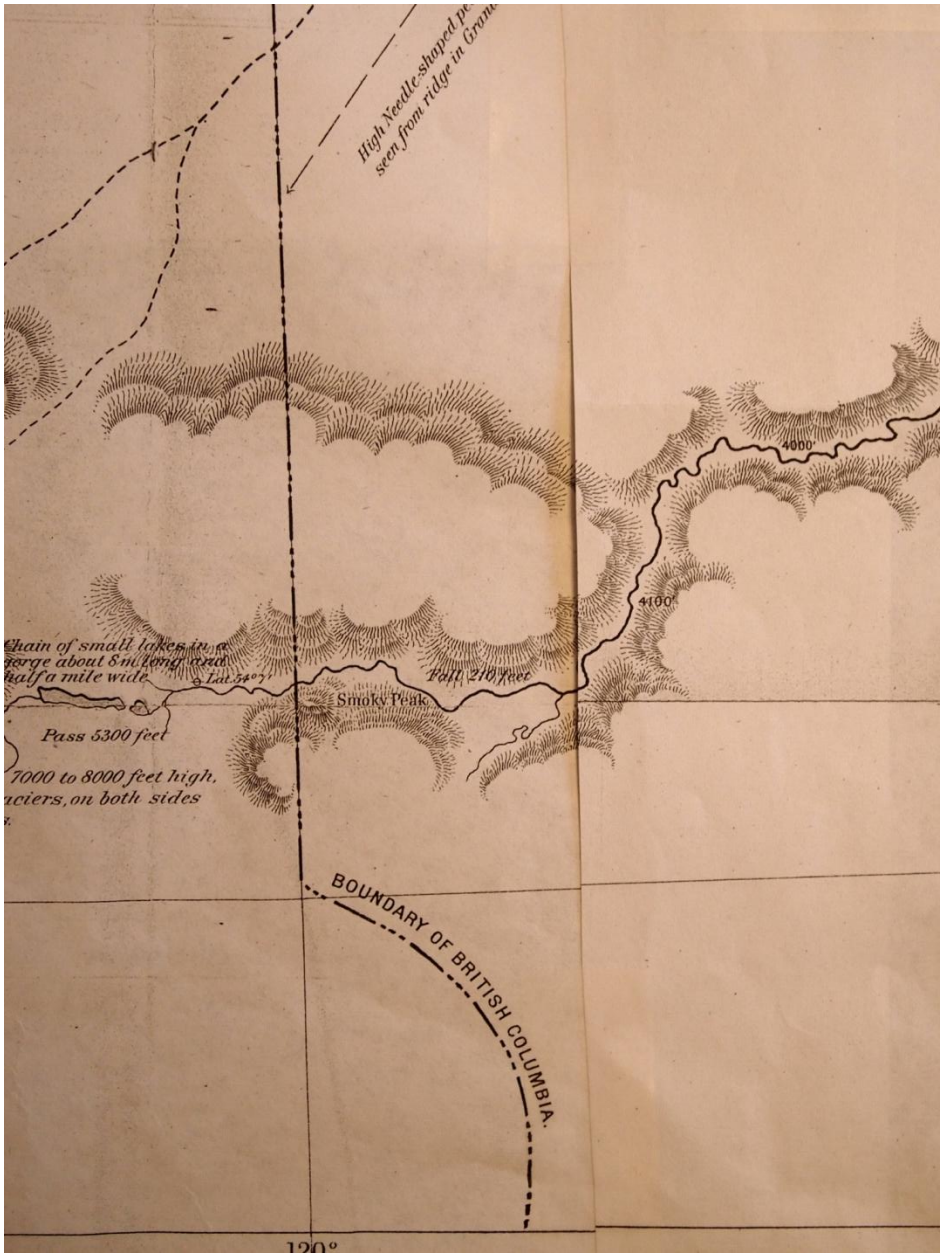



**Plate II (Detail 8 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

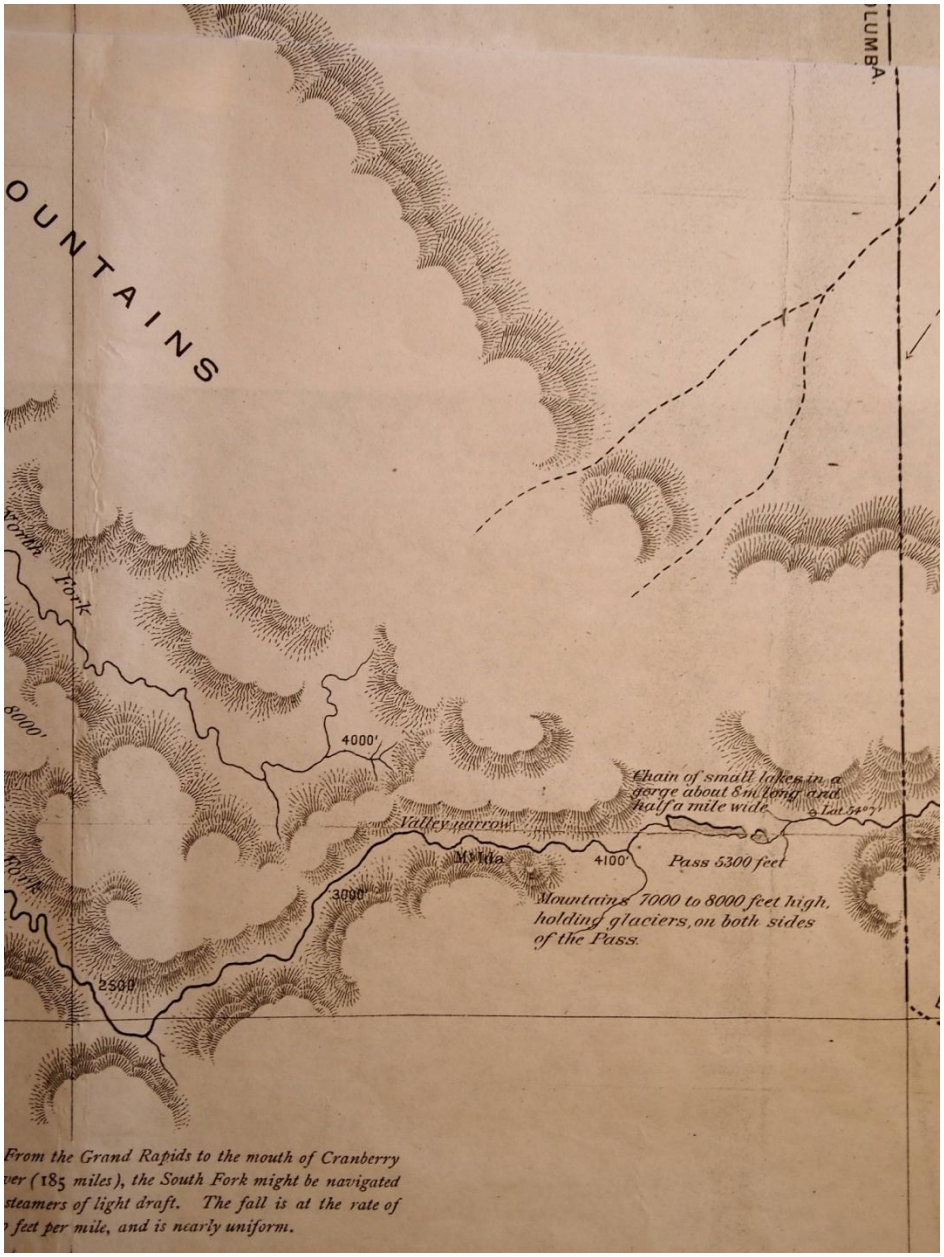



**Plate II (Detail 9 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

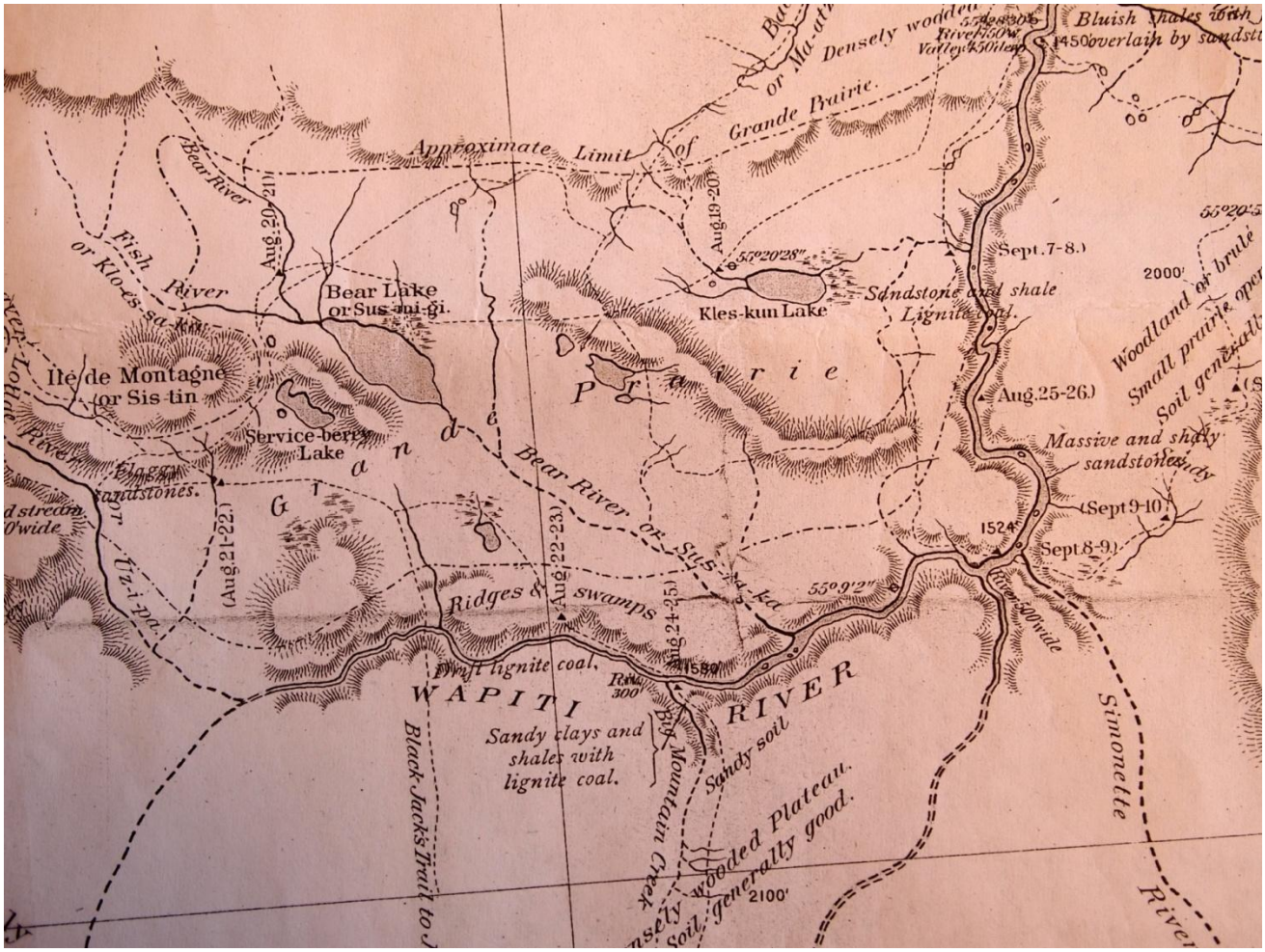



**Plate II (Detail 10 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

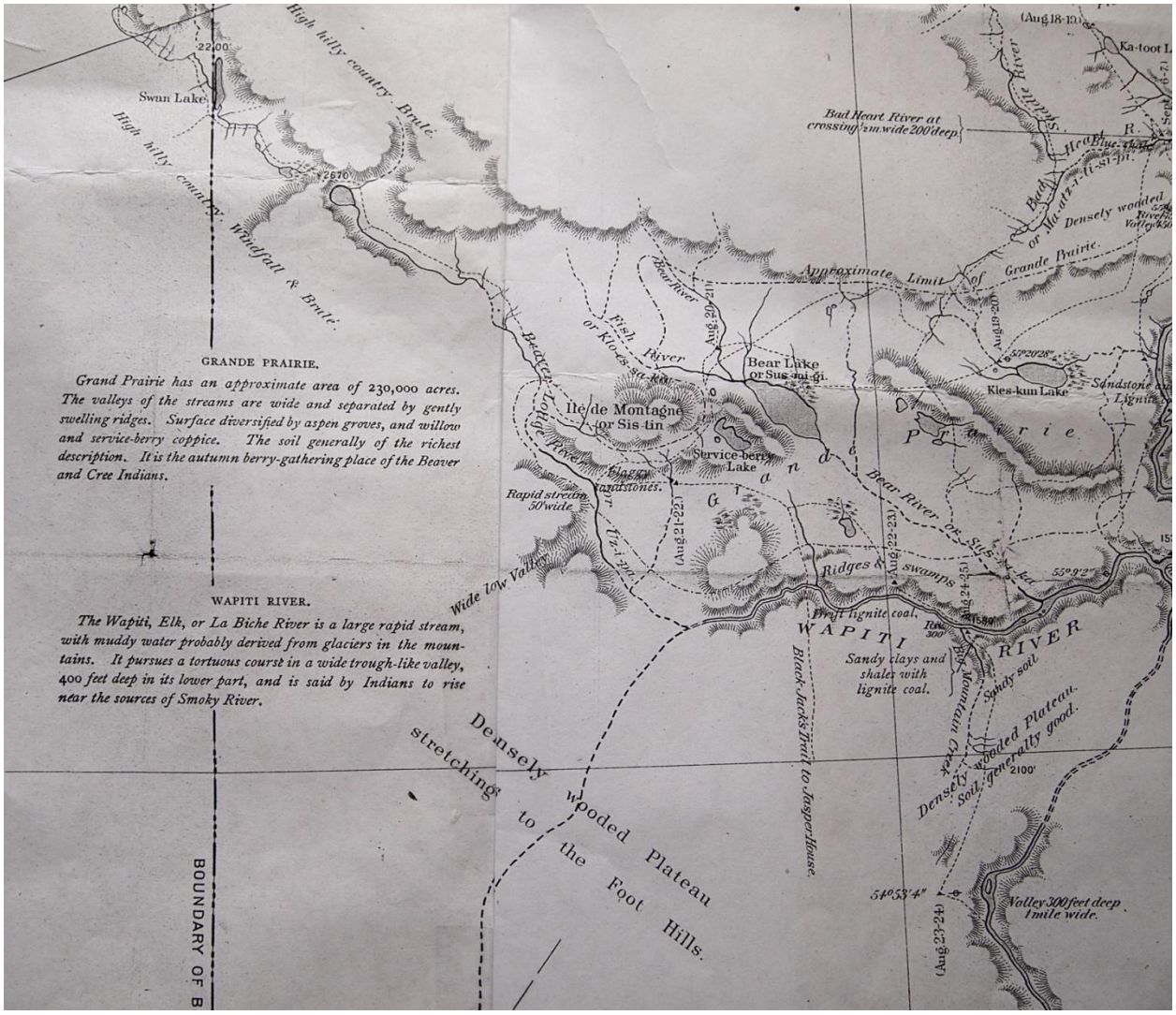



**Plate II (Detail 11 of 11) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

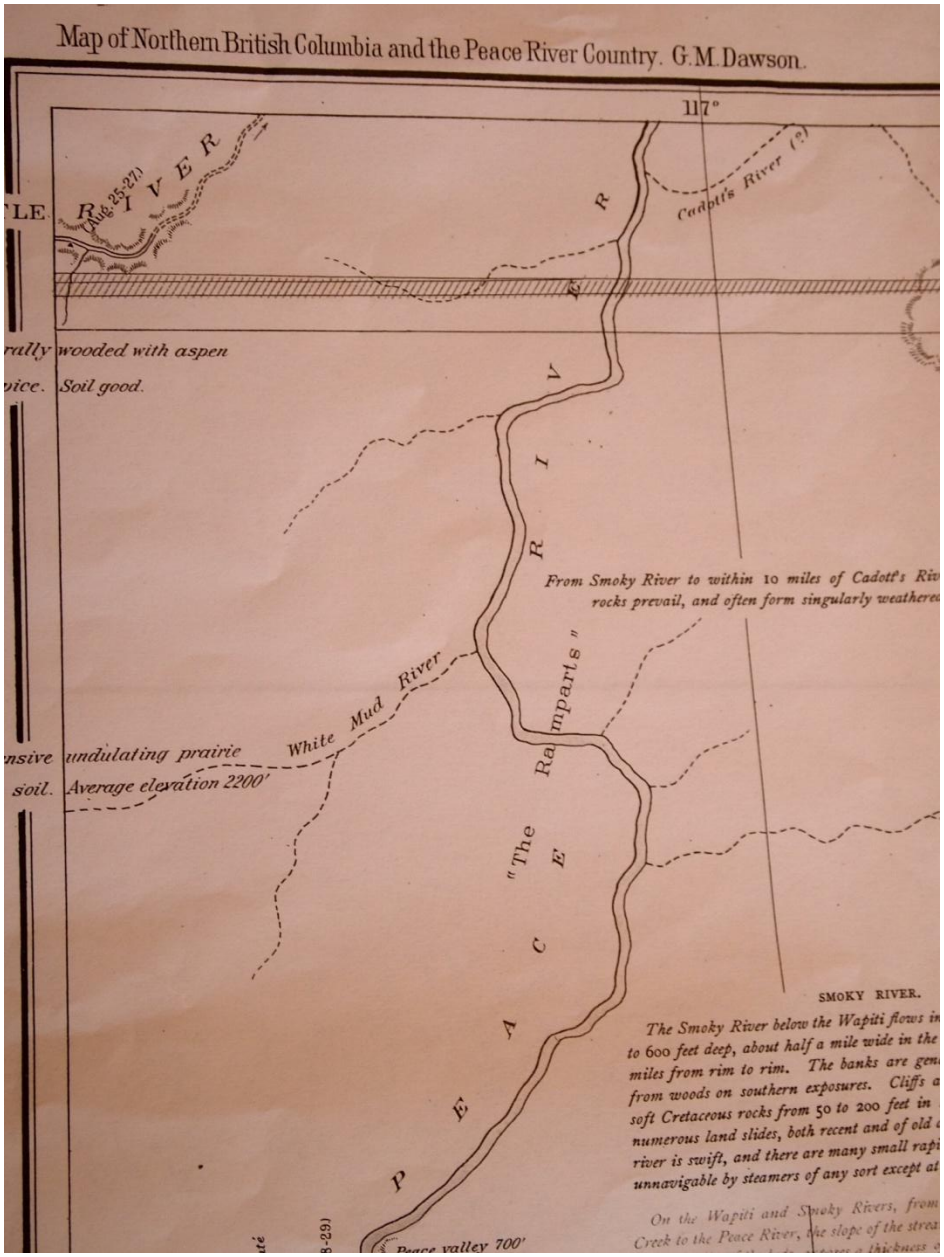



**Plate III (Detail 1 of 6) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

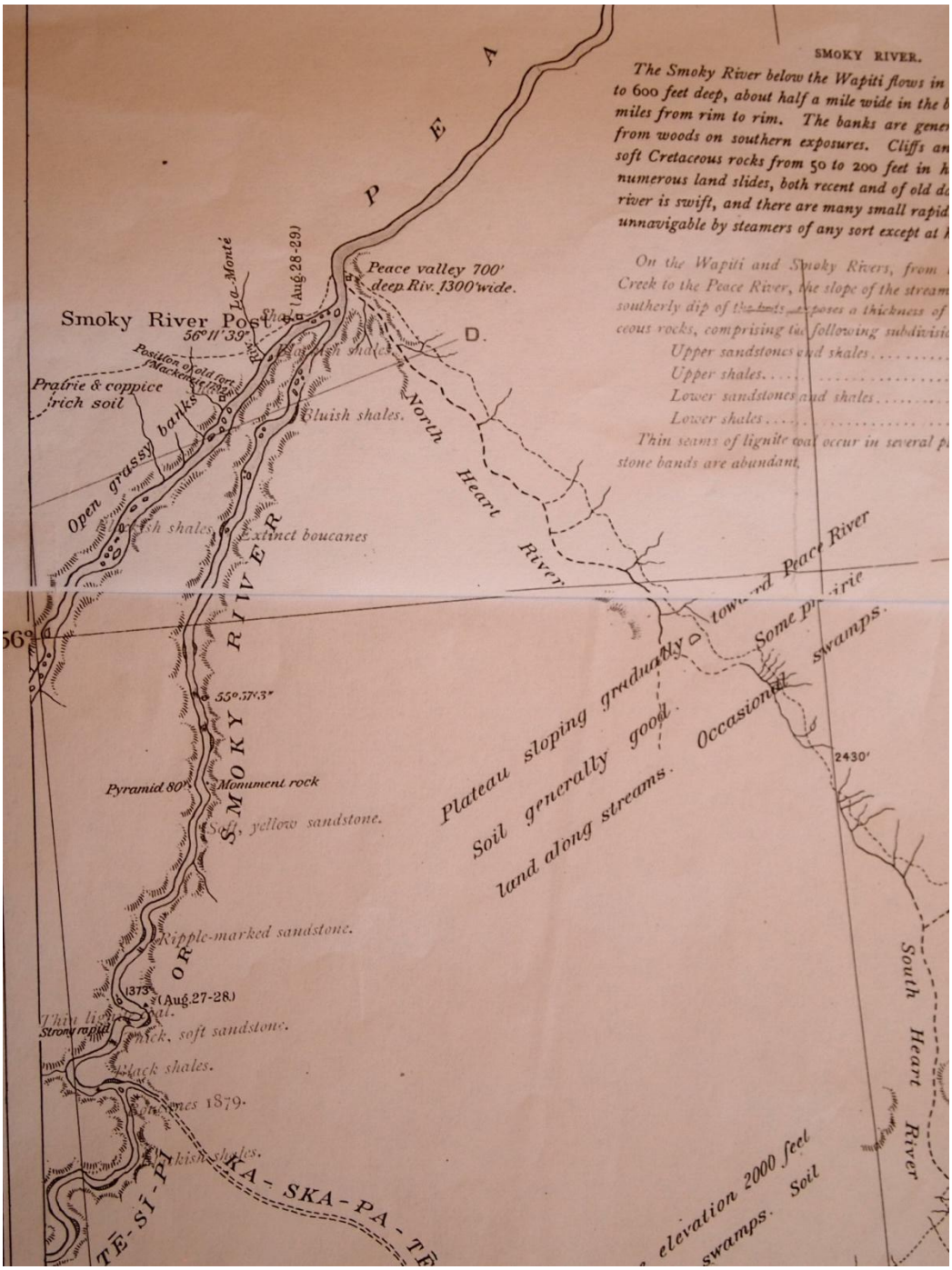



**Plate III (Detail 2 of 6) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

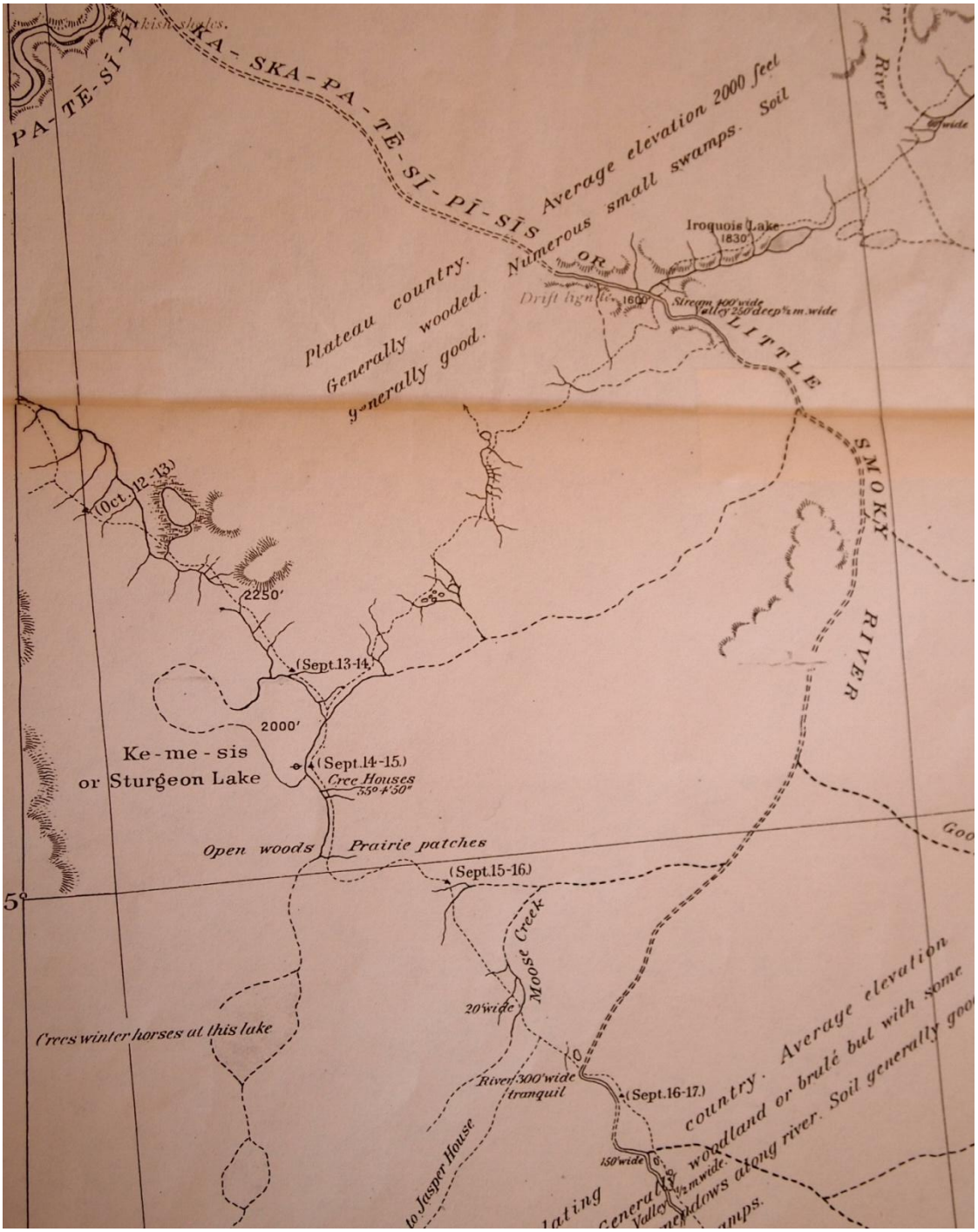



**Plate III (Detail 3 of 6) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

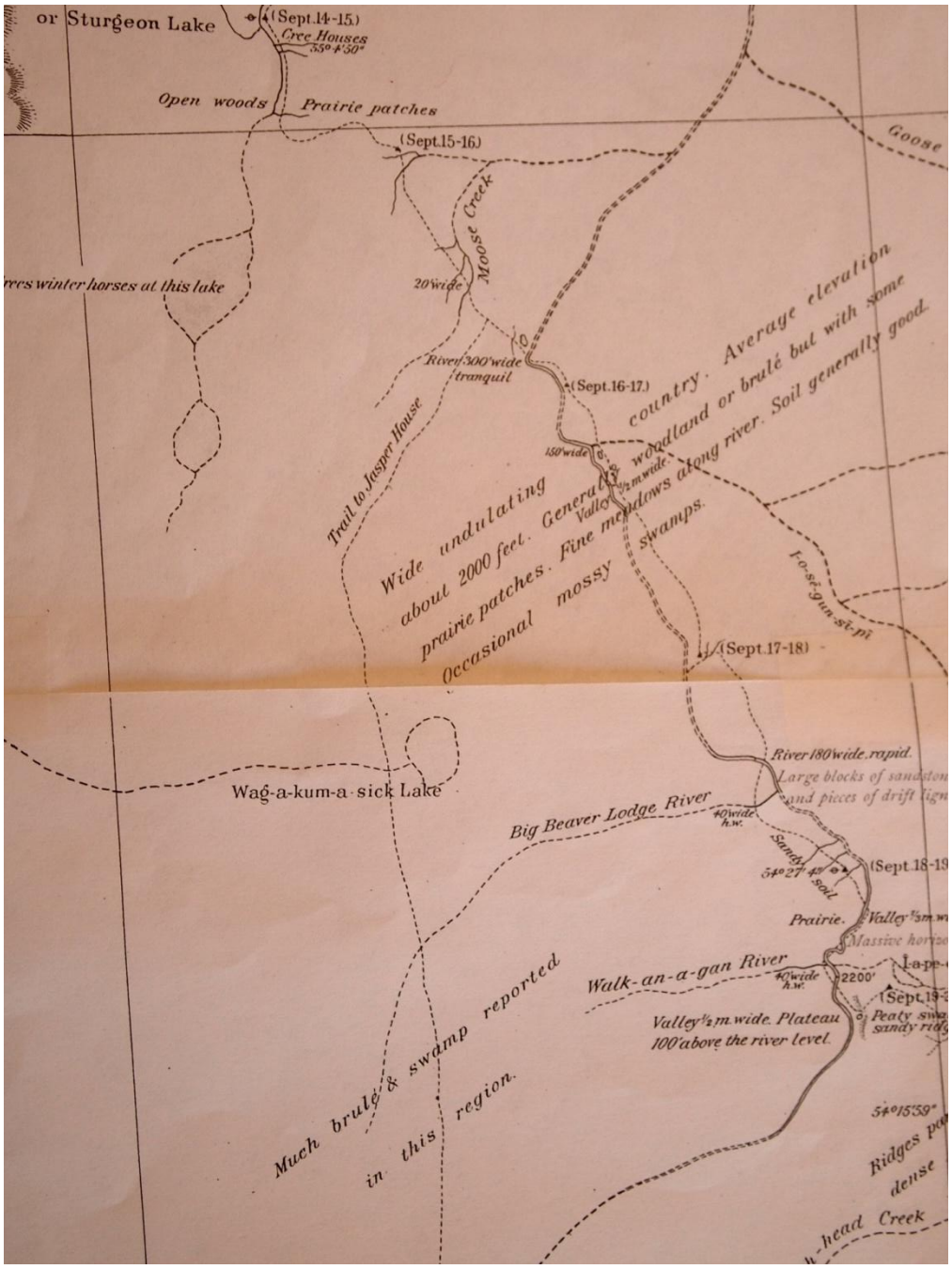



**Plate III (Detail 4 of 6) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

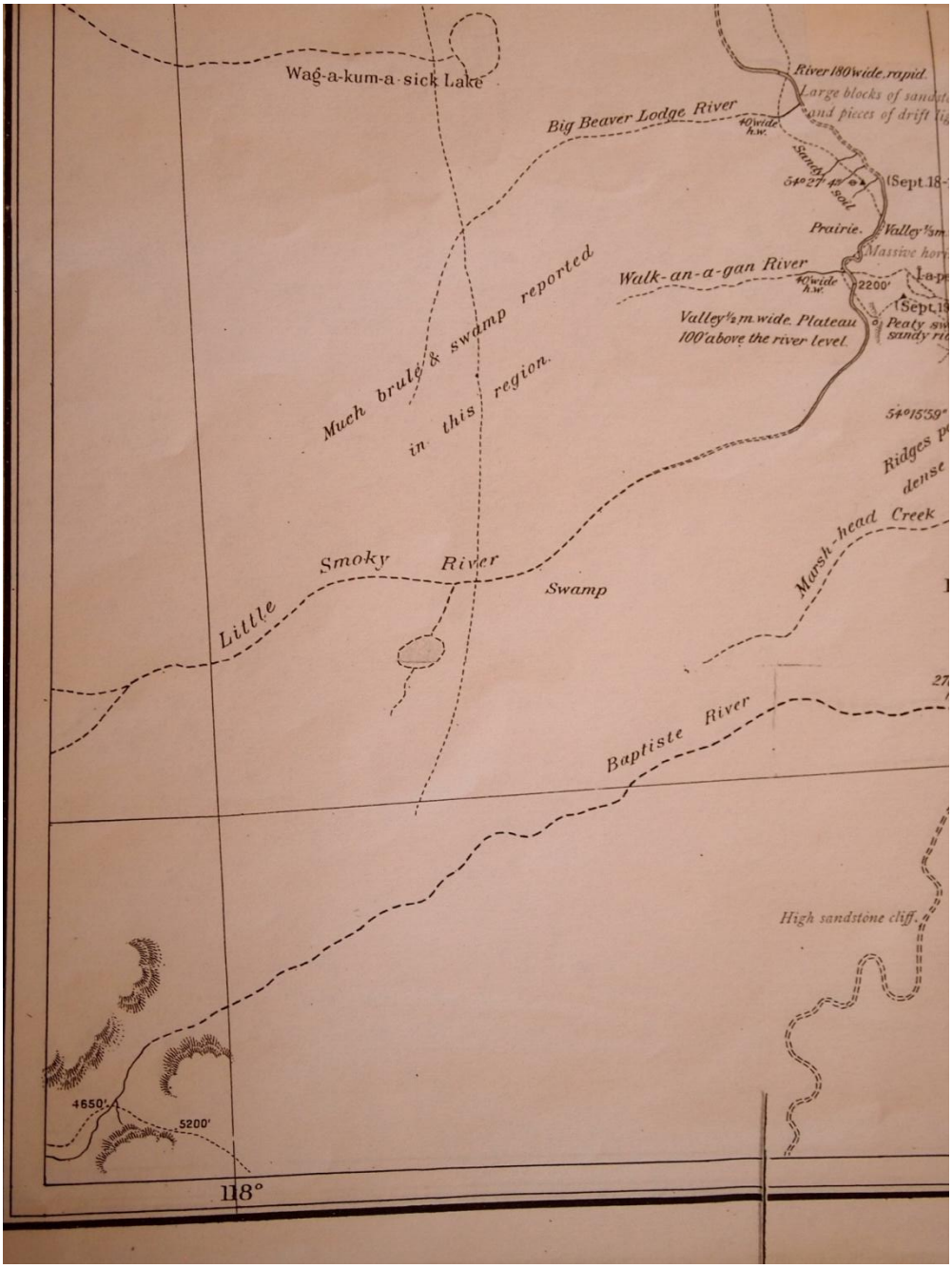



**Plate III (Detail 5 of 6) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

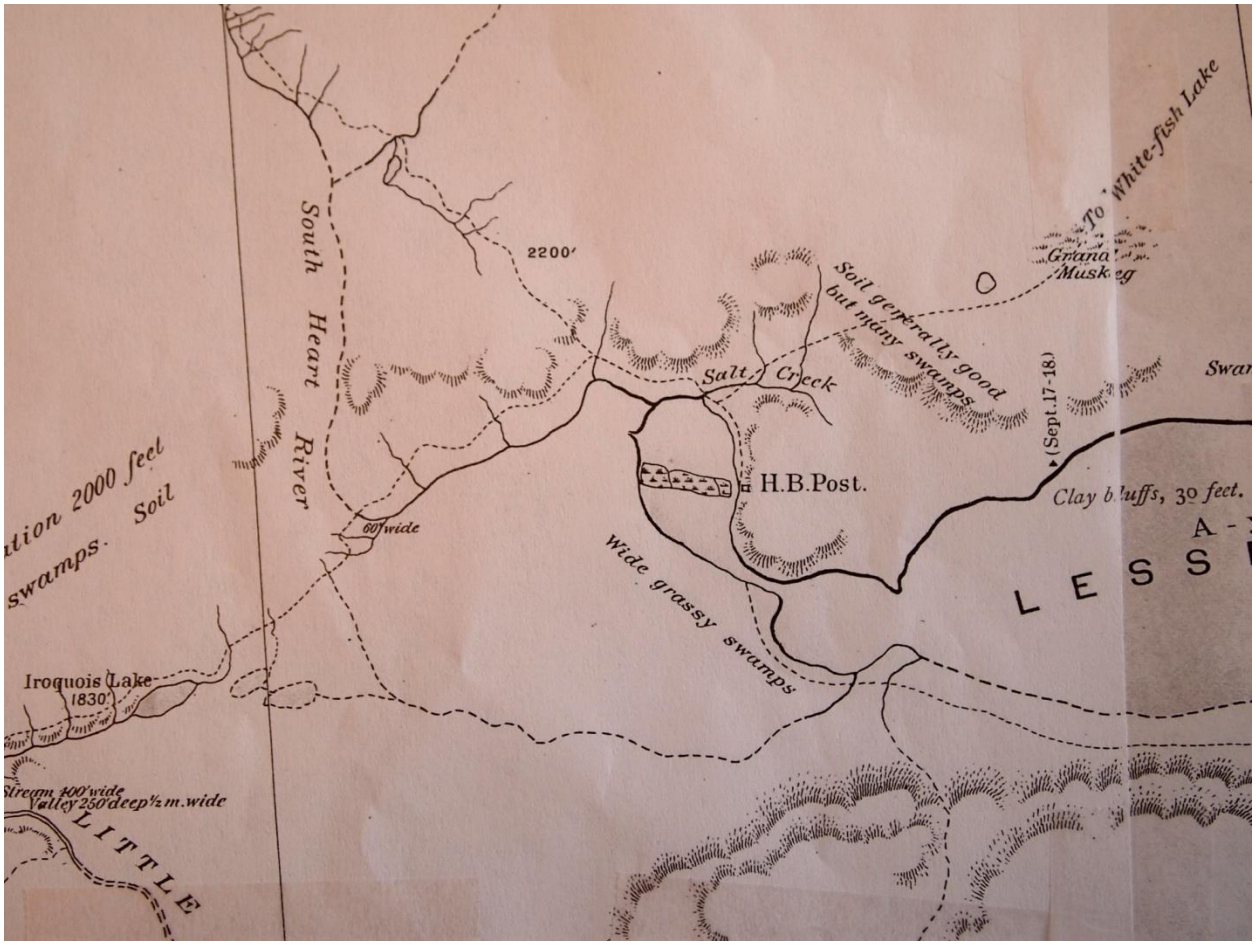



**Plate III (Detail 6 of 6) of the maps illustrating George Dawson's 1879 expedition, published in 1881.**

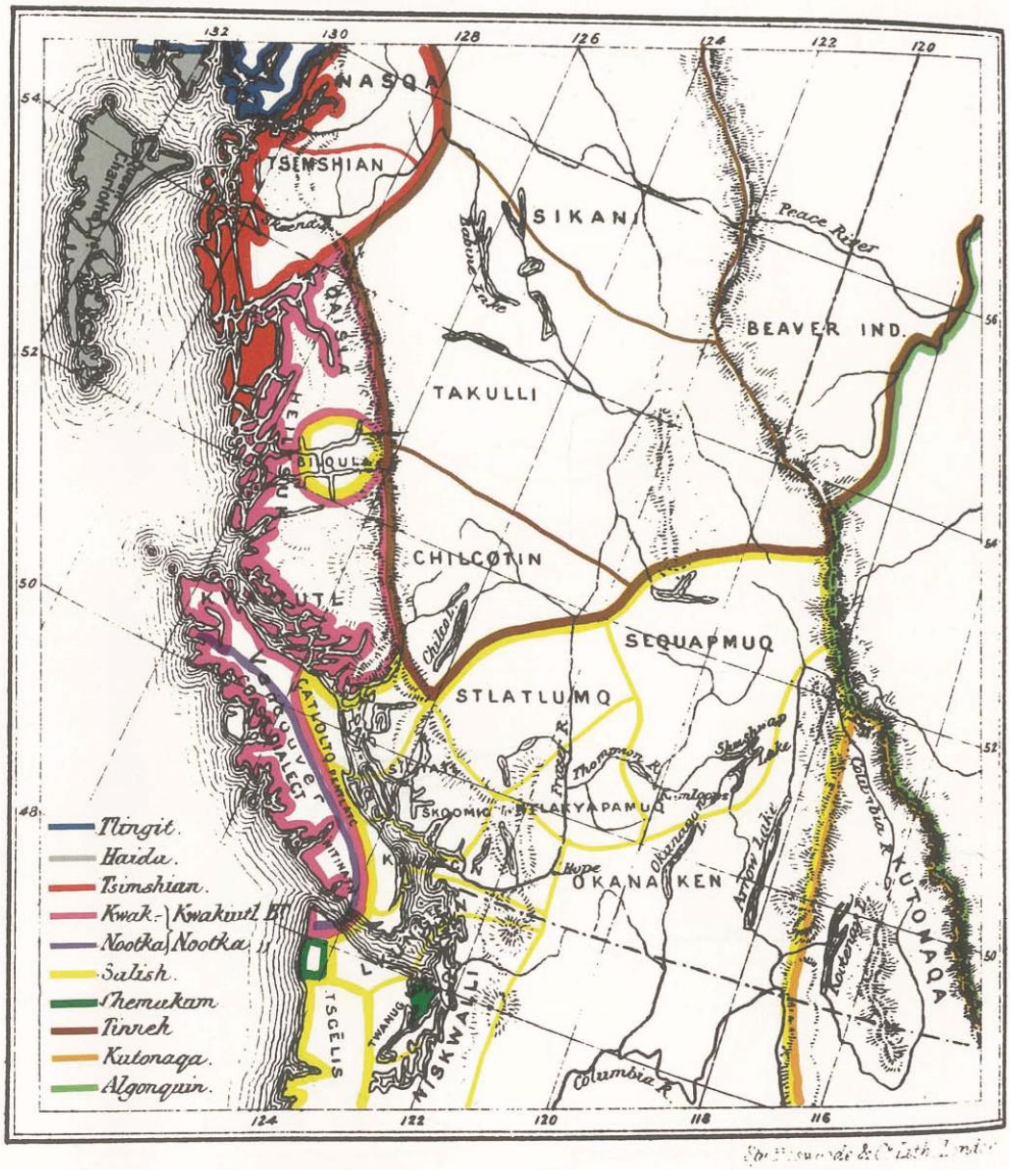
### 11.5 Boas 1890

Anthropologist and linguist Franz Boas in 1890 compiled a "Linguistic Map of British Columbia" that was published in 1891. Boas compiled this map on the basis of his 1888-1890 ethnographic and linguistic research in northwestern North America that was guided and financed by the Committee of the British Association for the Advancement of Science for the Study of the Northwestern Tribes of Canada (BAAS). Ethnologist Horatio Hale, editor of the BAAS Committee, directed Boas' work at this time. Hale's instructions to Boas in 1888 were that he was to gather enough ethnographic and linguistic information to prepare an ethnological map, based on linguistic distinctions, covering all of British Columbia. Because Boas had not by this time undertaken research with any of the Athapaskan tribes, himself, in British Columbia, he relied on George Dawson for information concerning the language boundaries of these groups. Consequently, Boas placed a "Note" at the bottom of this 1890 map, stating "The Tinneh [Dene or Athapaskan] are according to G.M Dawson." [586] As has been discussed (see Section 6.4.1), Dawson's 1884 map, which is relied upon by Boas for his 1890 map, extends the southernmost boundary of the Beaver or *Dane-zaa* approximately 30 miles (48 km) farther southeast along the Rocky Mountain summit than is defined in his 1879 journal notes and his 1881 publication.

[586] Franz Boas 1890 (published in 1891). Linguistic Map of British Columbia. Plate XIX in, Second General Report on the Indians of British Columbia. *Sixtieth Annual Report of the British Association for the Advancement of Science for 1890.* Page 552.

60th Report Brit. Assoc. 1890.

Plate XIV.




LINGUISTIC MAP OF BRITISH COLUMBIA.

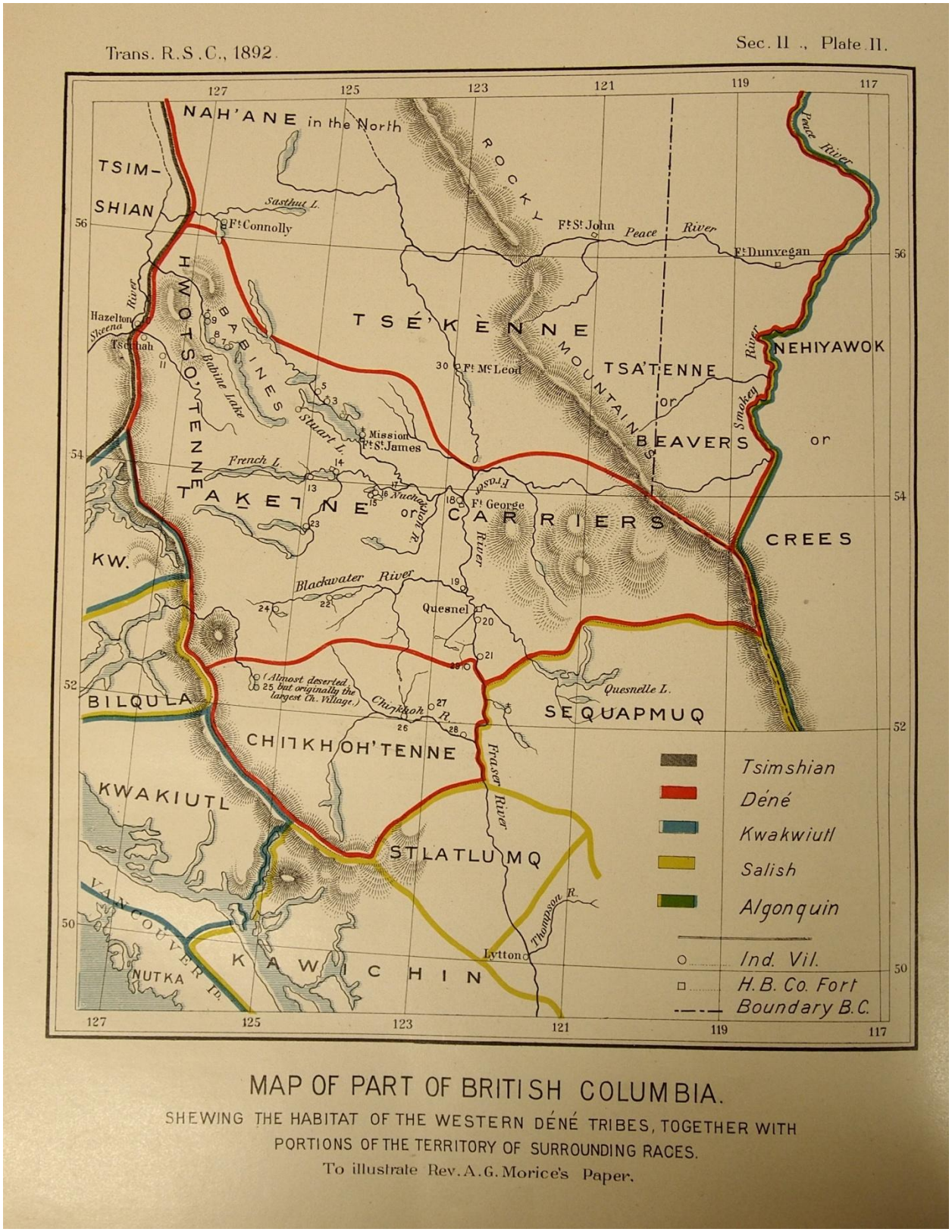
NOTE.— *The Tinneh are according to Dr. G. M. Dawson. Broad coloured lines denote limits of branches of one linguistic stock, thin coloured lines limits of more closely related dialects.*

## 11.6 Morice 1892

It is very likely that the Beaver territorial information on Morice's map also came from George Dawson.[587]

As has been discussed (see Section 6.4.1 and Section 11.5), Dawson's 1884 map, which is relied upon by Boas for his 1890 map, extends the southernmost boundary of the Beaver or *Dane-zaa* approximately 30 miles (48 km) farther southeast along the Rocky Mountain summit than is defined in his 1879 journal notes and his 1881 publication, is also relied on by Morice for his 1892 map.

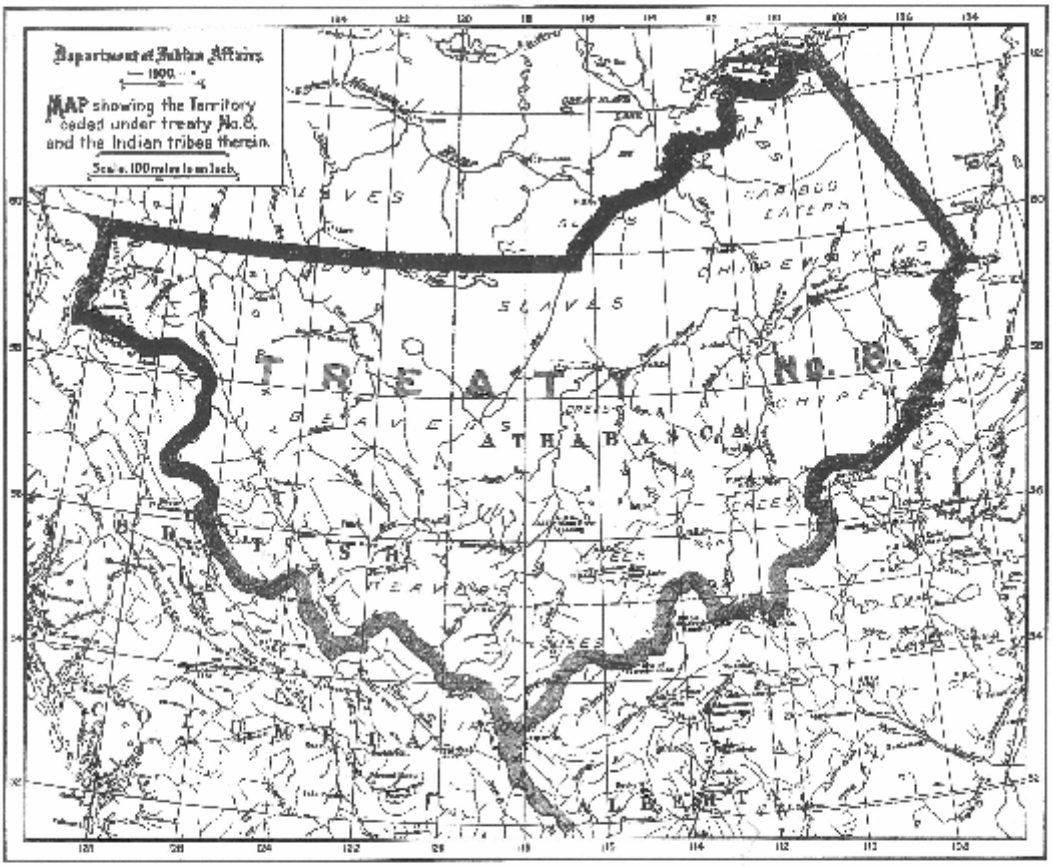
[587] See A.G. Morice (1892). Map of Part of British Columbia Shewing the Habitat of the Western Déné Tribes, Together With Portions of the Territory of Surrounding Races. [In] Are the Carrier Sociology and Mythology Indigenous or Exotic? *Transactions of the Royal Society of Canada for 1892, Section II, Plate II* (Section 11.6 in the present report).


Trans. R.S.C., 1892.
Sec. II., Plate II.
NAH'ANE in the North
TSIM-SHIAN
HWOTSO'TENNE
BABINES
TSÉ'KÈNNE
TSA'TENNE or BEAVERS
NEHIYAWOK or CREES
TAKETNE or CARRIERS
CHITKHOH'TENNE
BILQULA
SEQUAPMUQ
KWAKIUTL
STLATLUMQ
KAWICHIN
KW.
NUTKA
VANCOUVER I.
ROCKY MOUNTAINS
Peace River
Fraser River
Thompson R.
Skeena River
Babine Lake
Stuart L.
French L.
Nuchatlaht R.
Blackwater River
Chinkoh R.
Quesnelle L.
Sasthut L.
Ft Connolly
Ft St John
Ft Dunvegan
Hazelton
Ft Mc Leod
Mission
Ft St James
Ft George
Quesnel
Lytton
(Almost deserted, 25, but originally the largest Ch. Village.)
Tsimshian
Déné
Kwakwiutl
Salish
Algonquin
Ind. Vil.
H.B. Co. Fort
Boundary B.C.
MAP OF PART OF BRITISH COLUMBIA.
SHEWING THE HABITAT OF THE WESTERN DÉNÉ TRIBES, TOGETHER WITH PORTIONS OF THE TERRITORY OF SURROUNDING RACES.
To illustrate Rev. A.G. Morice's Paper.

## 11.7 Treaty 8 Map of 1900

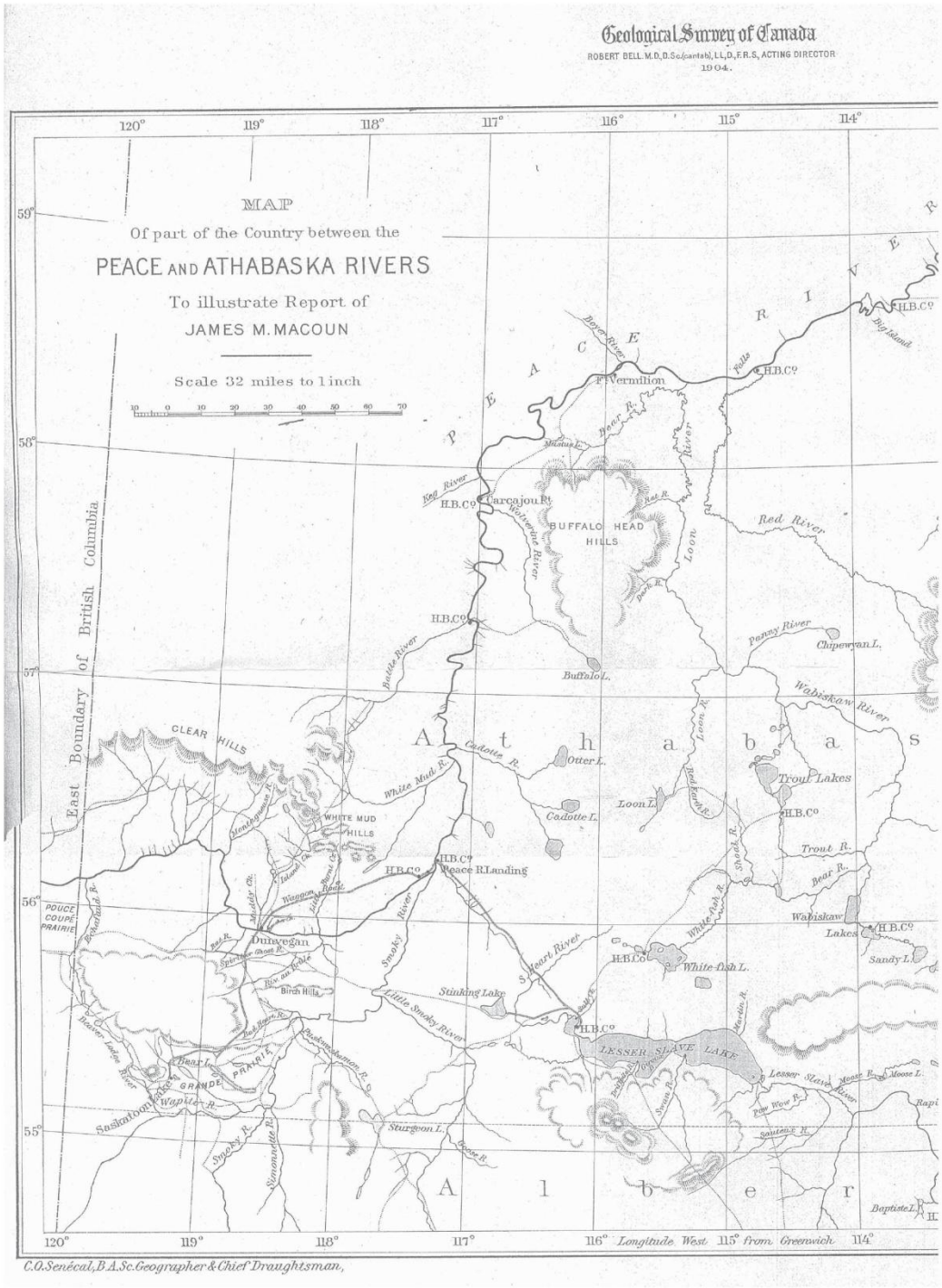
An official Department of Indian Affairs "Map showing the Territory ceded under treaty No. 8, & the Indian tribes therein" was published in the 30 June 1900 Indian Affairs Annual Report and appears in the Report of Commissioner for Treaty No. 8, 11 December 1900. (Annual Report of the Department of Indian Affairs for the Year Ended June 30, 1900. *Canada, Sessional Papers, Vol. 11, First Session of the Ninth Parliament of the Dominion of Canada, Session 1901*).

This map shows the southernmost extent of ceded territory to be in the vicinity of Jasper House. Iroquois are indicated around Jasper House, Cree near the headwaters of the Smoky River and Beaver to the west and north.


Department of Indian Affairs
1899
MAP showing the Territory ceded under treaty No.8, and the Indian tribes therein.
Scale. 100 miles to an inch.
TREATY No. 8
SLAVES
ATHABASCA

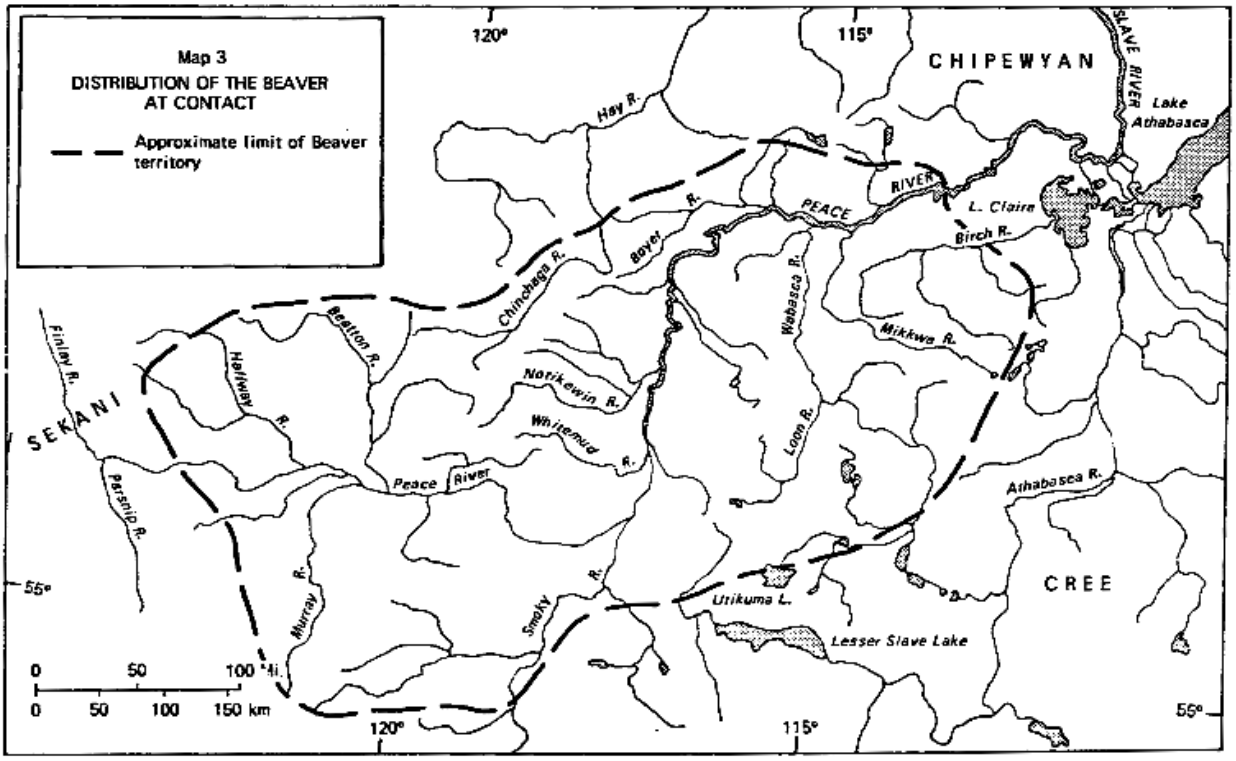
## 11.8 James Macoun

James Macoun undertook a survey of the Peace River region in 1903 and published the following map in his 1904 report. Macoun's report is accompanied by *Map of Part of the Country Between the Peace and Athabaska Rivers to Illustrate Report of James M. Macoun,* which appears here on page 86. (James M. Macoun. *Report on the Peace River Region* [15 December 1903]. Published by the Geological Survey of Canada by S.E. Dawson, King's Printer: Ottawa. 1904.)


Geological Survey of Canada
ROBERT BELL, M.D., D.Sc.(cantab), LL.D., F.R.S., ACTING DIRECTOR
1904.
MAP
Of part of the Country between the
PEACE AND ATHABASKA RIVERS
To illustrate Report of
JAMES M. MACOUN
Scale 32 miles to 1 inch
East Boundary of British Columbia
CLEAR HILLS
POUCE COUPÉ PRAIRIE
WHITE MUD HILLS
BUFFALO HEAD HILLS
Dunvegan
Peace R. Landing
Carcajou R.
Fort Vermilion
Peace River
Athabasca
Alberta
LESSER SLAVE LAKE
Trout Lakes
Wabiskaw Lakes
Sandy L.
White Fish L.
Stinking Lake
Sturgeon L.
Baptiste L.
Longitude West from Greenwich
C.O. Senécal, B.A.Sc. Geographer & Chief Draughtsman,

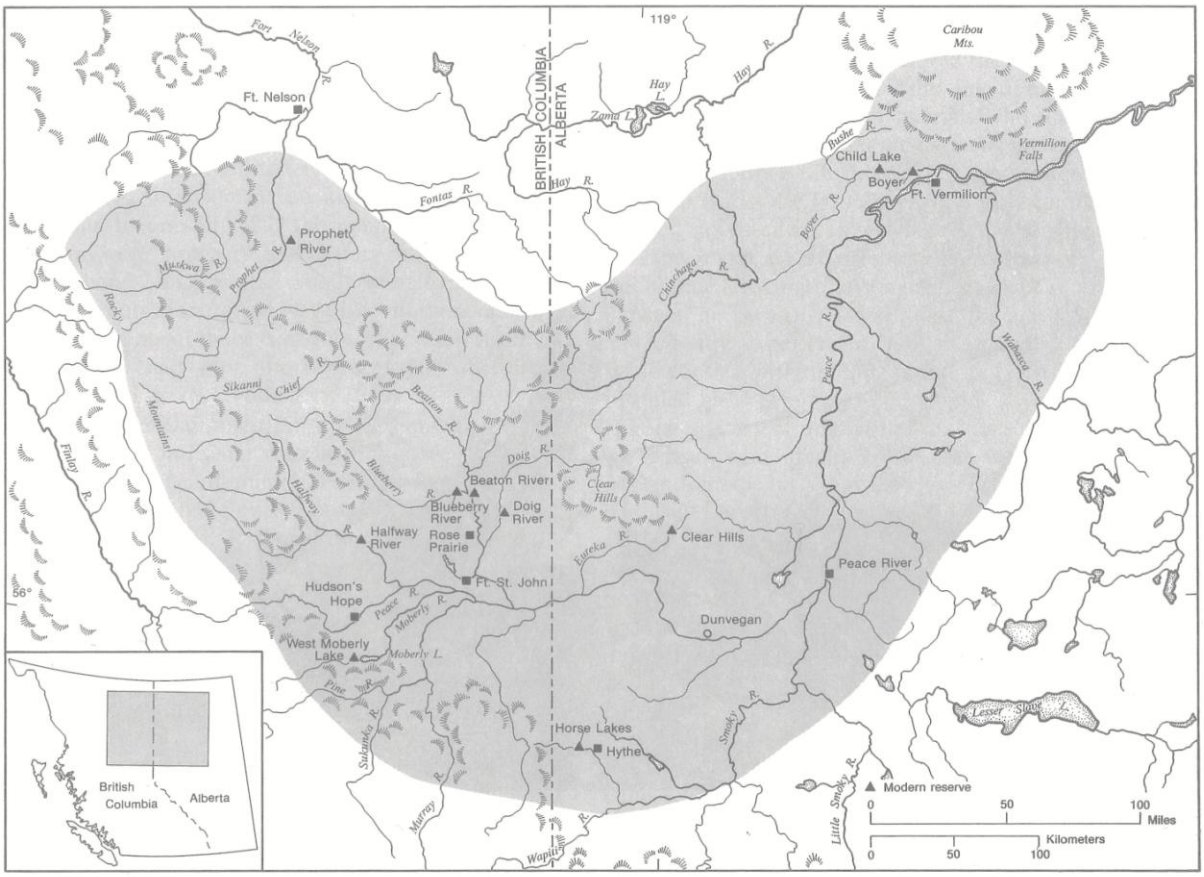
## 11.9 Leonard Ugarenko

Map entitled "Distribution of the Beaver at Contact," appearing in Leonard Ugarenko's 1979 Master's thesis, The Beaver Indians and the Fur Trade on the Peace River, 1700-1850. Master's thesis, Department of History, York University, Toronto.



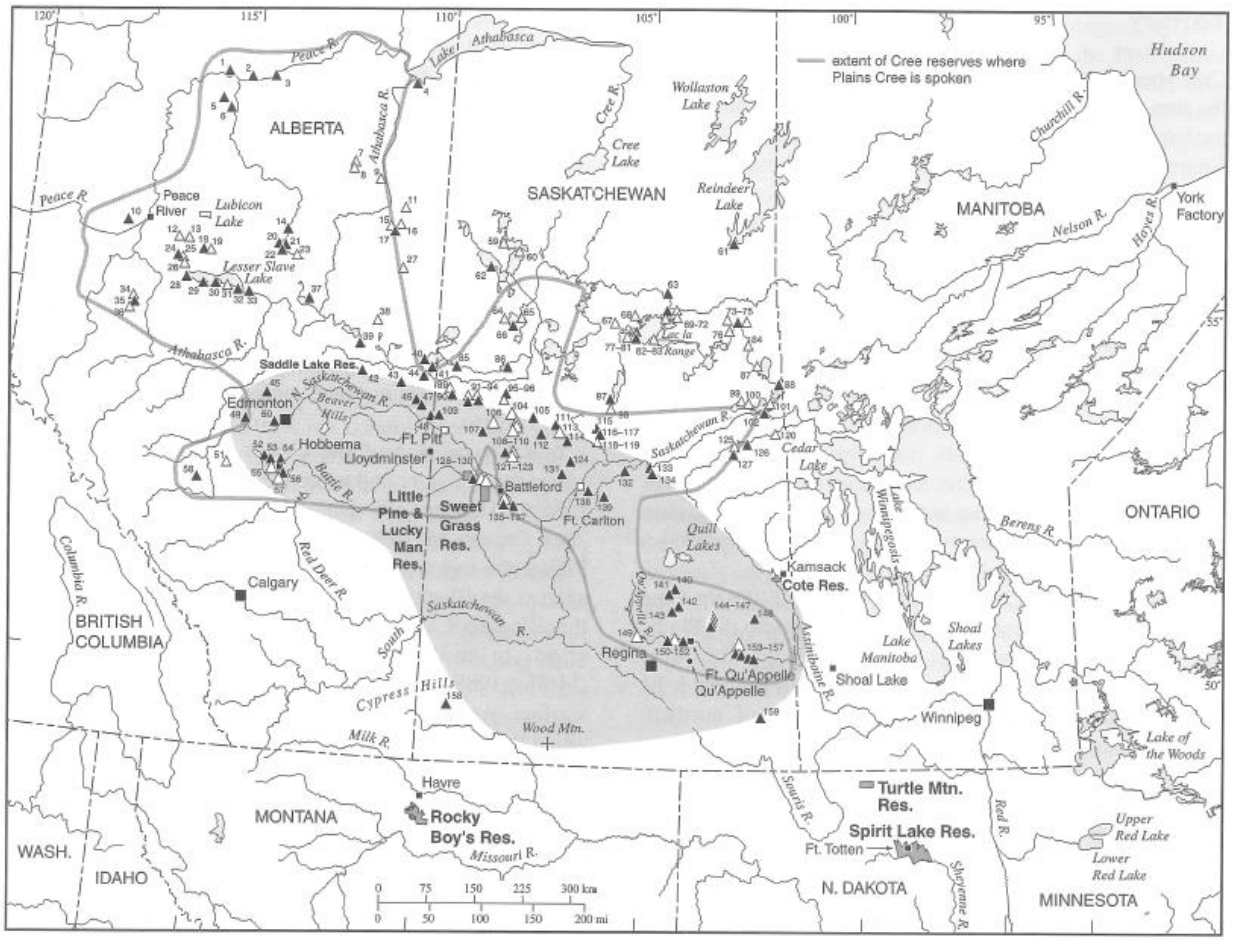
## 11.10 Robin Ridington

Anthropologist Robin Ridington (together with his first wife, Antonia Ridington) undertook ethnographic field work with *Dane-zaa* people in the Fort St. John region in the 1960s-1970s. His map of Beaver Territory "in 1800" is reproduced below. Published in: Robin Ridington (1981). Beaver. *Handbook of North American Indians, Vol. 6, Subarctic*. Edited by June Helm. Smithsonian Institution, Washington DC, 1981. Page 351.



## 11.11 Regna Darnell

Anthropologist Regna Darnell has reproduced David Mandelbaum's 1979 map of "Plains Cree" territory *circa* 1860-1870, based on his 1934-1935 fieldwork.[588] On this same map, Darnell has superimposed a line delineating the "extent of Cree reserves where Plains Cree is spoken." Darnell's westernmost "boundary" of the "extent of Plains Cree-speaking reserves"[589] includes the area where Beaver Indian Reserves 152 and 152A were formerly located (see section 9.1), but excludes the areas where two present-day Indian Reserves belonging to the Horse Lake First Nation are located--IR 152B (Horse Lakes) and IR 152C (Clear Hills).




[588] David G. Mandelbaum (1979). *The Plains Cree: An Ethnographic, Historical, and Comparative Study*. Canadian Plains Studies 9. Canadian Plains Research Center, University of Regina. Page 13.

[589] Regna Darnell (2001). Plains Cree territory 1860-1870. Plains Cree. *Handbook of North American Indians, Vol. 13, Plains.* Edited by Raymond J. DeMallie. Smithsonian Institution, Washington DC. Page 639.

## Appendix A: Chronological Listing of Early Posts in the Central and Upper Peace Area

The primary source for the following information is Terry Smythe (1968) *Thematic Study of the Fur Trade in the Canadian West, 1670-1870*, a Staff Report for the Historic Sites and Monuments Board of Canada, Agenda Paper 1968-29. A copy of this document is on file with the Hudson's Bay Company Archives (HBCA), Provincial Archives of Manitoba, Winnipeg. Additional, similar information has been provided from Ernest Voorhis (1930). Historic Forts and Trading Posts of the French Regime and of the English Fur Trading Companies. Report prepared for the Natural Resources Intelligence Service of the Department of the Interior, Ottawa, a copy of which is also on file with the HBCA (FC/171/V6).

| Chronological Listing of Early Posts in the Central and Upper Peace Area | | |
|---|---|---|
| c.1788-1791 | Boyer's Post | This first post built on the Peace River, just above the mouth of Boyer River, was important as one of the closest sources of buffalo for the Athabasca district trade of the North West Company ("NWC"); Alexander Mackenzie in October 1792 referred to Boyer's Post as the "Old Establishment" |
| c.1790 - 1792 | McLeod's Fort | A NWC fur trade and provisioning House situated on left bank of Peace River, at the mouth of Whitemud River. |
| 1792-c.1799 | Aspin House | A NWC provision and fur trading post on the north side of the Peace River in about Tp.106, R.17, W5 that was built to replace Boyer's Post; Alexander Mackenzie in October 1792 referred to Aspin House as the "New Establishment" |
| 1792-1805 | Fort Fork | A NWC fur trade and provisioning post, and Alexander Mackenzie's staging camp, situated on the south bank of the Peace River, about 10 km above the mouth of Smoky River. |
| c.1794-1804 | Rocky Mountain Fort | A NWC fur trade post on the south bank of the Peace River, near Moberly River, built as a temporary facility, intended for the purposes of trade in the late fall and winter |

| | | |
|---|---|---|
| | | months. |
| c.1798 – c.1831 | Fort Vermilion I | Built on the right bank of the Peace River, about 27km below the mouth of the Keg River, Alberta. It was a major provision and fur trading post. In 1821, it was taken over by the HBC and remained the chief post on the Peace River until being abandoned c.1830. |
| 1802-1803 | Mansfield House | HBC post situated on the Peace near the mouth of Boyer River to be near the buffalo. The post failed when the Aboriginal people refused to trade. |
| 1802-1804 | Fort Liard | NWC post situated on the north bank of the Peace River, just above mouth of Boyer River. |
| 1803-1805 | Fort Fork | An XY Company post near the NWS's original Fort Fork situated above the mouth of the Smoky River. |
| c.1803- c.1805 | Horse Shoe House | A NWC wintering post situated at the Horse Shoe bend just above the mouth of the Notikewin River. |
| c. 1806 – post 1808 | Encampment Island Fort | A NWC wintering post situated on an island in the Peace River below the mouth of Cadotte River said to be established for trading with the Beaver people. |
| 1805-1823 | Rocky Mountain Portage House | A NWC portage post built at the lower end of the Rocky Mountain portage near the present town of Hudson's Hope. |
| 1805-1825; 1828-1918 | Fort Dunvegan | A principal fur trading post and provisioning post on the Peace River; located on the north bank of the Peace, in Tp.8, R.4, W5. |
| c.1806-1823 | Fort St. John | A NWC wintering post on the north bank of the Peace River near junction with the Beatton River, established at the request of the Beaver people. |
| 1812 | Colin Campbell's House | A NWC wintering post situated between Cadotte and Smoky Rivers, about 38km below the town of Peace River. |

| | | |
|---|---|---|
| 1818 | St Mary's Post I | An HBC fur trade and provisioning post situated on the right bank of the Peace River, just above the mouth of Smoky River. |
| 1819 | St Mary's Post II | A wintering post situated on the north bank of the Peace River, just above the mouth of Smoky River. |
| 1820 | St Mary's Post III | A fur trade and provisioning post situated on the left bank of the Peace River, opposite the Harmon River |
| 1820-21 | Fort de Pinnette (a.k.a. Fort St. George) or Fort de Pinette | An HBC post situated on the south bank of the Peace River, below the mouth of the Pine River. |
| c.1831 | Fort Vermilion II | HBC fort located on south bank of the Peace River just above mouth of Boyer River. This post became the nucleus of the town of Fort Vermilion. |

## Appendix B: Cree Dialects and the Horse Lake First Nation

While the language spoken by the Cree members of the Horse Lake First Nation and their ancestors is classified within the "Algonquian" Language Family, there is some confusion in the literature concerning both the name of the particular dialect of Cree spoken in this region of northwest Alberta and the name of the ethnic grouping of those who speak this dialect of Cree.

The term "Cree" is used both in English and in French to designate all those who speak the Cree language. But the word "*Cree*," itself, is actually derived from a shortened form of the Ojibwa term for the Cree people that has been written as "*Knisteneaux*." Variants of this term, "*Knisteneaux*," first appeared in historical documents in the mid-1600s. The French Canadians are said to have immediately adopted the term and then shortened it to "*Crees*" or "*Cree*"; by the late 1700s, the English, as well, were using "Cree" in this generic sense to refer to all Cree people. [590]

Another term applied to the Cree and used in the early historical literature is said to be the term pronounced in Western Woods Cree as "*ne·hithawe*" and translated as 'those who speak the same language.' [591] Explorer David Thompson, writing about his 1790-1797 experiences among the Cree people, transcribed this same term as "*Na hath a way*" which he said is "their [the Cree's] native name." [592] And Alexander Mackenzie wrote the same term as "*Nahathaway*" on a *circa* 1804 map very likely prepared for him by Aaron Arrowsmith.[593]

The linguistic, anthropological and historical literature includes considerable discussion relating to the identification of the dialects of Cree and how to classify the dialect spoken by the Horse Lake First Nation and their ancestors. A further debate among scholars has focused on whether the dialect spoken by the Cree people in the region where Indian Reserves were set aside for the HLFN should be classified as "Woods Cree" (also given as "Woodland Cree" and "Northern Cree") or as "Plains Cree" (also given as "Northern Plains Cree"). As well, several researchers have referred to the westward expansion of the Cree.

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[590] Other transcriptions of this term include: "*Kinishtineau*"; "*Kiristinon*"; "*Kiristinous*"; and "*Kilistinous*"). See John J. Honigmann (1981). West Main Cree. In, *Handbook of North American Indians, Vol. 6, Subarctic*. Edited by June Helm. Smithsonian Institution, Washington DC. Pp. 227-228. See also David G. Mandelbaum (1979). *The Plains Cree: An Ethnographic, Historical, and Comparative Study* [based on Mandelbaum's 1934-1935 fieldwork]. Canadian Plains Studies 9. Canadian Plains Research Center, University of Regina. Page 15.

[591] David W. Pentland, Synonymy section, in, James G.E. Smith (1981). Western Woods Cree. In, *Handbook of North American Indians, Vol. 6, Subarctic*. Edited by June Helm. Smithsonian Institution, Washington DC. Pp. 267-268.

[592] William E. Moreau, Editor (2009). *The Writings of David Thompson, Volume 1: The Travels, 1850 Version*. McGill-Queen's University Press, Montreal. P. 95.

[593] [Aaron Arrowsmith (*circa* 1804)]. A Map of America, between Latitudes 40 and 70 North, and Longitudes 45 and 180 West, Exhibiting the Principal Trading Stations of the North West Company. Original held by The National Archives, London, England. Privy Council I, Unbound Papers #3997.

The chart that follows summarizes the various and sometimes-contradictory views concerning these above-mentioned subjects:

| Researcher(s) | Main Division of Cree language | Dialect of Western/Northern Division | Classification of Cree Dialect Spoken by Horse Lake First Nation |
|---|---|---|---|
| Richard Rhodes and Evelyn Todd (1981)[594] | The dialects of Cree fall into two groups, "Western Cree" and "Eastern Cree"[595] | Western Cree comprised of six dialects, including "Plains Cree" and "Woods Cree" [596] | The scale of Rhodes and Todd's 1981 Cree Dialect distribution map[597] is such that it is difficult to say with complete certainty if what they designate as "Plains Cree" includes any of the areas where Indian Reserves were set aside for ancestors of today's Horse Lake First Nation, thus suggesting that such areas were Beaver-speaking; however, a closer review of this map suggests IR's 152 and 152A were within the Cree-speaking region whereas IR's 152B and 152C were within the Beaver-speaking region (see also the comments below with respect to Darnell's 2001:639 map). |
| Ives Goddard (1996a) ;[598] Ives Goddard (2001)[599] | | "Plains Cree" and "Woods Cree" identified as dialects of Cree;[600] "Plains Cree" is | Goddard does not, on either of his two linguistic maps (1996a; 2001), extend the region where |

[594] Richard A. Rhodes and Evelyn M. Todd (1981). Subarctic Algonquian Languages. In, Handbook of North American Indians, Volume 6, Subarctic. Edited by June Helm. Smithsonian Institution, Washington DC. Pp. 52-55.

[595] Rhodes and Todd 1981:55.

[596] Rhodes and Todd 1981:55.

[597] Rhodes and Todd 1981:53, Fig. 1. "Cree dialect areas and settlements for which dialect affiliations are known."

[598] Ives Goddard (1996a). [Map entitled] "Native Languages and Language Families of North America." Map Pocket in, Handbook of North American Indians, Vol. 17, Languages. Edited by Ives Goddard. Smithsonian Institution, Washington DC.

[599] Ives Goddard (2001). [Map entitled] "Languages and language families of the Plains in the first half of the 19th century," in, The Languages of the Plains: Introduction. In, *Handbook of North American Indians, Vol. 13, Plains.* Edited by Raymond J. DeMallie. Smithsonian Institution, Washington DC. Page 62.

| | | | |
|---|---|---|---|
| | | the westernmost dialect of the Cree language; there is a "Northern Plains Cree sub-dialect"; Northern Plains Cree is spoken by "people classified ethnographically as the Western Woods Cree" [601] | Cree is spoken as far northwest as areas where Indian Reserves were set aside for ancestors of today's Horse Lake First Nation; thus both of Goddard's language maps include the HLFN within the region where the Beaver language is spoken. |
| Nancy LeClaire and George Cardinal (1998)[602] | | "Northern or Woods Cree" and "Plains Cree" [603] | Comments in the "Helping You Use the Dictionary" section of the *Alberta Elders' Cree Dictionary* indicate that this dictionary's authors would classify the Cree spoken by the HLFN as "Northern Cree." [604] |
| James G.E. Smith, (1981);[605] James G.E. Smith (1987)[606] | | The group known ethnographically as the "Western Woods Cree" speak dialects of Cree that included the "Woods Cree | Smith's (1981:257) map of 18th century Western Woods Cree territory does not extend this boundary as far west as areas where Indian Reserves were set |

[600] Ives Goddard (1996). "Consensus Classification of the Native Languages of North America." Table 3 in Goddard's Introduction to the *Handbook of North American Indians, Vol. 17, Languages.* Edited by Ives Goddard. Smithsonian Institution, Washington DC. Page 4.

[601] Ives Goddard (2001a). The Algonquian Languages of the Plains. In, *Handbook of North American Indians, Vol. 13, Plains.* Edited by Raymond J. DeMallie. Smithsonian Institution, Washington DC. Page 71. Goddard's statement that Northern Plains Cree is spoken by "people classified ethnographically as the Western Woods Cree" is problematic, in that the map in Smiths' (1981:257) article on the Western Woods Cree does not include the area of Cree "expansion of territory 1700-1780" as far west as the region where Indian Reserves were set aside for ancestors of today's Horse Lake First Nation.

[602] Nancy LeClaire and George Cardinal (1998 [2006 edition]). *Alberta Elders' Cree Dictionary*. Edited by Earle Waugh. The University of Alberta Press and Duval House Publishing, Edmonton, Alberta.

[603] George Cardinal in his Introduction to the *Alberta Elders' Cree Dictionary* refers to a distinction between "Northern or Woods Cree" and "Plains Cree" (LeClaire and Cardinal 2006:xi); Earle H. Waugh in his Preface to this same *Dictionary* associates Northern Cree with the "TH" dialect and Plains Cree with the "Y" dialect (LeClaire and Cardinal 2006:xiii). Smith comments on these same two "TH" and "Y" dialect distinctions, but he associates "Western Woods Cree" with the "TH" dialect and "Northern Plains Cree: with the "Y" dialect (Smith 1981:256).

[604] LeClaire and Cardinal 2006:xix-xx.

[605] James G.E. Smith (1981). Western Woods Cree. In, *Handbook of North American Indians, Vol. 6, Subarctic*. Edited by June Helm. Smithsonian Institution, Washington DC.

[606] James G.E. Smith (1987). The Western Woods Cree: Anthropological Myth and Historical Reality. *American Ethnologist,* Vol. 14, Part 3.

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| | | Dialect" and the "Northern Plains Cree Dialect";[607] elsewhere, Smith opined that the westernmost portion of "Western Woods Cree," which he also called the "Strongwoods Cree" or "Bush Cree," represents an "Expansion of [Cree] territory 1700-1780" [608] | aside for the HLFN, nor does his chart ("Population of Western Woods Cree by Government Bands, 1978") in this same article (Smith 1981:269) include the HLFN, thus suggesting that all such areas were Beaver-speaking. |
| Regna Darnell (2001)[609] | Within the overall dialect continuum of Cree, there was a major break in intelligibility between "Western Swampy Cree" and "Eastern Swampy Cree."[610] | Darnell notes that: "The boundary between the Western Woods Cree and the Plains Cree is virtually impossible to draw clearly, due to poor historical records, particularly during the fur trade period;"[611] as well, Darnell points out that in G.E. Smith's 1981 Smithsonian *Handbook* article, speakers of "Northern Plains Cree" are treated as part of the "Western Woods Cree" [612] | Darnell at page 639 of her article reproduces David Mandelbaum's 1979 map of "Plains Cree" territory *circa* 1860-1870, based on his 1934-1935 fieldwork; [613] on this same map, Darnell superimposes a line delineating the "extent of Cree reserves where Plains Cree is spoken" which includes areas where IR's 152 and 152A were set aside, and thus suggesting they were Cree-speaking, but excludes areas where IR's 152B and 152C were set aside, [614] thus suggesting they were Beaver-speaking (see also the comments above with respect to |

[607] Smith 1981:256.

[608] Smith 1987: 435, 443.

[609] Regna Darnell (2001). Plains Cree. In, *Handbook of North American Indians, Vol. 13, Plains.* Edited by Raymond J. DeMallie. Smithsonian Institution, Washington DC.

[610] Darnell 2001:638. This statement about "Western Swampy Cree" and "Eastern Swampy Cree" is cross-referenced to Rhodes and Todd's (1981:55) statements about the same major dialect differences, although Rhodes and Todd use the terms "Western Cree" and "Eastern Cree."

[611] Darnell 2001: 638.

[612] Darnell 2001: 638.

[613] David G. Mandelbaum (1979). *The Plains Cree: An Ethnographic, Historical, and Comparative Study*. Canadian Plains Studies 9. Canadian Plains Research Center, University of Regina. Page 13.

[614] Darnell 2001:639.

| | | | |
|---|---|---|---|
| | | | Rhodes and Todd's 1981:53 map) |
| Hugh Dempsey (1979)[615] | | Dempsey distinguishes "Woodland Cree" from "Plains Cree"[616] | Dempsey's 1979 Map and Key in his booklet *Indian Tribes of Alberta* suggest that areas where IR's 152 and 152A were set aside are within the "Woodland Cree"-speaking region, whereas areas where IR's 152B and 152C were set aside are very clearly within the Beaver-speaking region.[617] |

[615] Hugh Dempsey (1979). *Indian Tribes of Alberta*. Glenbow Museum, Calgary, Alberta.

[616] Dempsey 1979:51-64, 86-87.

[617] Dempsey 1979: 86-87.

# Horse Lake First Nation

# Traditional Land Use Survey 2011

## Community and Public Report

January 2012

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## A) The Need for a Traditional Use Survey

The Horse Lake First Nation (HLFN) asserts that it holds Treaty and Aboriginal Rights in north – western Alberta and north – eastern British Columbia, Alberta and the historic Treaty #8 area. HLFN community member individually exercise these rights on the ground within these areas. The rights of the Horse Lake People were affirmed when they entered into Treaty #8. In return for agreeing to share some of the lands with settlers, Crown officials guaranteed that the Horse Lake's people's traditional vocations would be maintained into the future.

**Treaty 8 Guarantees the Vocations, Livelihood and Rights of the Horse Lake People**

The HLFN families have a long term relationship with lands in north – eastern BC and north – western Alberta and their way of life, culture, spirituality, social needs and economy are tied to these lands. Many changes have occurred that have affected the Horse Lake's People ability to depend on the land and feed their families as they once did. In HLFN's view, large scale oil and gas, energy, forestry and farming activity has clearly resulted in some level of ecological change that has also affected Horse Lake people's use of their lands. Despite the pace and scope of change, the HLFN is clearly a community that continues to have ties to and relies on the same lands.

How can the HLFN confidently make such a statement as this? Living and relying on the land is simply a fact of the Horse Lake People ongoing existence. If this was in doubt, a person would simply have to casually walk through the community. When they did so, they would find ample evidence readily at hand that points to a life lived on, and tied to the land. One would find meat racks in people's backyards, cut and stacked tepee poles, lockers with hunting rifles, pictures on mantles with relatives pictured in camp or

with a recent kill, moccasins made from strongly smoked moose hide, freezers of game, canned jars of game and fish, fish nets hanging in the back yard, sheds with camping and trapping gear, fishing boats, ATV's, ski – doos and some very content dogs enjoying bone marrow from a front quarter. This is the case with many First Nations within northern Alberta and across the boreal forest of North America.

If this is so obvious, why do First Nations undertake Traditional Land Use Studies or Traditional Land Use Surveys?  Why should the Horse Lake First Nation – a First Nation with guaranteed treaty rights be required to undertake such land use studies and produce mapping to prove their use and occupancy of the land? There are several reasons for this.

*Onus of Proof*

Canada's courts have determined that the HLFN and other First Nations have Treaty and Aboriginal Rights and that such rights are protected by Canada's constitution. The courts have also stated that governments cannot unlawfully impact, take away or limit these rights. For example, when a government is looking at approving oil and gas facilities, a mine, a dam, forestry plans or making a decision about how natural resources are to be managed, it must meaningfully consult the HFLN and other First Nations.

**The Law:  Requires Governments to Consult and Accommodate Where Development Could Harm HLFN Rights**

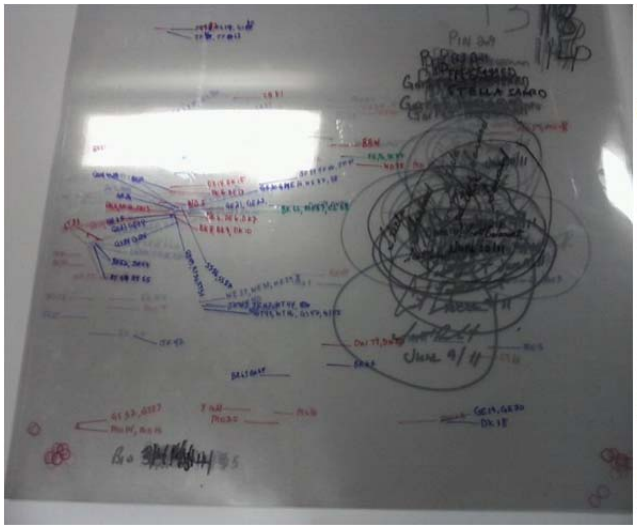
If a First Nation wishes to have its concerns, interests and rights addressed by governments, the courts have said that First Nations must present some level evidence of its use of lands and resources and the potential impact of a proposed development or decision on those uses. Given this, the HLFN, and other First Nations must have a

readily available source of information and evidence that it can present to government decision makers to establish the community's use of, and reliance on lands and resources. This is one of the key reasons why the HLFN needed to produce a new body of information and set of baseline information. A traditional land use survey, if done carefully, can help the HLFN produce this much needed information.

*A Base Line Inventory of Traditional and Cultural Use Data*

Past leaders of the HLFN understood this as well as the current band council does. Over the past decade, it appears that HLFN started two other traditional use research projects. The people who participated and managed these studies need to be acknowledged and thanked as they were attempting to record important cultural and historical information for the community. In one case a traditional use map was produced and was based on the knowledge of a limited number of community members. Another effort involved HLFN community members working to define the traditional territory of the HLFN along with other First Nations of the Western Cree Tribal Council.

Unfortunately, there are few records that document the purpose, objectives and extent of the research, who was involved from the community, what questions were asked of those people and how the resulting maps were arrived at. While the resulting maps from these study efforts could be used, if the HLFN cannot show how the maps were arrived at, the HLFN cannot readily use them or expect other parties to take them seriously. The HLFN is not alone. Many First Nations go through changes in government and experience many a turnover in administration where the maps and the original source material they are based on (interview transcripts, working maps, interview notes, recordings) are lost. People that worked on the projects move on. When this happens, it is hard for a First Nation to use those TLUS maps as they can't show or demonstrate how data on the maps was arrived at.



**HLFN: A Need to Produce Traditional Use Maps Based on Data That is Held to Be Valid, Accurate, Precise**

Further, many First Nations are finding that the TLUS projects that they had conducted or participated in the past are no longer considered enough by governments, companies, the courts and lawyer who work for the First Nations themselves. Simply not enough attention was paid to documenting and writing down the study approach and methodology by the First Nation to demonstrate how it arrived at the results it did.

Given this, the HLFN needed to build on past TLUS project work and support this with a new project. However in this case, the HLFN was required to focus on producing a set of maps that would reliable, precise and accurate. This required the HLFN to carefully document how it designed, and put into action its research plan and methodology. The task then for the HLFN was to create a detailed set of maps based on data that could be backed up through a clear, transparent and solid Methodology Report. A methodology report can be seen as a road map - that could followed to see how the HLFN arrived at the maps they did. This important need for the HLFN so that it could utilize its evidence to get better results from government and industry. Importantly, the Methodology Report will provide that road map and explanation of the maps for HLFN people now and in the future.

## *The Proposed Site C Hydroelectric Project*

A further driver for the need to carefully document traditional land use by the HLFN is the potential for the development of a third dam on the Peace River near Ft St John in British Columbia. This dam is called the Site C Dam and if it is constructed it may influence river flows, fish and mammal distribution in and associated with the project footprint area and potentially land use and resource utilization by aboriginal communities. The careful documentation of use by the HLFN will improve the

community's ability to participate in the assessment process and will provide the project proponent with the tools to better assess potential impacts to HLFN land use and resource utilization and an improved ability to propose, plan and conduct mitigation measures to mitigate potential project effects.

The project proponent is BC Hydro and in recognition of these drivers as well as the obligations that BC Hydro holds as a crown corporation, BC Hydro met with the HLFN and negotiated an agreement for HLFN to conduct a traditional land use study. The resulting document was called *the "Traditional Land Use Study Agreement for Site C Clean Energy Project"* and it set the initial framework for the study including objectives, methods and work planning as well as a set of deliverables from the work. The agreement also identified a budget which HLFN could use to conduct the work. While the Site C project was a key driver for the TLUS project, the HLFN opted to plan and implement a map biography survey that would address both the data and planning needs of Site C project as well as the longer term TLUS data needs of the community. BC Hydro's project funding will support the HLFN in engaging other resource development, environmental assessment and management scenarios into the future.

*Need to Record Land Use in Face of Development*

As noted, the HLFN, other First Nations and many other parties are of the view that sheer pace and scope of development has impacted the ecology of northern BC and Alberta and community members ability to use the land. In the HLFN's view, their ability to exercise their rights, maintain their culture and feed their families is dependent upon healthy and diverse fish, wildlife and plant communities which in turn depend on healthy and functioning eco-systems.

The HLFN and many other First Nations have called upon governments to investigate the cumulative impact of development on the environment and their rights. In preparation for the time that such requests are being acted upon, the HLFN must act now, by documenting community land and resource use and developing baseline inventory of data through a new traditional land use survey. In the future, the HLFN can build on this survey by undertaking other forms of research related to the impact of development on the environment and the community.

**Needs for a Baseline Inventory of Traditional Use Data to Begin to Document the Cumulative Impact of Development on HLFN's Way of Life, Socio – Economic Needs and Ability to Exercise Rights**

*Preserving a Cultural Record for HLFN Future Generations*

As noted above, there were many important reasons for undertaking a traditional use survey. However, the most important for the HLFN is to make an effort to document its historical and cultural record on the land involving as many community members as possible. As Chief Rick Horseman noted in a community meeting at the start of the project, *"We need to act now and fast. We have lost too many of our elders and the vast wealth of traditional knowledge that they held. We need to preserve a record of our existence on the land so that future generations understand how our people lived on and off of the land. Times are coming where people may need to rely on the land, more than ever."*

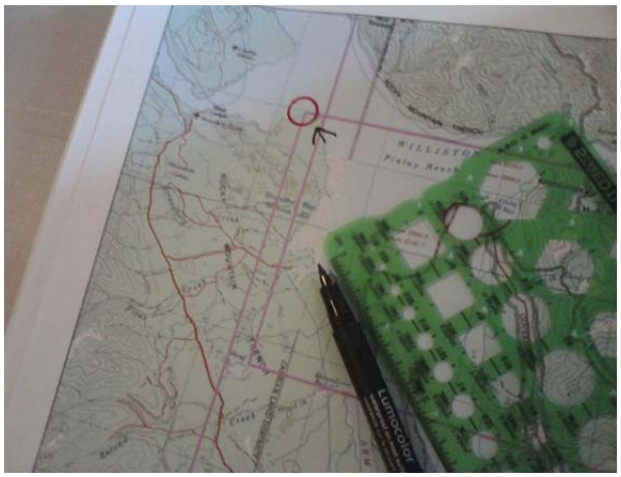
While there are many compelling external factors and forces that drove the need to for this map biography research project, the HLFN had its own important internal reasons for commissioning the survey. Community members have expressed the need to document important knowledge held by its aging group of elders. The transmittal of culture and history to new generations is deemed as an important priority by the HLFN and one of the key drivers for the current TLUS project.

## B) What is a Map Biography Survey?

Traditional land use studies and land and occupancy studies have been undertaken across Canada for thirty years. Much of this work occurred to address First Nations evidentiary needs for land claims negotiations, court cases and hearings to address the impacts of large natural resource development projects. There are of course many

types of studies that First Nations can undertake to document traditional and cultural land use and the importance of the land to their community, way of life and culture.

The Map Biography Survey is a specific type of traditional land use study that has been undertaken by many First Nations. The HLFN 2011 TLUS project is a Map Biography Survey. Essentially, this involves interviewing individual community members about their life on the land and water and recording various examples of their land use activities on maps and audio recordings. In this case, the research was site, species and activity specific. For example, the HLFN interviewed community members about where they killed some moose, elk, deer, geese etc.; where they caught some jackfish, walleye, whitefish etc; where they gathered some berries, medicine plants, firewood, water etc.; and where are some of the places they have stayed overnight and their knowledge of some special sites.



**Map Biographies – Documenting Examples of a Person's Land Use Activities and Life on the Land**

The key steps that HLFN took in developing and putting the TLUS project into action included:

- Obtaining community input and direction on research priorities
- Defining the Primary Research Objective – the most important question to be answered or information wanted
- Identifying specific categories or cultural activities HLFN felt were most important to document in this map biography survey at this time(e.g. moose kill sites, jack fish catch sites, food plant gathering sites)

- Preparing a research proposal that sets out the map biography survey's proposed methodology – a plan that showed how HLFN was setting out to design the research from the broadest considerations to the smallest details

- Developing a Data Collection Manual - a training guide and guidebook that set out clear and consistent rules of how the research was to be conducted

- Hiring and training community so that they would conduct the interviews and record the data from the interviews the same way, all the time

- Developing a fixed Questionnaire – so that the same questions would be asked of every interview participant, every time

- Determining how the map survey would be representative of the community – ensuring that an adequate groupings of men and women, all age groups and families were interviewed

- Undertaking one-one-one interviews with up to 100 participants or respondents

- During the interview, marking sites (land use activities and events) on "Bio Maps" using a fixed coding system

- Recording the interview and preparing interview transcripts that describe, document and back up the sites marked on the maps

- Transferring the marked data from all the participants / respondents Bio Maps onto various end product maps

- Documenting the research plan and how the research was actually undertaken and any affect on the results as a result of those differences. Two documents do this – the "Methodology Report: and this "Public Report"

- Use and share the resulting maps and research to support HLFN's in having its rights and interests acknowledged and acted upon

- Taking proper steps to safeguard confidential information and involving research participants in lands and resource project consultations and environmental impact assessments

- Determine next research needs and priorities of the HLFN community and come up with the funding to commission such research

There are of course many ways to conduct a traditional land use research project. Often people take the view that it is easy to do and it's simply a matter of talking to people and recording places on maps. This approach has failed to work because not enough attention was paid to determining what types of information was to be gathered, who should be involved, how the data was to be recorded and how the data could be verified. What is critical is ensuring that the every community member is interviewed in the same way each time; that they are asked the exact same questions as everyone else; and that the data marked on the maps are marked the same way, every time. This may seem to be easy, however the research must be designed and conducted in a consistent way – if it is not, you can get differing results from interview to interview degrading the quality of the data and calling into question the validity of the end maps.

**C) HLFN's Science Based Approach**

As noted, all parties have come to expect more from land use and occupancy research and traditional land use surveys in recent years. What was deemed as acceptable twenty or even ten years ago, is now no longer accepted by many parties – especially that of First Nations and their legal counsel. If a First Nation is going to go to the trouble and effort of planning and undertaking a comprehensive map biography survey with many community members, they want that research to be able to stand up, be utilized in different contexts and be able to be relied upon for years to come.

Despite the large amount of traditional land use research work conducted to date within Canada, there are not a large number of publically available studies or methodology reports to figure out the most useful and reliable form of research. What people often focus on is the look and amount of data on TLUS maps or the digital maps produced through computer mapping or a Geographic Information System (GIS). However, what is crucial is not the look of the maps – but the quality of data that is gathered that is recorded on maps that counts.

**Map Biography Research – Focus on How Data is Gathered and Whether Maps Are Supportable**

Remember, that above all and more than any other party, First Nations want and need their maps to be believable and supportable. This means that the HLFN had to focus on the methodology in this TLUS– a way of demonstrating and showing how it obtained the map data it did. At the end of the day the HLFN had be able to demonstrate that the data it collected is objective, reliable, valid, precise, accurate, has integrity, is auditable and is representative. The only way to achieve these data quality standards is through science or the framework of science.

Often the application of scientific methodology been looked on in a negative way by First Nations. Sometimes, the approach has inappropriately treated First Nations or indigenous people as test subjects to observed in an experiment. At times, governments and industry have relied on science in name to justify lands and resources decisions that impact First Nations' lands and rights. Often First Nations and indigenous people question how valid western science as opposed to traditional knowledge or traditional ecological knowledge?

Thus science has often been held by First Nations as something that is not to be trusted and that has worked against them in the past. This does not have to be the case – especially if the First Nation is the one who is structuring and conducting its own research to meet its own objectives and priorities. In the world of science, knowledge and data gained must ultimately be testable, provable and observable with the human senses. In this way, science can be held to be a powerful tool and ally to First Nations and indigenous people and support their observations of the land over years.

The HLFN opted to base and structure its traditional use research project within the framework of science with the goal of having its research held to be transparent and the resulting maps to be based on testable and provable evidence.

Specifically, the HLFN opted to base its TLUS project on a new important textbook about traditional land use studies written by Terry M. Tobais. The HLFN carefully reviewed the text and decided that its survey and maps would be defendable if it based the project and its methodology on the standards and practices set out in this academic text book. The books is called, "*Living Proof: The Essential Data Collection Guide for*

*Indigenous Use and Occupancy Map Surveys"* by Terry N. Tobias and released in 2009.

## D) Methodology: Designing and Planning the Research

The HLFN went to considerable length to base its TLUS project on a solid scientific foundation. This required the HLFN to construct a research methodology – a series of concrete and deliberate decisions in how HLFN planned, designed and actually conducted the map biography research.

The methodology was made up of five related layers of research design. These five layers were in fact - a series of research design decisions ranging from the broadest aspects of the research (e.g. what should be studied and why) to the smallest details (e.g. how a Moose Kill site was to be marked on a map) and the research rules. The five layers of research design are described below:

### *Framework*

The framework relied upon by the HLFN was founded upon a scientific approach where the resulting maps and the data they contained could be confirmed and proven.

### *Method*

The method is the general process used to conduct the research and collect data. In this case, the HLFN opted to choose the map biography survey method. As noted, this involves choosing a larger group of community members and interviewing them one-on-one using a set Questionnaire. All questions are asked of all community members or respondents. The respondent's answers or their specific land and resource use activities are then marked during the interviews on their own set of maps or series of "BioMaps". At the end of the interviewing process, all community members map data on the Bio Maps are combined into several types of end product maps showing different themes. The methodology relied upon and followed is then written up in a methodology report that is to accompany maps and help in interpreting the maps and analyzing the strength of the data.

*Parameters*

Parameters define the shape and extent of the research. These include the important why, where, when, who and what is the subject of the research. The HLFN had to answer important questions at the outset of the TLUS research project:

- Why are we undertaking this research and /or what is the main reason and objective of why the HLFN is conducting the survey?
- Where or what geographic areas were to be included in the survey?
- When or what time period would the survey be based on?
- Who needed to be involved in the research?
- What specific types of information was HLFN looking to document?

*Tools*

Tools are the actual materials that were used in the research to collect the data (e.g. base maps, markers, audio recorders, the questionnaire etc)

*Conventions*

Conventions are the agreed upon set of consistent rules that set out how the research is be conducted (e.g. how data is to be coded and marked on maps in every interview, the same way, every time)

**Research Tools and Conventions: Attempting to Structure and Conduct Each Interview with Every Community Member, the Same Way, Every Time**

## E) Methodology: Putting the Research Plan Into Action

The HFLN went into the research phase with the following key parameters set:

Why – What is the Primary Objective of the Research?

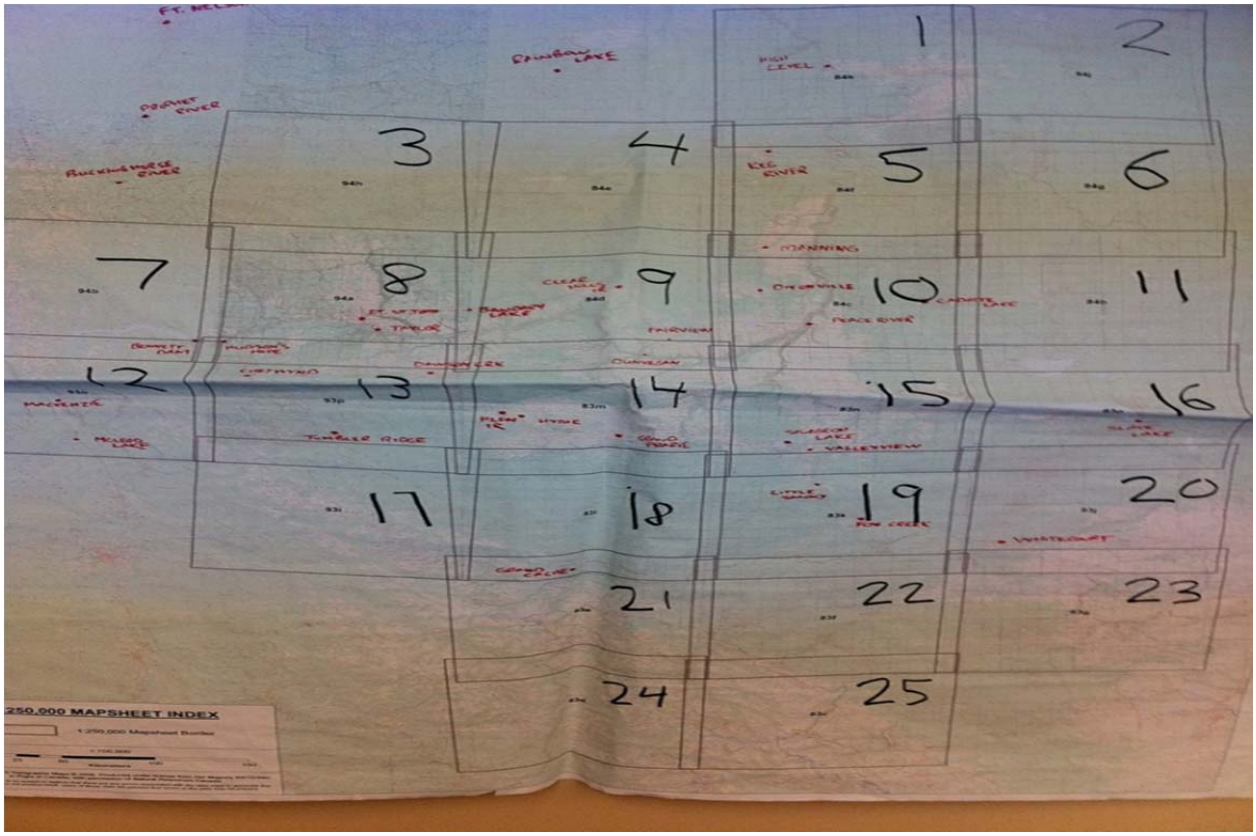
What was the most important reason for conducting the TLUS project? While there were many research needs or objectives, the HLFN needed to determine one primary objective for the research. The reason for this, is that if the research was conducted to address a number of objectives, it could have become confused and lead to confused results, potentially leading to differing data being marked on maps. Given this, the HLFN set the Primary Objective as:

*"The primary objective of the Horse Lake First Nation Traditional Land Use Survey is to document some of the HLFN's hunting and fishing kill sites and earth and plant material gathering sites with the overall goal of identifying areas of historical and ongoing critical community use".*

This set and agreed upon research objective then helped work out other more detailed aspects of research design.

Where – The Geographic Focus of the TLUS?

Based on internal community discussion, the HLFN determined that a large area in north – eastern BC and north western Alberta would be the subject of the map biography research. The HLFN decided not to base the survey on one specific project, or a pre-set area. Nor did it base the map biography survey on HLFN's traditional territory. It chose an area that it was felt was large enough to capture the majority of community's members use of lands. At the start of the interviews, participants or respondents showed the community researchers what maps they would want to use in their interviews. The same set of base maps were made available to every respondent.




**The Map Biography Survey Area: Large Enough Area to Take in the Majority of Community Use in NE BC and NW ALTA**

## Who Was Involved in the Map Survey?

At the outset of the research, the HLFN had to determine who was going to be involved in the survey and why? First the HLFN had to determine the number of people that would be considered as the sample – the body from which interview participants or respondents would be drawn from. HLFN took into account population statistics from the band and from Indian and Northern Affairs Canada (INAC). The HLFN based the survey on the number of community members reported as living on the Hythe Reserve. This was held to be 500 people.

The HLFN then determined criteria that would be used to select people for interviews. The goal is to have the map biography survey results be representative of the community as a whole. This is important given that First Nations generally never have the funding to interview everyone in the community, as was the case for the HLFN. It had the funding to interview up to 100 people – or approximately one – fifth of the community membership ordinarily residing on the reserve.

**HLFN: Planning to Ensure that all Family, Age Groups and Males and Females Involved in Map Biography Survey**

The HLFN was aiming to involve in the interviews, people that were representative of Horse Lake families, males and females and all key age groups. However the people selected had to also ensure that HLFN collected data in relation to the primary research objective. Given this, generally more men were interviewed than women. The criteria used to select people from the sample population frame included:

- Respondents can be a Status Indian registered to the HLFN, an HLFN Band Member, a Non Status Indian or Métis listed as being part of the total HLFN community population

- Respondents must be ordinarily resident within the HLFN community / the HLFN reserve and live no more than 250 miles from the HLFN IR at Hythe

- Respondents can be male or female and must be of 16 years of age or older

- Respondents must be physically and mentally capable of doing a map biography

- Respondents must report that they have or continue to actively utilize lands and resources to some degree

By the end of interviewing phase, the HLFN interviewed 92 participants. This translates into 92 out of a sampling frame of 500 people within the community or an overall response rate of 18.4 % or involving close to one fifth of the community. Given that HLFN set out interview 100 people, it achieved a participation rate of 92%. HLFN has never before achieved such a high level of community participation in such a map

biography research exercise. Since the completion of this TLUS project, there are ongoing calls from the community expressing interest in participating in further interviews and in other research initiatives.

When – Recall Interval - What Time Period Should be Studied and Why?

The HLFN had to think about the recall interval for the map biography survey. Should the survey focus on current use of lands by community members, or historic use? Should the survey questionnaire be designed to look at different time periods of people's lives? The HLFN opted to base the map biography survey on the recall interval of "within living memory". Thus community respondents would be asked to indentify examples of their land use activities over their lifetime or within their living memory.

This was done to avoid over complication of the interview process for the respondents and the community researchers. Adding differing and artificial time periods would have added complexity and result in interviews lasting beyond the desired two hour time period for interviews. Also this recall interval was chosen to help capture both current and earlier use patterns within living memory. Factors such as climate, presence and absence of wildlife in a given area, mode of travel, personal preference and age are all inter – related factors having a bearing on where a respondent elected to (e.g. hunt) through their life and where they actually killed game.

What – Choosing What Data and Information to Capture and Record

Mr. Terry Tobias, author of *"Living Proof"* cautions that First Nations should avoid trying to get all the potential levels of information and data all at once, within a survey. Experience shows that when this is attempted, the resulting maps can be weakened and open to more question. What is also important is that every community member or respondent needs to be asked the exact same questions about the same types of things.

The HLFN opted to focus on mapping examples of Wildlife Kill Sites, Fish Catch Sites, Plant and Earth Material Gathering Sites, Overnight Sites and Sacred Sites. The 44 categories selected were as follows:

**MAMMALS**

| | | | |
|---|---|---|---|
| MO | moose | CU | caribou |
| EK | elk | MD | mule deer |
| WD | white tailed deer | BB | black bear |
| GB | grizzly bear | XM | other mammal |

**BIRDS**

| | | | |
|---|---|---|---|
| DK | ducks | GE | geese |
| GR | grebes | GR | grouse |
| PT | ptarmigan | CR | cranes |
| XB | other bird | | |

**FISH**

| | | | |
|---|---|---|---|
| WE | walleye | JF | jackfish (northern pike) |
| DV | dolly varden | BT | bull trout |
| RT | rainbow trout | AG | arctic grayling |
| WT | whitefish | GY | gold eye |
| LC | ling cod (burbot) | XF | other fish |

**PLANT and EARTH SITES**

| | | | |
|---|---|---|---|
| BR | berries | FP | food plants |
| MP | medicine plants | SP | sacred plants |
| CL | construction logs | FW | fire wood |
| SR | specialty rock | DW | drinking water |
| XP | other plant/earth site | | |

**OVERNIGHT SITES**

| | | | |
|---|---|---|---|
| CB | cabin | TT | tent site |
| LT | lean to | XOS | other overnight site |

**CULTURAL SITES**

| | | | |
|---|---|---|---|
| BS | birth sites | BP | burial places |
| OS | old settlements | CS | cache sites |
| SS | sacred sites | XCS | other cultural site |

The above categories were then taken and developed into specific questions, which were then included into a questionnaire. In this way, all 92 community respondents were all asked the same questions about the same categories.

**The HLFN TLUS Interviews were based on a set group of questions based on a specific group of categories**

It should be noted, that some flexibility was built into the resulting questionnaire based on the above categories. If a respondent identified an activity, country food or forest product that was not one of the selected categories, community researchers had the ability to document it as “other”. As we found out, many have killed buffalo or caught suckers that weren’t included in the above list. These were then recorded as “XM” – Other Mammal or “XF” – Other Fish, in order to avoid missing this unique activity.

It is important to note that HLFN did not set out to document or ask people general questions about where they generally hunt or generally fish. When First Nations do this, it can lead to researchers marking huge circles on maps – while important and valid to mark – this approach often does not have the site specific data (such as Moose Kill Sites or Elk Kill Sites) to back up the large circle drawn on the maps.

Also, another problem can arise. If HFLN asked community members where they hunt, we might have got very different answers and data from person to person. To one person, asking them where they hunted might have resulted in marking mineral and salt licks, or where they actually killed a moose or white tailed deer. In other words, to another person where they hunt could involve the routes they take to go hunting, the places they scan and hunt as they travel; tracking and scouting out places where wildlife sign is observed, setting up camp as a base for the hunt, stalking areas for wildlife, the places and habitats were moose might be found, the location where a kill was made and where the kills was processed. Choosing to mark examples of moose kill sites ensured that every community respondent could understand the question and respond in the same way as all other interviewed community members.

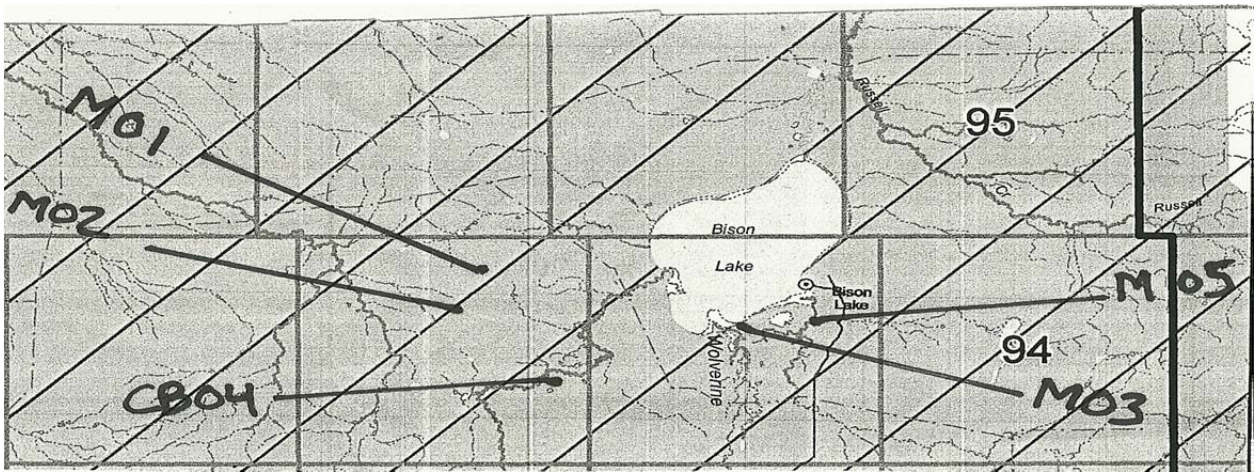
## Marking Data on Maps and Recording the Interviews

What happened in the interviews? What was the result of the interviews? This is important to note as it reveals how the interviews were conducted, and how data were recorded on maps. As noted the interview process was planned to ensure that each interview was conducted in the same way, each time and that all respondents were asked the same questions about the same categories.

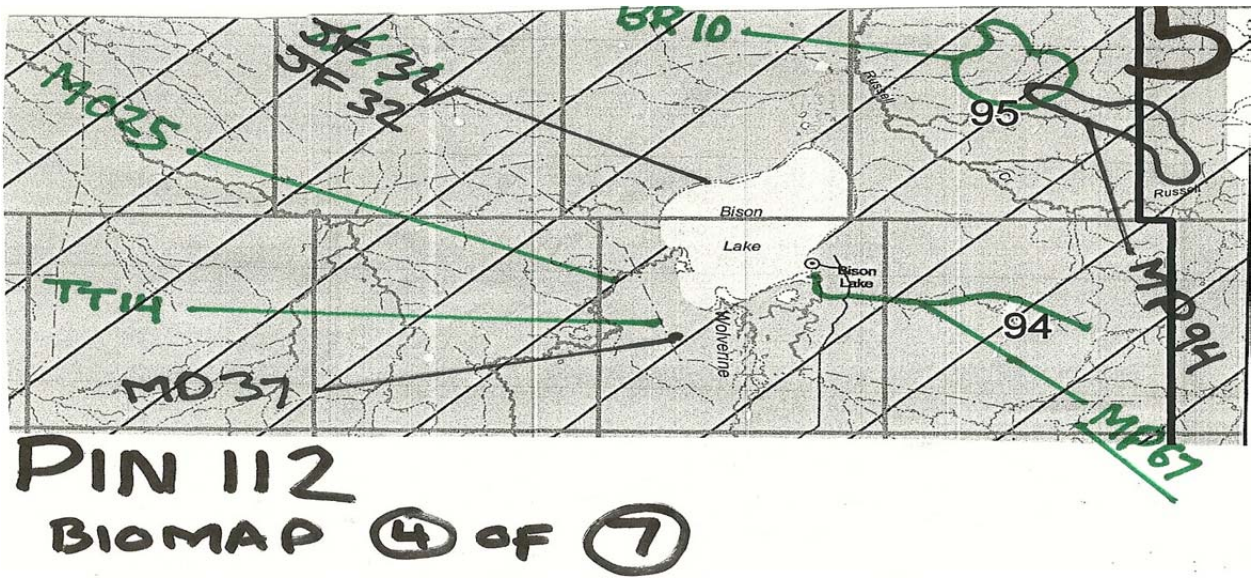
Another critical aspect of the interview process was to ensure that the community respondent’s answers and resulting data were all marked in the same way, each and every time. As noted each researcher was trained and provided the exact same tools to record the interviews and mark data on the base maps. Each researcher was taught to use a fixed set of conventions or rules so that data was marked on maps in a correct and consistent way.

**Methodology Tools and Conventions: Community Researchers Used the Same Set of Tools and Rules to Ensure that the Map Data Marked Was Consistent Way in Every Interview**

During the interviews, each person was asked a series of questions about whether they e.g. killed moose, elk, white tailed deer, jackfish, walleye, picked berries, stayed overnight etc. These were marked on clear plastic (mylar) overlays over top of base maps using a consistent code. When the interview started, the first site was marked as 01, then next 02, 03 and so on until the respondent had identified as many sites as they could recall. Every category had its own unique code – Moose was “MO”, Elk was “EK, Walleye was “WE”, Berry Picking was “BR” and camping overnight in a Tent Site was labelled as “TT”. Thus the marking on the mylars and base maps appeared as follows:

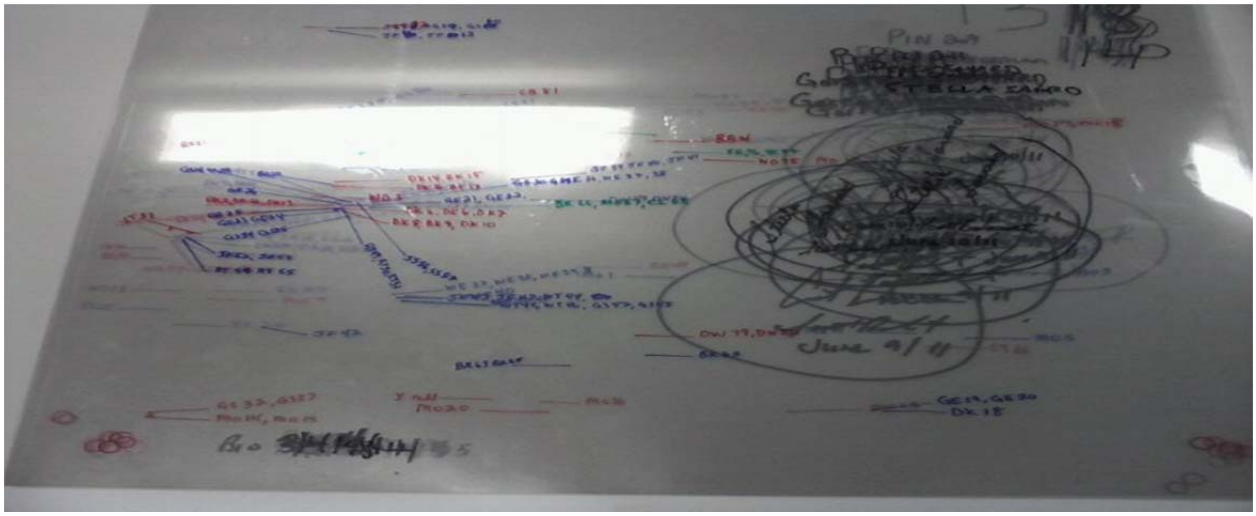



**Community Researchers Used a Set Coding System in Every Interview to Record Community Member Land Use Activities – Above “M01” is was the first Moose Kill Site Identified in the interview, “M02” was the Second, “M03: the Third, then they the fourth site was Cabin – “CB04_.**




**The Coding System Used a System of Points, Lines and Small Polygons to Document Different Types of Land Use Activities**

In some cases, community respondents identified dozens of such sites and some cases a couple of hundred. At the end of all 92 interviews, the HLFN documented over 6600 sites.  A fresh set of mylars was used in every interview to ensure that only that respondents' data were on the set of Bio Maps.



**During Every Interview, Researchers Marked People's Land Use Activities Using Agreed to Set of Codes – At the end of the interview process, 92 people identified over 6600 examples of land uses. Every community respondent had their own set of maps – or Bio – Maps.**

In addition, every interview was recorded using an older style audio cassette recorder to document what was being discussed in the interviews. Following the interviews, a community researcher wrote transcription of every interview. In this way the data on the

end maps that HLFN produced could be linked to the respondent's Bio Maps and written transcript. This step is also important as it provides evidence of how the research was conducted and whether there were any flaws or departures from the proposed standard methodology by community researchers. As such the data showing on the HLFN maps, is backed up with documented evidence.

**F) Survey Results: The Maps and Community Data**

At the end of the interview process, all the Bio Maps were checked against the audio recordings and interview transcripts. A careful check was done to see whether community researchers did a good job of following the set research conventions and agreed upon methodology. Where there were situations where the standard methodology wasn't followed, such instances were documented and noted and analyzed in the HLFN TLUS Methodology Report.

At the end, the HLFN had all the data in the Bio Maps combined into differing community mapping products through computerized mapping with use of a Geographic Information System (GIS). Different end mapping products were created. These include:

- Map Biographies – One map displaying data for all questionnaire categories for a single respondent. As required by confidentiality measures and provisions (strongly advocated within *"Living Proof"*) , the Map Biographies or personal Bio Maps will not be depicted or contained within this Methodology Report, the Public Report or any other document shared with external parties, unless written consent is provided and obtained by the respondent. Each respondent will be provided a copy of their map.

- Category Map – One map displaying all data for all respondents for a single questionnaire category (e.g. Moose Kill Sites, Bull Tout Kill Sites) **(Appendix L)**

- Thematic Map – One map displaying data for all respondents for a selected group of related questionnaire categories (e.g. Large Game Kills, Ungulate Kill Sites, Fish Kill Sites) **(Appendix L)**

- Hodgepodge Map – A single map displaying all data for all questionnaire categories from all respondents **(Appendix L)**

Sometimes First Nations will attempt to provide a detailed analyses of the resulting map data, discussing what the maps mean and what trends and patterns they reveal. In this case, the HLFN has opted to produce the maps and let the maps speak for themselves as being a baseline inventory of information. In the future, the HLFN will begin to discuss and write about what this information may mean within the context of project consultations, environmental assessments and government resource management decision making processes.

## G) Analysis: Looking at How We Did

The HLFN made best efforts to conduct the map biography survey within the framework of science and according to social science research standards. The initial Research Proposal set out HLFN's proposed plan for the collection and documentation of data. The Methodology Report document sets out how the data collection process unfolded on the ground. The two documents are companion documents that will assist the HLFN and other parties by providing a record of the methodology employed in this research effort which will demonstrate how the resulting map data was arrived at. It also helps ensure that the end map products and the data they contain are considered in an appropriate way.

At the end of the project, a proper methodology requires researchers to look at how they designed the research, how the actual research was undertaken, the resulting differences and whether the differences between the planned and actual had any potential impact on the end results.  The HLFN looked at and seriously considered any places where there were departures in standard methodology to see if there were any weaknesses in the maps and end results.

**An Important Task – Measuring Up How Close the Actual Research Went According to Plan**

In short the HLFN examined the Bio Maps, the Audio Recordings, the Interview Transcripts and other records made during the interviews. The HLFN carefully considered examples of where there were issues in relation to the following key areas:

- Categories: Did we identify all the categories that could / should have been marked. What ones did we miss out on?

- Geographic Scope: Did the base maps cover all of the areas that HLFN community members generally use. Did we miss any areas?

- Marking of Habitat: Where there situations were community respondents and interviewers started to mark animal habitat vs. places where wildlife was killed and plants gathered?

- Species Identification: Did we run into situations where interviewers had a hard time in naming actual species?

- Use of Large Polygons: Where there instances, where interviewers started to draw large circles on maps rather than marking very specific sites and small areas

- Map Scale: Did the map scale (1:250 000) pose any problems for community respondents? Did the maps contain enough detail to allow the specific identification of sites?

**A Sound Methodology Required HLFN to Carefully Check Over All Data Recorded During the Interview to Determine Potential Strengths and Weaknesses of the Map Biography Survey – Above: Checking Data on All Maps**

- Temporal Precision / Data Diamonds: Did we record enough detail about specific sites and would the survey have benefited from detail about the time when a

certain activity was taken and whether there were other people present at the time?

- Recall: Did memory cause problems for community respondents – did they have trouble in recalling sites

- Rushing / Burn Out: Where there examples where interviews were impacted by either the interviewer or community respondent felt rushed, tired or frustrated with the process?

- Missing Data – Audio Tapes and Transcripts – Did we capture all the data in the interviews or are there any gaps in the interview records

- Map Numbering and Labelling – Were all the maps labelled and numbered properly to ensure that they are not misplaced or digitized incorrectly?

- Data Marking Conventions – Did the interviewers work hard to record the data according to the agreed to set of conventions or rules?

Ultimately, it will be up the HLFN community and outside parties to judge whether the HLFN maps are believable and based upon a defendable and supportable set of land use facts. The gap analysis undertaken by the HLFN provides some strong indication that HLFN researchers carried out and implemented the research in a manner consistent with its original research design. Clearly, there were departures from the set methodology as there is in most research programs which results in some level of impact on the end results.

There were some limited instances of departures from the planned and set methodology which produced varying results in the interviews. In some cases, equipment didn`t work properly or a series of data from an interview was lost. Thus the question is whether these instances happened a great deal, greatly affecting the study results or where there few instances, not having a great impact on the end mapping results?

The HLFN takes the view that its TLUS research project was designed according to recognized social science standards and best practices. Its review and analysis of the actual way in which the land use data was documented, strongly indicates that the research was undertaken as intended and planned. As a result, the HLFN takes the view that the resulting TLUS maps are believable and that data marked on the maps are:

| | | | |
|---|---|---|---|
| *Objective* | *Reliable* | *Valid* | *Precise* |
| *Accurate* | *(Have) Integrity* | *Auditable* | *Representative* |

**H) Confidentiality and Community Ownership of Their Cultural Information**

An important aspect of social science research is that of informed consent and confidentiality. First of all, a person who is participating in such research should know the purpose of the research, what is going to happen within the research process and be told what the information gained in the research will be used for. Research participants should feel that they are making a free choice to be involved in research and provide their written permission and consent prior to the outset of the research.

The HLFN developed a permission form that set out the above information and reviewed this prior to the start of the interview. The interview would only occur if the permission form was signed.

Another important aspect of social science research is that of confidentiality. The HLFN wanted to provide a measure of confidentiality by not disclosing community respondents names on public materials such as the end product maps, the Methdology or this Community and Public Report. Instead, every respondent was assigned their own Personal Information Number (PIN) which is their research number for this map biography survey and should HLFN undertake other types of research in the future. Community researchers were assigned blocks of PINs (numbers), which in turn assigned a new PIN to every community respondent they interviewed.

There are other layers of confidentiality built into the map biography survey as well. It needs to be made very clear that the Bio Maps (that the original map data was marked on) are not public documents and are treated as confidential. Only the end product maps – the Category, Thematic and Hodgepodge Maps are considered a public document and record. All of the general or generic data of all community respondents are placed on these maps and there is no label or marking on these maps that would reveal who provided that specific data point or feature.

Further community respondents' audio recordings and interview transcripts are also considered confidential. Given this, the community respondent must provide their agreement or consent to have their personal interview products (Their Bio Maps, Audio Recording and Interview Transcript) to HLFN to release these to an outside party. There may be circumstances where such information requires an outside party to see such information for auditing purposes.

One thing the HLFN can do is to provide unnamed exerpts and samples from these materials to allow for outside parties to assess the data quality standards of the HLFN TLUS project. There are ways of doing this to maintain confidentiality and allow for the auditing and assessing of HLFN's research.

This project has been conducted by the Horse Lake First Nation for the Horse Lake First Nation and the people of Horse Lake. All information, data and maps presented and depicted belongs to, and is held to be intellectual property of the HLFN. The maps, data and all supporting documents produced under the auspices of this map biography survey may not be distributed and reproduced without the express consent of the HLFN. Full and named Map Biographies, Audio Recordings and Interview Transcipts are not to be released without the permission and consent of the community respondent who provided that information.

## I) Limitations

This HLFN 2011 TLUS achieved the primary objective and key research needs of the HLFN. In short, the HLFN has produced a baseline set of socio – cultural data and a set of maps which reveal some important land and resource use community trends and patterns. This map biography survey was designed and undertaken in a way to meet important data quality standards within the field of social science. With that said, there are some limitations with the map biography approach, the HLFN project and resulting data that need to be indentified, acknowledged and discussed. These include:

<u>Map Biographies as a Form of Quantitative Research</u>

The map biography survey method is a form of quantitative research, as opposed to qualitative research. There are many benefits with quantitative research but there are also some important limitations or drawbacks. Within *"Living Proof"*, Mr. Terry Tobias states the map biography surveys are limited - what they do is allow a First Nation to gather data about land use activities, events, occurrences trends and patterns. In the HLFN map biography survey, the research team was able to shed some light on ongoing community land use patterns and trends. However the map biography method doesn't provide much in the way of explanation as to:

- Why the community undertakes land use activities?
- How it undertakes these activities?
- What the cultural, social and economic importance of such activities are?
- What forces and factors are making it harder or easier for the community to use the land?
- How are land use patterns and trends changing with time?

- What would the consequences be to the community if they can't use large portions of the land over time?

Such important research questions must be the subject of future qualitative research – research aimed at providing observation and potential explanation of trends and patterns. Thus the 2011 HLFN TLUS cannot be held as study that addresses the whole array of much needed research.

## Mapping Extensivity and Use

The map biography method lends itself to documenting land and resource use over a wide ranging area – rather than mapping occupancy – the ongoing habitation or effective control of a given area through time. There are different forms of qualitative research that First Nations and academics have adopted that are better suited to mapping and documenting land use occupancy. The 2011 HLFN TLUS is a survey that documents land use and land use extensivity by the community.

## Traditional Use Survey vs. Traditional Ecological Knowledge Study

There is an important difference between traditional land use surveys and traditional ecological knowledge or traditional knowledge studies. Traditional Ecological Knowledge (TEK) or Traditional Knowledge (TK) a type of qualitative research that generally seeks to understand community knowledge about the environment, where wildlife tends to be found, wildlife and plant community habitats and long term trends and changes in habitats etc. As such, the 2011 HLFN TLUS is not a TK or TEK study.

It is also important to note that HLFN took steps to avoid mixing the two research streams. Within the map biography survey, the HLFN set out to identify kill, catch, gathering, camping and cultural sites NOT – the documentation of plant and animal habitats.

## Mapping of Specific Activity Sites and Not Larger Use Areas

What HLFN achieved in this map biography survey was gather and map traditional or socio – cultural use data. The survey generally mapped kill, catch, gather and camping sites. At its very best, the survey sheds light on examples of community land use patterns and trends. Specific instructions were included to map SOME of the sites a person could recall, not all. Further, the HLFN did not map hunting areas, or the broader areas in which people hunt, fish or gather using broader polygons or circles on maps.

Such work should likely be undertaken in the future, given the importance of these lands in supporting the ability to kill specific species.

**The TLUS: Documenting Kill, Catch, Gathering Sites – Not Wildlife and Plant Community Habitats**

Option to Not Map Travel Routes and Traditional Place Names

Based on the advice in *"Living Proof"*, the HLFN opted to not to map travel routes and traditional place names within this survey. This additional level of detail would have made the interview and data marking process more complex, possibly taking way from the focus of the community researchers. Clearly data layers from travel routes would be an important and useful to have, and HLFN might consider undertaking this kind of research in the near future.

Related to the topic of travel routes is that of mapping traditional place names. The HLFN simply opted to not undertake this. Rather, the HLFN should engage a Typonomy expert in the future to work with community elders and community members.

Survey Focus Structured Around Primary Research Objective

Again, as Mr Terry Tobias cautions First Nations should not try and "get it all at once", the HLFN opted to map a limited set of categories. Thus HLFN opted to keep the project manageable in keeping with its primary research objective and decided to map no more than 50 information categories (e.g Moose, Elk , White Tailed Deer, Walleye, Jackfish, Berries, Overnight Tent Sites etc). Given this, the survey didn't document the full range of community socio – cultural activities and use of lands and resources

Recall Interval

The HLFN decided to document land use activities undertaken over a community member's lifetime or within "living memory". It is possible to attempt to document far past, recent past and more current activities however, the HLFN opted to not water down in its focus on methods and mapping standards by creating artificial time frames. However, what was good in this approach is that it captured land use trends and patterns over a community respondent's lifetime.

Survey Population, Representativeness and Limited Budget

Given the opportunity, the HLFN would have wanted to interview all community members to gather an accurate picture of land use patterns and trends. However, as in all types of research, HLFN researchers needed to do as much work as they could with the budget they had. Within *"Living Proof",* Mr. Terry Tobais suggests that a map survey can be considered representative if a response rate of 70% - 80% can be achieved. Within this map survey research project, the HLFN was able to reach a response rate of 18.4% or close to one fifth of the community. While HLFN feel short of the desired target, by asking one fifth of the community the same questions about the same categories, did achieve a degree of representativeness.

"Ground Truthing" or Site Verification

The map biography was a map exercise. It did not involve ground truthing or going into the field to take GPS readings of sites. Clearly, if HLFN had the resources and the time, it would have been useful and beneficial to attempt to verify all sites mapped during the TLUS with GPS coordinates. The resulting data and map set produced within the HLFN TLUS could be utilized as a base to conduct more detailed on the ground assessments of proposed projects and areas that are deemed to be of critical community use. However, agreements between the HLFN and third parties would need to be reached to support and commission such detailed ground truthing and field work.

General Caveats and Limitations

On one hand the 2011 HLFN TLUS project was a much needed and very important piece of research for the community. The resulting maps and supporting data show a definite land use and trends and patterns for one fifth of the community covering a period of up to eighty years. However, as discussed, along with the strengths of the survey there are some inherent limitations with the quantitative research approach taken. It must be understood that the survey, at best, scratches the surface of the HLFN community's social, cultural and economic relations within this landscape.

Viewed in isolation, the data points on the maps can potentially convey the wrong impression. The data points or dots on the map are at best indicators of use and ongoing relationship of the land, but cannot and do not in of themselves represent the breadth and scope of HLFN uses, land utilization or rights held by the HLFN. HLFN's use of the lands and rights they exercise are dependant on a functioning and healthy eco-system.

Thus, while the fact that Jeff Napoleon may have killed one moose in a specific location is important, concentrating merely on the site in isolation misses the point all together. Jeff's right to hunt moose, the rights that his family exercise on the ground and the collective rights held by the HLFN are not confined to this one dot on a map or even a series of dots on a map. Rather, they result from and are dependent on large inter-connected, functioning landscapes – thus the spaces between the dots on the HLFN map can be said to carry more significance than the dots themselves. The dots are merely an indicator of use and utilization.

Such matters are important and need to be considered when viewing and considering the meaning of the maps. The maps need to be read in concert with the Methodology Report and understood with the proper context.

The HLFN has undertaken this survey and produced the maps it has with the objective of having this baseline data considered, incorporated and utilized within lands and resource decision making processes. The data could potentially be relevant and helpful in relation to environmental assessment reviews, planning processes and resource allocation and management policy decisions. However, it can only be helpful to the parties if it is seen and taken for what it is – a useful set of baseline data that is indicative of community land use and resource utilization trends and patterns. These resulting maps can only be of assistance and of value if they are viewed with the appropriate context and inherent limitations in mind.

**It's Not Just About the Dots on Maps: When Looking At TLUS Maps Parties Must Consider the Activities and Sites Marked on the Maps but also the Broader Area that Hosts Those Sites and Makes Land Use Activities Possible**

## J) Moving Forward: Community Stewardship and a Research Agenda

As noted, the real critical part of the TLUS now begins. The HLFN must now begin to use this research in productive and positive ways. The data and maps produced can and should be used by the HLFN in its engagements with industry and government for a variety of reasons. Already in the boreal area of Canada, First Nations that have such bodies of research and bring them to table are starting to see better environmental and socio – economic results for their community.

Secondly, the HLFN needs to develop a community stewardship and data maintenance plan. As HLFN and too many other First Nations have seen in the past, all the hard work put into such studies can be impacted with successive political and admininstrative change. Major portions of the studies be misplaced, removed or damaged impacting the usefulness of the maps and the studies. There are various ideas and measures that can and should be taken to protect, preserve and utilize the maps and its raw research materials. The community needs to set a standard of care and stewardship that all future HLFN governments are bound to uphold to preserve the data for this and future generations.

Thirdly, more than anything, it is hoped that this map biography survey may create a renewed interest within and by the community for conducting its own research programs to meet its research priorities and needs. More specifically, it is hoped that science will be seen and taken in a positive light and as a potential ally for the HLFN as it moves forward with a research agenda that tackles the very real and compelling challenges that it faces within the northwest region of Alberta and north eastern region of BC.

**The HLFN TLUS Discussed at the First Annual HLFN Lands and Resources Conference – A Need for Ongoing Community Care and Stewardship of its Cultural Use Data**

## K) Thanks and Acknowledgements

The HLFN wishes to acknowledge all those who have assisted and helped in carrying this research project through from its inception to its conclusion. First of all, it wishes to acknowledge and thank all those community members who agreed to participate in this map biography survey. Their contributions and knowledge will now always be there to assist their families, community and nation into the future.

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Thanks and acknowledgement also need to be extended to the Horse Lake First Nation Chief and Council and the Horse Lake First Nation Industry Relations Corporation who have supported and provided encouragement to make this important cultural research project a priority a reality for the community.

**The HLFN TLUS Was In House Effort Based in the HLFN and Staffed by Trained Community Reserachers**

The HLFN wishes to acknowledge and thank the community research team who ultimately made this project work, be responsible to and conducted for the community. Thanks and gratitude go to Karen Horseman, Sylvia Anderson, Jayme Savard, Scott Belcourt and Jenny Garneeart.

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Last of all, the HLFN wishes to extend its thanks and acknowledgements to Mr. Terry Tobias. This map biography survey work is based on his life`s work and contribution the field of traditional land use and occupancy mapping.

L)Appendices

- Hodgepodge Map
- Category Maps
- Thematic Maps

# Hodgepodge Map

**(DFN All Sites Map)**

# Category Maps

# Category Map:
# Moose Kill Sites

# Category Map:
# Elk Kill Sites

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# Horse Lake First Nation 2011 Traditional Land Use Survey Methodology Report

**January 2012**

INDUSTRY RELATIONS CORPORATION

HORSE LAKE FIRST NATION

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## 1.0 Project Summary

In 2010, the Horse Lake First Nation (HLFN) identified a critical need to undertake a traditional land use research project to document historic, current and ongoing traditional and cultural land and resource utilization by its community members. Project research design and planning occurred through the winter and spring of 2011, with project implementation occurring through the summer and fall of 2011.

The HLFN opted to use the map biography process – a well established form of quantitative research and approach to the conduct of traditional land use surveys. A project team consisting of a research director, four community researchers and one transcriber were hired and trained. Over the course of the survey project, HLFN interviewed 92 community members or respondents. Data was recorded on 1:250,000 topographic maps overlaid by transparent Mylar sheets, and by way of audio recordings and written transcripts. The resulting spatial data was digitized and organized into differing end mapping products such as Map Biographies, Thematic Maps and a Hodgepodge Map.

This Methodology Report documents in detail, both the research design and implementation phases of the HLFN Traditional Land Use Survey (TLUS) project. It also provides an analysis of the gaps between the planned research, how the research was actually implemented on the ground and potential effects on the survey's results and data quality.

## 2.0 Methodology Report Purpose

The HLFN set out to undertake the TLUS project based on demonstrable and defendable social science research methods and standards. Given this, it was imperative that HLFN's final mapping products were accompanied and supported by a comprehensive methodology report. This document is intended to satisfy that requirement. Thus the overarching purpose of this Methodology Report is to provide the community, future band administrations and external audiences an informed understanding of how HLFN arrived at the mapping results it did. Further, it is intended to provide a detailed account of the methodological rigour applied in the research design and implementation phases of the project. This report can also assist the same audience to assess and weigh the relative merits and potential deficiencies of the survey's data.

At the outset, the HLFN developed an initial Research Plan that set out how it planned to conduct the map biography research. This Methodology Report sets out how the

research was actually conducted and accounts for the differences between the initial plan, the actual research as implemented on the ground, the differences between planned and actual and the potential effect on the data outcomes resulting from this gap.

With both the Research Plan and Methodology Report in hand, the HLFN community and external audiences should be able to view the end product maps with a high level of transparency and re-trace the research path that HLFN took and why? Further, it is important that HLFN's end map products be viewed with the necessary context, understanding and interpretation. The Methodology Report is intended to provide this much needed context and documents some of the important limitations associated with map biography research and this specific survey.

This balance of this report will now walk the reader through how HLFN approached research design – taking into account basic, but critical research assumptions and principles to the very detailed procedural steps and agreed to rules that HLFN adopted and applied through the implementation of the research program.

## 3.0 Map Biography Need, Background and Context

### 3.1Traditional Land Use Research Need

The HLFN is an adherent to Treaty #8. It collectively holds Treaty and Aboriginal rights in relation to north – western Alberta, north – eastern British Columbia, Alberta and the historic Treaty #8 area. HLFN community members, individually exercise these rights on the ground within portions these geographic zones. The community has and continues to utilize lands and resources within these areas for a range of cultural, sustenance, socio – economic, spiritual, commercial and other purposes. Successive band administrations, staff and community members have felt confident in making such assertions in the past and to this day, given that they have constructive knowledge of their community members who continue to travel out onto and stay on the land to undertake these traditional vocations.

*Need to Build Inventory of Traditional and Cultural Use Data*

Living on the land is a fact of the HLFN's people ongoing existence. If this was in doubt, one would simply have to take a walk through the community. When they did so, they would find ample evidence readily at hand that points to a life lived on, and tied to the land. There are meat racks in people's backyards, cut and stacked tepee poles, lockers with hunting rifles, pictures on mantles with relatives pictured in camp or with a recent kill, moccasins made from strongly smoked moose hide, freezers of game, canned jars

of game and fish, fish nets hanging in the back yard, sheds with camping and trapping gear, fishing boats, ATV's, ski – doos and some very content dogs enjoying bone marrow from a front quarter.

For the HLFN and other First Nations, it seems counter intuitive and somewhat illogical that they are required to establish the fact of their existence on the land and their patterns of use and occupancy via traditional land use studies. Notwithstanding such views, the HLFN took up this task and conducted some traditional use documentation work.

In past years, it appears that the HLFN commissioned up to two TLUS projects that set out to document traditional and cultural use information. It appears that one of these projects involved one community member locating a number of sites with a Geographic Positioning System (GPS). These were documented on maps that HLFN has in its possession. Another earlier effort involved the Western Cree Tribal Council (WCTC) First Nations which appears to have focused on defining the bounds of the WCTC First Nations and including the HLFN traditional territory. HLFN attempted to ascertain information and back up documentation on the purpose, extent and other key information about these studies however it was unsuccessful in obtaining detailed information.

Given this, it was clear that HLFN would need to undertake another research effort to produce a map with baseline data that documented both historic and current uses by community members. It was deemed as necessary as HLFN did not have any baseline data (readily accessible at this time) to support its assertions to its ongoing connection to its lands and reliance on resources. Based on past experience, an important part of the project will be to determine a suitable stewardship and data protection and maintenance plan in the face of ongoing administrative and political change at the HLFN.

*Need to Document Historic and Ongoing Use in Face of Development*

The HLFN also determined a critical need for an expanded body of traditional and cultural use data, given the pace and scope of development occurring within the north-western Alberta and north-eastern BC. Based on repeated community anecdotal accounts, it appears that community members are finding it increasingly difficult to successfully hunt, fish, trap and gather earth and plant materials within this region. In the community's view, their ability to exercise their rights, maintain their culture and feed their families is dependent upon healthy and diverse fish, wildlife and plant communities which in turn are predicated upon healthy and functioning eco-systems.

HLFN elders, hunters and fishers assert that this perceived decline in ecological conditions and the drop in wildlife populations correlate with the concomitant rise in

industrial development and agricultural expansion. The HLFN has and continues to request government agencies and industry to investigate these phenomena and the consequences of the cumulative impact of development on its rights and people's way of life.

In the interim, a proactive measure would be to move on with research that can be conducted within HLFN's sphere of influence. Establishing an inventory of quantitative land use data now is an important first step. From here, it may be possible for the HLFN and other research partners to build on this foundation and launch future lines of qualitative inquiry to address the pressing concern of eco-system disturbance / stressors and the cumulative impact of industry and land use change.

*The Proposed Site C Hydroelectric Project*

A further driver for the need to carefully document traditional land use by the HLFN is the potential for the development of a third dam on the Peace River near Ft St John in British Columbia. This dam is called the Site C Dam and if it is constructed it may influence river flows, fish and mammal distribution in and associated with the project footprint area and potentially land use and resource utilization by aboriginal communities. The careful documentation of use by the HLFN will improve the community's ability to participate in the assessment process and will provide the project proponent with the tools to better assess potential impacts to HLFN land use and resource utilization and an improved ability to propose, plan and conduct mitigation measures to mitigate potential project effects.

The project proponent is BC Hydro and in recognition of these drivers as well as the obligations that BC Hydro holds as a crown corporation, BC Hydro met with the HLFN and negotiated an agreement for HLFN to conduct a traditional land use study. The resulting document was called *the "Traditional Land Use Study Agreement for Site C Clean Energy Project"* and it set the initial framework for the study including objectives, methods and work planning as well as a set of deliverables from the work. The agreement also identified a budget which HLFN could use to conduct the work. While the Site C project was a key driver for the TLUS project, the HLFN opted to plan and implement a map biography survey that would address both the data and planning needs of Site C project as well as the longer term TLUS data needs of the community. BC Hydro's project funding will support the HLFN in engaging other resource development, environmental assessment and management scenarios into the future.

*Need for Historical and Current Use Data to Trigger Duty to Consult*

In parallel, Canada's courts have determined that the Crown carries certain consultation, accommodation and reconciliation responsibilities in respect to the rights and interests of First Nations. If such obligations are to be triggered, the courts have held that a First Nation must present evidence of its traditional and cultural uses and potential impacts on such uses. The depth of consultation and level of accommodation that occurs is in part determined by the extent of use by a First Nation and the potential impact of an activity or decision on a given area. Given this, the HLFN must have a readily available and accessible source of baseline data that it can present to statutory decision makers to establish the community's use of lands and resources. Given this, HLFN decided to document historic, current and ongoing uses by its community members by way of the 2011 TLUS Project.

*Historical and Cultural Posterity*

While there are many compelling external factors and forces that are driving the need to undertake map biography research, the HLFN had its own important internal reasons for commissioning the 2011 TLUS Project. Within ongoing community meetings, community members expressed the need to document important knowledge held by its aging group of elders. The transmittal of culture and history to new generations is deemed as an important priority by the HLFN and one of the key drivers for the current TLUS project.

*Impetus for Future Indigenous Side Research*

Time seems to be of the essence and HLFN needs to embrace a culture of research to address the many pressing challenges and objectives of its community members. However, as shall be made very evident, there are certain research objectives that the current TLUS project can help realize, others it cannot. This quantitative research project cannot and has not been designed to address the full array of study and data needs of the HLFN.

Notwithstanding some of the inherent limitations of the map biography method, it is hoped that this TLUS project and its results will help demonstrate that research, undertaken within the framework of social science, can be an ally and a powerful tool to the HLFN. Moreover, it is hoped that this research effort will embolden HLFN and future generations of HLFN to embrace a culture of scientific research and chart a course designing and managing their own cultural research agenda.

### 3.2 Traditional Land Use Research Context

Traditional land use surveys (TLUS) have a long established history within Canada where a considerable amount of research effort was driven by specific and comprehensive land claim processes, evidentiary needs for litigation and controversial development projects. The courts have established tests which generally hold that First Nations are required to produce evidence of their historic and ongoing use and occupancy of their ancient territories to establish the existence of Treaty and Aboriginal Rights and Title.

Despite the sheer volume of traditional land use research work conducted to date within Canada, there are not a great many of publically available studies or methodology reports available to help in the assessment of such studies and best practices. This has largely resulted from the confidential environment in which such studies are funded and practitioner isolation. Further there have been few, academic sources and reviews produced on best practices and academically defendable approaches to designing and conducting studies. Some government agencies have produced TLUS guides and handbooks however these have been found to woefully inadequate and providing questionable advice to guide First Nations TLUS research efforts. (Tobias Pg. 134)

What has been absent from field of study and discipline, has been a set of written academic standards that sets out sound methodological approaches and detailed best practices to guide the creation of maps that are defendable and derived from the stringent application of scientific methods. (Tobias Pg 34).

Given the lack of written standards and academic review, traditional use studies and practice has varied, producing a wide array of results. TLU studies are being subjected to increased regulatory and judicial review and scrutiny. What was deemed as acceptable is now being questioned. There has never been a greater need for First Nations to produce sets of believable and supportable maps derived from data that is “demonstrably objective and reliable”. (Tobias Pg 47)

In 2009, this existing gap was narrowed with the release of *Living Proof: The Essential Data Collection Guide for Indigenous Use and Occupancy Map Surveys* by Terry N. Tobias. This text is held as setting a new benchmark for the design, planning and implementation of traditional use research given its adherence to the principle that such research can only held to be credible and ultimately useful if it is soundly rooted in, and conducted within the paradigm of science. Project proponents are already moving to adopt this new standard and are basing TLUS contribution agreements on the exacting methods and practices set out in *“Living Proof”.*

This context is critically relevant to the HLFN at this time. In the past, the HLFN undertook a level of traditional use mapping work, however, the lack of methodological reporting ultimately hampers and limits the application of this prior work. While many

First Nations are in such a position, HLFN decided to build on this past work with a focus on methodological rigour to produce maps that are derived from data that is demonstrably objective and reliable. In the current TLUS project, HLFN strove to produce a set of good quality maps which ultimately demonstrate what they purport to do.

Given this, HLFN took the time to review the "*Living Proof*" text in detail to determine what recommendations and practices it would incorporate within this TLUS. Upon a thorough review and in the absence of any other authoritative text, it decided to base the current TLUS on the prescriptive step by step process as advocated by Tobias.

HLFN's acceptance of this approach and adherence to the scientific method within the map biography survey's research design and implementation phases is documented in two key documents. This first is the Research Proposal, prepared at the outset of the project, which set out how HLFN proposed to design and undertake the research project. This second is this Methodology Report - the companion document that sets out how the quantitative research program was actually undertaken. It purports to provide an analysis of the gaps between the two (proposed and actual) and the potential influence of these gaps on research outcomes and collected data.

### 3.3 Community Vision and Support

As noted as the outset in this Methodology Report, the HLFN community expressed alarm at the increasing pace and scope of development within their traditional territory and their views of how this is impacting on their utilization of lands and resources. Countless community meetings have been held over the past decade where community members have expressed their desire to have successive administrations address the perceived decline in the quantity and quality of lands available for the exercise of their treaty rights.

However, HLFN's ability to engage the Crown and proponents has been generally hampered by the lack of data and evidence on the traditional and cultural uses and practices undertaken by the HLFN community as a whole. Through engagement with the community, the HLFN has developed an understanding and acceptance that it needed to sponsor a new traditional research effort. However there were also questions of why HLFN needed to expend time and resources in studying that which seems patently obvious to the community. One of the greatest concerns, was put concisely and logically by an HLFN community member:

*"Why do we need studies to prove that we use the land when we clearly know what we have always done and where we have been".*

The issue of onus of proof was discussed at length. While it seems counterintuitive and objectionable that a group of indigenous people are required to produce evidence of the fact of their existence on the land, in the end it was decided that HLFN should proceed with this survey in support of community's research and data needs.

Another issue raised by the community also relates to the site specific approach to data collection and documentation advocated within *"Living Proof*". Within the text, the identification and documentation of specific sites is advocated over the identification of broader use areas by way of map polygons. As with most First Nations, a general fear was expressed by the HLFN, that the production of a map with a sparse data set of dots will create the impression of a vastly underutilized landscape. This view was generally exacerbated by the apprehension that subsequent consultations with industry and government tend to deteriorate into a mere exercise of "show us your dots". With this done, industry and government then proceeds to move ahead on a business as usual basis occasionally amending project plans to dodge and avoid ploughing over a berry bush or camp site. This apprehension within the community is well founded given government agency and proponent's predilection for reducing the scope of consultation, accommodation and reconciliation to a discussion about how the project can be mitigated to avoid a camp site, moose lick or a berry bush.

As discussed by the community, clearly the fact of HLFN's history, traditional uses, cultural practices and the exercise of rights are not confined to a series of isolated spots in the forest. Rather, those places or dots on the map are indicative of an overall relationship with the land that is dynamic and dependant on a healthy, functioning eco – system and a range of cultural, socio – economic and ecological factors.

Thus the map biography is then held to be a starting point which provides some insight into the complex relationship of the HLFN with its lands, which can only be truly be understood by further in depth qualitative research led by and commissioned by the community with appropriate research partners.

The discussion of the inherent limitations of the map biography approach and the role of the Methodology report helps address some of these well founded concerns and apprehensions.

In addition, matters of confidentiality were also considered in depth. In some cases, community members take the view that it important to not provide a great deal of information in relation to some important cultural values. An example of this was medicine Plants. There are very important and strongly held beliefs about what should be shared with external parties and what should not. However, such concern was balanced with a need to identify and seek to protect where such plants occur within an eco-system and where people have habitually gone to gather medicines. In this case, it was determined that generic information about the location of medicine plants could be

mapped as a Category, but no information provided pertaining to their value, usage and care was to be provided.

Another key area of discussion was the identification of family burial sites. One on hand, a need and desire was expressed to ensure that such sites are identified and protected while not providing a fixed accurate location on the ground within the survey's maps and records. Once it was explained that so called "ground truthing" would not form part of the survey's work some of these concerns were addressed. The scale at which the mapping is occurring is at 1:250 000 which would help in identifying a precise location, while avoiding the pin pointed location confirmed by way of GPS. In this way the new maps can be used to engage industry and government by working to establish protective buffers for such specific sites without disclosing too much detail about the values present.

There was considerable discussion about the differences between anonymity and confidentiality within social science research. The HLFN staff was supportive of the proposed confidentiality measures built into the survey and the rules governing the use of end mapping products. In summary the following rules provide a level of confidentiality in respect access to information:

Map Biographies

Only respondents (the person who provided map data) are allowed to view and access their individual map biography along with selected / responsible HLFN staff or community stewards. The respondent must consent to the release of, or viewing of their map biography by an external audience.

Interview Transcripts

Only the respondent and selected HLFN staff or community stewards are to view and access respondent's interview transcripts or listen to the recording that the transcript is based on.

Thematic, Category and Hodgepodge Maps

These end product maps, containing the aggregated traditional use data of the community can be released to an external party, where there is an adequate agreement to do so. Such maps may also need to be released to government agencies and each instance will be weighed by the HLFN band administration on a case by case basis.

Public and Methodology Reports

These two reports will be released in conjunction with Thematic, Category and Hodgepodge maps to ensure that these maps are interpreted and understood in the correct context by external audiences. Thus they are public reports and can be made

available to external parties where there is an agreement to do so. Personal information of respondents (such as names) or information that can link data to actual respondents will be within these reports.

Once these interests had been addressed and set out within the Research Plan, the HLFN issued a Confidentiality Directive indicating its overall support for the map biography survey and an explanation of the measures that would be taken to address the matter of confidentiality. **(Appendix B).** The Confidentiality Directive was read out to respondents prior to the conduct of their interviews.

By the end of interviewing phase, the HLFN interviewed 92 participants. This translates into 92 out of a sampling frame of 500 people within the community or an overall response rate of 18.4 % or involving close to one fifth of the community. Given that HLFN set out interview 100 people, it achieved a participation rate of 92%. HLFN has never before achieved such a high level of community participation in such a map biography research exercise. Since the completion of this TLUS project, there are ongoing calls from the community expressing interest in participating in further interviews and in other research initiatives.

### 3.4 Research Team and Community Capacity Building Approach

The primary research goal of map biography survey was to build a baseline set of hunting, fishing, gathering, overnight sites and other site specific data and end product maps based on demonstrable social science methods and practice. This primary research objective guided all key and subsequent decisions about the project. Notwithstanding, the HLFN also established other secondary and tertiary project objectives.

One of these sub-objectives was to build the HLFN's capacity and skills in engaging in social science research and cultural research. The planning and implementation of this project was designed around this objective to train several community members in social science research skills and the utilization of the map biography method. Five community members were hired as community researchers.

Another sub - objective was to utilize and test the methods, standards and best practices set out within "Living Proof". A considerable amount of time was spent by HLFN in understanding and analyzing the advocated methods and standards being advocated within the text, then in ensuring that the project followed the prescribed standards throughout both the research design and implementation phases.

Given these goals, the HLFN assembled the following research team based of the following people:

- Karen Horseman – Community Researcher
- Jayme Savard – Community Researcher
- Sylvia Anderson – Community Researcher
- Scott Belcourt – Community Researcher
- Jenny Garneert – Office Support and Interview Transcriber
- Matthew General – Research Director

### 3.5 Community Research Project Office

The HLFN established a community research project office at the HLFN community arena to support the design, planning and implementation of the project. Training, the organization of interview materials and the conduct of interviews occurred at the office.

Each interviewer was assigned a work station and a completely stocked interview tool kit containing all required data marking and recording materials to facilitate interview preparation, the conduct of the interviews and post interview activities.

The office was set up to ensure the consistent storage, logging and preparation of materials. For example, a Mylar cutting station was in place along with a place where each interviewer stored their audio cassettes and interview record forms. Organization of office space contributed to a clutter free work environment and an organized and methodological approach to the conduct of each interview.

Appropriate well lit and quiet spaces were set up in the HLFN community building for the conduct of interviews. HLFN also purchased light weight folding tables that could be used moved around and that provided adequate working space during the interviews.

The community office also acted as a base for the dissemination of information about the project, building awareness of the project, addressing questions and queries from community members and ultimately securing community participation in the map biography research process.

### 3.6 HLFN TLUS Proposed Research Design Plan

During the research design phase and in the lead up to research implementation, the HLFN developed a Research Proposal that set out HLFN's early methodology design considerations and proposed measures to ensure a methodologically sound approach to the design and conduct of the survey.

This was a beneficial exercise to go through as it helped clarify for HLFN, the key components and measures to address key research principles and data quality

standards. It was in effect, a road map that required the HLFN to think through all key aspects of research design and create more detailed plan at an early stage.

The HLFN prepared an initial plan in February 2011. This plan was then amended in March 2011, a full two months prior to hiring and training of community researchers and a full three months prior to the commencement of community interviews. It was amended as a result of HLFN consideration and reconsideration of certain aspects of research design. The amended TLUS Research Proposal is attached. **(Appendix A).**

## 4.0 METHODOLOGY

The HLFN endeavoured to construct a methodology predicated and built upon a scientific foundation. Specifically, the methodology itself was comprised of five interlocking layers of research design. These five increasingly detailed methodological components were in essence, a sequence of research design decisions. These decisions ranged from the broadest assumptions and principles that guided the research to the very specific details related to the conduct and recording of the research. (Tobias Pg. 48). These five layers were as follows:

*Framework*

The framework relied upon was founded upon a scientific approach and positivistic world view - where the resulting survey data could be confirmed and rationally proven.

*Methods*

Methods are the general means or mode and process used to conduct the research and collect data.

*Parameters*

Parameters place stricture and bounds on the research, providing shape and defining the extent of the research. These include the critical who, why, when, where and what of the research.

*Tools*

Tools are the actual devices and materials with which data are collected during the research.

*Conventions*

Conventions constitute the detailed, agreed upon and consistently applied set of rules and steps through the research and that govern the use of research tools.

### 4.1 Framework

A quick comment must be made about western science and the matter of indigenous knowledge, lands rights and traditional land use research. The two paths clearly meet, but have often been seen as being in conflict and at odds with each other. In respect to the matter of proof, First Nations are often incredulous when they understand that they are required to provide proofs of their ongoing existence and use and occupancy of their lands to governments.

In the Canadian judicial system, the onus and burden of proving aboriginal title and rights is placed on First Nations. Given this, some indigenous peoples reject the notion of undertaking traditional land use research and instead take the view that it should be up to modern jurisdictions to prove how they have come to acquire their powers, land rights and tenure systems. However, many other indigenous groups and First Nations within Canada have opted to undertake TLUS research to support their efforts in having their Treaty and Aboriginal Rights recognized, acted upon and enforced.

Also, the application of “science” in respect to environmental assessment and resource development decisions has tended to constitute another contentious area in the realm of First Nations – Crown – Industry relations. Governments and industry establish laws and policies designed to regulate the development and management of natural resources. Environmental assessment decisions and processes are generally held to be based on and rely on the process of scientific inquiry and the paradigm of science.

First Nations and other parties have taken the view that such processes are not so much based on the application of empirical science but rather on the appearance of scientific inquiry, which is then relied upon to justify pre – determined lands and resources decisions and political imperatives.

Such views have become accentuated with the discounting of traditional knowledge held by First Nations. First Nations pose the question - what is more accurate – a predictive environmental impact assessment based on one or two years of field studies or the observations of an entire community who has observed the state of a given land base and values contained therein over several decades and in all seasons?

Against this background and with these issues in mind, the HLFN opted to approach the TLUS project and research tasks with an open mind and being receptive to the merits of scientific inquiry and open to adopting scientific method in this case.

HLFN understands that the goal of scientific inquiry and social science inquiry is to explain and develop an informed understanding of social phenomena. As science does not equate with common sense, an intuitive or introspective approach to arriving at that understanding had to be ultimately rejected. In the world of scientific inquiry, knowledge and data gained must ultimately be testable and proved by way of deductive research. Ultimately research should be observable with the human senses and research must be proven with deductive logic. Given this, the HLFN understands that its approach to this research program had to free of bias and value neutral to the extent possible.

In *Living Proof*, Terry Tobias advocates the imperative that traditional land use surveys must be grounded within a process that is fundamentally scientific – more specifically, that of social science. (Tobias Pg 47) The HLFN opted to base and structure its traditional use research project within the framework of science with the goal of having its research held to be transparent and the resulting maps to be based on testable and provable evidence.

### 4.2 Framework: Research Principles

As HLFN set out to produce a set of traditional use maps based on quality data, it considered, understood and incorporated a set of sanctioned research principles.

Tobias holds that the following 16 fundamental research principles should guide and underlie all map biography surveys (Tobias Pg. 126) and if adopted, will go long way towards generating quality data (Tobias Pg 134):

| | |
|---|---|
| *Respect* | *Confidentiality* |
| *Informed Consent* | *Minimizing Response Burden* |
| *Minimizing Interviewer Burnout* | *Common Sense and Experience* |
| *Focus* | *Flexibility* |
| *Simplicity* | *Consistency* |
| *Organization* | *Caution* |
| *Self Reporting* | *Data Diamonds* |
| *Fun* | *Posterity* |

In the following description, HLFN demonstrates its understanding and adoption of these key principles. Hallmarks and examples are provided to show how these research principles were operationalized and are manifest within key components of the research design and implementation:

Respect

While there were various land and resources management issues driving the need for a further TLUS research, the HLFN ultimately set out to design a research program to address the community's most immediate and pressing research needs. HLFN rejected ideas to map certain areas to address environmental impact assessment priorities of proponents. Rather, it set out to address its needs, which was to create a baseline of quantitative data upon which the community could build on in future years. In turn, such a database could be utilized within the context of major project environmental assessment reviews and other resource management consultation processes. As such, the primary research objective and research agenda was designed to respect and address the interests of the community.

The principle of respect was also grounded in the interview process with time being taken to explain the purpose of the research and to listen to the views of the respondents at the outset. In a very few cases, some potential respondents noted their concerns about the research when they understood the limitations of the research (e.g. the site specific nature of the mapping). These people's views were respected and they were not coerced into the research. Follow up discussions occurred with several people. As a result many of those community members opted to participate whereas a three (3) opted to not participate.

Respect was also ingrained into the construction and administering of the questionnaire. For example, when it came to the category of identifying grave sites, spiritual sites and medical plant gathering sites, special care was taken to ensure that the respondent was comfortable in providing this information. Even though respondents were required to answer all questions, they had the option of not providing an answer to this set of category questions.

The conduct of the interviews was set to meet the Two Hour Rule of Thumb (THROT) principles to ensure that respondents were not overburdened with too much questioning resulting in frustration. Further, interviewers were also instructed to allow the respondent to depart from the main line of questioning, if they wanted to discuss something that was of importance to them (e.g. personal anecdotes and family history). This was documented within the scribble pads, Interview Record Forms and in the audio recordings for follow up and for further inquiry.

On a last note in relation to the principle of respect, community members noted a preference to be interviewed by an interviewer from their own family. While this didn't occur in all cases, it seemed to boost confidence and a willingness to participate by being approached by a direct family member.

Confidentiality

As is often the case with TLUS projects and cultural information, there is an instinctive need and urge to share information and to protect it. This project was no different with the community expressing a need to document and share its information with external parties while also safeguarding it against wrongful use and one-sided interpretation.

In internal discussions, it was pointed out that the courts have answered this question to some extent. If the HLFN wants to have a remote chance of having its traditional vocations and treaty rights considered within resource development and management decisions, it must be prepared to share a reasonable level of information with proponents and government decision makers.

Comfort in the TLUS project approach was developed and built with the notion of providing for a level of confidentiality through the use of Personal Information Numbers (PINs) for respondents rather than disclosing their names within mapping products and reports. In addition, the measure to only provide the community's consolidated data via Category, Thematic and Hodgepodge Maps was strongly supported. Respondent's Map Biographies or Bio Maps and transcripts would not be shared with external parties, unless the consent of that individual was obtained.

The HLFN Confidentiality Directive set out the principle of confidentiality for respondents prior to all interviews. **(Appendix B)** The Confidentiality Directive was to read to respondents prior to the commencement of their interviews.

Informed Consent

The HLFN treated the issue of informed consent with due seriousness and utmost consideration. Simply, research participants were clearly informed of the purposes of the TLUS project and the potential range of end uses of the Category, Thematic and Hodgepodge Maps. The Permission Form was reviewed with each respondent prior to the start of the interview so as to allow people to make a free and informed decision regarding their participation as research participants – a fundamental principle in social science research. **(Appendix H)**

Minimizing Response Burden

HLFN structured its approach to interviews with the goal of obtaining reliable information while reducing response burden to the extent possible. This was achieved

with constructing the questionnaire around the primary objective with no more than 45 categories being selected for inclusion.

Further, to keep the interview manageable and ensure that focus was kept on the application of repeated procedures and application of conventions, the HLFN opted to not strive for a high level of descriptive precision. While the data diamond model was adopted to establishing land use facts, it was done so at a higher level. For example, dates and the names of third parties were not requested on every site as such an approach would become too burdensome, lead to frustration and was not required given the primary research objective.

The Two Hour Rule of Thumb (THROT) principle was adhered to minimize response burden and to respect people's time and their contribution to the project. In some cases, interviews went beyond two hours; however the vast majority were completed within two hours given the tightly prescribed research focus.

## Minimizing Interviewer Burn Out

HLFN set out to interview up to 100 respondents over the course of the map biography project. So as not to overburden interviewers and help in managing potential burn out, four interviewers were hired for a five week period. In this way, each interviewer could interview one respondent per day or a total of 25 over the interview period.

During training, emphasis was placed on interviewers not administering more than two questionnaires per day to guard against burn out and to support focus on pre – interview set up, the appropriate utilization of tools and repeated application of conventions.

The focus of the questionnaire on the primary research objective, a condensed set of categories and the adherence to the Two Hour Rule of Thumb principle went some way keep the work load of interviewers manageable, which in turn allowed them to focus on the consistent application of the core research ground rules and research conventions.

## Common Sense and Experience

The notion that TLUS research is intuitive and is easy to do was rejected at the outset, given HLFN's need to produce a model set of maps. While the HLFN notes Tobias' caution that no appropriate "one size fits all" template exists for a TLUS, the HLFN took into consideration that Tobias' text is the first written comprehensive treatment of the subject and would be ignored at HLFN's peril. Given this, nothing was left to chance. As

can be noted in the initial Research Plan and this Methodology Report, all aspects of research design and implementation mirror and follow the prescriptive set of standards and best practices advocated in *"Living Proof".* In this context, common sense manifests itself in following best practices and learning from Mr. Tobias' contribution to the field of TLUS research.

## Focus

HLFN based the research on a well defined primary objective that kept the project manageable with a realistic set of outcomes and expectations. As noted, the community identified numerous important research areas and lines of inquiry that it wished to pursue. Some of the ideas included consideration of the cumulative impact of development of environmental values, identification of remaining intact critical habitat areas, "loss of use" issues and ungulate exposure to contaminants.

Such research avenues are critical and would be best addressed through a qualitative research program and partnership. While HLFN is working to address these over the long term, it was determined that HLFN should focus on producing a baseline inventory of site specific data. Such a quantitative baseline data will be needed if and when HLFN pursues other avenues of qualitative research.

Further, there was some consideration of the inclusion of categories pertaining to travel routes, traditional place names and traditional ecological knowledge. As recommended in *Living Proof*, these were deliberately deferred to allow the project to be grounded in the key research objective – which is to determine wildlife kill, fish catch, overnight, earth material gathering and culturally significant sites. HLFN will seek to document travel routes, traditional place names and traditional ecological knowledge through subsequent focused studies, should funding be accessed. "*Living Proof"* cautions First Nations against the temptation to "get it all at once".

## Flexibility

Flexibility and the ability to adapt was important in the case of this survey. Given the multitude of procedural steps and conventions that had to be applied, community researchers were at first, somewhat apprehensive in taking on the interview task. At first blush, administering the questionnaire seemed to be a daunting task as people don't necessarily approach life or can recount what they have done on an activity by activity or in this case, a category by category basis.

While the Questionnaire had to be administered in a consistent manner in every interview, measures were taken to address the situation where a respondent was more comfortable in relating traditional use information on an area basis as opposed to a category basis. For example, in some cases, respondents began to answer questions relating to the first category (Moose Kill sites). However, as they started to talk about Moose Kill sites that occurred in one area, they started to relay information about other categories (e.g. White Tailed Deer Kill Sites, Jackfish Kill Sites, Overnight Camping Sites and Earth Material Gathering Sites). Once the respondents had completed an area, they would cast over other areas of the base map or other base maps and discuss other areas.

This of course required a level of flexibility and adaptability by the community researchers. First they were prepared for such an occurrence in the training phase. It was also addressed by having a Quick Reference Feature Code Sheet where they could quickly select the correct acronyms to keep up with the respondent and mark the required features. **(Appendix C)**

Flexibility was also introduced to allow respondents to make departures from the Questionnaire as they wanted to. In some case, they did so to relay some aspect of family and community history about an area. In other cases, it was to relay their direct observations of induced changes in habitats and the ability to successful hunt, fish or gather in a given area. However, the flexibility was also paired with rigour, as the community researchers were trained to ask and close out each category question. This was done by returning the respondent to whether they could identify any other particular sites pertaining to categories they had discussed.

Flexibility was also built into the research design phase. Initially, HLFN prepared a Research Proposal that appeared to be definitive and all encompassing. As HLFN moved through the research process, ideas and rethinking of certain aspects of the Research Proposal occurred. HLFN prepared an amended Research Proposal in February 2011, well before the interview process was underway in June 2011.

One example of such as change was the decision to include some basic questions on the reliance of country foods by respondents.

<u>Simplicity</u>

While complex and involving hundreds of sub steps, key project tasks were broken into learnable and manageable tasks so that community researchers could concentrate on the consistent application of procedures and use of research tools or conventions.

Examples of this include training, were key concepts and tasks were broken down and practiced through in class training, mock interviews and supervised interviews. Another

example included the creation of separate work stations where actual Took Kits (with actual bins containing all their required interview tools) were assembled for each community researcher interviewer. This allowed people to focus on the key tasks regarding the selection of respondents, coordination of interviews, conducting and documenting the interviews.

Simplicity is also manifest in the packaging of interview forms. While the Data Collection Manual contained all the necessary forms, HLFN opted to break out all the key forms that had to be reviewed and signed off during the interview into a discreet Interview Forms Package. One package was provided for each interview. This also guarded against the tendency to want to pull apart one's Data Collection Manual to use those forms.

Further each interviewer was provided a discreet place to file their completed and labelled Mylar overlays, binders to store their completed and filled out Interview Forms and their own storage boxes for their completed audio cassette tapes.

Data Marking Conventions and Category Codes, as set out within Living Proof are very straight forward and can learn within a week of training, as HLFN did. However, so as not to put community researchers in a place where they had to memorize all the codes and conventions, prompts were provided in various places such as the Questionnaire (e.g. Elk – EK), the Quick Reference Category Code Sheet and the Data Collection Manual.

## Consistency

The HLFN map biography project was planned and executed in a way so that researcher could strive to achieving data reliability, accuracy, integrity, representativeness and precision. Consistent use and application of working definitions, Categories, the Questionnaire, Tools and Conventions occurred throughout. An example of HLFN's consistent approach and application of consistency is clear in the design and administering of the Questionnaire in interviews. All interviewers were trained and prompted to ask the exact same category questions, every time, in every interview, across the entire project.

Training, provision of support and oversight also helped cement the consistent use of research tools or conventions. Conventions were set out, discussed, taught and applied. The Data Collection Manual bears this out, along with a review of the interview transcripts, the Interview Master List and resulting map biographies.

Organization

A project management structure was implemented to ensure an efficient and organized approach to research design, project planning and implementation. This Methodology Report bears witness to the exhaustive attention paid to organization to ensure that traditional land use data was collected in a consistent and demonstrably reliable manner.

The need for organization also drove the set up and management of the community research office. In short there was a place for everything and everything related to the project had a home. This included:

- community researcher work stations
- community researcher tool kits containing all interview tools
- storage places for copies all key interview forms to ensure that an ample supply was always available
- a Mylar storage area with a cutting station for Mylar overlays
- a place to display the Index Map and examples of Map Biographies
- a storage bin for completed audio tapes organized by PIN
- discreet binders for community researcher to file their interview forms (e.g. Interview Record Forms, notes from Scribble Pad and other key forms), signed permission and honoraria forms upon completion
- quiet and well lit places in which to conduct interviews
- Light foldable tables to ensure that community researchers always had a large flat working service to work on

Pre interview training with community researchers focused on the critical importance of preparing for interviews, conducting the interview and closing down the interview. Community researchers were provided and trained to use an actual Interview Procedure Checklist and fill physically fill it out as they moved through the interview process with each respondent.

Caution

HLFN community researchers employed caution in various ways and means. Caution was also employed in the construction of Questionnaire by using clear unambiguous wording to ensure that questions could be clearly understood by interviewers and respondents. Key words were used within the questionnaire to eliminate confusion around meaning of words and questions (e.g. asking respondents to mark some of the sites where they killed a specific species rather than demarcating general hunting areas).

Caution was also manifest in the approach to data marking. The use of large polygons was avoided in favour the identification of specific sites and small polygons where required. Where respondents had difficulty in locating a site with precision and accuracy, instruction was given to not mark the site or to add the suffix “A” (approximate) to the marked feature code. Respondents were not rushed and provided time to be certain about the identification of a site. The use of pencils as pointers and illuminated magnifying glasses helped ensure the “zeroing in on” sites.

## Self Reporting

In undertaking this map survey project, HLFN saw the opportunity and importance of supporting HLFN elders and community members in documenting the knowledge and history that has been passed on to them from previous generations. This is a fundamental aspect of the HLFN’s community that allows for the transmittal of culture.

Flexibility and respect governed the interview process to allow and support respondents to convey the information and knowledge that they feel should be recorded. With this said, the map biography process demanded that respondents had first knowledge of the kill, catch, gathering and overnight sites they were referring to. Some flexibility was permitted in relation to marking of sacred and special sites when the location and importance of such a site was passed might have been orally passed on by and elder or family member.

First, the reliance on one-on-one interviews ensured that respondents were providing information that they had firsthand knowledge of. Workshop settings and interviews with multiple respondents were decided against early on, as the HLFN did not wish to have second hand information as being deemed as hearsay at later time by an external party. Further HLFN wished to guard against the potential for conflation – where respondents essentially feed off of each other’s responses. HLFN needs to make this clear – there is clearly a time and place for group work and settings; however the map biography process adopted called for one-on-one interviews and the documenting of first-hand knowledge of sites and activities undertaken by the respondent themselves.

## Use of Data Diamonds

HLFN understands that the map biography research is about establishing facts in relation through the documentation of a respondent’s use of lands and resources over their life time. Thus every identified site within a map biography and end product maps must be supported by the following:

- What activity took place?
- Who undertook the activity?
- Where did the activity take place?
- When did the activity take place?

Within *"Living Proof"*, Tobias asserts that all data points indentified within a map biography survey must meet this test and exhorts First Nations to gear all of their research effort to "chasing data diamonds" that establish these key four facts in relation to each site.

HLFN understood this to be a critical aspect of map biography research and explicitly embedded the data diamond approach in the research design and implementation phases of the project. However, HLFN had to balance the need of chasing data diamonds (achieving greater levels of descriptive prescription) with the need to meet the primary research objective and manage the very real problem of response burden – which too can impact on data quality.

The interview process would have bogged down if HLFN sought to obtain information on exact dates and third parties present at every site identified by a respondent. Tobias advocates that the level of descriptive precision should also be driven by the primary objective of the research. The HLFN is of the view that the data diamond model was applied to the research process and each identified site is supported by these four legs.

## Fun and Posterity

This research effort constitutes a serious undertaking by the HLFN and the focus of all aspects of the project on the collection and documentation of reliable, precise and accurate data. Many within the HLFN community felt that the TLUS has been necessary and worthwhile. Feedback from respondents was overwhelmingly positive, where many noted that this is the first time the community had been involved in such a research project and the first time that a project so comprehensive in scope had been undertaken in the community.

Considerable interest was expressed in expanding the survey to involve a greater segment of the community. In addition, many community members felt that this project triggered all kinds of memories and other recollections of other sites and want another "go around" to document this information. Overall community feedback has indicated a high level of support for the project and the importance of documenting land use data to transmit and pass on to future generations at HLFN.

Following the completion of this research phase of the survey, the HLFN work with the community to develop a community stewardship plan so as to avoid prior occurrences of data loss. The data collected represents the collective history and memory of the community and it needs to be protected and cared for posterity's sake.

### 4.3 Framework: Data Quality Standards

Supportable and credible TLUS maps are ultimately dependant on good quality data (Tobias Pg 142). Within *"Living Proof"*, Tobias goes a great distance in trying to address the gap that has existed with the absence of explicit written data quality standards or quality indicators for field of map biography research. HLFN has carefully considered the following data quality standards set out by Tobias and has deliberately incorporated them into its research design, planning and implementation. In summary, those data quality standards are:

| | |
|---|---|
| *Objectivity* | *Reliability* |
| *Validity* | *Precision* |
| *Accuracy* | *Integrity* |
| *Auditability* | *Representativeness* |

In the following summaries, the HLFN demonstrates its understanding of the critical importance of these principles and identifies hallmarks or examples of how these data quality standards were applied and are manifest in research design and data collection phases of the TLUS project.

#### 4.3.1 Objectivity

The HLFN set out to eliminate bias and eliminate potential pathways in which bias and subjectivities might potentially creep into the project during the project design and data collection phases. Objectivity then can be defined as the absence of subjectivity or measures taken to eliminate and guard against the potential of bias.

*Use of Map Biography Process*

HLFN's selection of the map biography survey approach itself was sound research choice given that it results in quantitative research and data. In the map biography process, respondent's land use activities were logged as data points. This differs from a

qualitative research framework where research participants are responding to a more open ended line of inquiry providing observations on land use phenomena and personal opinions about the potential causes and induced change in relation to those phenomena.

Further, the resulting maps of the HLFN TLUS are, at the end of the day, a baseline inventory. Reviewers of the survey and this Methodology Report will note, that at this stage, the HLFN has not attempted to go too far in respect to the interpretation and analysis of the survey results. The resulting map data and this accompanying methodological analysis simply establishes an objective baseline set of data for HLFN (and other parties) to consider within the context of future resource management decision making scenarios and upon which to base future HLFN cultural land use research. The HLFN may opt, at a later date to undertake further, more detailed and subsequent analysis of the results.

*Questionnaire Design and Use*

The Questionnaire was designed in a way to ensure that all respondents were asked the same set of questions for all categories. Key words were used to avoid creating expectations amongst respondents. For example, at the outset of every category question, respondents were asked if they had ever undertaken a certain type of land use activity (e.g. “Have you ever killed moose.....”). It was not taken as a given that respondents had. If they had undertaken such an activity, then the respondent and researcher proceed to locate and mark specific sites. If the respondent has not killed a moose, then the line of questioning would end and their negative response would be documented by way of audio recordings and interview transcripts. The researcher would then proceed to the next category question.

Further the identification and marking of general land use activities such as “hunting”,” fishing”, “trapping”, and “gathering” was to be avoided wholesale. Rather, HLFN opted to import Tobias’ recommendation to make the interview process category (species and activity) specific.

For example, respondents were not asked to mark where they had generally “hunted” which could result in the mapping of large polygons, but rather to identify specific sites where specific wildlife species were actually “killed” or “caught”. Further, in instances where a respondent, responded to a category question and indicated a general area or “all over”, such a response was to be rejected. Instead community researchers were directed, trained and demonstrably worked to identify specific sites, within the area under discussion. The objectivity adopted in the design of the Questionnaire guarded against the potential for such an occurrence and provide options to researchers if and

when they came to such a place with a respondent. The Questionnaire is attached for reference purposes. **(Appendix E)**

*Data Marking*

HLFN went to considerable lengths in the research design and implementation phase to eliminate subjectivity and guard against bias when it came to the marking of data.

When identifying sites with respondents, HLFN researchers took considerable effort to precisely and accurately identify and mark site locations. Where a respondent was unsure, sufficient time was allocated so that both respondent and researchers were sure of the sites. If there was uncertainty around a particular site, the general location was noted with an “A” denoting that the sites location was approximate (e.g. EK43 A). If too much uncertainty existed as to the location of a site, researchers were instructed to not mark the site and note it within their scribble pad.

Subjectivity was also guarded against by providing a pencil to the respondent and having the respondent indicate specific sites, not the community researcher.

In respect to the use of small polygons, community researchers were trained, directed and observed to work with respondents to seek precise and accurate bounds of polygons for resource procurement areas. Where large polygons were employed in a limited number of cases, they were the exception rather than the rule and justification was provided for their usage.

Where a respondent needed some extra time, researchers were trained and instructed to not lead the respondent or make assumptions about marking a site. The respondent had to be sure and clearly been able to mark that on the map. This avoidance of assumption and care taken in documentation can be observed by reviewing audio recordings and interview transcripts and is summarized in the Interview Master List.

### 4.3.2 Reliability

Reliability speaks to the manner in how data was collected in a consistent manner. HLFN worked to produce reliable maps based on data that was collected in a consistent manner.

*Data Collection Manual and Training*

Evidence for reliability can be determined in the design and use of the Data Collection Manual (DCM) and heavy reliance on it during the training and interview phases. The DCM and companion training provided step by step instructions to researchers on the overall research framework, research methods, tools and conventions. The DCM **(Appendix I)** provided specific guidance and instruction on the use of all research tools such as markers, Mylar overlays, audio recorders, the Questionnaire, the Interview Checklist, Scribble Pad and Interview Record Forms and further detailed instruction on their specific use.

Audio Recordings and Transcripts

Evidence of the application of methodological rigour can be determined through an audit of interview tapes and transcripts. In a review of the transcripts, one can pick out the level of consistency applied during the interview process, where a few deviations in methodology occurred and how they were documented. Noted deficiencies and deviations from standard methodology are documented and summarized in the Interview Master List.

Questionnaire

Every written question within the Questionnaire was accompanied by visual prompts for community researchers. These included the correct data marking conventions (point, line or polygon) and the Category Code to mark on the Mylar overlays. Respondents were trained in the use and administering of the Questionnaire to ensure that all questions were asked of all respondents.

Categories and Category Codes

The use of fixed and universally accepted and understood category codes supported the consistent collection and marking of data.

Data Marking Conventions

The established and unalterable rules that governed the marking of data on maps, supported HLFN community researchers in collecting and documenting data in a consistent and reliable manner. Consistency occurred within interviews and across all interviews. These were set out in the Data Collection Manual and community researchers received in class and hands on instruction in their use.

### 4.3.3 Validity

Validity speaks to the need to ensure that the data depicted on the TLUS maps depict what they purport to do and actually contribute to the intended research objective.

*Community Input into Research Design,*

Community input into the research design ensured that the primary research objective addressed the research priorities and needs of the community. As noted, it was agreed that the goal of the map survey would be to confirm sites where actual land use activities and events occurred. Thus, the questions (within the Questionnaire) were constructed so that respondents and community researchers would have shared understanding of their specific intent and meaning.

This went some way in ensuring that respondents and community researchers understood that the task and outcome of each question, which was to precisely and accurately mark the locations of on the ground events (e.g. Food Plant gathering sites, Whitefish kill catch sites) as opposed to traditional ecological knowledge held in relation to wildlife habitats. Thus researchers and respondents had an explicit understanding that of what they were setting out to map (e.g. Elk kill sites where a respondent had actually killed an Elk) and not where they understood suitable Elk habitat to exist or where they might find elk at certain times of the year.

Categories, Questionnaire and Data Marking

The early decisions made in relation to research parameters were structured into more refined and detailed levels of methodological design and implementation. As noted above the decision to record facts and events vs. habitat was cemented into the subsequent selection of the research parameters, tools and conventions. For example

the primary objective of recording events and activities filtered down the hierarchy of research decisions and steps in the following way:

**<u>Hierarchy of Research Decisions</u>**

*Selection of Primary Objective*

*Early decision to mark events and activities undertaken by community members*

❖

*Selection of Categories*

*Elect to include that activity and event as a discreet category to be mapped*

❖

*Selection of Questionnaire Questions*

*Construction of specific question around category to illicit specific response*

❖

*Selection of Tools and Data Marking Conventions*

*Recording of responses with established and consistent rules*

### 4.3.4 Precision

Precision is a measure of how precisely data is marked on maps and the fineness with which researchers mark data on the maps. HLFN set out to create precise maps utilizing appropriate tools and conventions as noted in the following:

*<u>Selection of Map Scale</u>*

The HLFN opted to map at a scale of 1:250 000 rather than 1:50 000 to reduce the sheer numbers of maps that would have been required. Mapping at 1:50 000 would have resulted in higher degrees off complexity and response burden, raising the potential for error and more departures from the standard methodology.  The scale of

1: 250 000 permitted the HLFN to document extensivity while achieving the goal of positional precision.

Tobias sanctions the use of this scale to manage response burden and reduce the amount of complexity involved in mapping vast land use areas such as the HLFN community does. The information available on the selected 1:250:000 base maps were sufficient to allow the vast majority of respondents to identify use sites with precision and respondents to mark data with precision. Visual aids and back up maps also helped in the precise identification of sites where some respondents had difficulties.

Respondents were prompted and given adequate time to locate the correct site. Verbal anchoring present within the audio recordings shows demonstrates how researchers worked to pin point the site with the respondent and confirmed that exact location with follow up questioning.

Use of Data Marking Conventions and Appropriate Sized Markers

The use and selection of appropriate data marking conventions allowed researchers to precisely mark data. The correct use of points, lines and small polygons as set out in the Data Collection Manual and as instructed during the training created a situation where data would be marked consistently and precisely from interview to interview.

The use of appropriate tools within the interview process also contributed to the precise recording and marking of data. For example, researchers used Staedler permanent fine point markers for the drawing on of features and labelling of feature codes. Training and advice was provided via the Data Collection Manual, training and in follow up to ensure that blunted markers were thrown out and to ensure that sites were being marked with positional precision.

**4.3.5 Accuracy**:

Accuracy is defined as the measure of the closeness of fit between the location of a feature as marked on a map and its real position on the earth. (Tobias Pg 143). Ultimately, the only way to ensure absolute positional accuracy would be to ground truth each recorded site via a GPS reading. However, the task of fixing 1000s of sites via GPS would prove to be cost prohibitive and not supported by funders. Given this, absolute positional accuracy is a data standard that is extremely hard to satisfy. Notwithstanding, the HLFN took steps to achieve as high as level of positional accuracy within the map survey. Some of these steps and measures include:

*Selection and Use of Appropriate Base Maps*

1:250:000 base maps were selected that included sufficient detail that would allow the accurate locating and marking of data, while being free of extraneous details. Standard topographic maps were used given that they have contour levels and free of shading. HLFN experimented with such maps but found that the colours might have interfered with the clear identification of feature codes.

Interviews were conducted in a well lit room and magnifying glasses were used to assist respondents in accurately pin pointing features. Respondents were also provided pencils to use as pointers so that the location under discussion could be clearly viewed and confirmed.

Where respondents had difficulty in identifying features accurately, the letter “A” was to be added to the recorded feature code to show that there had been some difficulty in pint pointing the location. Where a respondent had extreme difficulty in recalling and precisely locating where an event occurred, community researchers note this site on their scribble pad and declined to mark the site.

Use of Registration Marks

As noted, base maps and mylars were marked with red registration marks. This measure ensured that each Mylar overlay corresponded exactly to its companion base map so as to support the goal of precision.

### 4.3.6 Integrity

“Integrity refers back to the traceability of data back to their sources”. **(Tobias Pg. 144)** The HLFN has undertaken and set up the TLUS project to ensure that that data points on the hodgepodge, category and thematic maps can be linked to the appropriate respondent via their map biography, audio tape and interview transcript in which each feature is discussed and marked.

*Audio Recordings and Transcripts*

While not a strict requirement, the HLFN opted to record all respondent interviews to provide a back up record to prevent against data loss but also with the expressed

purpose of supporting audits of the map survey's data integrity. The verbatim transcripts serve as back up and co-berates the data marked on the maps.

*Verbal Anchoring*

Related to the practice of recording interviews and the production of transcripts is that of the practice of verbal anchoring that occurred during the interviews. Community researchers were taught and trained in the practice of verbal anchoring. As interviewers marked feature codes, they would say the code out loud. In this way the sites being marked would be linked to the feature codes via the transcripts. As, HLFN was not seeking to achieve higher levels of descriptive precision, the basic objective was to document each feature code in relation to each marked site.

*Interview Record Forms and Interview Master List*

Interview Record Forms and the Interview Master list are the nexus of the TLUS project – the literal project key that ties all aspects of the research together. These tools can allow an external audience to assess integrity of data by being able to link data points on all end product maps with respondent's bio maps, their audio tape and written transcriptions. The Interview Master List is attached for reference purposes. **(Appendix L)**

### 4.3.7 Auditability

"Auditability is the measure of the extent to which the research is transparent and accountable". **(Tobias Pg. 145).** HLFN adopted one of Tobias' fundamental recommendations and principles, which is that First Nations should not share respondent's Bio Maps, audio recordings and interview transcripts with external parties. Ensuring this level of confidentiality was a key to obtaining community participation in, and support of the project. However, external parties can be granted access to the end product maps such as the Hodgepodge Map, Thematic Maps and Category Maps.

If this is the case and if the HLFN's goal is create a believable set maps, there must be means and ways of assessing the methodological rigour that was applied in the map survey. As Tobias notes, there are means and ways of testing and auditing the strength of HLFN's research, without breaking the critical principle and commitment of confidentiality. Useful tools that support data auditability were created during the research process. These include:

*Research Plan and Methodology Report*

This Methodology Report and original Research Proposal **(Appendix A)** allows the community and an external audience to assess, retrace and understand how the survey findings were arrived at. Both documents set out key matters such as the primary research objective, early decisions made in relation to the scoping of the study and more detailed research design decisions related to the selection of the framework, method, parameters, research tools and conventions. The Methodology Report documents how HLFN applied the agreed upon rules and standards within the interview process and how the resulting data was systematically transferred from map biographies to the actual final end mapping products.

Interview Master List

The Interview Master List **(Appendix L)** is a complete listing of all interviews, related meta-data and provides a summary commentary of where departures in standard methodology were observed based on a review of map data marking, interview transcripts and audio recordings.

*Audit / Test of Randomly Selected Data Sets*

The map biography survey has been conducted in a manner that would allow for testing of the map data. It would be possible for HLFN to select given maps on consolidated Hodgepodge map, link it to the same data in a Thematic Map, trace it back to a respondent's map biography, and link that to point in the interview where the feature is discussed and documented in the audio recording and interview transcript.

### 4.3.8 Representativeness

"Representativeness is the extent to which research findings represent an entire community, rather than just individual respondents". (Tobias Pg 145) Clearly a response rate of 70 % - 80% is desirable for map biography surveys so that resulting data can held to be representative of a community as a whole. The HLFN considered this, however it was clear that HLFN could not meet this goal as discussed by Tobias given budget limitations.

Rather HLFN set out to interview up to 100 community members out of a sample frame of 500 people. At the end of the interview process, the HLFN interviewed 92 people achieving a response rate of 18.4 or involving almost one fifth of the community. It di

however achieve a participation rate of 92%. Thus the HLFN TLUS cannot be held to be as meeting the representativeness standard set by *"Living Proof".* However, the fact is that HLFN was able to involve up to one fifth of the community and posing all category questions to each respondent. This is not insignificant. Measures undertaken to strive towards representativeness include:

*Categories and Questionnaire*

The Categories selected and Questionnaire structure is important. Within this survey, each question within the Questionnaire was structured around an established and set number categories. Further each question was put to each respondent. In this way, a measure of representativeness was achieved given that all respondents were asked the same questions about the same categories.

*Sampling Frame and Protocol*

Given that the prime objective primarily relates to the identification of ungulate and fish kill sites, the exercise tended to involve more males within the community, resulting in more interviews with males than females. With that said, women within the community also undertake such activities within the community and their contribution to the traditional subsistence and socio - economic mode of life was documented.

A suitable sampling protocol, protocol and selection criteria was put into effect to achieve a representative mix of the population by age, gender, family and residence. This was further refined and defined through the development of interview selection criteria which was applied to the sampling frame. Thus steps were taken to achieve a level of representativeness in the face of the reality that survey was naturally skewed and resulted in the selection of men.

The process and rationale for establishing the sampling frame and study population is set out and discussed within the Parameters section of this Methodology Report.

### 4.4 Method

The research method is the general means or process by which the research is conducted and data collected. The method employed in this case was the map biography survey method – a form of quantitative research that permits the empirical identification and investigation of socio – cultural activities. As such the research the

process was rigid, highly structured and focused on the acquisition of set categories of socio – cultural data.

It bears mentioning that the map biography survey method, as a form of quantitative research, stands in stark contrast to other forms of qualitative research that seek to explain and describe socio – cultural phenomena. Thus in this survey project, the HLFN set to document socio – cultural activities occurring on the landscape by HLFN community members, *not* setting out determine why these activities are occurring, the importance of such activities and how such activities are changing in response to various ecological stressors and bio – physical changes.

There are of course benefits and limitations with the quantitative research and map biography approach. One of the benefits, and why HLFN (and so many other First Nations have done so) elected the map biography research method is that it permits the collection of large amounts of data in an orderly and time and cost effective manner. The relative strengths, weaknesses and most importantly limitations of the map biography method and the HLFN TLUS project will be discussed within the Limitations section of this report.

The map biography is specific type of use and occupancy survey method. Tobias describes the map biography as *"an account of person's life on the land, sea or ice as recorded on maps (and audio recordings) during a face to face interview. Respondents indicated places where they have personally travelled, stayed and procured resources.....a map biography is really a map autobiography because each person tells his or her own story....for rigorous use and occupancy projects, the individual map – biography interview is the standard collection* event". (Tobias Pg. 38)

The Map Biography survey is a way of documenting the facts of person's use and utilization of the land, and in doing so converts them into data subject to verification. The key components of this method and the map biography method that HLFN employed involved:

- Obtaining community input and direction on research priorities
- Defining the Primary Research Objective
- Identifying specific categories or cultural activities that were consistent with the Primary Research Objective that HLFN saw as relevant and important to map (e.g. Moose kill sites, Jack Fish catch sites, Food Plant gathering sites)

- Preparing a Research Proposal that sets out the methodology to be employed containing a description of the research framework, method, parameters, tools and conventions

- Developing a Data Collection Manual that sets out clear rules on how the research is to be conducted

- Selecting community researchers and undertake sufficient training in the use of research tools and consistent application of research conventions

- Developing a standardized, fixed Questionnaire with questions aimed at gathering data in relation to all selected Categories

- Undertaking ongoing communication with the community as the purpose and timing of the survey research program

- Defining the Population Sampling Frame and interview selection criteria

- Coordinating interviews with selected respondents and administer the Questionnaire with all respondents in one on one Interviews

- Recording and documenting interviews and marking cultural use data (activities and events) on Mylar overlays utilizing a standardized coding system and according to fixed rules and convention

- Preparing verbatim interview transcripts from the audio recordings

- Transferring data from Mylar overlays and digitize them onto end mapping products including:

    - Map Biographies – One map displaying data for all questionnaire categories for a single respondent

    - Category Map – One map displaying all data for all respondents for a single questionnaire category (e.g. Moose Kill Sites, Bull Tout Kill Sites)

    - Thematic Map – One maps displaying data for all respondents for a selected group of related questionnaire categories (e.g. Large Game Kills, Ungulate Kill Sites, Fish Kill Sites)

  - Hodgepodge Map – A single map displaying all data for all questionnaire categories from all respondents

- Developing Draft Methodology and Public Reports

- Implement the research results and utilize the mapping products

### 4.5 Parameters

Parameters places stricture and bounds on research providing shape and defining the extent of the research. *"Parameters are the definable factors that govern virtually every aspect, large and small, of a map survey. They delineate the research. Parameters give the map biography concrete shape. They are the bridge between the research principles and quality standards applied and the tools and conventions used"***.** (Tobias Pg 172)

In short, the parameters of social science research can be conceptualized as box with shaped by five joined and mutually supported sides. These include:

- Why – What are we opting to research and why?

- Who – Who is going to be the study population?

- When – What period of time are we going to conduct research on?

- Where – What area are we going to conduct research in relation to?

- What – What kind of data are we attempting to gain?

The following describes and sets out HLFN's thought process and critical choices made about these critical research parameters.

#### 4.5.1 Primary Objective (Why)

Why did HLFN wish to conduct a traditional land use survey? What did HLFN want to achieve by having a new baseline set of cultural use data? These were critical questions that HLFN posed at the outset of the research program. The answers to these questions ultimately guided all subsequent HLFN research decisions.

The drivers and needs for a new TLUS research project were noted at the outset of this report. In short, if HLFN is to have is to have it treaty rights acknowledged and acted upon, it needs a baseline of land and resource utilization data that establishes the exercise of such rights. The core of HLFN's way of life has been based on the utilization of bush resources and commodities. Hunting, fishing, trapping and gathering has sustained generations of HLFN families and such socio – cultural activities continue to play a key role in the way of life of the community. Thus it made sense to gear the research to document key activities such as hunting, fishing, gathering and other key cultural activities.

Thus HLFN''s initial primary research objective of the traditional land use survey is as follows:

*"The Horse Lake First Nations will conduct the Horse Lake First Nation Fish and Wildlife Traditional Land Use Survey to document historical and current hunting and fishing kill sites occurring within riparian forests within its traditional territory".*

The primary research objective was then refined at an early stage to provide greater clarity and focus for the research effort:

*" The primary objective of the Horse Lake First Nation Traditional Land Use Survey is to document some of the HLFN's hunting and fishing kill sites and earth and plant material gathering sites with the overall goal of identifying areas of historical and ongoing critical community use".*

The defined and agreed upon research objective then drove all subsequent and more detailed aspects of research design.

### 4.5.2 Study Population (Who)

*Unit of Analyses and Unit of Observation*

*"The Who parameter defines the study population"*. (Tobias Pg 173). Within the field of social science, the unit of analysis must be decided upon and selected at the outset of the research process. The decision of who the study population was in this case was tied to the primary objective. Further, as the map biography survey method entails the interview of individuals to obtain first hand data, the individual ends up being both the subject of analyses and the unit of observation.

*Sampling Frame*

With the individual established as the unit of observation and analyses, the HLFN research team then had to turn its mind to the larger population base from which individual respondents would be selected – the HLFN community at large.

An important note needs to be made here in relation to the uncertainties that can arise when attempting to determine and analyze the population statistics of Indian Bands (First Nations). One can enumerate populations of Indian Bands by various ways and means based on the total number of Status Indians registered to an Indian Band (pursuant to the *Indian Act*), Band Membership as defined by individual Indian Bands (pursuant to their specific band membership codes) and overall community population (which can include Registered Indians, Band Members, Non – Status Indians, Metis and non – aboriginal people residing at the reserve).

Thus statistics provided by agencies such as INAC can and do vary with those kept and provided by a First Nation. Such was the case with HLFN. To further complicate matters, one can often find inconsistencies within the aggregate figures and statistics provided by both sources.

The survey research team considered the statistics provided by the HLFN (as of February 2011 and updated as of October 2011) and INAC (based on the 2006 census). As predicted, the HLFN research team found inconsistencies between both official sources and within the individual set of statistics provided by each INAC and the HLFN. Thus the survey team had to make use of the most accurate information available. Generally the HLFN adopted the statistics provided by the HLFN, however utilized INAC statistics were ambiguities were present with the HLFN data.

It was clear that this approach is not entirely satisfactory and this reality would have some limited impact on the representativeness of the TLUS results, the research team had utilize the most accurate available data. Thus while some inaccuracy might be held to exist, the research team is of the view that the statistics relied upon, provided for an adequate sampling frame from which respondents could be selected. The basic statistics are as follows:

**Horse Lake First Nation Derived Statistics (As of October 2011)**

| | |
|---|---|
| Total Registered Population: | 1203 |
| Total Registered Male Population: | 553 |
| Total Registered Male Population as % of Total Pop. | 49% |
| Total Registered Female Population | 567 |
| Total Registered Female Population as % of Total Pop. | 51% |

| | |
|---|---|
| Total Number of People Living on Reserve | 500 |
| Total Number of People Living off Reserve | Undetermined |
| Age Distribution | Undetermined |

**Census Canada / Official INAC Derived Statistics (Based on 2006 Census)**

| | |
|---|---|
| Total Registered Population | 972 |
| Total Registered Male Population | 478 |
| Total Registered Male Population as % of Total Pop. | 49% |
| Total Registered Female Population | 483 |
| Total Registered Female Population as % of Total Pop. | 51% |
| Total Number of People Living on Reserve | 500 |
| Total Number of People Living off Reserve | 520 |
| Age Distribution (By Age Groups): | |
| Ages 0 – 16 | 38% |
| Ages 17 – 29 | 31.3% |
| Ages 30 – 55 | 20.9% |
| Ages 55 – Up | 9% |

**Final Statistics Utilized for Purposes of Establishing Survey Sampling Frame And Selection of Source Statistics**

| | |
|---|---|
| Total Registered Population | 1203 (HLFN) |
| Total Registered Male Population | 553 (HLFN) |
| Total Registered Male Population as % of Total Pop. | 49% (INAC) |
| Total Registered Female Population | 567 (HLFN) |
| Total Registered Female Population as % of Total Pop. | 51%(INAC) |
| Total Number of People Living on Reserve | 500(HLFN/INAC) |
| Total Number of People Living off Reserve | 520(INAC) |
| Age Distribution (By Age Groups): | (INAC) |

| | |
|---|---|
| Ages 0 – 16 | 38% |
| Ages 17 – 29 | 31.3% |
| Ages 30 – 55 | 20.9% |
| Ages 55 – Up | 9% |

Before moving onto a discussion of the criteria that was used to select respondents from this sampling frame, an important point needs to be made about the relationship of the sampling frame to the primary objective. This survey set out to document land and resource utilization trends and patterns by the HLFN community as a whole.

Given this, the research team might have only considered those people of HLFN that are registered Status Indians who are the beneficiaries of HLFN's treaty rights - essentially Status Indians who are also considered Band Members according to the HLFN band membership code. In the alternative, the research team had the option of taking a broader view of the role of individuals within the traditional economy of the HLFN community, which could encompass Status Indians registered to the HLFN, HLFN Band Members, Non – Status individuals and Metis.

Thus one definition would be rather limiting and other more expansive. In this case, the HLFN research team opted to look at the broader context and consider those individuals who have and continue to actively use the land and play an important role in procuring bush commodities for HLFN families. An important principle still in effect within the HLFN culture, is that people share what they kill and take from the land with others, as others do with them. To a large extent, HLFN people procure bush commodities and bring those commodities into the community to meet their own purposes, their family's their extended family and that of fellow community members.

Given this, the HLFN opted for the broader context which would capture this important reciprocal relationship practiced by the community at large. The benefit in taking this broader approach would capture band members.

Thus the important figure that the HLFN research team keyed on is – **500** – the total number of people living on the Reserve. As noted above, this one of few areas where there was a congruency between HLFN and INAC population statistics. It also represents 50% (3% plus or minus) of the total number of Status Indians registered to the HLFN. Thus, as the HLFN had the budgetary resources to interview up to 100 respondents, the research effort would take in one – fifth of the Total Number of People Living on the Reserve or the community. At project end, the HLFN interviewed 92 respondents translating into a response rate of 18.4% and a participation rate of 92%..

*Population Sampling Criteria*

With the population sample frame established, the HLFN then moved to consider the criteria that would be used to govern the selection of individual interview respondents – in other words, to determine who would be eligible to be interviewed.

One point of clarification is needed. The HLFN ruled out probability sampling methods where every person within the sampling frame has an equal chance of being selected for an interview. Rather, judgement sampling was determined as the appropriate approach, which involves selecting the unit of observation based on one's own judgement of what will be most useful or representative given the project's focus. Such an approach is strongly advocated within Living Proof. (Tobias Pg. 174).

Clearly, given that Primary Objective of the research was to obtain data in relation to hunting, fishing and gathering activities, it was clear that generally more men, than women would be interviewed given that more men than woman tend to spend time on the land undertaking traditional vocations and pursuits. However, some level of gender balance was to be achieved given that many HLFN women actively participate in hunts, fish and procure food plants and medicines. There was also a need to achieve representation from all age groups. Thus while, the selection criteria would be systematically applied to the sampling frame to ensure a systematic and representative approach to selection, the primary objective would clearly tend to favour the interviewing of more men than women.

HLFN defined selection criteria well in advance of the interview commencement. Considerable attention was given to the matter with selection criteria being addressed as a priority item in a project workshop held in April 2011. The importance of having defined and rigid selection criteria was explained, understood and accepted. Community researchers opted to set the following criteria that would be set and unchanged during the entirety of the research initiative:

The survey sample population will be based on the systematic application of the following set of criteria:

**Respondent Selection Criteria**

- Respondents can be a Status Indian registered to the HLFN, an HLFN Band Member, a Non Status Indian or Métis listed as being part of the total HLFN community population

- Respondents must be ordinarily resident within the HLFN community / the HLFN reserve and live no more than 250 miles from the HLFN IR at Hythe

- Respondents can male or female and must be of 16 years of age or older

- Respondents must be physically and mentally capable of doing a map biography

- Respondents must report that they have or continue to actively utilize lands and resources to some degree

The above criteria that HLFN opted for are referenced within *"Living Proof".* However, HLFN differed in respect to the last bullet – that Respondents must report that they or continue to actively utilize lands and resources to some degree. While it could be argued that this criterion skewed the study towards land users, HLFN felt that there was little point in going to the time and expense of administering an interview to someone who doesn't undertake cultural land use practices. If HLFN had the budget and ability to interview the totality of the community, then HLFN could have potentially adopted such an approach. However, HLFN did not have the option to undertake such an exercise.

Further, it should be noted that the above age criteria (of being 16 years older or above to be eligible to be interviewed), eliminated 38% of the total community members or approximately one – third of the community. While this might seem to be significant given the demographically young age of the HLFN population, the vast majority of those 16 years are not out actively hunting by themselves, however are beginning to accompany their family and relatives into the bush to pursue traditional vocations.

*Survey Respondent Statistics, Participation and Response Rate*

Funding and timing limitations were realities that HLFN needed to weigh and the survey results need to be reviewed and understood within this context. Tobias asserts that community TLUS research projects should attempt to achieve an overall participation rate of between 70% - 80%. Given that HLFN interviewed 92 community members out of 500 eligible community members, it achieved a response rate (number of respondents as a percentage of the study population) of 18.4%

Tobias notes that the response rate can only be considered as a useful indicator of representativeness if all respondents are asked to provide answers for all categories in the questionnaire. Thus if a 70 – 80% response rate achieved, then the survey's findings might be found to representative of the community as a whole. Given that HLFN was only achieved a response rate of 18.4 % with available resources and budget, the survey results point to and highlight some clear trends, but cannot ultimately

be held to be representative of the community as a whole. However as it interviewed 92 out of 100 potential respondents, it achieved a 92% participation rate.

The actual statistics relating to those that participated in the survey are as follows:

*Actual Respondent Statistics*

The following sets out the actual numbers of respondents that HLFN interviewed and what these numbers represent in terms of overall community population. Overall the HLFN:

| | |
|---|---|
| Total Number of People Living on Reserve | 500(HLFN/INAC) |
| Total Respondents interviewed: | 92 |
| Total Males Interviewed | 64 |
| Total Females Interviewed | 28 |
| Youngest Respondent Interviewed(Age) | 20 |
| Oldest Respondent Interviewed (Age) | 88 |

Total Respondents Interviewed by Age

| | |
|---|---|
| Ages 0 – 16 | 0 |
| Ages 17 – 30 | 24 |
| Ages 30 – 55 | 50 |
| Ages 55 and Up | 18 |
| Total | 92 |

Total Male Respondents Interviewed by Age

| | |
|---|---|
| Ages 0 – 16 | 0 |
| Ages 17 – 30 | 21 |
| Ages 30 – 55 | 33 |
| Ages 55 and Up | 10 |
| Total | 64 |

Total Female Respondents Interviewed by Age

| | |
|---|---|
| Ages 0 – 16 | 0 |
| Ages 17 – 30 | 4 |
| Ages 30 – 55 | 16 |
| Ages 55 and Up | 8 |
| Total | 28 |

Registered to HLFN / Metis / Non Status / Registered to Other First Nations

| | |
|---|---|
| Status Indian and Registered to HLFN and Living on IR | 80 |
| Métis Living on IR | 2 |
| Non Status Indian Living on IR | 9 |
| Status Indian Registered to other First Nation on IR | 1 |
| Total | 92 |

Total Number of Respondents Interviewed

| | |
|---|---|
| Sampling Frame | 500 |
| Total Number Interviewed | 92 |
| Overall Response Rate | 18.4% |
| Overall Participation Rate | 92% |

### 4.5.3 Recall Interval (WHEN?)

The recall interval establishes the time frame that the interviews and ultimately the research will based upon. Respondents were asked a consistent set of questions that probed how far in past they undertook traditional and cultural land and resource practices.

There are different views and priorities on what TLUS data is most important and relevant to collect. First Nations, historians, researchers often place emphasis on placing First Nations within their traditional lands with the aim of demonstrating levels of historical and ongoing use and occupancy of lands. First Nations, government agencies

and project proponents also place importance on gathering current and ongoing use and occupancy data as they want to determine the level of infringement of a policy or project on the current use of lands by aboriginal people. The *Canadian Environmental Assessment Act* and its supporting policies are an example of the trend in placing weighting on obtaining data about current use of traditional lands and resources.

Within *Living Proof*, Tobias describes the increasing level of complexity and difficulty in mapping different periods of people's lives. *"Attempts to add temporal precision often results in poor data as respondents often inadvertently telescope significant time periods together"*. (Tobias Pg. 177)

Response burden and interviewer burnout were important factors that HLFN considered and planned for. For this baseline survey, HLFN wanted to undertake the interview process in the easiest manner that contributed to the goal of documenting accurate, reliable, precise and auditable data. Introducing differing and artificial time periods within the interview process would have made the interview process more complicated which could have potentially detracting from meeting data quality objectives. Given this, mapping respondents' utilization of lands and resources over their lifetime (within living memory) was deemed to the most straightforward and appropriate recall interval.

This recall interval was deemed to help capture both historic and current use patterns. While not an objective of the survey, using the within "living memory" recall interval may help capture the changes and variations in land use patterns of respondents through time. Factors such as climate, presence and absence of wildlife in a given area, mode of travel, personal preference and age are all inter – related factors having a bearing on where a respondent elected to (e.g. hunt) through their life. Given this, electing the survey's recall interval as within living memory is congruent with, and supports the primary research objective.

Further, in parallel with this TLUS research project, the HLFN commissioned an ethno – historical scoping exercise. This literature search may help in shedding light on HLFN historical patterns of use and occupancy and help in comparing and contrasting historical and current cultural land use and occupancy patterns.

### 4.5.4 Study Area (WHERE?)

Like many First Nations, the HLFN has demarcated a traditional territory or a use and occupancy area on a map. One of the first decisions that HLFN undertook was to ensure that no such boundary was depicted on the interview base maps. Further, no traditional territory map was present or posted in the interview room or community

research office. Rather, the only map that was available prior to viewing was the Index Map – a mosaic of a large number of unmarked base maps. This was done so as to avoid unduly influencing respondents or potentially creating a bias in survey results.

Further, no maps depicting the location of proposed major resource development projects or oil and gas fields were posted or available for viewing to guard against influencing people's selection of sites. Base maps were also free and clear of any such indications.

Within preliminary community consultations and workshops, community members anecdotally reported on the extent of use by community members. Areas as far west as the WAC Bennett Dam in north – east BC were identified. Areas as far north as The Chutes on the Peace River near Fox Lake, Alberta were identified. Further, areas as far east as Slave Lake and far south as Grande Cache were identified. This is clearly a large area, thus HLFN opted to not define a survey area. Rather HLFN chose a number of base maps that was broad enough to capture data of respondents over a very broad area within north – east BC and north – western Alberta. This is seen as relative strength in the survey design, as no artificial boundaries were created that might have the potential of affecting or influencing interview responses. The study or survey area was as broad as the extent of respondents use and utilization of lands.

This choice determined the use of mapping tools. Ideally HLFN could have selected 1:50:000 base maps however the sheer number of maps required to map extensivity would have been too cumbersome for both community researchers and respondents. Thus 1:250 000 maps were selected to reduce the response burden.

In all HLFN used 25 base maps in total. The National Topographic System (NTS) code or listing for the utilized maps were:

| | | | | | |
|---|---|---|---|---|---|
| 84k | 84j | 94h | 84e | 84f | 84g |
| 94b | 94a | 84d | 84c | 84b | 92o |
| 83m | 83n | 83o | 92i | 83l | 83k |
| 83j | 83e | 83f | 83g | 83d | 83c |

Thus the survey can be held to be inclusive of the areas demarcated within the above NTS maps. The total geographic extent of this survey area was also set out on the research team's Index Map**. (Appendix G)**

### 4.5.5 Data Layers and Categories (WHAT?)

Data Layers

The primary objective of the research drove key decisions about what information and data HLFN wished to document. As noted, there were many areas and types of information that the HLFN wanted to document. Understanding was built about the need to establish a comprehensive survey or baseline of data, but a survey with important bounds and limitations. The problem of the “trying to map it all at once” was discussed, understood and this precautionary principle was adopted, which in turn set limits on what data was to be mapped.

Internal community discussion and deliberation led HLFN to making one of the key decisions about its map biography research – determination of the primary objective of the research. Again this was:

*“ The primary objective of the Horse Lake First Nation Traditional Land Use Survey is to document some of the HLFN’s hunting and fishing kill sites and earth and plant material gathering sites with the overall goal of identifying areas of historical and ongoing critical community use”.*

Thus the research was focused on a certain set of activities undertaken for subsistence, sustenance, socio-cultural and spiritual purposes. For example hunting, fishing and gathering activities was the predetermined focus of the survey.

Specifically, HLFN made a concrete decision to not map those activities that community members might undertake for commercial purposes such as commercial trapping, guide outfitting and fishing activities. While these activities play an important role in the mixed economy of the HLFN, an important fire wall was built into the research design and into the interview process that ensured that only activities undertaken for subsistence, sustenance, socio-cultural and spiritual purposes were identified, recorded and mapped.

Further, despite the important need to document and record traditional ecological knowledge / traditional knowledge data, HLFN opted against this within this survey. This was done to ensure that the research team collected data related to the killing of wildlife, catching of fish, gathering of earth and plant materials and not the habitats and eco – systems that host and support such values and activities. To be clear, the survey documented use and procurement activities, not habitat or local knowledge held in relation to eco-system conditions.

Further, HLFN opted to not mark travel routes and traditional place names given that the qualitative approach in the map biography approach does not necessarily lend itself to the qualitative type of research that is better suited to such lines of inquiry. The HLFN

will need to map such information in the near future. Given this, the current survey's focus was built to gather and map data and produce three key data layers:

- Animal (fish and wildlife) harvest sites
- Plant, wood and earth material gathering sites
- Fixed cultural sites (Over night habitation, spiritual, and sacred and legend sites)

Another important distinction is that given the recommendations set out in *"Living Proof"*, HLFN opted to not map general resource use and procurement activities. Rather, interviews and resulting data were mapped based on specific questions / categories that were species, activity and bush commodity specific. For example, the HLFN did not set out to document general areas where people hunt.

Rather, the survey was predicated on a line of inquiry that sought to identify where a respondent specifically killed and procured a specific animal species. Thus within the interview, the question, *"Can you show me where you hunt*" or "*Can you show me where you hunt moose"* does not occur. Rather, the respondent was asked*, "Have you ever killed moose to feed yourself and family...if so, can show me some of the spots".* The questioning then preceded to all other selected species, such as elk, white tailed deer, mule deer, caribou, whitefish, walleye, jackfish etc. Thus the survey is based on a species and activity specific approach. The survey records events. The same occurred with earth and plant materials, overnight sites, sacred sites and so forth.

*Research and Questionnaire Categories*

Once HLFN had decided the general type of on the ground procurement activities it wished to document, it needed to further refine that line of inquiry. HLFN proceeded to define detailed research categories that it wished to illicit information about. In addition to being site specific, the categories were also species, activity and bush commodity specific.

Examples of categories that are species specific include jackfish or whitefish catch sites. Examples of categories that are commodity specific include firewood or food plant gathering sites. Examples of categories that were activity specific include overnight camping at a tent site. Examples of a specific procured bush commodity include food plants or medicinal plants.

By approaching the research in this manner, HLFN had the ability to identify potentially several hundreds of distinct activities, bush commodities or species (or categories) that

it wished to obtain data on. There was clearly a desire to document as much as possible within this survey and “get it all” at once. However, HLFN paid heed to the warning set out in *Living Proof* – that it is both impossible and unwise to attempt to document a community’s complete range of land and resource use within one research program.

Given this, HLFN opted to limit the number of research categories with the aim of keeping the project manageable, on track and in keeping with the primary objective. Thus, the HLFN opted to gather and map data for the following categories:

**MAMMALS**

| | | | |
|---|---|---|---|
| MO | moose | CU | caribou |
| EK | elk | MD | mule deer |
| WD | white tailed deer | BB | black bear |
| GB | grizzly bear | XM | other mammal |

**BIRDS**

| | | | |
|---|---|---|---|
| DK | ducks | GE | geese |
| GR | grebes | GR | grouse |
| PT | ptarmigan | CR | cranes |
| XB | other bird | | |

**FISH**

| | | | |
|---|---|---|---|
| WE | walleye | JF | jackfish (northern pike) |
| DV | dolly varden | BT | bull trout |
| RT | rainbow trout | AG | arctic grayling |
| WT | whitefish | GY | gold eye |
| LC | ling cod (burbot) | XF | other fish |

**PLANT and EARTH SITES**

| | | | |
|---|---|---|---|
| BR | berries | FP | food plants |
| MP | medicine plants | SP | sacred plants |
| CL | construction logs | FW | fire wood |
| SR | specialty rock | DW | drinking water |
| XP | other plant/earth site | | |

**OVERNIGHT SITES**

| | | | |
|---|---|---|---|
| CB | cabin | TT | tent site |
| LT | lean to | XOS | other overnight site |

**CULTURAL SITES**

| | | | |
|---|---|---|---|
| BS | birth sites | BP | burial places |
| OS | old settlements | CS | cache sites |
| SS | sacred sites | XCS | other cultural site |

The above 44 distinct and important categories were identified and formed the basis of the line of inquiry. These categories cannot be held to be all encompassing or exhaustive however in obtaining data on these key areas, HLFN produced some excellent insights and data on important cultural activities. These categories then formed the basis for the interviews and interviewers asked every respondent questions about each of the above noted categories.

It should be noted, that some flexibility was built into the resulting questionnaire based on the above categories. Should a respondent identify an activity, bush commodity or resource that was procured, that was not one of the selected categories, community

researchers had the ability to document it as “other”. (e.g. Other Mammal - XM, Other Fish - XF, Other Bird - XB, Other Overnight Site - XOS).

### 4.5.6 Questionnaire Design

The Questionnaire is the primary tool that is used within the map biography to gather data in one-on-one interviews with respondents. The questions are framed around each of the identified subject areas or Categories that HFLN wished to obtain data on. The complete listing of Categories that HLFN determined in consultation with the community were set out in the prior section 4.5.5.

The HLFN designed and administered the Questionnaire in a manner that ensured all respondents were asked the same questions about the same Categories. The HLFN Questionnaire contains all recommended components and features as recommended in *“Living Proof”*:

*Categories*

A one to four word that describes an action or activity which has it own coding. It identifies the specific kinds of features to be mapped.

FROM HLFN QUESTIONNAIRE - *“Did you ever **KILL MOOSE** to feed your family or community?”*

*Definitions*

A definition for each category to ensure that there is understanding between interviewer and respondent on what action or activity they are being asked about. Definitions provide specifity in relation to the activities.

FROM HLFN QUESTIONNAIRE - *``I`m now going to ask you questions about where you killed different kinds of animals – fish, mammals and birds. For this part of the interview we want to map only places where you **KILLED animals and took some home for eating purposes**. We don`t want to mark a spot where you killed animals for commercial or barter purposes unless you took some of it home to eat. We don`t want to mark spots where you killed animals for tourists while you were guiding, unless you took some of the meat to eat.``*

*Examples*

Examples can help provide clarity when the category might be more complex or open to interpretation. In almost all cases, the categories and definitions selected by HLFN were very straight forward so as not to give rise to such situations.

*Questions*

A specific question is framed around each category to specifically illicit the who, what, where and when for each category.

FROM HLFN QUESTIONNAIRE – *"**Did you ever kill MOOSE to feed your family or community? Can you show me some spots"?***

*Keywords*

A word that is consistently used in relation to all categories that supports good data validity and manages response burden.

FROM HLFN QUESTIONNAIRE – *"Did you ever **kill** moose to feed your family and community? (If affirmative then proceed) Can you show me **some** spots?".*

*Interviewer Specifications*

Instructions that are embedded / written into the questionnaire to support good data validity and application of data marking conventions. Underlining of the category and prompts for the abbreviated category form and data marking convention are provided immediately next the question.

FROM HLFN QUESTIONNAIRE –

*Did you ever kill MOOSE to feed your family or community?* ***MO***

*Can you show me some spots?* ***.*** *only*

*Respondent Specifications*

Instructions, reminders and clarifications provided for the respondent.

FROM HLFN QUESTIONNAIRE – *"For this part of the interview we want to map only places where you KILLED animals and **took some home for eating purposes**."*

It was critical that questions were understood clearly by both the respondent and community researcher. The approach adopted by HLFN in questionnaire design reduced ambiguity that could in turn give rise to differing interpretations and the mapping of inconsistent data. An important example of this is related to the word *hunting.* Asking a respondent "*where they hunt*" could have resulted in a variety of responses that differ from respondent to respondent. The word *hunt* can and does

mean different things to different people as the act of hunting involves a series of inter-related activities such as:

- scouting out broad areas for wildlife sign
- travelling to wildlife features such as licks and corridors to determine the recent presence of game
- travelling to a preferred area to commence a hunt, scanning and actively hunting for animals as one travels
- stalking and tracking an animal through a broad area
- shooting and animal, pursuing a wounded animal
- cutting up and processing an animal in a place
- setting up a camp to support the hunt or a camp to process the kill
- undertaking supporting and incidental hunting activities such as fishing, snaring, gathering, obtaining firewood and water – those activities that sustain one in the bush while hunting

While the above activities are clearly valid hunting activities and could and should be mapped, the methodological approach taken by the HLFN in this map biography research and this methodology seeks clarity and specificity. Thus, respondents were not asked where they "*hunt*" but where they whether they "*have ever KILLED a MOOSE, and if so, could they indicate SOME of the spots?*"

As noted, an important consideration in the design of the questionnaire was to elect the identification and mapping of kill, catch and gathering sites rather than where mammals, fish and earth materials can be found and procured. There can be tendency of community hunters in TLUS projects to switch back and forth between a discussion of where they have killed animals and the habitats that they can be found in. The HLFN TLUS was deliberately designed to not map habitat. Given this, specific reminders were written into the questionnaire which reminded both the community researcher and respondent so as to guard against this potential occurrence.

Another important consideration carefully weighed was the level of detail that HLFN should strive for within an initial baseline survey. While it was imperative to adhere to the data diamond model, balance was also needed. HLFN opted to not seek a high level of descriptive precision to guard against interviewer and respondent burn out.

The Questionnaire utilized by the HLFN is attached for reference purposes. **(Appendix E)**

## 4.6 Research Tools

The HLFN research team employed numerous devices and materials that supported data collection during map biography sessions. As Tobias notes in “Living Proof”, the *“tools selected and made available can profoundly influence the outcomes of the map biography”.* **(Tobias Pg 204).** The research tools that HLFN opted to employ are those directly advocated within the *Living Proof* text.

The Map Tool Kit used by community researchers can be said to have been comprised of the main key research areas and tools:

*Mapping Tools*

- Base Maps
- Mylar Over Lays
- Index Map
- Map Guides
- Mylar Overlays

*Data Marking Tools*

- Markers
- Ruler
- Pencil
- Code pieces
- Lamps
- Illuminated Magnifying Glasses

*Audio Recording Tools*

- Audio Recorder
- Baby sock and recorder stand
- Audio Cassettes
- Audio Cassette Storage Container

*Questionnaire Tool*

- Interview Questionnaire

*Interview Form Package Tools*

- Interview Checklist
- Consent, Confidentiality Directive and Honoraria Forms

- Category Quick Reference Sheet
- Scribble Pad
- Interview Record Form
- Researcher Binder

Data Collection Manual

- Manual

### 4.6.1 Mapping Tools

The above tool kit contents are physical devices that every HLFN community researcher was provided. Orientation and training in their appropriate use and application was also provided. Photos were taken to document the training session. **(See Appendix F)** Researchers were provided ample supplies and tools were made readily available in the community research office, to ensure that research principles and data quality standards were being applied consistently, in every interview. A short description follows of the each of the interview tools:

Base Maps

HLFN utilized colour National Topographic System maps (NTS 2009) produced by Natural Resources Canada. Data was marked on clear plastic Mylar sheets that was overlain on each base map sheet (See below). A scale of 1:250 000 was chosen given that apparent and reported far flung use of lands and resources through north western Alberta and north eastern BC.

In all HLFN used 25 base maps in total. The NTS code or listing for the utilized maps were:

| | | | | | |
|---|---|---|---|---|---|
| 84k | 84j | 94h | 84e | 84f | 84g |
| 94b | 94a | 84d | 84c | 84b | 92o |
| 83m | 83n | 83o | 92i | 83l | 83k |
| 83j | 83e | 83f | 83g | 83d | 83c |

These maps were marked and customized. These measures will be described in the Conventions portion of this Methodology Report.

Index Map

HLFN assembled an Index Map – a reference composite that contained all the above base maps as they occur in their real world position. **(Appendix G)**The map was set at a scale of 1:500 000 that set out all 25 maps available for recording data. This map was then posted on the community research office wall. When interviews commenced, the community researchers brought each respondent before the map and asked the respondents to identify which maps they would need for their interview session. Each base map was numbered 1 through 25 for ease of reference and tracing onto mylars during the interview process.

Mylar Over Lays

HLFN utilized Mylar overlays to reduce the overall cost of base map purchases and to reduce the sheer amount of base maps that will be needed to record data upon. HLFN utilized Hewlett Packard Clear Film Mylar rolls. (Non Matte Both Sides / 36 Inches X 75 feet / HP C3875A)

A cutting station was set up in the community research office so that researchers could cut sheets to match the dimensions of the base maps. Maps were cut with exacto knives and cutting template was used.

The marking of these Mylar sheets prior, during and after the interview session will be described in the Conventions section of this report.

Map Guides

There were some draw backs in mapping at 1:250 000. Sometimes, respondents had a hard time in pinning down locations given the large scale used and the lack of detail such as new access roads and seismic lines. Map reference books were on hand to assist both respondents and interviewers if and when they needed to confirm sites with an extra reference.

### 4.6.2 Data Marking Tools

Markers

Permanent markers were used to mark data on the Mylar overlays and for labelling the maps. Permanent markers were needed to guard against data and labels being erased through extensive handling of the mylars during the interview process and following the research project.

Thus HLFN used permanent Staedler Lumocolour pens. Fine nib markers (0.6mm) were used to mark the sites, leaders and feature codes and registration marks to achieve precision in marking data. Medium nib markers (0.8 – 1.0 mm) were used to label base maps and the Mylar overlays with key information such as PIN numbers, names, dates and map numbers and number of maps in the series. Medium markers were used so important labels would stand out. Again, certain rules were employed in the use of the markers which set out in the Conventions section of this report.

Ruler

A clear plastic ruler was used for drawing leaders – the lines that connect marked sites with their feature codes on the Mylar sheets.

Codepieces

Researchers used a marker (a game board piece) to keep track of their last marked feature code. As the respondent moved or jumped around a map, the interviewer left the marker at the last marked feature code. When the new site was identified the marker was moved to the new location. The codepiece was a device that allowed interviewers to keep track of the rising code sequence in an easy way, while not distracting them from other key interview duties).

Pencil

A pencil was provided so that respondents could point and refer to sites easily and so that locations of sites were made clear to community researchers. Also in this way, the interviewer could lead the identification of sites, not the interviewer.

Lamps

Small desk lamps were made available to ensure that the interview / mapping working surfaces were well lit and so that maps could be readily seen and understood by both respondent and interviewer.

Illuminated Magnifying Glasses

Battery powered illuminated magnifying glasses were provided to assist respondents in concentrating on an area and to pin point and confirm exact locations of sites.

### 4.6.3 Audio Recording Tools

Audio Recorder

As advised by Tobias, interview sessions were recorded with audio recorders. Video recorders are deemed as being too intrusive, and can often result in people under reporting cultural use information and often require an additional person to supervise the recording.

HLFN opted to utilize an analogue tape recorder over a digital recorded to reduce the number of operating steps, complexities and complications that come with the operation of digital equipment. Data loss can more readily occur with digital recorders than with the older cassette technology. HLFN tested a type of recorder with an external microphone; however the recording was not clear enough. Thus HLFN opted for another brand that resulted in clear recordings that would allow for accurate written transcription. HLFN purchased Sony Clear Voice M - 570 V mico –cassettes recorders. Pre – tests of the equipment resulted in satisfactory volume and clarity so as to ensure accurate production of interview transcripts.

Training in the use of the recorder and rules on their use is set out in the Conventions section of this Methodology Report.

Sock and Recorder Stand

A sock was used to cover the audio recorder when the audio was not in use and recording ceased. This step guarded against data loss, as it was clear visual queue for the community researchers to ensure that they turned the audio recorder on to record the sessions and off when the recording ceased. A recorder stand was also fashioned

out of the ends of Mylar spools to ensure that the audio recorder could be positioned directly between the interviewer and respondent and to ensure that internal microphone was pointed upwards towards those speaking.

Audio Cassettes

An ample supply of micro audio cassettes were on hand in the community research office and within the community researcher's tool kits. Tapes were used with a total duration of 90 minutes. Tapes were stored in their clear storage cases and labels on both the tapes and the storage case were used and marked with clear identifying labels and descriptions.

Audio Cassette Storage Cases

Each community researcher was provided with their own distinct box for their completed and labelled audio cassette tapes. Each bin was marked with their assigned block of PIN numbers. This allowed for the orderly storage and retrieval of audio cassette tapes for transcription, auditing and storage of raw data.

### 4.6.4 Questionnaire Tool

*"The questionnaire is a categorized, ordered listing of all questions that will be asked of respondents".* **(Tobias Pg 194)** The questionnaire is the key tool that guided each interview and ensured that each interview was conducted in a consistent manner. A key goal of the interview questionnaire is to ensure that each respondent was asked the same set of questions about the same subjects or categories (e.g. Moose Kill Sites, Elk Kill Sites, Whitefish Kill Sites, Food Plant Gathering Sites). As a quantitative type of research, the map biography approach is rigid and relatively inflexible, which is a strength in this case.

The interview questions were constructed around all key categories and designed to keep most interviews under the two hour time frame and meet the "Two Hour Rule of Thumb Principle" advocated within "*Living Proof".* The questionnaire was structured utilizing key words that were consistent with the primary research objective, geared to obtaining data regarding the specified categories and to avoid in posing leading questions to respondents. The HLFN TLUS Questionnaire is attached. **(Appendix E)**

The Conventions section of this report provides detail on how the Questionnaire Tool was used in the interviews and what rules were in place, governing its usage.

### 4.6.5 Interview Form Package Tools

Interview Procedure Checklist

An interview checklist was prepared to help provide a step by step guide to community researchers to ensure that they undertook an organized and consistent approach in every interview. The checklist was set up to ensure that interviewers conducted every key step in preparing for, conducting, closing down and following up on the interview.

The Interview Procedure Checklist is attached. **(Appendix D)**

Consent, Confidentiality Directive and Honoraria Forms

HLFN used three main forms to document the respondents understanding of, support for and consent to participate in the research program. These forms were reviewed and signed off with respondents prior to the commencement of their interviews. The Consent Form is a standard feature of participatory research that explains the purpose of the research and what uses the products of the research will be put to. A key principle is that respondent provides their explicit consent to participating in the research process and signs of on the Consent Form prior to the commencement of the interview.

The Consent Form is attached. **(Appendix H)**

The HFLN also passed a Confidentiality Directive which demonstrated the priority that HLFN placed on matters of confidentiality during the design and implementation of map biography process. The rules that govern what level of information is disclosed to third parties are set out in the Directive.

The Confidentiality Directive is attached**. (Appendix H)**

Interview respondents were remunerated for their participation in the map biography research. **The Honoraria Form** was signed prior to the commencement of each interview.

The Honoraria Form is attached**. (Appendix H)**

Category Quick Reference Sheet

Every Interview Form Package contained a Category Quick Reference Sheet. This contained the short forms or abbreviations for all Category Codes (e.g. MO – Moose,

EK - Elk). This helped the interviewer in cases where respondents tended to identify numerous categories in one area, vs. proceeding through the questionnaire, category by category. The reference sheet allowed the interviewer to keep pace with the respondent, focus on methodology and ensure that the right Category Codes were being applied to the identified sites.

The Category Quick Reference Sheet is attached. **(Appendix C)**

Scribble Pad

A scribble pad will be used to support interviewers keep track of important points within interviews that require follow up, noting information that falls outside the set categories and observations regarding factors that may contribute to or detract from data reliability. Key pieces of Meta data were recorded on the Scribble Pad that would allow for the tracking and linking of all key interview products.

Interview Record Form

The Interview Record Form is a one page form which was provided to interviewers for every interview. The Interview Record Form documents all key interview information and that tracks and ties all products of each interview together in one place (PINS, Respondent Name, Base Maps used, audio cassettes used, starting and end Code Sequence and Catch All (X) Codes used.

The Interview Record Form is attached. **(Appendix H)**

Researcher Binder

All completed Interview Forms and the Interview Record Forms were filed in binders. Each researcher had their own binder and they filed their interview forms by PIN number.

*Interview Form Package*

Packages containing all key interview forms were made of available to ensure that interviewer had a complete package of required forms for each interview. This package included the Confidentiality Resolution, Consent Form, Honoraria Form, Interview Record Form and Feature Code Sheet and Interview Checklist. This ensured that

proper forms were always on hand to support the consistent conduct and documentation of each interview.

*Data Collection Manual*

The Data Collection Manual provides guidance on the conduct of every aspect of the interviews and the collection of data. The HLFN used this document to assist interviewers with the systematic and effective collection of data and the application of consistent procedures and habits in relation to each interview. *"Distilling a well constructed methodology into a data collection manual is a must. The manual is the concrete expression of research design; it is consistent with the principles of good social science, early decisions about the map survey, and unique project parameters. The DCM contains the questionnaire and is built around a set of map tools. It includes descriptions of all the conventions and procedures that govern the use of the toolkit".* (Tobias Pg. 278). The DCM is listed within the Appendices. **(Appendix I)**

## 4.7 Conventions

Conventions are the smallest details that HLFN considered in research design. Conventions are the agreed upon rules that govern the use each research tool that ensures their consistent use and application. HLFN worked to ensure that the following set of rules were not altered and followed as closely as possible, all the time so as to meet critical data quality standards.

### *4.7.1 CONVENTIONS RELATED TO USE OF KEY INTERVIEWER TOOLS*

Base Maps

Key conventions related to the use of topographic base maps included:

- Ensure that the selected set of base maps were the only maps used by researchers in the interviews and ensure that each researcher used the same set of base maps as all other researchers

- Each base map was customized where red registration marks and arrows where drawn onto four corners of the base maps. This was replicated for each set of base maps – all fixed on the same four points. This allowed for the accurate positioning of the Mylar overlays over the base maps and provided subsequent

direction to the digitizers. Registration marks were drawn on with a pre – set circle from a draftsman's template

- Each base map was assigned a numeric value in the upper right hand corner to denote its order in the series of base maps used in the survey. The order and numbering of maps corresponded the order and numbering as appearing on the wall Index Map.

- Prior to the commencement of the interview, researchers ordered their set of base maps according to its order and numbering in the series to ensure that all maps were accounted for and organized prior to interview commencement

Mylar Overlays

Key conventions related to the use of the clear Mylar overlays included:

- Cutting mylars to correspond to size and dimensions of the base maps. The bottom of the Mylar was to be edged flush with the bottom right hand corner of the base map

- Clamps were used to clip the Mylar to the map, to ensure that the Mylar overlay did not slip during the interview

- A full set of mylars were cut to size and registration marks were added. The map number was traced on the top right hand corner of the Mylar overlay. If the base map was numbered, "7", then the researcher would trace that number "7" on the upper right hand corner of their map. This ensured that the interviewer was organized. The same circle on the draftsman's template was also used on the base maps

- At the conclusion of each interview, while the audio recording was still on, the respondent and interviewer signed and dated each Mylar overlay

- At the conclusion of each interview and once the respondent had left, the interviewer then placed the following labels on each Mylar overlay:

  - Printed PIN number of respondent in area on Mylar so it is clear an legible

  - Printed name of respondent in area on Mylar so it clear and legible

- ➢ Printed total number of maps used in the interview (e.g. 1 of 4, 2 of 4, 3 of 4, 4 of 4)
- ➢ Permanent Medium nib, black Staedler markers were used for labelling

- Mylars were carefully stored by PIN number in storage rack

Markers and Ruler

Key conventions related to the use markers and rulers included:

- Staedler permanent Lumocolor markers were used to prevent against erasure and wearing off of features and labels and data loss
- Fine nib markers were used for marking features to ensure data precision
- Feature codes, leaders and features were marked with fine nib markers to ensure clarity
- Interviewers instructed to use green, red, blue and black markers for marking features and to alternate use of markers to create a level of visual contrast. Light coloured markers such as orange and yellow and brown were to be discarded
- As noted within the Mylar Overlay section, black medium nib markers were used to print labels on maps
- Interviewers were provided an ample supply of markers to ensure that markers that were running dry or getting dull were thrown out to ensure clarity, legibility and precision
- Only colours that stood out on the mylars were used such as red, green, blue
- Clear plastic rulers were used to draw leaders (lines that connect features to feature codes) to ensure that all key elements are tied together and to allow interviewer to extend leaders when needed to create room when a map becoming crowded with data

## Audio Recorders

Key conventions related to the use of the recorders included:

- Ensure that Voice Activation Mode function turned off all the time and this status was checked prior to the start of every interview. This guards against the audio drop out that occurs and prevents against data loss

- Ensure that recorder batteries are good working order. Interviewers conducted audio pre – tests at the commencement of interviews, following breaks in interviews and when flipping the audio cassette over. The interviewer was instructed, prompted and trained in playing back test recording to ensure unit and batteries in good working order

- Even though HLFN did not use external microphones, a visual device was used to ensure that the audio recorder was turned on at interview commencement, turned off in breaks and off when the interview was concluded and the respondent left. This guards against data loss. Thus the sock is placed over the recorder when the recorder not in use and record button off and the sock taken off when the recorder in use and recorder turned on

- Use of a fabricated stand ensured that the audio recorder and its internal microphone was always pointing upwards towards the interviewer and respondent to ensure the best possible sound quality

## Audio Cassettes, Cassette Storage and Labels

Key conventions related to the use of audio cassettes included:

- Discarding of any the free 60 minute tapes that came with recorders or any other tapes

- Use of tapes 90 minutes in length (45 MIN / Side)

- The decision was made to use a fresh tape to start every interview and use a second tape if required

- Used masking tape to temporarily mark tape side during interview

- When interview was completed, researchers were to use store issued tape labels and were to mark on the PIN, Name, Date of Interview, Project Name, Session # and Tape Sides (1 of 3, 2 of 3, 3of 3). Researchers were to repeat the same on the store issued cassette storage case.

- Researchers were to use the clear cassette storage container provided for storing tapes post interview. A distinct shelf for each interviewer was provided and the completed cassettes were stored in order by PIN number

**Interview Form Package**

The following package of documents was provided to interviewers and formed part of their tool kit. There was complete package of documents allocated for use in each interview. Ample supplies of these packages were pre – printed and made available at all of the interviewers work stations:

Interview Checklist

Interviewers were trained in the use of, prompted to use and provided with the Interview Checklist. Boxes were actually ticked off in all phases as to remind and prompt interviews on all key steps that must be undertaken and completed as part of the interview process. **(Appendix H)**

Consent, Confidentiality Directive and Honoraria Forms

The Consent Form, Confidentiality Directive and Honoraria Form were read out allowed to each respondent prior to the commencement of the interview. The Consent Form and Confidentiality Directive were signed by the respondent and witnessed by the interviewer. These forms were stored in the Interview Binders following the interviews and appended to the completed Interview Transcripts as they were completed. All of these forms are included within the Appendices. **(Appendix H)**

Category Quick Reference Sheet

The interviewer was instructed, trained and prompted to have the Category Quick Reference Sheet to the left of the mapping surface so that they could quickly find the

short forms or abbreviations for all Category Codes (e.g., MO – Moose, EK - Elk). **(Appendix H)**

Scribble Pad

Scribble Pads were provided to each interviewer to mark down the following information as the interview progressed:

- Interview Date
- Participant Name
- PIN
- Base maps identified and selected by respondent at outset of interview
- Use of Catch all Codes
- Recording of comments and notes
- Starting code feature and ending code sequence

Key data from the Scribble Pad was then transferred to the Interview Record Form at the completion of the interview by the community researcher

Interview Record Form

Interview Record Forms were provided to each interviewer to mark down the following information following the completion of the interview:

- Interview Data
- PIN #
- Participant Name
- Interview Location
- Lead Interviewer
- Observers Present
- Cassette SIDES used
- Duration
- Map Sheets Used
- Notes on Departures in Standard Methodology
- Comments
- Use of Catch All Codes
- Starting and end code sequence

The Interview Record Form is attached. **(Appendix H)**

Researcher Binder

- Each researcher was provided their own binder. Following the completion of the interview, all of their Interview Package Forms and relevant pages from the Scribble Pad were stored and separate by PIN number

- Interview transcribers also filed their completed transcriptions with the matching Interview Package Forms

*Data Collection Manual*

- The Data Collection Manual was utilized and guided training of the community researchers and each researcher was prompted and trained to have the DCM with them at all times and during the conduct of interview, in case they needed to refer or clarify a matter of methodology. **(Appendix I)**

**Other Tools for Staying Organized**

Index Map

- The Index Map was posted in easily visible and well lit location. Prior to interview commencement, respondents were shown the map and asked to select which maps they would need to mark their data. Familiar land forms and cities and villages were drawn into the Index Map to assist in identifying geographic areas. **(Appendix G)**

Code Pieces

- Interviewers were provided or chose their own unique code piece for use during an interview. Once an interviewer marked a feature code, the code piece was moved to that feature. The code piece remained in that spot until the next feature code was marked. The code piece was then moved to that spot. This procedure was repeated until the interview was complete

Map Reference Books

- Map reference books were on hand to provide the interviewer and respondent to provide a more detailed view of an area under examination

Pencils – Pointers

- At the commencement of each interview, the respondent was provided a pointer to assist them locating and pointing to a site that needed to be identified and mapped. Only the respondent used the pencil / pointer, not the interviewer

Magnifying Glasses

- At the commencement of each interview, respondents were shown a magnifying glass and encouraged to use it to assist in the identification of sites or examine an area carefully. The glass was provided to the respondent

### 4.7.2Conduct of Interview

There were some important general conventions that were implemented in relation to the conduct of the interviews that require mention given their importance. These include:

- Only one person was interviewed at a time. Interviews were conducted on a one on one basis. While observers could be present, observers were asked and instructed to be simply observe and not provide any prompts to the respondents

- Data from one interview was marked on one distinct set of Mylar overlays / base maps. Data from one or more interviews were not to be marked on the same set of Mylar overlays to guard against data loss and conflation

- While respondents pointed to the features to be marked, the interviewers marked the data

- Each respondent was assigned their own unique Personal Information Number (PIN) at the outset of each interview. That PIN was marked on molars, the Interview Record Form, Scribble Pad, Audio Cassettes and Audio Storage cases. That person is to hold and keep that research number for the future

- Every interview started with Part 1 of the questionnaire. The questionnaire was read out and followed from start to finish and every question was to be asked of each respondent

- All respondents were to respond to all six (6) parts of the questionnaire. A map biography was only deemed completed once the respondent has been asked about all the questions

- All written parts (except for the interviewer prompts) of the Questionnaire were to be read aloud and clearly to the respondent

- While the Questionnaire was designed to be administered within a two hour time frame, if an interview took a long time and the participant appeared to be getting tired or frustrated, then the interview was adjourned and resumed the next day or as soon as possible. Such breaks were noted and recorded in audio recordings

- While discreet interview rooms were set up, the interview could be conducted in any location provided that there the interview room was quiet, that there was an adequate, flat working surface of sufficient size to map and work in an orderly fashion and that the room and map surface was well lit

### 4.7.3 Verbal Anchoring

*"A verbal anchor is an audible cue, captured on an electronic recording. Its purpose is to enable a listen to match a respondent's site descriptions with the corresponding feature marked on a map or overlay"* (Tobias Pg. 224)

During the interview, once a feature had been identified by a respondent, the interviewer, as they are marking the feature code, repeated out loud the feature being marked. For example:

*"Jeff Napoleon has just indentified a Moose Kill Site at the north side of the Weyerhaeuser Haul Road at KM 36. I am marking this site as MO 25....MO 25", or*

*"Alphonse Fox has just noted a site where he built an overnight camp – it was a tent site that he stayed in October 2009. I am now marking this tent site as TT112, Tent Site 112...TT112."*

This practice is done to link the marked feature to the spoken description, which was picked up in the interview transcription. This helped guard against potential data loss. A considerable period of time was allocated to this unfamiliar procedure during training with community researchers. Thus the convention employed within the interviews was thus:

- Every time a feature was marked on a map, it was to be verbally anchored. This means speaking the code out loud as it is being marked. As your pen is actually laying down the line of ink for “MP 59”, “the words” medicine plant eighty six” should be passing your lips. Speak clearly and in a normal voice when you anchor sites. Don’t mumble, and don’t drop your voice as you do it.

### 4.7.4 Data Marking Conventions

There was a whole suite of established, set and agreed to rules or conventions that applied to the marking of data on the Mylar overlays. These included:

<u>General Description of Coding System Employed</u>

HLFN adopted the Alpha Numeric Coding system advocated within “Living Proof” given its relative strengths over other forms of TLUS coding that has been employed such as the use of symbols and colors. This system allowed for an extremely high level of specificity, precision and auditability. For example, a site appearing on a Hodgepodge, Category, Thematic or Map Biography can distinguish what feature is being depicted (e.g. Moose), the sequence that site was mapped in a respondent’s interview (the 56$^{th}$ site) and which specific respondent identified that site.

As interviews occurred, sites or features were marked on Mylar overlays with a point, line or polygon. Within the HLFN survey, the vast majority of features were marked as points, however line features and some small polygons were also used.

Each mapped feature was given its own unique code to distinguish it from every other site mapped during the interview, and all the interviews undertaken as part of the overall map biography. Thus interviewers assigned an alphanumeric code to each mapped feature.

**E.G. GE 124**

The letters of code represent the questionnaire categories and the numbers indicated the sequence – representing the order in which the features are mapped. The pair of

letters denoting the category is called code category. The complete list all of the Categories and their abbreviations are set out in Section 4.5.5 of this Methodology Report. Examples the categories and corresponding abbreviations are:

- MO – Moose
- WD – White Tailed Deer
- GE – Geese
- WE – Walleye
- BR – Berries
- TT – Tent Site
- OS – Old Settlement

In relation the sequence, numbers ascend from 1 to the highest number of features mapped during the interview. Thus if a respondent identified 145 sites, the first site to be marked would be “1” and the last “145”.

Thus an example of a completed Feature Codes appear as:

**DIAGRAM**

**Feature Code**

**MO 15**

**Category / Sequence**

The above code would denote a moose kill site identified in that interview with MO – denoting Moose (kill site) and 15 as denoting the 15$^{th}$ site marked in the interview. Another example of a completed Feature Code would be:

**Feature Code**

**WE 92**

**Category / Sequence**

The above code would represent the Walleye (kill or catch site) and the ninety – third site marked during the interview.

<u>Specific Data Marking Conventions</u>

The following data marking conventions appear in the Data Collection Manual **(Appendix X)**, however are set out here to create a seamless description of all conventions employed during the map biography TLUS. Note that actual colours are

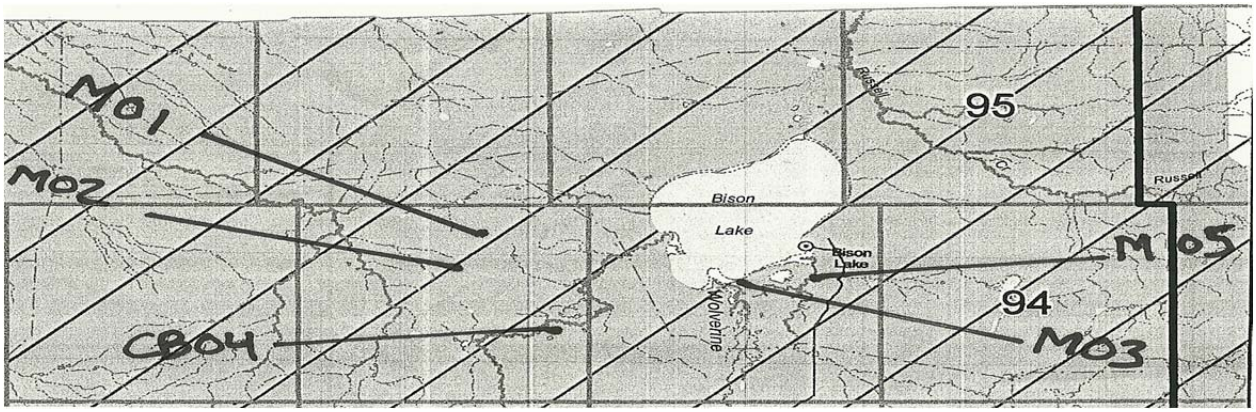
used were used in marking the Mylar overlays during the interviews. Below the diagrams are marked with black marker.

Feature Codes

- Each feature was identified by a code. The code was made up of two parts. The first part of the code is a pair of upper case letters representing the Questionnaire Category. The second pair of the code is number that indicated where the feature fits in the sequence of data marking. When the interview is conducted with a respondent, the interviewer starts with 1, then 2, then 3 and so on.

- The code sequence for each interview ascends or goes up, starting with the number “1”. The sequence follows the ascending order that features are mapped, regardless of whether the respondent is jumping back and forth between questionnaire categories, or back and forth between base maps or between points, lines and polygons. The first feature marked during an interview is numbered “1”. (e.g. MO1). The second feature indicated is two (MO2). The third feature is three (MO3). The fourth is four (CB4). The fifth is five (MO5) and so on.

**DIAGRAM**




- Each separate feature has its own code. Two or more features cannot share the same code. There cannot be – for any given participant – duplicate sequence numbers. For instance, the same person’s maps should never display two MO12’s or two CB5’s.

- If a second interview is required with a respondent and follow up session is required - interviewers must pay close attention to the last code assigned. These will be recorded on the last code assigned. These will be recorded on the

interview record form. Start the follow up interview with the next available 3 digit "hundreds value" plus 1). For instance, if the last feature number assigned during Jeff Napoleon's interview is 185, the first number assigned during his 2nd session would be 200 plus 1 = 201.

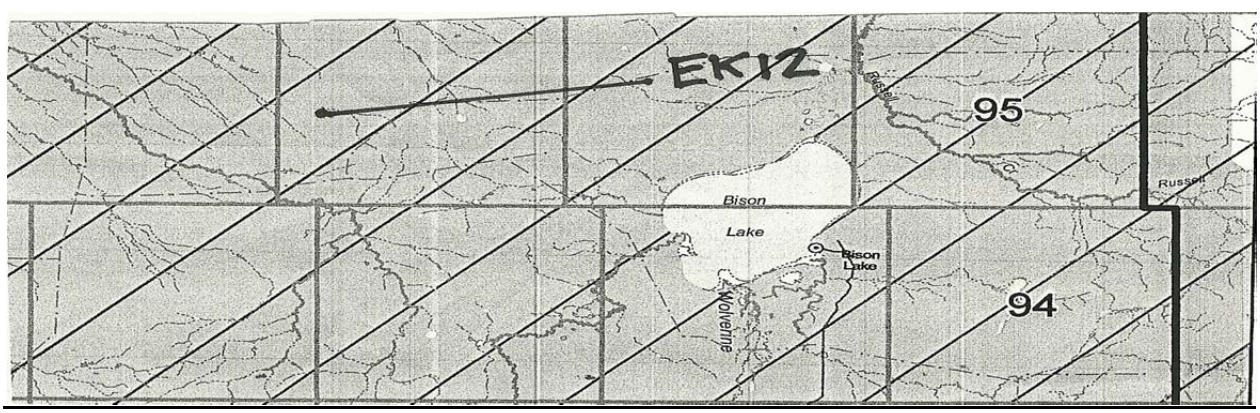
- Use the "approximate convention" – add a capital A to the end of the code – to indicate locations the participants is unsure about. Use it when the person either cannot point to the site, if a polygon's involved, cannot show the interviewer its perimeter. This convention is used to indicate that the respondent is confident the site is in the general vicinity, but not necessarily at the precise spot marked

<u>Marking Features</u>

- Features are to be mapped using the agreed to symbols adopted by HLFN. Each feature marked on a map will take one of three forms: point, line or polygon (area).

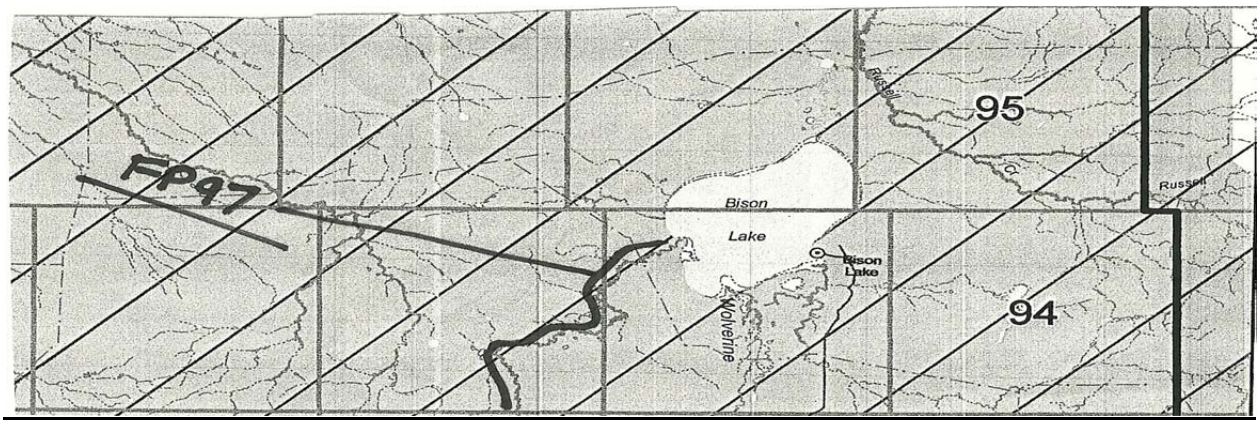
POINT: A site can be marked with point (2MM in diameter). For example an Elk kill site can be marked in the following way:

**DIAGRAM**



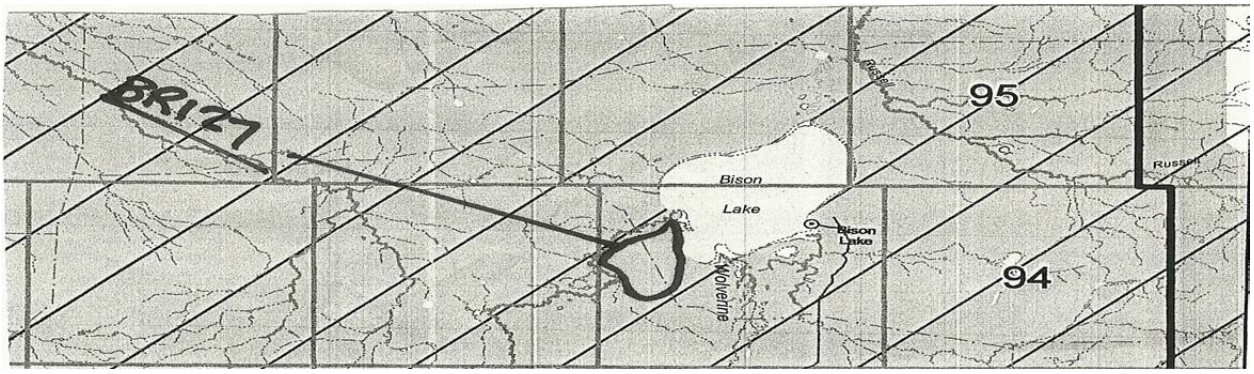

LINE: A linear feature can marked with a line. Often people will blaze a trail, walk a path or follow a linear feature like a road, path or river. They might hunt chickens, snare or gather plants along this trail or line. Such features are marked with a line feature. However their Feature Code is always underlined to make it clear that it is a line feature that is being mapped. For example the respondent walked up one side of the river and back down along the same line, gathering Food Plants along the way. This was the 47th site identified by the respondent. The feature code was to be marked in the following way:

**DIAGRAM**



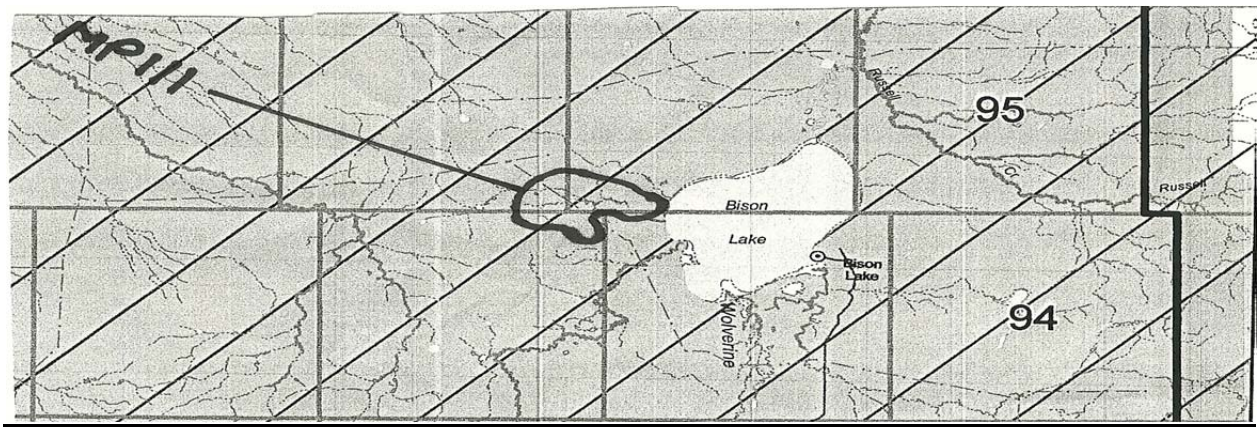

- Whenever an interviewer codes a line feature, they must underline the code. This lets the digitizers know that a feature is a line and not a polygon. Sometimes a line feature joins back on itself, in which case it's not clear whether it's a line or a polygon. Perhaps a respondent indicates that she has picked berries all along the trail that loops back on itself. The absence or presence of the oval tells the digitizer how to process the feature.

**DIAGRAM**




POLYGON: A small area where a resource activity occurs can be marked with a small polygon. Often people will undertake an activity over a small area such as collecting Medicine Plants. This was the 11$^{1th}$ site identified by the respondent. In such cases, a small polygon can be used to indicate such an activity. Note, that it is not underlined. This could be shown in the following way:

**DIAGRAM**

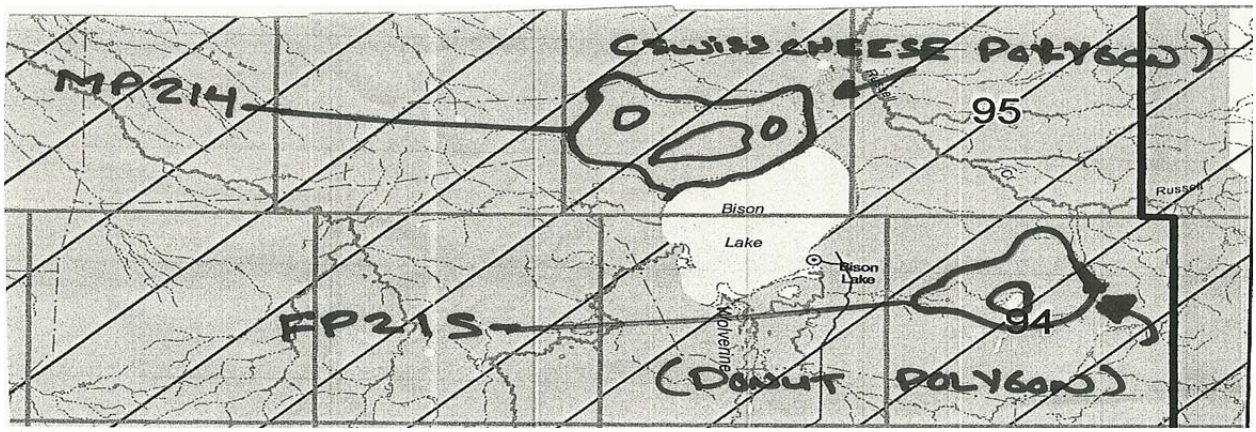



- Each polygon must be completely closed. The line forming each boundary must come back on itself, creating a closed loop. If it doesn't, there will be two dangling ends. Sometimes a polygon will end abruptly at the edge of a map sheet, creating dangling ends. Make sure that before the session is over you take out the adjoining map and complete the polygon.

- Make sure that any polygon or line that covers parts of two or more base maps lines up at the edges correctly. Make sure the feature is coded the same on all maps on which a portion is drawn. If a polygon or line covers parts of two sheets, the same code should appear twice, once on each sheet. If it covers parts of three maps, it should appear three times.

- Avoid at all times, the use of large polygons. Instead, the interviewer needs to work with the respondent to identify specifically the bounds of the specific area where a given activity occurs. Donut polygons and Swiss cheese polygons can be used to provide further accuracy, detail and precision to the exact areas used vs. drawing a larger polygon. Areas should be deleted from the polygon where activity does not occur. Below examples of both are depicted:

**DIAGRAM**




Multi Coded Sites

- In the real world, often a respondent often undertakes more than one activity at a site or within an area. For example a person may have caught both Walleye and Jackfish at the same site or they may have killed a Moose and also set up a Tent Site at the kill site and gathered Drinking Water from a same site. There are ways of recording data at multi – coded sites – where there is one site or feature and several categories associated with the site

- Sometimes a mapped point feature represents more than one questionnaire category. For instance, a respondent might have killed a “Moose” (MO) and a Grouse (GS) at the same site. All such features require multiple codes. The number of codes must match the number of categories

- A variety of leader configurations can be used. Whenever possible, use a single leader and a string of codes, with each separated by a comma. Another option includes marking the site, then having multiple leaders to separated feature codes. Below a respondent caught and killed a Walleye, Jackfish and Lingcod at a site. Below both marking options are demonstrated:

**DIAGRAM**

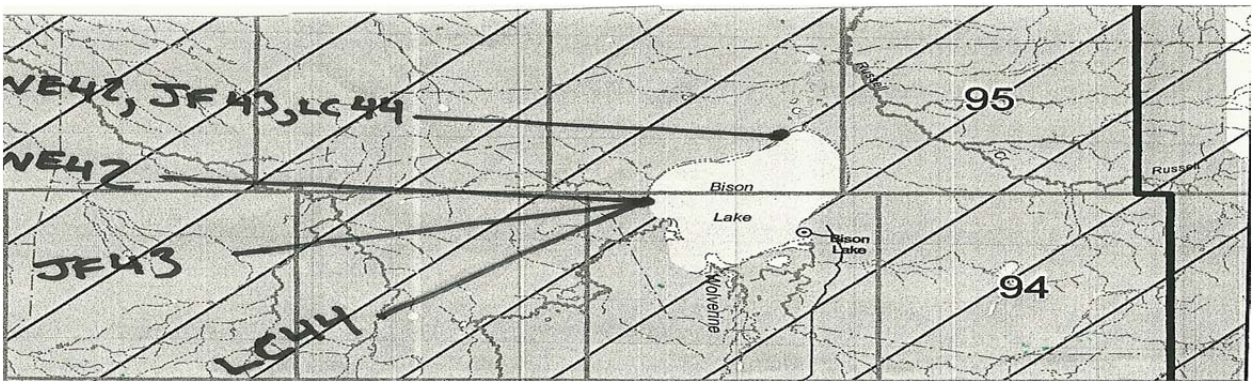



**DIAGRAM: LINE -** E.G. Here a respondent collected Medicine Plants and Berries collected along trail and returned on the same trail– Note underlined feature codes and feature codes separated by commas)

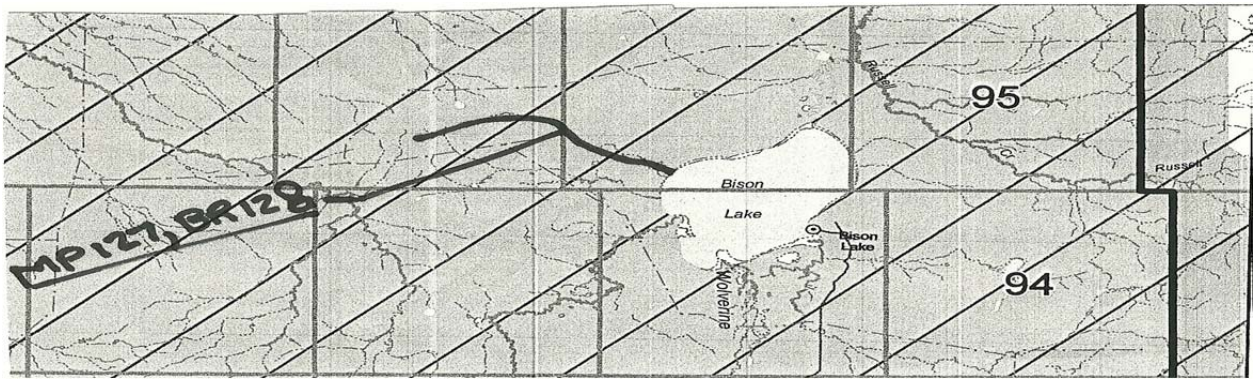
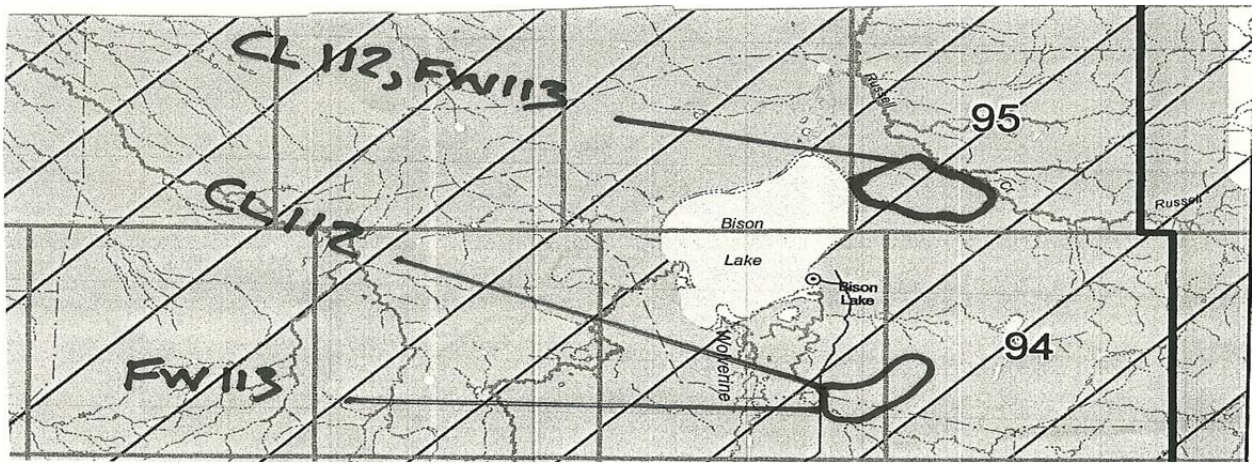



**DIAGRAM: POLYGON -** E.G. Here a respondent has noted that they have gathered both Construction Logs and Firewood from an area. As above, this can be depicted in two different ways shown below.



Code Legibility

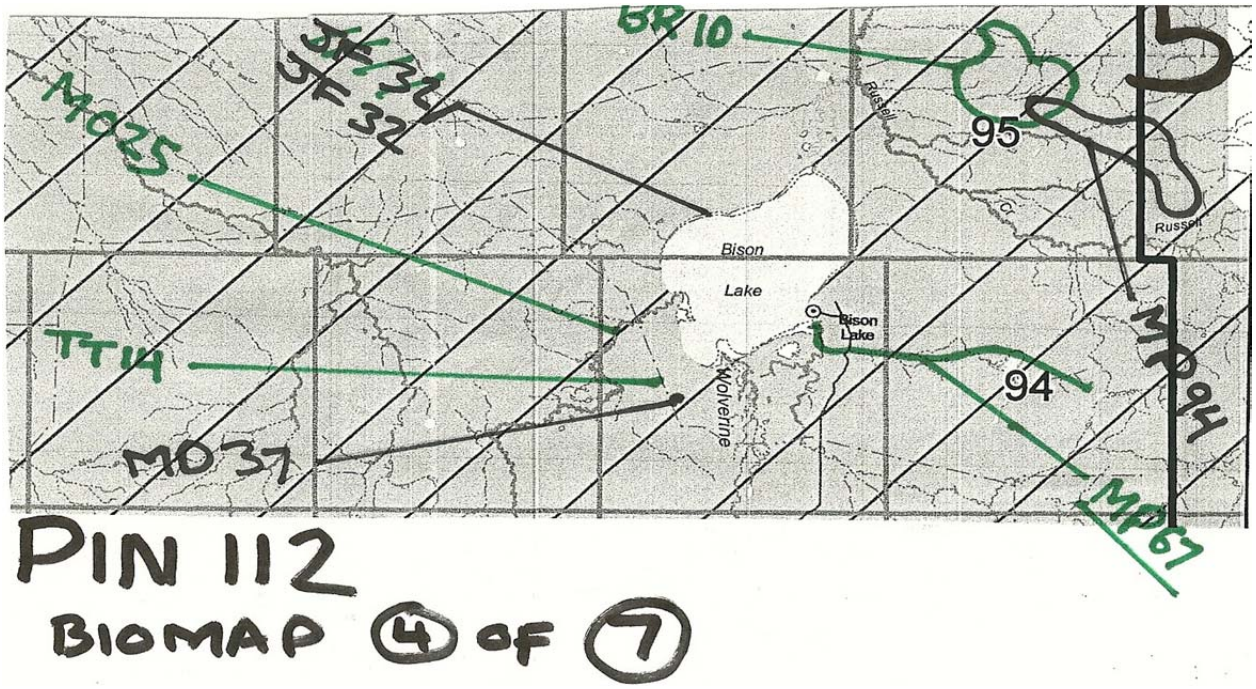
- Use only pens that are in good working order and where the nibs are still sharp and not dull.
- Use upper case letters as capitals are more distinctive
- Leave plenty of open space of daylight in the loops of letters and numbers
- Extraneous Markings are absent to eliminate any confusion such as putting in periods
- Errors are corrected with diagonal cross hatching using a different colour than the writing / code / feature that is being corrected
- The code must be attached to the feature with a line called a “leader” and floating codes are always to be avoided (floating code – where a feature is not attached the code). The feature, its code and its leader are to be marked in the same colour ink.
- Each feature, code and leader is to be of the same colour
- A variety of colours can be used – switch colour when map area becomes crowded
- Different colours are used for overlapping features

Leaders

- Leaders are marked neatly and are to be attached to features and there is only a small gap between the leader and the code
- Floating codes are absent – each code must be attached to a leader and feature
- Crossing of Leaders is avoided

- Every leader is an appropriate length thus overly long leaders or short leaders are avoided. Leaders can be extended to create more room when working in a more confined space of the map with a large number of features

**DIAGRAM:** Examples of below Conventions demonstrated below.




## 5.0 Data Collection: Quality Assurance and Documentation

As documented within the preceding sections of this Methodology Report, HLFN undertook considerable effort and time to understand the imperative of building the traditional land use survey on and around the principles of social science. Every effort was made to ensure that research principles and data quality standards were carefully weighed and imbedded within every aspect of research design and implementation.

Thus, while the objective of the map survey is to produce quality maps, it became very clear to HLFN that this goal could only be realized if all aspects of data collection met the data quality standards of:

*Objectivity* *Reliability*

*Validity* *Precision*

*Accuracy* *Integrity*

*Auditability* *Representativeness*

Thus all efforts taken by HLFN in respect to research design and planning all led up to the seminal event in the research process – the interview and how the interview was prepared for, conducted, overseen and evaluated.

Much came down to the community researchers and their understanding of the key aspects of data collection, why methodology was critical and the rationale for collection of data within a rigorous, consistent, precise and documentable manner. Thus a high level of quality assurance could be heightened through careful preparation and training of the community researchers. Quality assurance could also be evaluated and documented through other research measures.

## 5.1Data Collection Manual

The Data Collection Manual (DCM) was a tool that was created to document and instruct how data was to be collected on the ground – within the community setting. The DCM is essentially a handbook designed specifically for the project that sets out rules and procedures on the use of key research tools. It boils down the most crucial aspects of the conventions to be employed in the interview by community researchers.

As a handbook, it was reviewed and studied prior to commencement of interviews, serves as a training tool and as quick reference rule book to provide ongoing support and consistent application of key research tools. It can also be taken as indicator of data quality standards manifest within the project's data collection phase.

The DCM designed by the HLFN contained a brief description of the tools to be used and was organized in a manner that walks users through a step by step approach to their use and consistent application. While there were many conventions employed through research design and implementation, the DCM contained a distilled version of those most pertinent to the interview process. It was written in plain language to help provide ongoing and consistent guidance to community researchers as they prepared for interviews, administered interviews and undertook key follow up tasks post interview. The DCM addressed the following core interview areas:

- Assigning Respondent PIN (Numbers)
- Permission Form
- Confidentiality Resolution

- Honorarium Form
- Interview Procedure
- Interview Procedure Checklist
- Using Your Questionnaire
- The Questionnaire
- Guidelines for Coding and Marking Data
- Category Codes
- Labelling Audiocassette Sides
- Interview Record Form Template.
- Index for Base Maps
- Examples of Mapping Products / BIOMAPS

The DCM utilized by the HLFN during its TLUS has been attached for review and comparison purposes. **(Appendix I)**

One of the important strengths of the design and use of the DCM, was that it meant the community researchers did not have to remember every convention by rote and rely on their memory. As it was set out in lay person's language and task orientated, it facilitated early and ongoing use by the community researchers. The layout and use of a clear table of contents allowed for easy and quick access by a reader. The descriptions of the conventions were not encumbered by too much detail or explanation as to why the convention is important or must be employed. Rather it simply set out the core rules – how the research tools were to be used and applied.

Each community researcher was provided with a copy of the DCM in a durable three ringed binder. Additional copies were also stockpiled in the community research office, should someone misplace a copy.

## 5.2 Interview Procedure Checklist

Another key tool that was described in the Tools and Conventions section of this report and was attached to the Data Collection Manual was the Interview Checklist. The Interview Checklist was provided to community researchers for training purposes but to actually fill out as part of organizing and documenting the interview process undertaken with each respondent.

The Checklist was divided up into those critical tasks that must be preformed prior to the respondent arriving for the interview, those tasks that must be undertaken during the interview once the respondent arrived and the critical steps that had to be undertaken once the respondent left and the interview was concluded.

Every step within the Interview Checklist was cross-referenced with its expanded explanation within the Data Collection Manual, should the researcher need to seek additional clarification. The Interview Checklist is set out below (Note – The Interview Procedure Checklist references original pages within the HLFN Data Collection Manual). **(Appendix D):**

The Interview Procedure Checklist was present within the DCM but was also broken out and included in the Interview Forms Package which each researcher had for every interview. They were directed to actually fill it out as they prepared for, conducted and completed the interview. The completed form was filed by PIN number along with other key interview forms, the interview transcriptions of the respondents.

## 5.3 Community Researcher Training and Questionnaire and DCM Pre - Test

HLFN determined that training of community researchers was a must, to facilitate understanding of the project's science based approach, primary objective and methodological framework. Familiarization and use of tools and application of conventions in the lead up to, conduct of and follow up to the interview was the focus of the training.

Comprehensive training occurred over a six day period in May 2011 conducted within the community research office. The four community researchers and transcriber were present and the training was led by the Research Director.

Training was broken into key components to ensure there was a sensible balance between verbal and hands on instruction, so as not overwhelm participants with information.

**TRAINING SCHEDULE**

| | |
|---|---|
| Day 1 | Introduction to TLUS Project |
| | Purpose and Goals of Project |
| | Concentration on Research Methodology |
| | Community Consultation and Primary Objective |
| | Methodology – Framework, Method, Parameters, Tools and Conventions |
| | Introduction to Interviewer's Tools |
| | Practice in use of Base Maps, Mylars, Markers |

| | |
|---|---|
| Day 2 | Introduction to the DCM |
| | Review Sections of DCM – Interviewers to take turns reading |
| | Practice in use of Recorders and Tapes |
| | Review of Data Marking Conventions and Hands on Map Work |
| | Research Director to conduct first training interview with community member with community researchers observing |
| | Community Researchers to Assemble Their Interview Tool Kits |
| Day 3 | Review sections of the DCM |
| | Detailed Review of Interview Procedure Checklist |
| | Research Director to Conduct Second Interview with Community Researchers |
| | Observing |
| | Community Researchers to Interview Each Other – 2 Interviews |
| Day 4 | Review Sections of the DCM |
| | Detailed Review of Interview Record Form and Other key interview documents |
| | Community Researchers to Interview Each Other - 2 Interviews |
| | Review of Sample Population and Interview Criteria |
| Day 5 | Community Researchers to Conduct First Interviews – Research Director Observing and Providing Direction |
| | Daily Activity Sheets – Workload to Prevent Interviewer Burnout |
| | Q and A Session |
| Day 6 | Community Researchers to Conduct First Interviews – Research Director Observing and Providing Direction |

Within the interview week, the HLFN was able to conduct a pre-test of both the DCM and the Questionnaire. The DCM and Questionnaire was reviewed in detail by community researchers in three ways. First, within the training week, the researchers took turns in reading out loud all sections. Second, the DCM and Questionnaire were reviewed and subjected to a pre – test, when the Research Director conducted two interviews. The community researchers followed the interview process step by step using the DCM. Third, the DCM was reviewed as “homework: each night during the training. Some small modifications were made as a result of feedback provided by the community researcher’s review and application of the DCM and Questionnaire.

Taken together – the DCM, its review, training and the pre-test – allowed for suitable and comprehensive training for community researchers – a measure and indicator of quality assurance. Photos taken during training week are attached **(Appendix K)**

## 5.4 Interview Record Forms

As reviewed and discussed, the Interview Record Form is a one page document which community researcher filled out following the completion of the interview. It allows for the collection of metadata and to ensure that anyone (now and in the future) could determine what interviews occurred with whom, who conducted the interviews, the assigned PIN, base maps used, number of cassette sides used, use of catch all codes, whether all key Interview forms like the Consent Form were filled out and notes on departures in the standard methodology. **(Appendix H)**

## 5.5 Research Notebook

The research director maintained a research notebook to document the research – design and data collection phases of the HLFN TLUS project. The project notebook is a confidential record and must be treated with the same measures and principles in respect to respondent’s map biographies and interview transcripts. A copy of the research notebook should be appended to this Methodology Report, for future use and reference by the First Nation, but should not be shared with external parties.

Daily entries related to key project decisions being arrived at, key milestones being met, issues encountered and addressed and the overall progress as the project moves forward.

The research notebook also contains key inventories such as list of audio recordings.

## 5.6 Interview Master List

An Interview Master List was produced as the interviews progressed and interviews were completed. The interview master list is a key document that is critical to interpretation of the map survey and the methodology employed by the First Nation.

Two copies exist of the Interview Master List – one where each interview is listed by research PINs and respondent name, and one that is listed just by research PINs. The former is a confidential document and latter is appended to this Methodology Report to assist in the evaluation of the application of the methodology in the interview phase. Thus it is critical as it as one stop shop containing and listing all key inventories of information for now and in the future.

It is also an adjunct tool that can be used to assess, evaluate and as an indicator of how thorough the data collection was and can assist in assessing data quality. There is a space for recording any departures from standard methodology that are transferred from the Interview Record Forms. This is the place that any strategic response bias can be recorded in summary form and assessed against all other interviews undertaken. The Interview Record Form is attached. **(Appendix L)**

## 5.7 Interview Transcription

All respondent interviews were recorded by way of audio recordings. The HLFN opted to transcribe interviews for three key purposes. The first was to ensure that a written record would survive, should the audio recordings be lost and degrade over time. Secondly, the written transcriptions record the key facts needed to establish and build data diamonds – the who, what, where and when of the data being documented. The transcription allows the data to be more readily accessed and assessed. Thirdly, the transcriptions, while treated as a confidential document, can be used to assess the application of sound methodology and support the key data quality standard of auditability.

Interview transcripts were also checked against the data recorded on map biographies to ensure that the data discussed within the interview, recorded on the audio tape, and appearing in written transcription are congruent with the data appearing on the map biographies.

An actual example of a transcription from an actual interview is attached as a working example. The name has been eliminated as a measure of confidentiality. **(Appendix J)**

## 6.0 Data Digitization:

As set out in prior sections, the HLFN used a set of base maps overlaid with clear Mylar overlays. In every interview, feature codes were marked onto maps for every site identified by each respondent. Thus every interview resulted in a discreet set of Mylar Bio Maps - one for each respondent. Each map set was labelled, collated and clipped together. These then had to be digitized. As HLFN did not have the in house capacity and financial resources to undertake this task, it obtained in kind digitizing support and GIS services from BC Hydro's Photogrammetry Department and GIS group.

The HLFN met with representatives of both groups to build and ensure that there was a shared understanding of the applied data marking conventions, map labelling and desired end mapping products.

The following provides a technical description of the steps, equipment and process used to convert the data recorded on the Mylar Bio Maps to the completed end product maps contained within this report:

**Step 1) Photogrammetry Department Creation of Digital Map Files:**

Platform used Microstation (dgn files)

a) Scanned the reference map sheet (Mylar Bio Map Sheets) to jpg format using a large format scanner

b) Downloaded and opened a geo-referenced version of the same map sheet

c) Imported the jpg of the reference sheet and matched it to the geo-referenced version, copied the reference circles

d) Scanned each layer into a jpg file

e) Opened a unique dgn file for each overlay using the reference circles and matched each layer to its corresponding reference map circles

f) Digitized all pertinent data (point with associated text for each interview)

g) This unique file was then converted to shapefile format using FME to a point with attribute information

h) The file was then checked against the original for completeness

This product was then transferred to BC Hydro's GIS group

**Step 2) GIS Department Creation of End Product Maps**

a) The provided shapefiles for each interviewee were merged into one shapefile, maintaining all attribute information.

b) New blank columns called Province, Category and Group were created in the merged shapefile. For each record, the Province attribute was populated with the appropriate code (alb or bc) after intersecting the data points with provincial boundary polygons. The code in the FEAT_ID_CO attribute was then used to populate the Category column after comparing values with the category codes document. These were then grouped in the Group column (e.g. the Cabin, Lean To and Tent Site categories were grouped into the Overnight Sites group).

c) In the maps, the merged shapefile was displayed so that only the desired data showed and symbolized accordingly using the PIN, Category and Group attributes

d) The finalized maps / end mapping products were then reviewed with the HLFN. Two products were provided to HLFN – the resulting digitized map data that could be incorporated into a GIS based in the community, shared with external parties if and when HLFN deemed that appropriate and the attached PDF version of the maps

## 7.0 Results

The objective of the HLFN TLUS was to develop a set of baseline data that provided indicators of community use and utilization patterns. As a baseline survey, the intent was to provide a body of spatially explicit data that documents phenomena or, in this case, the occurrence of socio – cultural activities or phenomena within a given landscape.

This has been achieved through the undertaking of 92 interviews in the HLFN community where data was recorded by way of audio recordings, converted into transcripts and marked as data points on individual Map Biographies. The data from the 92 Map Biographies has been compiled into differing end product maps – Category Maps, Thematic Maps and a Hodgepodge Map. These maps are the results of the map biography survey, which are supported and provided context through this Methodology

Report. In short the results of the survey are the data on the maps or the maps themselves.

HLFN could attempt to provide a detailed analysis of what it believes that the emergent land use patterns and trends indicate or reveal about HLFN land use through the past 80 year period. However HLFN has opted to defer this step at this stage, being satisfied with the resulting maps at this time. The HLFN does not wish to mar these results with observations and opinions that could be held as being detrimental or detracting from the resulting baseline data and overall integrity of the survey. The purpose of a baseline survey is to collect, enumerate and display resulting data, not to analyze the results. Rather the results of a baseline survey are then incorporated into other levels of assessment and study, where queries and questions are posed. The maps and data of the HLFN map survey will be applied in differing project management and resource management scenarios where such queries belong.

Thus the HLFN takes the view that it is enough to have produced the maps and concentrated on the methodology required to arrive at the results at this stage. The HFLN may opt to update this survey or prepare a supplemental report in the future that will speak more to the results of the data.

As noted within prior sections of this report the resulting data has been broken out and presented into different end mapping products. These include:

- Map Biographies – One map displaying data for all questionnaire categories for a single respondent. As required by confidentiality measures and provisions (strongly advocated within *"Living Proof"*) , the Map Biographies or personal Bio Maps will not be depicted or contained within this Methodology Report, the Public Report or any other document shared with external parties, unless written consent is provided and obtained by the respondent.

    - Category Map – One map displaying all data for all respondents for a single questionnaire category (e.g. Moose Kill Sites, Bull Tout Kill Sites) **(Appendix M)**

- Thematic Map – One maps displaying data for all respondents for a selected group of related questionnaire categories (e.g. Large Game Kills, Ungulate Kill Sites, Fish Kill Sites) **(Appendix M)**

- Hodgepodge Map – A single map displaying all data for all questionnaire categories from all respondents **(Appendix M)**

The HLFN may opt to undertake to present the aggregated TLUS map data in other ways not yet determined. For example, a TLUS density analysis or heat mapping might be a useful companion document to be produced to assist HLFN and other parties to determine areas of critical and ongoing community use.

## 8.0 Limitations

This Methodology Report has documented the beneficial aspects of the map biography approach and the HLFN TLUS project and how the resulting data and maps can be subjected to key data quality standards. In short, the HLFN has produced a baseline set of socio – cultural data that reveals some important land and resource utilization community trends and patterns. With that said, there are some also some limitations with the map biography approach and the HLFN project and resulting data that need to be indentified, acknowledged and discussed. These are set out in the following sections:

Map Biographies as a Form of Quantitative Research

The map biography survey method is a form of social science research. The methods and standards applied in data collection can be demonstrably reliable, which all speak to the derived land use data. This is a clear strength, however quantitative research must be compared and contrasted to qualitative research. As a form of quantitative research, map biographies must be rigid, somewhat inflexible and geared to collection and aggregation of data from a large number of survey respondents in a relatively short period of time. This contrasts to qualitative research approach that tends to focus on eliciting and documenting views, observations and opinion from a selected group of research participants. The research process is as different as the results. Within *"Living Proof"*, Tobias offers the view that surveys have limitations, can only scratch the surface of a research topic and seek to gather descriptive information whereas qualitative studies should seek to provide explanation. **(Tobias Pg. 43)**

This is critical to understanding of what the HLFN map survey focused on and the resulting data. The quantitative research approach adopted within the map biography method is geared to the collection of data that can shed light in indentifying socio cultural patterns and trends but are limited in that they are not capable of describing or providing an explanation of those phenomena.

This is key, given that the land use data that HLFN documented is a result of a series of inter-locking factors that ultimately have a significant bearing on community land use patterns and matters such as the spatial distribution and density of data within a given

area. The advent of large scale forestry, energy development, agriculture, oil and gas in additional to government land use policies have an effect on where the HLFN can go and hunt, fish, gather and undertake other activities. Thus the survey method *"cannot describe important socio – cultural phenomena such as land use alienation".* (Tobias Pg. 44) Other forms of qualitative research would need to be undertaken to understand this inter – related and relevant matters.

Mapping Extensively and Use

The map biography method lends itself to documenting lands and resource use over a wide ranging area – rather than mapping occupancy – the ongoing habitation or effective control of a given area through time. There are different forms of qualitative research that First Nations and academics have adopted to map occupancy such as Typnomy, however in this case, the HLFN has opted to map extensivity of use and utilization of lands and resources.

Traditional Use Survey vs. Traditional Ecological Knowledge Study

There is an important distinction that needs to be made between what traditional land use surveys document and explain as opposed to what traditional ecological knowledge studies aim to study and understand. Traditional ecological knowledge (TEK), traditional knowledge or local knowledge studies are a form of qualitative research that generally seeks to understand community understanding of habitats, wildlife utilization of habitat, wildlife movements, the presence or absence of wildlife or cultural values, hosting environmental conditions and change affecting hosting environments.

HLFN opted to limit the field of inquiry so as not to mix the two streams of documenting of kill, catch, gather and camp sites with the documentation of habitats. This Methodology Report documents how HLFN took determined steps and implemented measures to ensure that community researchers and survey respondents mapped the former rather than the latter. There is a clear need to commission TEK studies; however that will have to be added to the research menu of the HLFN.

Mapping of Specific Activity Sites and Not Larger Use Areas

What HLFN achieved in this map biography survey was to gather and map traditional or socio – cultural use data. The survey generally mapped kill, catch, gather and camping sites. At its very best, the survey sheds light on examples of community land use patterns and trends. The map biographies document sites where an HLFN community member undertook a certain land use act or activity – e.g. "I killed a moose at this site on the north west side of Cardinal Lake in October 2005".

In contrast, the HLFN elected to not map areas where people hunt or undertake a range of other activities. This is a critical distinction. As noted in a prior section, the HLFN heeded the advice set out in “Living Proof” and steered away from mapping larger land use areas by way of polygons.

Instead specific sites were HLFN maps actually killed wildlife, caught a fish, gathered earth material or camped overnight. The research was designed and implemented in a way to ensure that researchers and respondents had a clear idea of this objective of the research. As noted, when you ask a person where they have killed a moose – you obtain specific responses and data that address the specific question. If you ask a person where they hunt, you would get varying responses from respondent and across interviews impacting the data reliability, accuracy and other key data quality standards. This would result given the differing thought process and definitions that come to people about what hunting entails and the differing components of the overall activity of hunting. If you asked a person where they hunt, you would likely end up with a larger polygon resulting from that individual’s unique notion of the acting of hunting and the area involved.

Defining HLFN hunting, fishing and other key cultural use activity areas by way of mapping lager polygons would be a useful and valid exercise that could help document land use and potential test the data gathering under the auspices of this map biography research project.

Option to Not Map Travel Routes and Traditional Place Names

Based on the advice in *“Living Proof”*, the HLFN opted to not undertake to map travel routes and traditional place names within this survey. It was deemed that the additional level of complexity added with mapping travel routes would add a layer of complexity that could compromise data quality standards that HLFN was striving to meet. Clearly data layers from travel routes would be an important and useful to have, and HLFN might consider undertaking this in the near future.

Related to the topic of travel routes is that of mapping traditional place names. The HLFN simply opted to not undertake this activity as it felt that the subject and practice of Typonomy deserves a special treatment by an expert within this discipline. The HLFN could consider seeking funding and commissioning such a study in the future.

Survey Focused Structured Around Primary Research Objective

Tobias cautions researchers to avoid the urge to try and “get it all at once” – trying to map as many subject areas and information categories in one survey / study. Rather conventional wisdom and best practice counsels that map biography surveys should be

predicated and constructed around a primary research objective. HLFN opted to do this thus the primary objective and information categories aim to gather data that are indicators of key hunting, fishing, gathering, camping and other incidental activities. Thus HLFN opted to select no more than 50 information categories.

Given this deliberate approach to mapping data consistent with the primary objective, the survey does not result in an exhaustive documentation of the full range and totality of community socio – cultural activities and usage of lands and resources

Recall Interval

One of the important parameters set in research design was the recall interval – the time period over which respondents undertook activities on the ground. As noted, HLFN opted to base the set the recall interval on “within living memory”. Thus a respondent would recount activities undertaken throughout their life. Tobias holds that adding layers of complexity during interviews with artificial time periods and asking people to recall dates for every site, can increase response burden and can impact on data reliability and accuracy.

While some testing of recall occurred within the interviews, the data does not carry a high degree of temporal specificity. However, mapping events within living memory had benefits as it captured variations in land use patterns over a respondent’s lifetime and a general land utilization pattern over a person’s lifetime.

Survey Population, Representativeness and Limited Budget

Given the opportunity, HLFN would opt to interview all community members to gather as accurate a picture of land use patterns and trends. However, as in all types of research, researchers need to do as much work as they can within given budget limitations. Within *“Living Proof”,* Tobias suggests that a good degree of representativeness can be achieved if all respondents answer questions on all categories and when a participation rate of between 70% - 80% can be achieved.

Within this map survey research project, the HLFN was able to reach a response rate of 18.4% or close to one fifth of the community. While HLFN did ensure that all respondents were asked all questions about all categories, it clearly fell short on the participation target. Thus, this while this survey cannot purport to be entirely representative of community use, the methodology adopted and number of people interviewed is clearly indicative of community land use patterns and trends over a substantial period of time.

Confidentiality

As described in this Methodology Report, HLFN strove to undertake advocated best standards in relation to confidentiality and addressing confidentiality principles. As noted HLFN committed to meeting participatory research confidentiality principles. In meetings, workshops, in written communications and at the outset of interviews with respondents, community researchers set out how HLFN proposed to ensure confidentiality through measures such as employing PIN (numbers), not sharing map biographies, audio recordings and interview transcripts with external audiences.

Further, HLFN discussed the matter of sacred sites and medicinal plants with respondents and note that they did not have to share information about these category areas if they felt it was inappropriate.

Notwithstanding, within the Interview Record Forms, the HLFN community researchers noted some instances where they believed people were un-reporting in relation to these particular categories. Thus, concerns about these specific matters and issues with confidentiality in general may have had the effect of limiting the amount and types of information that respondents felt very strongly about.

“Ground Truthing” or Site Verification

Ground Truthing general refers to the verification of mapped data, or mapped GIS data on the ground through field visits to the actual sites and fixing their precise location with use of a Geographic Positioning System (GPS). Clearly, if HLFN had the resources and the time, it would have been useful and beneficial to attempt to verify all sites mapped during the TLUS with GPS coordinates. The benefit of taking the respondent out on the land would be considerable, as not only would they be able to recall more aspects about the use of that site, but the mere exercise of being out on the land could also lead to the recall of additional use and utilization sites and values.

However, the task and cost of attempting to ground truth all sites identified within the map biography phase would be daunting to say the least.

However when considering this, one also needs to consider the degree of positional accuracy that is required given the primary objective and intent of the map survey which was to create a baseline inventory of data providing insight into land utilization patterns and trends.

The resulting data and map set produced within the HLFN TLUS could be utilized as a base to conduct more detailed on the ground assessments of proposed projects and areas that are deemed to be of critical community use by the community. However, agreements between the HLFN and third parties would need to be reached to support and commission such detailed ground truthing and field work.

General Caveats and Limitations

While the HLFN TLUS was an absolutely important and mandatory piece of research that needed to be conducted, at the end of the day it also revealed how much more study is needed and the inherent limitations of quantitative research. Cleary the survey results cannot purport or be taken as describing or explaining the totality of HLFN use and utilization of the land and the community's socio – cultural relationship and dependence on the regional eco-system. At best, this survey scratches the surface of such matters while revealing a compelling story of inter-dependence worthy of further in depth study led and commissioned by the HLFN itself.

Viewed alone and isolation, the data points documented in this survey can potentially convey the wrong impression. The data points or dots on the map are at best, indicators of use and an ongoing relationship with the land, but cannot and do not in of themselves represent the breadth and scope of HLFN land and resource utilization or its rights. The HLFN's hunting, fishing, trapping and other treaty rights are predicated on key species and values being present and abundant, which are in turn dependant on functioning healthy habitats and a functioning regional eco-system.

Thus, while the fact that Jeff Napoleon killed one moose in a specific location is important; concentrating merely on the site in isolation misses the point all together. Jeff's right to hunt moose, the rights that his family exercise on the ground and the collective rights held by the HLFN are not confined to this one dot on a map or even a series of dots on a map. Rather, they result from and are dependent on large inter-connected, functioning landscapes – thus the spaces between the dots on the HLFN map can be said to carry more significance than the dots themselves. The dots are indicators of use and utilization.

Such matters are relevant and need to be considered when viewing and contemplating the meaning and import of the resulting HLFN maps. The maps need to be read in concert with this Methodology Report and understood within the proper context.

The HLFN has undertaken this survey and produced the maps it has with the objective of having this baseline data considered, incorporated and utilized within lands and resource decision making processes. The data could potentially be relevant and helpful in relation to environmental assessment reviews, planning processes and resource allocation and management policy decisions. However, it can only be helpful to the parties if it's seen and taken for what it is – a useful set of baseline data that is indicative of community land use and resource utilization trends and patterns. These resulting maps can only be of assistance and of value if they are viewed with the appropriate context and inherent limitations in mind.

Overall, this map biography survey builds on prior traditional use mapping work undertaken within HLFN. More importantly it reveals how much more community led and sponsored socio – cultural research is required. Further it is hoped that this survey may reveal that science and the scientific framework can be a helpful tool and ally that HLFN can opt to take up with confidence and courage in support of its rights and interests and to support the goals and aspirations of the Horse Lake people.

## 9.0 Analysis

The HLFN did its utmost to conduct this map biography survey within the framework of science and according to social science research standards. The initial Research Proposal set out HLFN's proposed plan for the collection and documentation of data. This Methodology Report document sets out how the data collection and documentation unfolded on the ground. The two documents are companion documents that are to assist the HLFN and external parties by providing a record of the methodology employed in this research effort and to demonstrate how the resulting map data was arrived at. It also helps ensure that the end map products and the data they depict are considered and viewed within an appropriate context.

Thus the purpose of this section is to provide a level of analysis regarding the differences or gaps between the proposed and actual data gathering activities, the potential effects of these gaps on the research outcomes and the quality of data depicted on HLFN's end mapping products. Specifically, this section generally confines itself to dealing with the areas where the HLFN identified deficiencies in method and departures from standard methodology.

Deficiencies and departures from standard methodology where documented in the research director's research journal and summarized within the Interview Master List. The Interview Master List is an important document as it sets out all key information pertaining to each interview including pertinent metadata. It also functions as an audit tool that was used to document instances within the interviews where departures in the established methodology occurred. The Interview Master List also documents and notes some examples of adherence to standard methodology and where consistent application of conventions occurred within the interviews. The observations recorded in the "Departures from Standard Methodology" and the "Comments" section of the Interview Master List were based on an HLFN review of:

Observations made during audited interviews

- A Review of Interview Record Forms and notes on the Scribble Pad Sheet

- A review of a selected number of audio recordings and or sections of audio recordings
- A review of the full written version of each interview transcript of each respondent, and
- A review of each completed Bio Map for each respondent

The Interview Master List is attached. **(Appendix L)**

In addition, the HLFN has considered identified gaps and deficiencies and has broken them out into the following key areas to support the analysis of the relative strengths and weaknesses of the survey and data depicted on the end product maps:

- Categories
- Geographic Scope
- Marking of Habitat
- Species Identification
- Use of Large Polygons
- Map Scale
- Temporal Precision / Data Diamonds
- Recall
- Rushing / Burn Out
- Missing Data – Audio Tapes and Transcripts
- Map Numbering
- Data Marking Conventions

## 9.1 Categories

The categories were selected to be consistent with the survey's primary objective. A key question was how many categories were needed to ensure that all key land use activities could be documented while managing overall response burden. Categories were derived and confirmed within a community meeting and in smaller working group sessions. However despite this preliminary work in species and activity identification, there were some species omitted as distinct categories. In retrospect, the inclusion of such species (fur bearers and some large mammals) would have helped in creating more specifity to the end product maps.

As noted, the HLFN opted against mapping certain data layers at this stage such as place names, travel corridors and travel routes and trapping. As HLFN eliminated trapping it did not include many of the fur bearing species that are most often procured by way of trapping and snaring. This was an oversight, given that community members have and continue to kill fur bearers by other means other than trapping and snaring.

Several respondents indicated some locations of where they have killed beaver, muskrat, squirrel, wolf, mink, weasel, porcupine, marten and lynx within living memory. It is possible that had these had been included and broken out as specific categories, the HLFN may have identified many other sites as the additional category and corresponding category question would have acted as prompt. Notwithstanding, respondents recalled some of these species kill locations during interviews. Instances of some of fur bearer kill sites were documented through the use Catch All Codes (e.g. Beaver – “XM” – Other Mammal. Such instances where this occurred were documented within the Interview Master List’s Catch All Code section.

This occurred in other areas – namely that of large mammals found in distinct environments. Some respondents identified Buffalo / Bison and Big Horned Sheep kill sites. In some cases, community researchers were able to document on such sites on the provided base maps / molars using the Catch All Code (“XM” – Other Mammal). In other cases, they were not marked on maps and only noted on Scribble Pads and in the Interview Record Forms.

This occurred given that Buffalo / Bison kills were occurring in far flung areas such as Pink Mountain in north – east British Columbia. The HLFN did not anticipate that so many community members would be travelling as far west as Pink Mountain and the Sikanni River areas to hunt buffalo and other species found within the area. While not overly detrimental to the end survey results, a higher level of species specificity in the research design phase would have contributed to the survey. It is clear that buffalo and the Pink Mountain area of BC are important to the HLFN and the species and geographic area should have been incorporated into the survey.

Other Category omissions included Mushrooms, Duck and Geese Eggs. It should be noted that given that Duck and Geese Eggs were not identified researchers often had to make a judgement call on what data layer these should be assigned to. In some cases they were listed as “XB” – Other Birds or in some cases as “XP” – Other Plant and Earth Material gathering sites. The choice made by community researchers in each case was documented within the audio recordings, transcripts and within the Interview Master List within the Catch All Code section. In any future research mapping work, such values and associated community activities should be broken out as a discreet category.

Further definition in the fish categories would have improved the overall comprehensiveness of the survey. Perch, Brook Trout, Suckers and Mountain Grayling were fish species identified by respondents not identified or broken out as discreet categories. As is often the case, it also appears that some respondents who identified Pickerel kill sites were likely referring to Walleye kill sites. However, the use of Catch all Codes for these species helped identify them as unique caught and killed species.

Meat Racks another category identified by respondents not, set in the research design phase. These were most often identified by community researchers as “XCS” – Other Cultural Site. Another Overnight Site omitted from the categories that arose a handful of times – was instances where people stayed overnight while hunting in a trailer or car. Such sites were documented as “XOS” - Other Overnight Site.

## 9.2 Geographic Scope

The geographic scope for the survey was very large given the anecdotal evidence provided by community members regarding the far flung nature of their activities. Based on this information, the HLFN selected 25 base maps at a scale of 1:250:000 as it was felt that this would be sufficient to capture the full range of extensivity of use. For the most part, the HLFN did capture the vast majority of activities within this geographic area. However, it failed to include a base map that took in the Upper Halfway River, Sikanni River and Pink Mountain areas. As it turned out, a significant number of HLFN community members interviewed reported ongoing use of these areas. As noted in the prior section, Pink Mountain carries some special significance, as people will go to hunt and kill buffalo. Other species were also killed in this area, incident to the hunting of buffalo.

It wasn’t until the interviewing was half way complete, that researchers identified this issue to the Research Director. Some discussion occurred as to whether a 26$^{th}$ map should be added to take in the Pink Mountain area. It was decided that it was best not change the geographic scope mid way through the data collection process to create mixed results. Thus researchers continued to document use within the Pink Mountain, Upper Halfway and Sikanni River area by noting such use within their Scribble Pads for follow up.

It may advisable for the HLFN to undertake a second interview session with those community members that reported large mammal kills sites and other land use activities within these areas.

## 9.3 Marking of Habitat Vs Kill Sites

The primary objective of the HLFN TLUS was to mark wildlife kill, fish catch, gathering and overnight camping sites. The research was consciously designed to specifically exclude the marking of wildlife and plant community habitats. The measures taken to guard against this is documented throughout this Methodology Report.

This important distinction was discussed at length with HLFN staff and community researchers. Considerable time was taken to being attention to the implications if the survey diverted from marking kill, catch and gather sites to marking the habitats that support and make these activities possible. Specific cues and prompts were imbedded into the Questionnaire and the Data Collection Manual.

In a review of Bio Maps, interview transcripts and audio tapes, it is evident that community researchers stuck with the primary objective and adhered to standard methodology in the vast majority of cases. This is borne out through the identification and marking of over 6600 distinct sites. Thus kill, catch, gathering and overnight sites – were being marked for the most part - not habitat. However, the HLFN was able to pick up limited instances where habitat marking occurred. Based on HLFN's review marking of habitat was very limited and clearly the exception rather than the rule. For example the HLFN notes the following instances where "Moose Licks or "Salt Licks" were identified:

- Interview of Community Member PIN 107 — 2 lick sites
- Interview of Community Member PIN 010 — 2 lick sites
- Interview of Community Member PIN 300 — See Below

Documents discussion and possible mixing of lick sites with moose kill sites where large number of moose were killed within living memory

- Interview of Community Member PIN 313 — 6 lick sites

Early on in the interview process (based on a review of the audio tape of Community Member – PIN 107), the Research Director identified that 2 lick sites had been identified and marked. In the discussion with the community researcher, the researcher felt very strongly that such wildlife features were important to mark given that is were many of the kill sites can occur and the importance of such sites to traditional hunting practices of the HLFN. The agreement then was to clearly identify when such sites were identified so that these could be clearly identified within follow up report writing.

In the case of the interview with a community member (PIN 300), the person had killed so many moose and elk at a set number of licks, there appears to be some level of confusion over what is being marked. The interview transcript documents this inversion.

The HLFN has clearly identified this limited occurrence as it relates to the above interviews. Overall, the incidence of habitat marking appears to be very limited and the overwhelming majority sites identified and marked on the maps were kill sites and not mineral or salt licks. The overall impact of this departure from methodology in these cases is held to be limited as the lick and mineral lick sites are very small specific sites were marked – as opposed to demarcating large swaths of land through the use of polygons.

## 9.4 Marking and Use of Large Polygons

As noted, the HLFN invested considerable time and effort into considering the merits and drawbacks of undertaking a map biography that was predicated on the identification of specific activity sites. In the end and for purposes of this specific survey, it opted to follow the recommendations set out in *"Living Proof"*, which recommends against the use of large polygon mapping.

Various measures were implemented that guarded against the adoption of large polygons. The matter was discussed at length with community researchers where buy in was created to mark specific kill, catch, gathering sites as opposed to large areas and landscapes in which such activities occur.

Yet despite the internal agreement obtained and conventions employed, a few large polygon areas were identified on the Bio Maps of two (2) HLFN respondents. The HLFN undertook a careful review of the corresponding interview transcripts with community researcher to determine the rationale for their use. These include:

- Interview with Community Member (PIN 110)
- Interview with Community Member (PIN 114)

It appears that polygons were employed by one researcher in these two interviews when he came to a situation where the respondents had indicated that he had killed 20 mammals in a given area. The area appears to have been so prolific and produced such positive results over the respondent's life time; it seemed that identifying the area was important and the best alternative in this case. From a research stand point, it would have been better for the interviewer to remind the respondent that they were only trying to indentify "some" of the sites and attempted to mark one or more examples within the

area. In the alternative, using a Swiss cheese polygon would have provided more desired specificity in these two instances.

The polygons identified will clearly stand out within the HLFN end product maps and these two areas may be subject to some scrutiny given they do represent a significant departure into the standard methodology and agreed upon conventions. However they are also important given that they stand in contrast to the rigour in which all community researchers employed in the vast majority of interviews, for the vast majority of sites identified, throughout the research process.

## 9.5 Lack of Use of “A” – Approximate Location Coding

One of the agreed to data marking conventions was to add the suffix “A” to feature codes where a respondent did their best but could only identify the best approximate location of a kill, catch, gather, overnight or other category site. This useful and important convention was discussed in training and included within the Data Collection Manual. However the Research Director failed to reinforce the importance of this device in follow up auditing of researcher’s work. Rather he made the assumption that this convention would have been employed when relevant.

As interview transcripts began to be produced and reviewed during the interview process, it became clear that the convention could have been employed in numerous cases and that the Bio Maps and end product maps would have benefited from this visual clarification. The HLFN undertook a careful review of the interview transcripts and noted where the Approximate code could have been employed within the Interview Master List. From a review of the transcripts it appears that the use of the approximate code could have been employed in seven (7) instances. The HLFN surmises that if the use of the “A” code had been more thoroughly engrained, more sites would have been coded as such, providing a higher confidence level in precision in which the sites were identified.

However a review of transcripts and audio tapes also reveal a high level of diligence by interviewers in prompting and some cases pushing, respondents for precise locations for the vast majority of sites.

## 9.6 Map Scale

The HLFN opted to map at a scale of 1:250 000, a scale that was suitable to document extensivity while meeting the primary objective. Even at this scale, the HLFN was required to use 25 base maps – a considerable number of maps that added to the

complexity of the exercise. Mapping at a scale of 1:50 000 would have been unadvisable and potentially unmanageable.3

The HLFN ensured that the interviews were conducted in well lit rooms and made illuminated magnifying glasses available to respondents to support the accurate and precise location of sites. Further, additional mapping books were made available that contained more detailed data on access roads.

Notwithstanding, in seven (7) cases out of 92 interviews, respondents remarked that they had some difficulty in locating some of the sites due to the small scale of the maps and that fact that topographic base maps did not include the most up to date seismic lines, pipeline ROWs and access roads. In these (7) seven cases, map scale and lack of up to date access road and seismic data might be found have some effect on the reliability of some of the marked sites.

With this said, the transcripts, interviews and comments from researchers all tend to indicate that the majority of respondents were able to carry on the interviews which led to the identification of over 6600 sites.

## 9.7 Recall

In a review of all interview transcripts, it appears that one third of the respondents from time, to time had some challenges in recalling specific sites and clearly all of the sites where they killed mammals, caught fish, gathered plants, stayed overnight etc.  There is evidence within the verbatim transcripts of these respondents casting back in time to recall all of the specific locations. However the same transcripts show considerable effort and work by respondents to locate some of the sites that they could recall, acting as an indicator of overall reliability.

## 9.8 Fish Identification

The vast majority of respondents were able to identify what specific fish species they took at specific sites. In (5) five cases, there are instances where respondents struggled with identifying the specific species of fish they caught at specific sites. In most cases, the community researchers used the appropriate Catch All Code (“Other Fish”:XF)  to reflect the uncertainty about species under discussion. However it should be pointed out the uncertainty relates to the identification of certain species in certain cases, however specifity was achieved in relation to the activity and specific location.

A fish identification guide was made available, however it was clearly not used as much as it could have been. In any future work, a fish identification guide should be built directly into each category question to assist respondents in providing as many assured responses as possible.

## 9.9 Interviewer Burn Out / Cases of Rushing

In two (2) cases, the Research Director indentified an emerging pattern where it appeared that two (2) researchers were rushing. In once case, toward the end of the interview process, the Research Director saw a pattern of data marking and map labelling issues emerge indicating some lack of attention to detail in relation to certain aspects of data marking. These were discussed and corrected with community researchers and noticeable improvements occurred.

In one case, it appeared that the one researcher was feeling rushed and undertook four (4) interviews on May 30th and four (4) on June 22nd. This arose as this researcher was also undertaking some other projects and felt like *“he needed to get them in while he could”*. On a review, there do not appear to be an inordinate number of issues arising (e.g. data marking issues, etc) in these interviews in relation to other interviews undertaken.

On or about June 6th, map labelling issues began to emerge with one community researcher’s maps. This potentially indicates a level of burn out, however again in this case, there does not appear to be an inordinate number of other issues arising within the interviews or data marking. Labelling issues were addressed as the interviews proceeded from there on.

## 9.10 Verbal Anchoring and Chasing Data Diamonds

Community researchers employed verbal anchoring through their interviews. The audio tapes and transcripts clearly capture the process of the identification of a site by a respondent, then the community researcher confirming the location and announcing the feature code as they marked the site. This habit and data marking convention was applied well and consistently though out the majority of all interviews (with the rare exceptions of where audio recorders failed and did not capture portions of the interview).

As noted, the HLFN set out document land use facts by employing the Data Diamond model, however at very basic level. The research and questionnaire was designed to capture the who, what, where and when for every identified land use site. However the

HLFN did not attempt to capture exact dates of activities at sites to guard against burn out and address response burden issues. The Primary Objective required that respondents be able to identify those sites where they undertook land use activities within living memory. HLFN did this so as not to create an additional level of complexity that may have made the exercise more difficult to manage and result in failure to accurately document the spatial aspects of land use facts. In retrospect, given that the community research team was able to implement the research plan and established conventions, HLFN feels that it could have added a more detailed temporal aspect to the research.

## 9.11 Respondent Marking Data and Observer Prompting

Three (3) instances were documented were interviewers let the respondents mark the sites on the maps, and the interview then filled in the leaders and feature codes. This practice was discouraged and for the most part, it appears that in vast majority of cases, respondents marked data. The transcripts pick up instances of where the researcher encourages the respondent to use both the pencil and magnifying glass to pin point sites.

In one interview (Pin 008), an unidentified observer is sitting in. The interview recording and transcript picks up some discussion between the two and conferring on up to three (3)sites. This was incorrect and this exchange could be taken as influencing the respondent. However, this instance only appears to occur once in the whole set of interviews. What is important is that all interviews were conducted on a one on one basis, to ensure that the respondent was identifying sites that had personally been to and participated in a land use act or activity.

## 9.12 Audio Recorder Errors and Malfunctions

Issues emerged with one (1) researcher over the course of three (3) days. In the case of one community member (PIN201), the recorder appears to have shut off and did not record. Thus the audio recording and transcript are silent on sites 39 though to 45. In one case (PIN 202), no recording was made and in a second case (PIN 203), the recorder did not pick up the interview until site is discussed. This issue was flagged and resolved by the research director and researcher, however this represents a flaw and potentially undermines the validity and ability to audit the data marked on these maps. However, the a review of the Map Biographies for PIN 201, 202 and 203 reveal application of standard and agreed to data marking conventions.

## 9.13 Marking of Traplines

As noted HLFN opted to defer trapping and the marking of traplines to a subsequent time and study effort. Notwithstanding, numerous respondents indicated they had trapped on traplines or that a line or Registered Fur Management area had been held and utilized by their family for some period of time. In one case, (PIN 308), the researcher marked on a trapline as “TL 103”. This represents a departure in the standard methodology as in the first instance, interviewers were to only make note of whether a respondent had trapped in their Scribble Pad and Interview Record Forms . Secondly, the researcher assigned a non – existing feature code to the Trap Line – (TL103). This again occurred within the interviews of PIN 318 (“TL 54”) and PIN 320 (“TL56”). These were drawn as polygons which may cause confusion at the mapping stage and depict a feature that was not to be marked in this specific survey. Notwithstanding, this occurred only (3) three times within the context of this survey and this limited occurance does not overly skew the appearance of the maps or the effect the majority of recorded data.

## 9.14 Specific Data Marking Conventions

Overall, community researchers did a very good job at applying the agreed to set of rules and data marking conventions throughout the map survey. However, as part of its methodological analysis, the HLFN reviewed and identified instances where there were departures from standard methodology. These can be viewed in detail by viewing the Interview Master List **(Appendix L).** A summary of some of the infrequent but common mistakes made are listed below:

- Points being drawn too large effecting precision

- Marking of sites and feature codes at times with medium markers vs. fine somewhat degrading precision in these cases

- Not using a second map when map data becoming too crowded – in some cases researchers did a good job in using good appropriate length leaders to lessen crowding. However in some cases, portions of a few map sheets were crowded. While the feature codes are clear, a less crowded map would have assisted digitizers down the road

- Use of large polygons where examples of specific kill sites or use of Swiss cheese polygons would have provided more specificity (see Section 9.4)

- A few cases of floating codes however the leaders do point to the sites and visually connect sites with feature codes

- In some cases, researchers began to use single colours to mark feature codes that detracted from the contrast that could be achieved through using runs of colours

## 9.15 Feature Code Inconsistencies

An additional review of all mylars sheets revealed a limited number of instances where incorrect / non – existent feature codes where recorded by interviewers. The following codes were identified on the maps, however there were no categories associated with these codes. Many of these were identified in the review of the interview transcripts. However, these are broken out and indentified for reference purposes.

AT
BJE  BK
blank
BU
BV
CD
CE
CO
Copy
Default
DR
E
EI
FN
GS
GU
JI
M
ME
MI
MWT
NP
NP
OF
OM
OT
PK
PR
RB
RD
RR
RS
SB
ST
TF
TL
TP

WF
WY
XA

In addition to the above noted deficiencies, there were 88 features identified on the mylars which did not have numbers associated with it.

Thus, overall there were 129 inappropriately applied feature codes / missing feature codes found to occur within the 92 interviews that resulted in the identification of a total number of 6649 sites. In another way, there were approximately 1.4 feature code labelling mistakes made per interview on average. 6520 of the 6649 sites were marked with appropriate and set feature codes.

## 9.16 Interview Transcripts

The HLFN has opted to have the interview transcripts redone at some point in the near future. The transcripts were produced in a way that ensured that key details regarding sites were documented and that a data diamonds were established for each site (Who, What, Where and When). However, on a review and a comparison of the audio recordings and the transcripts, it appears that the transcripts don’t pick up the totality of the interview discussion. The majority of the missing discussion relates to the dialogue occurring as a respondent is recalling sites and conferring locations with the community researchers. This was discussed during the interview process and it was determined that this was the best that could be achieved with time and resources available. While not critical, capturing this dialogue would provide added support and validity to the identified and marked sites.

## 9.17Analysis Summation

Ultimately, it will be up the HLFN community and external parties to determine whether the HLFN maps are believable and based upon a defendable and supportable set of land use facts. The gap analysis undertaken above provides some strong indication and evidence that HLFN researchers carried out and implemented the research in a manner consistent with its original research design. Clearly, as noted, there were some departures from the set methodology as there is in most research programs. As noted, there were some limited instances of methodological deviation which produced varying results in the interviews. In some cases, equipment didn`t work properly or a series of data from an interview lost.

Thus the question is whether these departures and variances represent the exception rather than the rule and to what extent did they negatively affect the map survey`s results and the resulting maps themselves.

The HLFN takes the view that its TLUS research project was designed according to a recognized social science standards and the best practices and prescriptive standards set out by Tobias within ``*Living Proof*``. Its subsequent review and analysis of the actual way in which the land use data was elicited and documented, strongly indicates and provides evidence that the research implementation mirrored the initial research plan and that the map data goes a long way in satisfying the data quality standards of Objectivity, Reliability, Validity, Precision, Accuracy, Integrity, Auditability and Representativeness. Thus HLFN takes the view that the resulting TLUS maps are believable and purport to represent what they say they do. The aim of this Methodology Report and its companion Research Proposal document is to support other parties in considering, testing and hopefully validating this view.

## 10.0 Country Food Harvest Survey Question

While the HLFN concentrated on collecting species and activity specific data on traditional and vocational land use within the map biography research, it opted to add in a section with its Questionnaire related to the consumption of, and reliance on country foods. From HFLN's perspective, it made sense to utilize this opportunity (where up to 100 community members were being interviewed) to gather some quantitative data in relation to respondent's consumptive patterns.

Questions were designed and posed to illicit information in relation to preferred fish and wildlife species, the numbers of days in week / month in which country foods are consumed and average estimated serving portions. Questions were also posed in relation to berries.

It should be noted that this effort was undertaken incident to the traditional land use survey and cannot be considered as a full, bonafide country food harvest survey. Notwithstanding, the HLFN have gathered some important data that will be broken out, analyzed and written up as a supporting document to the TLUS.

## 11.0 Community Stewardship and Data Maintenance Plan

As noted at the outset of this report, the HLFN has undertaken two prior attempts to document traditional use and traditional knowledge information. Two maps are all that

remain of these studies, with supporting documents and interview data being lost or misplaced through time. For example, HLFN has one TLUS map with an accompanying but limited data base that speaks the nature of values present. Both the HLFN and external parties have determined that the data depicted on the maps is not supported with enough evidence and methodological description so as to put the data to much use. For example, if the HLFN attempted to assert that the Crown consult it based on such data, the Crown would have a good reason to ignore such a request given the state of the mapping and supporting data. Further, if HLFN was ever required to litigate on some issue, it is highly doubtful whether the TLUS maps produced would be given much weighting by a court.

The HLFN is not alone in this predicament. Many First Nations have undertaken TLUS programs and acquired the GIS software and hardware, only to have these investments, tools and data often go unused or lost through successive administrations. The HLFN does not want history to repeat itself in the case of the current TLUS research project. The HLFN believes that this data represents the collective cultural memory of the HLFN and as much, must be preserved for posterity's sake and to support the HLFN's long term needs and goals in relation to having its rights respected and acted upon.

The HLFN has begun to undertake research on how successful First Nations have been able to act as stewards of their community's data over the long term and protect the data from being degraded or lost through time. The HLFN is aware of the situation of several First Nations in north – western BC. Decades of land claims and TLUS research was lost due to an act of theft and arson.

More importantly, HLFN undertook this research for an important purpose. HLFN needs to rely on, use and build on this initial set of baseline data. Thus while no TLUS community stewardship plan is in place yet, some of the components under considered include:

- Preserving primary research materials (e.g. copying end copy maps and accompanying reports, copying or photographing the Mylar Bio Maps, making backup copies of the audio tapes on computer disc and making copies of interview transcripts)

- Creating an onsite secure (on reserve) and off site (off reserve) secure repository for all TLUS related data. A redundant back up site would protect the information, should either site be compromised (e.g. through fire, flood, damage, theft etc)

- Creating a community stewardship positions (outside of Chief and Council and the Administration) who would be charged with the task of acting as curator and steward for the information

- Potentially consider publishing the maps and key reports so copies could continue to exist in public archives (however, such an option would have to be carefully weighed and considered by the community)

## 12.0 Confidentiality and Information Ownership

This project has been conducted by the Horse Lake First Nation for the Horse Lake First Nation and the people of Horse Lake. All information, data and maps presented and depicted belongs to, and is held to be intellectual property of the HLFN. The maps, data and all supporting documents produced under the auspices of this map biography survey may not be distributed and reproduced without the express consent of the HLFN.

Further the Map Biographies (Bio Maps), Audio Recordings and Audio Transcripts produced during interviews with HLFN community members are considered as confidential, and all third parties are expressly prohibited from distributing or reproducing these without the express consent of the HLFN and the HLFN community members / individuals who contributed this information during the interview process. At no time will HLFN disclose the name of participating respondents, unless that respondent consents in writing, to such disclosure.

The HLFN can and will share unnamed an limited samples of Map Biographies, Audio Recordings and Audio Transcripts with third parties to assist the auditing of map biography data and assessment of methodological rigour applied during the research process.

## 13.0 Acknowledgements

The HLFN wishes to acknowledge all those who have assisted and helped in carrying this research project through from its inception to its conclusion. First of all, it wishes to acknowledge and thank all those community members who agreed to participate in this map biography survey. Their contributions and knowledge will now always be there to assist their families, community and nation into the future.

The HLFN also wishes to acknowledge its elders and knowledge holders who have given support to this initiative though providing guidance and participation in the research.

Thanks and acknowledgement also need to be extended to the Horse Lake First Nation Chief and Council and the Horse Lake First Nation Industry Relations Corporation who

have supported and provided encouragement to make this important cultural research project a priority a reality for the community.

The HLFN wishes to acknowledge and thank the community research team who ultimately made this project work, be responsible to and conducted for the community. Thanks and gratitude go to Karen Horseman, Sylvia Anderson, Jayme Savard, Scott Belcourt, Jenny Garneart and Audrey Horseman.

The Horse Lake First Nation Chief and Council also wishes to acknowledge and thank BC Hydro and the BC Hydro Site C Team for supporting this project and working with the HLFN in proactive way on this project so that HLFN's values, goals and principles guided this project and underlay the end results. BC Hydro's financial, in kind and co-operative planning support enabled this project to succeed in meeting its objective and the interests of both parties. Specifically, the HLFN wishes to acknowledge and thank BC Hydro employees Debbie Seto-Kitson, Michelle Macdonald, Hugh Smith, Darcy Hill, Anre McIntosh and Trevor Proverbs.

Last of all, the HLFN wishes to extend its thanks and acknowledgements to Mr. Terry Tobias. This map biography survey work is based on his life`s work and contribution the field of traditional land use and occupancy mapping.

## 14.0 Sources

Elias, Peter Douglas. 2004.*Standards for Aboriginal Cultural Research in Forest Management Planning in Canada.* Calgary: *Prepared for Canada`s Model Forest Network Aboriginal Strategic Initiative.*

Tobias, Terry N. 2000. *Chief Kerry`s Moose: A Guidebook to Land Use and Occupancy Mapping, Research Design and Data Collection.* Vancouver: Union of BC Indian Chiefs and Ecotrust Canada.

Tobias, Terry N. 2009. *Living Proof: The Essential Data-Collection Guide for Indigenous Use-and-Occupancy Map Surveys*. Vancouver: Union of BC Indian Chiefs and Ecotrust Canada.

## 15.0 Appendices

A. HLFN TLUS Research Proposal

B. Confidentiality Directive

C. Category Quick Reference Sheet
D. Interview Procedure Checklist
E. Questionnaire
F. Photos of Community Researcher Tool Kit
G. Index Map
H. Interview Forms Package
    -Interview Procedure Checklist
    -Consent Form
    -Confidentiality Directive
    -Honoraria Form
    -Interview Record Form
I. Data Collection Manual
J. Interview Transcript Example
K. Photos from Training Week and Bio Map Check
L. Interview Master List
M. Maps
    - Hodgepodge Map
    - Category Maps
    - Thematic Maps

# Appendix A

# HLFN Traditional Land Use Survey

# Research Design Proposal: Amended

# Horse Lake First Nations

# Traditional Land Use Survey

## Research Design Proposal: Amended

**Horse Lake First Nation 2011 Traditional Land Use Survey**

**March 2011**

M. General

## Background

The Horse Lake First Nation (HLFN) has identified a critical need to undertake a traditional land use survey to document historic, current and ongoing traditional and cultural land and resource use activities. The HLFN has opted to use the map biography process – an established form of quantitative research and approach to traditional land use surveys.

This Research Design Proposal documents early research design decisions and sets out, at a higher level, how the HLFN intends to undertake further detailed research planning and implement the research plan. A key focus of this document is on the methodology to be employed both in the research design and implementation phases.

The HLFN has opted to predicate this specific TLUS project on the methods and standards described and advocated in the comprehensive text, *"Living Proof: The Essential Data Collection Guide for Indigenous Use and Occupancy Map Surveys"* written by Mr. Terry Tobias. This text represents one of the first comprehensive academic efforts to describe and set out best practices and written standards in relation to the conduct of traditional land use survey mapping projects grounded within social science framework.

## The Map Biography Survey

The elected research method (the means by which data will be documented and collected) will be the map biography survey method – a form of quantitative research that permits the empirical identification and documentation investigation of socio – cultural activities. As such the research the process is rigid, highly structured and focused on the acquisition of socio – cultural data.

As a form of quantitative research, stands in stark contrast to other forms of qualitative research that seek to explain and describe socio – cultural phenomena. Thus in this survey project, the HLFN set to document socio – cultural activities occurring on the landscape by HLFN community members, *not* setting out determine why these activities are occurring, the importance of such activities and how such activities are changing in response to various stressors and bio – physical changes.

There are of course benefits and limitations with the quantitative research and map biography approach. One of the benefits, and why HLFN (and so many other First Nations have done so) elected the map biography research method is that it permits the collection of large amounts of data in an orderly and time and cost effective manner.

The key components of the map biography method that HLFN will employ involves the following key components:

- Obtaining community input and direction on research priorities
- Defining the Primary Research Objective
- Identifying specific categories or cultural activities that were consistent with the Primary Research Objective that HLFN saw relevant and important to map (e.g. Moose kill sites, Jack Fish catch sites, Food Plant gathering sites)
- Developing a Data Collection Manual that sets out clear rules on how the research is to be conducted and data collected
- Selecting community researchers and undertake sufficient training in the use of research tools and consistent application of research conventions
- Developing a standardized, fixed Questionnaire with questions aimed at gathering data in relation to all selected Categories
- Undertaking ongoing communication with the community as the purpose and timing of the survey research program
- Defining the Population Sampling Frame and interview selection criteria
- Coordinating interviews with selected respondents and administer the Questionnaire with all respondents in one on one Interviews
- Recording and documenting interviews and marking cultural use data (activities and events) on Mylar overlays utilizing a standardized coding system and according to fixed rules and convention
- Preparing verbatim interview transcripts from the audio recordings
- Transferring data from Mylar overlays and digitize them onto end mapping products including:
    - Map Biographies – One map displaying data for all questionnaire categories for a single respondent

- Category Map – One map displaying all data for all respondents for a single questionnaire category (e.g. Moose Kill Sites, Bull Tout Kill Sites)

- Thematic Map – One maps displaying data for all respondents for a selected group of related questionnaire categories (e.g. Large Game Kills, Ungulate Kill Sites, Fish Kill Sites)

- Hodgepodge Map – A single map displaying all data for all questionnaire categories from all respondents

- Developing Draft Methodology and Public Reports

- Review with community

- Implement the research results and utilize the mapping products

As noted, given that there has been a dearth of academic source work to guide the design of TLUS methodology and planning and implementation of TLUS project, the HLFN feels compelled to base this map biography survey project on the prescriptive set of standards contains with Terry Tobias' *Living Proof: The Essential Data – Collection Guide For Indigenous Use – And – Occupancy Map Surveys.* The full citation of the text is as follows:

*"Living Proof: The Essential Data – Collection Guide For Indigenous Use – And – Occupancy Map Surveys":* Terry Tobias

Published by Eco – Trust Canada / Union of BC Indian Chiefs

2009: British Columbia

ISBN 978 – 896866 – 07 - 0

## Primary Research Objective

The HLFN is at an important and critical juncture in its history. Like many other First Nations of the Upper Peace, the HLFN have witnessed unprecedented changes within Upper Peace region and much of its traditional territory over the past fifty years. Oil and gas, agriculture, mining, forestry, hydro development and urban – rural expansion has

transformed the boreal forest, it's critical habitats and consequently the eco-system relied upon by indigenous people of the region.

Such rapid change has resulted in health, cultural, socio – economic and overall societal change for the HLFN. HLFN has and continues to make the case to Crown representatives for the need to study, assess and address such impacts and change on their community and their rights. As such, HLFN has a very large research agenda with the need to collect data and information on an array of inter-related cultural research subjects and values. Given this long term goal of conducting qualitative and quantitative interlinked, it makes sense for HLFN to begin with establishing an initial baseline map survey of traditional and current usage of its lands.

Thus when approaching the map biography survey project, HLFN feels compelled to identify and capture as much data as possible. Notwithstanding, it is abundantly clear to HLFN that it cannot and should not attempt to map all of its cultural use information, so as not to make the task unmanageable and dilute its research efforts and focus. Given there is a need to define the Primary Research Objective for the research as this time.

The core of HLFN's way of life has been based on the utilization of bush resources and commodities. Hunting, fishing, trapping and gathering sustained generations of HLFN families and such socio – cultural activities continue to play a key role in the way of life and the community. As with other First Nations in north eastern BC and north western Alberta, trapping as an economic pursuit poses has declined. Thus it makes sense to focus on categories (specific land use events, actions and activities undertaken by HLFN community members) that are representative of the over arching activities of hunting, fishing and gathering. Categories need to be based on those species that are of critical cultural importance to the HLFN – such as Moose hunting.

Initially (in February 2011) HLFN articulated the following as its primary research objective for the traditional land use survey:

*"The Horse Lake First Nations will conduct the Horse Lake First Nation Fish and Wildlife Traditional Land Use Survey to document historical and current hunting and fishing kill sites occurring within riparian forests within the its traditional territory".*

The primary research objective was refined, prior to the conduct of interviews and researcher training in March 2011 to provide greater clarity and focus for the research effort:

*" The primary objective of the Horse Lake First Nation Traditional Land Use Survey is to document some of the HLFN's hunting and fishing kill sites and earth and plant material gathering sites with the overall goal of identifying areas of historical and ongoing critical community use".*

The Primary Research Objective will shape all subsequent and more detailed aspects of research design to come.

## Project Principles for the HLFN TLUS

The following sets out the key principles and a brief overview of the measures that HLFN will undertake to engage those principles in all facets of the project:

***Respect:*** While there are many external reasons driving and creating the need for this map survey project, HLFN is ultimately designing a product and tool to address the community's research needs and goals. The foundation of the project will be based on respect for HLFN community members – those who hold the knowledge and exercise their rights on the ground. In conducting a map survey project that is grounded in respect of its community members, HLFN will incidentally produce a set of maps that support HLFN in producing evidence and data of its historical and current use of lands and resource. Such information will also be used to support HLFN efforts to engage government agencies and project proponents in project consultations, environmental assessments and be used as solid basis for future community driven research efforts.

***Confidentiality***: HLFN is undertaking this survey project with the aim of creating of a spatially explicit data base of cultural and traditional uses of its community. One of the reasons for doing so is share this critical and important information with external parties to support HLFN's participation in environmental assessment and consultation process. And ultimately have its community's concerns, rights and interests addressed.

Thus a certain level of information must be shared with external parties if the data is to achieve the desired goal. However, HLFN intends to do so in a way that ensures confidentiality of respondents. As such HLFN will share certain end products with external parties to support the goal of having its rights, interests and concerns addressed with consultation processes. Thus HLFN will share the end mapping products – the Hodgepodge Map, Thematic and Category Maps with parties where an appropriate information sharing agreement is in place. The HLFN will not share Map Biographies, Audio Recordings and Interview Transcripts of respondents. It would only share portions of this information for auditing purposes and the above components in full only where the respondent consents to do so.

A Confidentiality Directive has been developed and issued by the Chief of the HLFN to set out the above principle and the importance that HLFN is attaching to the principles of confidentiality. This directive will be reviewed with all interview participants at the outset of each interview to ensure that there is a shared understanding of the purpose,

objectives of the survey, intended uses of end mapping products and the measures to be implemented to achieve a high level of confidentiality.

***Informed Consent*** : An important principle is to ensure that research participants understand the purpose of the research, how the data and information they provide will be utilized and providing their explicit free and informed consent to be engaged in the research. HLFN will draft and utilize a permission form in the interviews. It will be reviewed at the outset of every interview and signed off prior to the commencement of the interview. The Consent Form will be reviewed with participants in concert with the Confidentiality Directive. .

***Minimizing Response Burden:*** HLFN will structure its approach to interviews with the goal of obtaining reliable information while reducing response burden, so as to avoid impacting key data quality standards. This will be achieved through the focused research based on the Primary Objective, a reduced number of categories and utilizing the “Two Hour Rule of Thumb” – where interviews generally don’t exceed two hours in duration.

***Minimizing Interviewer Burn Out:*** HLFN will hire four community interviewers to reduce over reliance on one interviewer. It will also hire an individual to prepare transcripts of the audio recordings to avoid over burdening the interviewers and allowing them to focus on methodology and the consistent application of research conventions. As the interview process has been geared to guard against response burden through the Two Hour Rule of Thumb principle, it has been geared to avoid burning out the community researchers. Further, utilization of tools such as the Questionnaire, Data Collection Manual and other key forms will help reduce the amount of memory work that community researchers will have to take on – rules and conventions will be set in clearly written prompts to assist researchers along the way.

***Focus:*** HLFN has a well defined primary objective that will keep the project manageable with a realistic set of outcomes and expectations. The limited number of categories set out in the CA will assist in maintaining the research focus.

***Flexibility:*** While HLFN will strive to adhere to the methodological approach set out in Living Proof, it will apply flexibility where it makes sense to do so and in the interest of completing the project in a reasonable time frame. Flexibility will be built into key tools that will allow interviewers to conduct the interviews in a flexible manner to match participant’s response preference, while ensuring that the Questionnaire is administered consistently and that all methodological rules and procedures are followed.

***Simplicity***: Questionnaires will be kept straightforward with questions structures around the required categories – which will produce the sought after data that is consistent with the research objective.

***Consistency***: HLFN will take considerable effort in all interviews to apply the same methodological approach. Within the training, agreement will be obtained about the application of critical research conventions. Again, a careful approach to training, provision of support and rigorous use of tools such as the Data Collection Manual will assist in the implementation of a consistent approach and application of data recording conventions. The project's research design and implementation will be predicated and focused on achieving a high level of methodological rigour.

***Organization:*** Tools such as the Interview Procedure Checklist will support an organized and consistent approach to each interview. In addition, the Research Notebook and Interview Master List, Interview Record Form will support the conduct of sound project management.

***Caution:*** In the past, HLFN has utilized government handbooks that provided guidance on the conduct of map surveys, where the use of larger polygons was deemed as acceptable. The approach taken to (e.g. hunting) was to have a community members identify the extent of key hunting areas they utilized through their life and the various activities associated with the act of hunting. HLFN will guard against over reporting through the use of site specific data where appropriate.

***Self Reporting***: In undertaking this map survey project, HLFN sees the opportunity and importance of supporting HLFN elders and community members in documenting the knowledge and history that has been passed on to them from previous generations. This is a fundamental aspect of the HLFN's community that allows for the transmittal of culture. Flexibility and respect will govern the interview process to allow and support respondents to convey the information and knowledge that they feel should be recorded. HLFN will focus on marking specific sites where they have personally killed animals, caught fish, gathered earth material and overnight sites that they stayed at. However, community researchers will also make notations in interviews, within the tapes and scribble pad of knowledge that has been passed on to respondents from others that academia would regard as "second hand".

***Use of Data Diamonds***: HLFN has carefully reviewed the data diamond model for TLUS data recording set out in Living Proof. This approach will be discussed in training and will act as the basis for information gathering data for each category capturing the who, what, where and when related to each land use data point or fact.

***Fun and Posterity:*** While this map biography research project is a serious undertaking designed to gather data related to HLFN community land use patterns, at the same time the HLFN is embarking on this process to engage the community in a constructive exercise to document is collective history on the land for future generations.

## Achieving Data Quality Standards

HLFN will conduct the map survey within the framework of social science with the goal of having its historical and current uses of the land understood and acted upon. If it is to achieve this and have it maps be perceived and taken as credible, a key focus of the project will be on obtaining and recording quality data.

HLFN will aim for data quality assurance through a consistent application of methodological detail and striving to ground all aspects of the project in the following eight quality standards:

1) **Objectivity:** HLFN will guard against the perception of bias to the degree possible by setting out the steps its project staff will take to strive for an objective approach in the research design and collection phases of the project. Examples of this include the design and administering of a questionnaire to avoid the asking of leading questions. The exacting use of data marking conventions will demonstrate diligence in recording data on maps and in audio recordings.

2) **Reliability:** HLFN will work to produce reliable maps based on data that will be collected in a consistent manner and based on a data collection method applied consistently across the board. HLFN will provide sufficient detail on the use of the Data Collection Manual, recording equipment and maps as evidence of the research method and survey tools were used consistently.

3) **Validity:** HLFN will ensure community input into research design and administer an interview questionnaire that is consistent with the project's primary objective and build in steps as proof of the application of a consistent approach. Auditing of mapping via audio recordings act as one test of data validity. Another test of validity would be a defendable approach to sampling within the study population. Adequate training for interviewers will be another indicator of validity.

4) **Precision:** HLFN will set out to create precise maps utilizing appropriate tools and conventions such as maps with an appropriate scale and data marking conventions to achieve the goal of having the mapped data's location equate to its actual position on the earth. Appropriately sizes pens will also be utilized to ensure a higher degree of precision in data recording.

5) **Accuracy**: HLFN will take steps to strive towards positional accuracy of data. Magnifying glasses and Google earth maps will also be projected on walls to assist respondents in pin pointing locations. Clear base maps void of

unnecessary detail will be utilized to assist respondents in providing true positions for data. Registration marks will also be used on Mylar overlays.

6) I**ntegrity**: HLFN will strive to ensure that data points in hodgepodge, category and thematic maps can be linked to the respondent via their bio map and audio recordings. HLFN will conduct one – on – one interview to ensure that data is traceable and attributable to the firsthand knowledge of a particular respondent. A key tool that will assist in tracking and linking data back the sources of information will include the Interview Master List.

7) **Auditability:** HLFN wants external audiences to hold its map products as credible and reliable. In ensuring this, HLFN will need to assist those audiences to understand how it came to such findings through transparent and accountable research. The Research Methodology Report will be the key document that allows external audiences to follow the methodology used, where the actual methodology diverged with this Research Plan and an assessment of the results of that divergence.

8) **Representativeness**: Overall, HLFN will be aiming for as a high a rate participation rate that is achievable with its budget. Given that the prime objective primarily relates to the identification of ungulate and fish kill sites, the survey will tend to document data from males, however, women within the community also undertake such activities within the community. A suitable sampling protocol will be used to achieve a representative population that will subdivide the population by age, gender, family and residence.

## Detailed Research Plan and Methodological Detail

The following is a forward looking plan and description setting out how the HLFN intends to conduct its map survey its methodology – or the underlying approach, principles and working assumptions:

**Project Name**

Horse Lake First Nations Traditional Land Use Survey – 2011

**Project Acronym**

HLFN TLUS 2011

**Research Framework**

HLFN proposes to undertake the proposed quantitative map survey project within a social science framework. The goal is to document specific historical and current usage to produce spatially explicit maps based on data obtained an derived through a science based approach.

**Research Method**

The Map Biography survey is a way of documenting the facts of person's use and utilization of the land, and in doing so converts them into data subject to verification. The key components of this method and the map biography method that HLFN employed involved:

- Obtaining community input and direction on research priorities
- Defining the Primary Research Objective
- Identifying specific categories or cultural activities that were consistent with the Primary Research Objective that HLFN saw relevant and important to map (e.g. Moose kill sites, Jack Fish catch sites, Food Plant gathering sites)
- Preparing a Research Plan that sets out the Methodology to be employed containing a description of the research framework, method, parameters, tools and conventions

- Developing a Data Collection Manual that sets out clear rules on how the research is to be conducted and data collected

- Selecting community researchers and undertake sufficient training in the use of research tools and consistent application of research conventions

- Developing a standardized, fixed Questionnaire with questions aimed at gathering data in relation to all selected Categories

- Undertaking ongoing communication with the community as the purpose and timing of the survey research program

- Defining the Population Sampling Frame and interview selection criteria

- Coordinating interviews with selected respondents and administer the Questionnaire with all respondents in one on one Interviews

- Recording and documenting interviews and marking cultural use data (activities and events) on Mylar overlays utilizing a standardized coding system and according to fixed rules and convention

- Preparing verbatim interview transcripts from the audio recordings

- Transferring data from Mylar overlays and digitize them onto end mapping products including:

    - Map Biographies – One map displaying data for all questionnaire categories for a single respondent

    - Category Map – One map displaying all data for all respondents for a single questionnaire category (e.g. Moose Kill Sites, Bull Tout Kill Sites)

    - Thematic Map – One maps displaying data for all respondents for a selected group of related questionnaire categories (e.g. Large Game Kills, Ungulate Kill Sites, Fish Kill Sites)

    - Hodgepodge Map – A single map displaying all data for all questionnaire categories from all respondents

- Developing Draft Methodology and Public Reports

- Review with community
- Implement the research results and utilize the mapping products

**Research Parameters**

The following Research Parameters will place stricture and bounds on the research providing shape and defining the next level of research design and detail:

Survey Primary Research Objective (Why)

There are many pressing needs and drivers that have given rise to this map biography project. A primary consideration is the need to produce a data set that provides examples and on the ground evidence of community use of lands and utilization of resources consistent with its treaty rights of hunting, fishing, gathering and other incidental activities. Further, a base line of defendable and supportable spatially explicit data is needed on which to base future qualitative research efforts.

Thus the Primary Research Objective for the map biography survey is proposed as:

*" The primary objective of the Horse Lake First Nation Traditional Land Use Survey is to document some of the HLFN's hunting and fishing kill sites and earth and plant material gathering sites with the overall goal of identifying areas of historical and ongoing critical community use".*

The defined and agreed upon research objective will drive all subsequent and more detailed aspects of research design.

Survey Population (Who)

The map biography survey method entails the interview of individuals to obtain first hand data, the individual ends up being both the subject of analyses and the unit of observation.

With the individual established as the unit of observation and analyses, the HLFN will undertake a level of statistical analysis of the community – the larger population base from which individual interview participants will be selected.

With the population sample frame established, the HLFN will establish criteria that will be to govern the selection of individual interview participants - in other words, to

determine who will be eligible to be interviewed. Criteria will address key considerations sex, age, residency, membership and contribution to the traditional economic of the community. Once the criteria are established, it will not be changed to ensure that it is applied equally to the sample population.

The HLFN will strive to obtaining as a high as participation rate as possible, however must do so within budgetary constraints.

Survey Time Parameter (When)

The HLFN proposes to utilize ``within living memory`` as the appropriate recall interval to address natural cycles and guard against response burden and interviewer burnout. Within Living Proof, Tobias spends some time cautioning communities about the complexity involved in trying to map different uses based on artificial divisions in a person's life. In the case of this project, the focus is being placed on creating a data set that is reliable and to keep the project as simple as possible to guard against issues that could cloud key data quality standards. Thus, interview participants will be asked to recall activities and events that have occurred within their lifetime.

This recall level will also capture both historic and current use patterns, which were and continue to be widespread. In the past (pre 1970), many HLFN members travelled many days in all directions, hunting, fishing and trapping as they travelled. Today, while land use patterns have changed, HLFN members find they now have to cover the same or greater distances given the reduction of fish and wildlife habitats and populations – the material difference is that they now use vehicles to travel to and from resource use areas.

Survey: Data Layers, Categories and Questions (What)

First and foremost, HLFN will set out to map extensivity rather intensivity. It will do so, given the wide ranging activities that have been documented to date by the HLFN in initial TUS research.

The TLUS will solely focus on those activities undertaken for subsistence, cultural and spiritual purposes and will not deal with those activities undertaken for commercial purposes such as commercial trapping and fishing activities. Further, HLFN purposely steer away from mapping habitat or those data layers generally associated with traditional knowledge or traditional ecological knowledge. Specific measures, prompts, preparation and community researcher training will be geared to key on kill sites, catch sites, gathering sites and overnight sites.

Thus the HLFN will focus its efforts and gear the Questionnaire and interviews on eliciting data on the following species specific and activity specific Categories: categories:

## CATEGORIES

### MAMMALS

| | | | |
|---|---|---|---|
| MO | moose | CU | caribou |
| EK | elk | MD | mule deer |
| WD | white tailed deer | BB | black bear |
| GB | grizzly bear | XM | other mammal |

### BIRDS

| | | | |
|---|---|---|---|
| DK | ducks | GE | geese |
| GR | grebes | GR | grouse |
| PT | ptarmigan | CR | cranes |
| XB | other bird | | |

### FISH

| | | | |
|---|---|---|---|
| WE | walleye | JF | jackfish (northern pike) |
| DV | dolly varden | BT | bull trout |
| RT | rainbow trout | AG | arctic grayling |
| WT | whitefish | GY | gold eye |
| LC | ling cod (burbot) | XF | other fish |

**PLANT and EARTH SITES**

| | | | |
|---|---|---|---|
| BR | berries | FP | food plants |
| MP | medicine plants | SP | sacred plants |
| CL | construction logs | FW | fire wood |
| SR | specialty rock | DW | drinking water |
| XP | other plant/earth site | | |

**OVERNIGHT SITES**

| | | | |
|---|---|---|---|
| CB | cabin | TT | tent site |
| LT | lean to | XOS | other overnight site |

**CULTURAL SITES**

| | | | |
|---|---|---|---|
| BS | birth sites | BP | burial places |
| OS | old settlements | CS | cache sites |
| SS | sacred sites | XCS | other cultural site |

These questionnaire categories will form the basis for the interviews and interviewers will ask every respondent about each of the above categories. In doing so, HLFN can ensure that the survey is representative of cultural use activities that have, and continue to happen on the ground.

In respect to the construction and administration of the questionnaire / interview questions, HLFN will utilize the “data diamond” approach to fact collection advocated within Living Proof to establish the following for each site / features:

- What activity is taking place?
- Who is undertaking the activity?
- Where the activity is taking place?
- When the activity occurred?

*Questionnaire*

HLFN will develop and administer a questionnaire in interviews with all respondents to ensure consistency across all interviews and to ensure that all identified categories are addressed. The questionnaire will be structured utilizing key words that are consistent with the primary research objective and obtaining data regarding the specified categories and will avoid asking leading questions

It should also be noted that HLFN interviewers will be asking respondents to indicate "some" and not all of the sites where they undertook a particular activity to manage the response burden and to attempt to have interviews undertaken within a two hour window and meet the " Two Hour Rule of Thumb" (THROT) principle.

The HLFN TLUS questionnaire will also be constructed with the following key ideas in the mind:

- naming of categories  indentify the specific kinds of features to be mapped during the interviews
- definitions for each category so that respondent and interviewer have the same understanding of what is being asked and answered to support good quality data
- provision of examples in cases of possible ambiguity to support good validity
- question based around each category and the data diamond model for fact finding and detailing to achieve prescriptive precision
- utilize key words to assist in assisting to define specificity of activities to manage response burden and support good quality data
- include prompts and reminders for interviewers to support good validity data and consistency in approach of conventions (e.g. through data collection manual)
- include helpful prompts and clarifications to assist respondent

**Research Tools**

HLFN will employ numerous devices and materials that will support data collection during map biography sessions.  HLFN will undertake care in the utilization of the

correct tools to ensure that the “map tool kit” to support the exercise of identifying, gathering and documenting precise and accurate data. At this time, HLFN proposes to employ the following tools:

Base Maps

HLFN will utilize the National Topographic System 2009 series of 1:250 000 scale maps. HLFN will opt to map at a scale of 1:250,000 due the following reasons:

- scale suitable for mapping large areas
- scale suitable for extensivity mapping and baseline inventories of large areas
- small number of maps that will keep costs lower and response burden low
- small number of maps easier to manage at interviews

HLFN will also purchase and assemble an Index Map at 1:500 000 to support interviews and provide additional organization at the outset of interviews.

Plastic Overlays

HLFN will utilize Mylar overlays to reduce the overall cost of base map purchases and to reduce the sheer amount of base maps that will be needed to record data upon. Specifically HLFN will use pre – cut polyester Mylar that is non – matte both sides and is .0005 inches thick.

HLFN will undertake due care to use registration marks prior to interviews to assist GIS technicians in accurately aligning overlays on base maps following the interview process. This will be done by:

- Identifying a pair of intersecting UTM grid lines that is closest to the corner of the four corners of the map

- Use a draftsman’s’ template and mark a circle around each of the four intersections

- Given that there will be multiple interviews, ensure that four circled UTM grid intersections are exactly the same for all copies of the same map

Writing Utensils for Marking Data

HLFN will utilize the following:

- Permanent Staedtler Lumocolour pens and will use a fine nib size to mark data and registration cross hairs and medium nib size to label maps and overlays
- Will utilize four contrasting colours to create contrast with the base map and between coded sites (e.g. black, blue, green, red)

Interview Recording Equipment

*Audio Recording*

HLFN has opted to utilize an analogue tape recorder over a digital recorded to reduce the number of operating steps and problems that can come with the operation of digital equipment.

*Baby Sock and Mouse Pad*

HLFN interviews will be trained to place the microphone inside a sock every time they turn the mike off. The mike and audio recorder will be placed on mouse pads.

*Audio Tapes*

Tapes will be used that have a total duration of 90 minutes and will be stored in boxes with translucent lids. Labels will be used along with masking tape to label tapes in the appropriate way during the interview and in interview follow up activities.

*Codepieces*

Codepieces will be used to assist in marking feature codes and avoid assigning the same code more than once.

*Scribble Pad*

A scribble pad will be used to support interviewers keep track of important points within interviews that require follow up, noting information that falls outside the set categories and observations regarding factors that may contribute to or detract from data reliability.

## Research Conventions

HLFN has considered the considerable advice and guidance in *Living Proof* in respect to research / data marking conventions. HLFN will apply the following rules to ensure that the survey tools and data marking rules are applied in a consistent way:

### Verbal Anchoring of Data

Interviewers will use verbal cues / anchors to highlight and allow for the easy cross referencing of features between maps and the audio tape. Interviewers will be trained to repeat codes out loud as they are being discussed and marked on maps during the interviews.

### Use of Alphanumeric Coding

Interviewers will assign each site and alphanumeric code comprised a pair of letters followed by a number. The following is an example:

**Feature Code**

| | |
|---|---|
| **PR** | **141** |
| **Category** | **Sequence** |

### Data Marking Conventions

HLFN has carefully reviewed all recommended data marking conventions as outlined from Pgs 228- 255 within Living Proof and will adhere to the outlined conventions. HLFN has opted to not replicate the conventions within this Research Proposal as it will need to list the conventions in the Data Research Manual and training materials to be provided during interview training.

In summary, HLFN notes the following to document its understanding and acceptance of some of the critical data marking conventions:

- Each feature to have its own separate code
- All line codes and polygon codes to be underlined
- Multi coded sites to capture different activities at same site
- Use of multiple codes attached by single leader
- Complete closure of polygons
- Features covering two or more base maps edge matched

- All codes to be printed and use of upper case letters
- Utilize open space in character loops
- Eliminate extraneous markings in codes
- Correct errors with diagonal hatching
- Each feature, code and leader is of the same colour
- Use variety of colours when map overlay is becoming crowded with data
- Use different colors for over lapping features
- Leaders attached to features
- Ensure each point is 2 mm in diameter
- Avoid crossing of leaders
- Consistent leader length
- Leaders attach at linear base map features at right angles
- Donut polygons to use circled code and attached by a leader
- Utilize numerous codes for one feature where mapping a complex feature
- Accuracy – Asking what specific portions of an area is utilized vs. demarcating large polygon
- Utilize a Code Basics Chart to as reminder to interviewers
- Utilize multiple codes for travel routes for clarity's sake
- End travel routes with single square brackets
- Direction of travel to be shown with arrows
- Utilize line textures to differentiate travel routes

## Interview Tool Kit and Associated Conventions

*PIN Numbers*

HLFN will assign a Participant Identification Number (PIN) to every respondent made up of three numbers. The four community interviewers that will be hired will each be assigned a block of PIN numbers to assign in their interviews. Each PIN will be assigned to respondents in ascending order.

*Interview Record Form*

HLFN will utilize a one page document as a checklist to ensure that interviewers capture and record all key information of respondents. It will also serve as a confidential record that ties the PIN number to the respondent and the person who conducts the interview. The document will track and make note of all key pieces of information and ensure that labelling of raw data occurs after every interview. The IRF will also be utilized to

document pertinent comments and observations about reliability and of the respondent and to document both the weak and strong points of the interview.

*Research Notebook*

The HLFN survey project manager will utilize a daily log to record and document progress, issues encountered and resolved and key matters considered by the survey team in the research design and data collection phases of the project. Key data inventories will be kept and tracked in the Research Notebook such as the audio cassette inventory list.

*Interview Master List*

An Interview Master List will be built as data from interviews are completed and information from interview record forms is amassed. The IML will provide a complete list of the particulars of the interview, records an cross referencing to audio cassettes and maps, interview forms completed and logged, notes on methodology departures and numbers of features documented and the range of codes for the features.

*Interview Procedure Checklist*

An interview checklist will be used by each interviewed to support the consistent application of critical actions in the Interview Set Up, Interview and Interview Cleanup phases of each interview. Key actions to be undertaken in every interview include:

INTERVIEW SET UP:

- Tape overlay to each base map
- Arrange entire set of base maps in ascending order
- Select an audio cassette
- Set up recorder
- Organize the rest of the map toolkit
- Organize and tidy interview room
- Determine the feature number for the first feature
- Determine the respondents' PIN

INTERVIEW:

- Review the honorarium form

- Review the confidentiality form
- Get the respondent to sign the consent form
- Identify the required base maps
- Give the respondent a pencil to use as a pointer
- Check the recording equipment
- Make a verbal interview introduction on tape
- Administer questionnaire
- Verbally anchor all mapped features
- Move codepiece every time a feature is marked and coded
- Use scribble pad at every interview
- Break off security tab every time a cassette side is removed
- Add a temporary label to every cassette sides
- Check the recorder every time a new cassette side is about to be started
- Introduce the beginning of every cassette side using a verbal label
- Write down the highest code sequence number
- Check features crossing from one map to another for edge matching
- Make a verbal crossing from one map to another for edge matching
- Make a verbal interview closure on tape
- Date and sign every overlay
- Complete the honorarium form
- Switch off the audio – cassette machine

INTERVIEW CLEANUP

- Print respondents name and PIN on every overlay
- Print the date on every overlay
- Print the project acronym on every overlay
- Print the respondents PIN once more on every overlay
- Print a map sequence number on every overlay
- Print the base maps name and index number on every overlay
- Print the base map name and index on every overlay
- Print the base map ratio scale on every overlay
- Draw a large north arrow in the margin of every overlay
- Print the map index number once more on every overlay
- Add registration cross hair to every corner of every overlay
- Add permanent label to every cassette side
- Fill in the interview record form
- Double check work

*Data Collection Manual*

The HLFN will use this document to assist interviewers with the systematic and effective collection of data and the application of consistent procedures and habits in relation to each interview. HLFN will not set out the outline of the proposed manual at this time however notes that it will base its manual on the example Data Collection Manual found within Living Proof (Pgs. 282 – 292).

*Confidentiality Directive*

HLFN will use this document to demonstrate to participants of the commitment by the First Nation to the principle of confidentiality and will set out how confidentiality will this will be achieved within the project.

*Consent Form*

HLFN will use this form to inform participants about the purpose of the project and the potential use of the information they provide and will set out their consent to participate in the research project.

*Honorarium Form*

This document will confirm payment for the participants and acceptance of the rate of remuneration.

## Training and Methodology Pre – Test

The need for traditional use surveys has risen with changes in constitutional and common law and HLFN has a need to be able to conduct them as part of environmental assessment and consultation processes. HLFN has articulated the need and interest in buildings its internal capacity to conduct its own research in a manner consistent with social science principles. The development of *Living Proof*, puts the tool in the hands of the community that can make this possible.

With this in mind, HLFN has opted to manage the project in house..

In respect to training HLFN proposes to:

- Retain a Research Director to provide overall supervision and direction to the project
- Hire four community interviewers who will undertake the interviews
- Hire one interview transcriber to prepare verbatim transcripts from the audio recordings of the interviews
- Undertake intensive training over a seven day period focused on the understanding, support for and application of the outlined methodology

The training to be delivered will focus on:

- The link between legal developments, consultation requirements and the need for rigour and methodology in TUS studies
- The need for a detailed, consistent application of tools and conventions
- Review of the Data Collection Manual
- Observe model / initial interviews and discuss approach – conduct pre – test with three community participants
- Undertake interviews with interviewers

## Country Food Harvest Survey

HLFN proposes to conduct a country food harvest survey in parallel with the map survey component of the project. A distinct portion of the interview and the Questionnaire will be devoted to documenting a preliminary level of data to assist the HLFN in quantifying the type and amount of country foods / bush resources / bush commodities utilized by the HLFN community with a given period of time.

# Appendix B

# Confidentiality Directive

HORSE LAKE FIRST NATION

## CONFIDENTIALITY DIRECTIVE

**Whereas the Horse Lake First Nation is:**

Undertaking this Traditional Land Use Survey (TLUS) to provide a snapshot of how community members have and continue to use lands and resources

Undertaking one–on –one interviews with some community members to document some of their land use activities and practices on maps, audio tapes and interview transcripts as examples of overall community land and resource use patterns

Supporting this important community research project to help preserve the record of our use of our lands and resources, support consultations on proposed projects, help identify impacts on our culture and rights from development and support HLFN's efforts to preserve, protect and assert our Treaty and Aboriginal Rights and Title, and

Documenting land and resource information with the goal of sharing portions of research with external parties such as government agencies and companies to support HLFN's participation in consultations, environmental assessment studies, land use studies, environmental and cultural and regulatory hearings, and

**Therefore this HLFN Administration Directs and Commits:**

That each participating community member will be assigned a Personal Information Number (PIN) so that their names and personal information will not be shared with outside parties

That HLFN will only share general maps showing overall community use data with outside parties only where there is an appropriate information sharing agreement in place, and

That the personal Map Biographies and interview recordings and transcripts of a community member will only be shared and viewed with outside parties where that community member agrees and provides their consent

**Chief Rick Horseman: Horse Lake First Nation**

# CONFIDENTIALITY DIRECTIVE

**Whereas the Horse Lake First Nation is:**

Undertaking this Traditional Land Use Survey (TLUS) to provide a snapshot of how community members have and continue to use lands and resources

Undertaking one –on –one interviews with some community members to document some of their land use activities and practices on maps, audio tapes and interview transcripts as examples of overall community land and resource use patterns

Supporting this important community research project to help preserve the record of our use of our lands and resources, support consultations on proposed projects, help identify impacts on our culture and rights from development and support HLFN's efforts to preserve, protect and assert our Treaty and Aboriginal Rights and Title

Documenting land and resource information with the goal of sharing portions of research with external parties such as government agencies and companies to support HLFN's participation in consultations, environmental assessment studies, land use studies, environmental and cultural and regulatory hearings, and

Implementing the appropriate measures and controls to safeguard community members personal information, confidential and sensitive information they share during this research

**Therefore this HLFN Administration Directs and Commits:**

That only the consolidated TLUS maps and data (general maps showing overall community data) will be reviewed and shared with external parties only where there is an appropriate information sharing agreement in place, and

That research participant's Map Biographies (their personal maps), Audio Recordings and Transcripts of their interviews will not be shared with external parties. These materials will only be viewed and shared with external parties with each participant's agreement or consent.

**Unsigned Version**

_____

**Chief Rick Horseman: Horse Lake First Nation**

# Appendix C

# Quick Reference Category Code Sheet

# QUICK REFENCE CATGEGORY CODE SHEET

## ANIMAL KILL SITES

## Questionnaire Part 2

### MAMMALS

| | | | |
|---|---|---|---|
| MO | moose | CU | caribou |
| EK | elk | MD | mule deer |
| WD | white tailed deer | BB | black bear |
| GB | grizzly bear | XM | other mammal |

### BIRDS

| | | | |
|---|---|---|---|
| DK | ducks | GE | geese |
| GR | grebes | GR | grouse |
| PT | ptarmigan | CR | cranes |
| XM | other bird | | |

### FISH

| | | | |
|---|---|---|---|
| WE | walleye | JF | jackfish (northern pike) |
| DV | dolly varden | BT | bull trout |
| RT | rainbow trout | AG | arctic grayling |
| WT | whitefish | GY | gold eye |
| LC | ling cod (burbot) | XM | other fish |

## PLANT and EARTH SITES

### Questionnaire Part 3

| | | | |
|---|---|---|---|
| BR | berries | FP | food plants |
| MP | medicine plants | SP | sacred plants |
| CL | construction logs | FW | fire wood |
| SR | specialty rock | DW | drinking water |
| XM | other plant/earth site | | |

## OVERNIGHT SITES

### Questionnaire Part 4

| | | | |
|---|---|---|---|
| CB | cabin | TT | tent site |
| LT | leanto | XOS | other overnight site |

## CULTURAL SITES

### Questionnaire Part 5

| | | | |
|---|---|---|---|
| BS | birth sites | BP | burial places |
| OS | old settlements | CS | cache sites |
| SS | sacred sites | XCS | other cultural site |

# Appendix D

# Interview Procedure Checklist

# INTERVIEW PROCEDURE CHECKLIST

## SETTING UP FOR INTERVIEW (BEFORE PERSON ARRIVES)

1. Put Base Maps in Order _____
2. Select Audiocassette _____
3. Set Up Recording Equipment _____
4. Organize Rest of Tool Kit _____
5. Organize Interview Space _____
6. Note the Starting Code Sequence Number _____
7. Assign Participant`s PIN _____

## CONDUCTING INTERVIEW (AFTER PERSON ARRIVES)

8. Review Honorarium Form _____
9. Discuss Confidentiality Directive _____
10. Sign Permission Form _____
11. Identify Base Maps Needed _____
12. Set Up Mosaic _____
13. Give Respondent a Pencil to Use as Pointer _____
14. Check Recording Equipment _____
15. Introduce Session _____

16. Administer Questionnaire _____

17. Remember to Verbally Anchor Data _____

18. Remember to Use the Codpiece _____

19. Remember to Use the Scribble Pad _____

20. Remember to Remove Side Tabs _____

21. Remember to Add Tape Side Labels _____

22. Remember to Double Check Recording Equipment _____

23. Remember to Introduce Cassette Side _____

24. Record Last Code Sequence Number _____

25. Check Data Along Map Edges _____

26. Ask Participant if Ever Trapped _____

27. Administer Country Food Harvest Survey Portion _____

28. Close Interview _____

29. Date and Sign Maps _____

30. Fill Out and Sign Honorarium Forms _____

31. Turn Off Recording Equipment _____

CLEANING UP AFTER INTERVIEW

32. Print Name and PIN on Maps _____
33. Print Date on Maps _____
34. Print PIN Again on Maps _____
35. Print Map Sequence Number on Maps _____
36. Add Permanent Cassette Side Labels _____
37. Fill Out Interview Record Form _____
38. Double Check Labels and Record Form _____

# Appendix E

# Questionnaire

# QUESTIONNAIRE

## Introduce Session

My name is _____ and today is_____, 2011. I have just reviewed the Confidentiality Directive, Consent Form and Honoraria Form with _____ that he / she has just signed. We're in the community arena (or other location) at the Horse Lake First Nation reserve to do a traditional land use survey map biography session. Our data will be marked on clear Mylar overlays that are sitting over top of 1:250,000 scale base maps. We'll be starting with map sheets_____.

## PART I

### CATEGORY – BIOGRAPHICAL INFORMATION

1)What is your birth date? Where you were you born? What are your parents names? Where were your parents born? What is your mother's maiden name?

## PART 2

### CATEGORY – ANIMAL KILL SITES

``I`m now going to ask you questions about where you killed different kinds of animals – fish, mammals and birds. For this part of the interview we want to map only places where you KILLED animals and took some home for eating purposes. We don`t want to mark a spot where you killed animals for commercial or barter purposes unless you took some of it home to eat. We don`t want to mark spots where you killed animals for tourists while you were guiding, unless you took some of the meat to eat. Also I want to point out that we are only looking to map actual locations where you killed animals. We are not mapping wildlife habitat – the places where you tend to find animals or where you know that animals go. We are marking kill sites.

Kill sites for all animal categories below are only mapped as points. Not lines or polygons.

**MAMMALS**

2) Did you ever kill MOOSE to feed your family or community? **MO**

Can you show me some spots? ▪ only

3) Did you ever kill CARIBOU to feed your family or community? **CU**

Can you show me some spots? ▪ only

4) Did you ever kill ELK to feed your family or community? **EK**

Can you show me some spots? ▪ only

5) Did you ever kill MULE DEER to feed your family? **MD**

Can you show me some spots? ▪ only

6) Did you ever kill WHITE TAILED DEER to feed your family or Community? **WD**

Can you show me some spots? ▪ only

7) Did you ever kill BLACK BEAR to feed your family or community? **BB**

Can you show me some spots? ▪ only

8) Did you ever kill GRIZZLY BEAR to feed your family or community? **GB**

Can you show me some spots? ▪ only

**BIRDS**

9) Did you ever kill DUCKS to feed your family or community? **DK**

Can you show me some spots? ▪ only

10) Did you ever kill GEESE to feed your family or community? **GE**

Can you show me some spots? ▪ only

9) Did you ever kill GREBES to feed your family or community? **GR**

Can you show me some spots? ▪ only

10) Did you ever kill GROUSE to feed your family or community? **GS**

Can you show me some spots? ▪ only

11) Did you ever kill PTARMIGAN to feed your family or community? **PT**

Can you show me some spots? ▪ only

12) Did you ever kill CRANES to feed your family or community? **CR**

Can you show me some spots? ▪ only

**FISH**

13) Did you ever kill WALLEYE to feed your family or community? **WE**

Can you show me some spots? ▪ only

14) Did you ever kill JACKFISH to feed your family or community? **JF**

Can you show me some spots? ▪ only

15) Did you ever kill DOLLY VARDEN to feed your family or community? **DV**

Can you show me some spots? ▪ only

16) Did you ever kill BULL TROUT to feed your family or community? **BT**

Can you show me some spots? ▪ only

17) Did you ever kill RAINBOW TROUT to feed your family or community? **RT**

Can you show me some spots? ▪ only

18) Did you ever kill ARCTIC GRAYLING to feed your family or community? **AG**

Can you show me some spots? ▪ only

19) Did you ever kill WHITEFISH to feed your family or community? **WT**

Can you show me some spots? ▪ only

20) Did you ever kill GOLDEYE to feed your family or community? **GY**

Can you show me some spots? ▪ only

21) Did you ever kill LINGCOD to feed your family or community? **LC**

Can you show me some spots? ▪ only

## PART 3

## CATEGORY – PLANT AND EARTH SITES

I`m now going to ask you questions about where you collected different kinds of plants, wood and earth materials. Again, we are looking to map only those actual sites and places where you have actually gathered plants, wood and earth materials. We are not mapping places where you tend to find those plants, wood and earth materials.

Plant and earth material sites are to be collected as points, lines or polygons depending on the extent of the area used.

22) Did you ever collect wild BERRIES? Show some spots. **BR**

▪ or O

23) Did you ever collect FOOD PLANTS? Show some spots. **FP**

▪ or O

24) Did you ever collect MEDICINE PLANTS? Show me some spots? **MP**

▪ or O

25) Did you ever collect CONSTRUCTION LOGS? Show me some spots. **CL**

▪ or O

26) Did you ever collect FIRE WOOD to heat your home? Show me some spots. **FW**

▪ or O

27) Did you ever quarry or collect SPECAILTY ROCK? Show me some spots. **SR**

▪ or O

28) Did you ever collected DRINKING WATER to bring back to your house, cabin or camp site? Can you show me some spots? **DW**

▪ or O

## PART 4

## OVERNIGHT SITES

I'm now going to ask you questions about places where you personally stayed out overnight while you were hunting, fishing, gathering, travelling or working in region.

All overnight sites to be mapped as points.

29) Have you ever stayed overnight in a CABIN? Show me the spots. **CB**

Do you know who built the cabin? Is it still being used? ▪only

30) Have you ever stayed overnight in a TENT? Show me the spots. **TT**

▪only

31) Have you ever stayed in a LEANTO? Show me the spots. **LT**

▪only

## PART 5

## CULTURAL SITES

I'm now going to ask you questions about other kinds of cultural sites. For this part of the interview we want map only places that you know for sure have been used in your lifetime or the life times of your parents or grandparents.

The cultural sites below are to be mapped as points, lines and polygons

32) Do you know of any Duncan's or Duncan's family Burial Places? **BP**

Do you feel comfortable in showing me those spots. If so, show the spots. Do you know who was buried at this place?

▪ or O

33) Do you know of any Duncan's or Duncan's family Birth Sites? If so show the **BS**

spots.

▪ or O

34) Do you know of any Old Settlements? If so, show them. **OS**

■ or O

35) Do you have or have used Cache Sites. Can you show me where these are? **CS**

36) Do you know of any Sacred Sites that you would be comfortable in talking about? Can you show me where these are? **SS**

■ or O

## PART 6

## COUNTRY FOOD HARVEST SURVEY

I am now going to ask you some questions about the foods that you kill and gather from the land. I am going to ask you what kinds of country foods you eat such as moose and fish and berries, how often and in what amounts. In asking this question, we are trying to get a sense of how important country foods are to you and your family. You need to answer as accurately as you are able.

Fill in the answers below the question in neat printing.

### MAMMALS

37) How many times in a week on average do you eat moose? Or how many times a month on average do you eat moose?

38) How many times in a week on average do you eat deer or elk? Or how many times a month on average do you eat deer or elk?

39)How many times in a month do you eat other animals, but not moose, elk and deer?

40) When you eat wild game what size of portion do you eat? A portion size of one palm, two palms, three palms or more? When I say palm – what I mean is the palm of your hand.

42) In what months do you seem to eat wild game the most?

43) How do you generally prepare / cook wild meat?

44) Do you dry or can wild game? Do you freeze it?

45) Do you share wild meat that you kill with your extended family or the community?

46) How much of a kill do you share with your extended family or the community?

47) Do members of your extended family or the community share what they kill with you? How much of the kill do they share with you?

**FISH**

48) How many times in a week on average do you eat fish? Or how many times a month on average do you eat fish?

49) When you eat fish what size of portion do you eat? A portion size of one palm, two palms, three palms or more? When I say palm – what I mean is the palm of your hand.

50) In what months do you seem to fish the most?

51) How do you generally prepare / cook fish?

52) Do you dry, can or freeze fish?

53) Do you share fish that you kill with your extended family or the community?

54) Do members of your extended family or the community share the fish they kill with you?

54) What species of fish do you eat the most? What species of fish do you enjoy the most.

**BERRIES**

55) Can you tell what types of berries you gather and eat?

56) What type of berry do you eat the most?  What is your favourite type of berry?

57) Do you dry, can or freeze berries??

58) How many times a week do you eat berries? Or how many times a month do you eat berries?

59) When you eat berries, generally how much do you eat in one sitting? One cup? Two cups? Three cups or more?

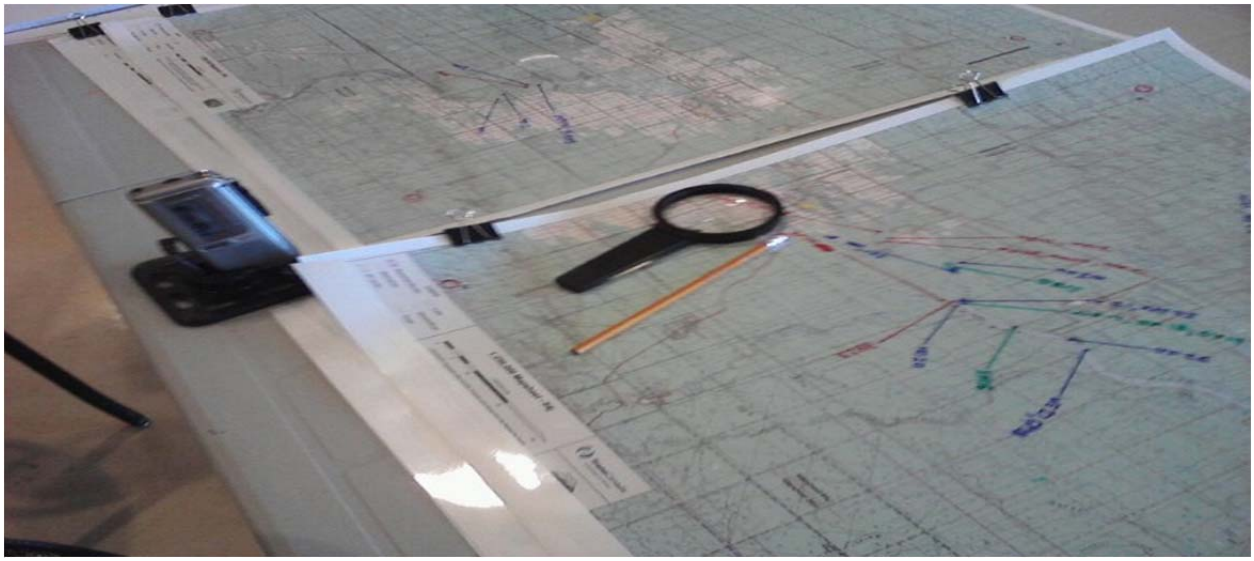
60) Do you share the berries you gather with your family?

61) Do other people / families share berries with your family?

62) Have you ever trapped for sustenance or commercial purposes? We are not going to map trapping in this specific study but will come in another study to map those places. Did your family actually have a trapline number or can you recall the general areas in which they trapped?

# Appendix F

# Pictures of Community Researcher Tool Kit



**Tool Kit: Each Researcher Provided Required Tools to Ensure Consistent and Accurate Recording of Data**

**Leaving Nothing to Chance: Complete Tool Kit Ensures That Community Researchers Organized and Equipped for Each Map Biography Session**

**Mylar Overlays Used Over Top of Base Maps – The Cutting Station – Helped Ensure that Mylars Ready for Each Interview**

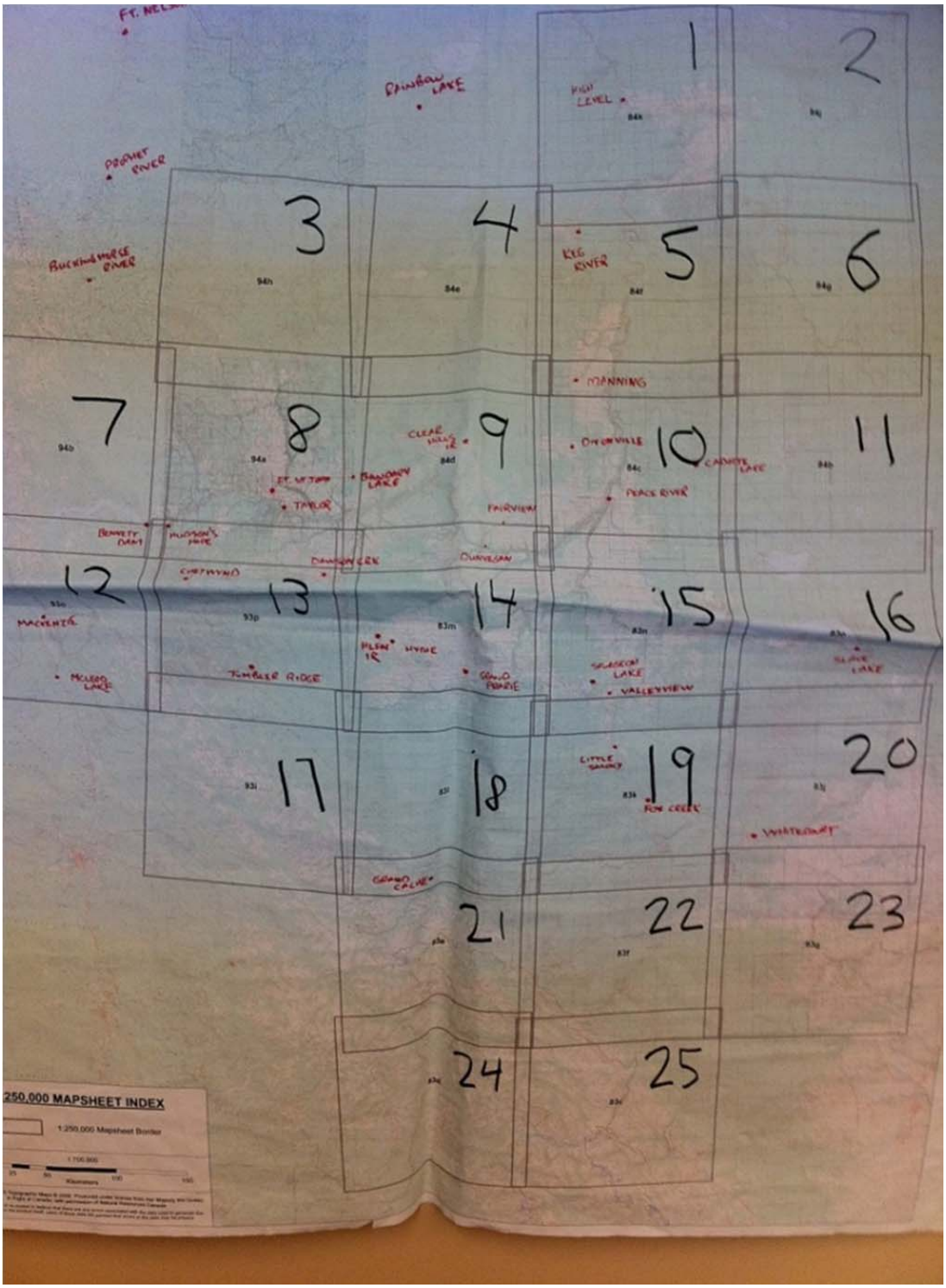
**Organizing for Success: All raw data from interviews (Mylars, Audio Tapes and Interview Record Forms) all filed after interviews to prevent against data loss**

**Storage for Completed Mylars – Filed by PIN**

**Community Researcher Work Stations: An organized office helping community researchers focus on careful and consistent application of research conventions**

# Appendix G

# Index Map




**Prior to start of interviews, respondents were shown this Index Map. The respondents selected which maps they would want to use during the interviews. The maps numbers in the right hand corner correspond to numbered base maps each interviewer had. HLFN utilized 25 NTS base maps.**

# Appendix H

# Interview Forms Package

# TLUS INTERVIEWER FORM PACKAGE

**Ensure that you have a complete package for every interview to ensure you are prepared for every interview**

**Ensure that you review and fill out each form with the respondent**

**These are the key documents that you will need to prepare, conduct and close out your interview.**

**These documents are contained in your**

**Data Collection Manual.**

# INTERVIEW PROCEDURE CHECKLIST

## SETTING UP FOR INTERVIEW (BEFORE PERSON ARRIVES)

1. Put Base Maps in Order _____
2. Select Audiocassette _____
3. Set Up Recording Equipment _____
4. Organize Rest of Tool Kit _____
5. Organize Interview Space _____
6. Note the Starting Code Sequence Number _____
7. Assign Participant`s PIN _____

## CONDUCTING INTERVIEW (AFTER PERSON ARRIVES)

8. Review Honorarium Form _____
9. Discuss Confidentiality Resolution _____
10. Sign Permission Form _____
11. Identify Base Maps Needed _____
12. Set Up Mosaic _____
13. Give Respondent a Pencil to Use as Pointer _____
14. Check Recording Equipment _____

15. Introduce Session _____

16. Administer Questionnaire _____

17. Remember to Verbally Anchor Data _____

18. Remember to Use the Codpiece _____

19. Remember to Use the Scribble Pad _____

20. Remember to Remove Side Tabs _____

21. Remember to Add Tape Side Labels _____

22. Remember to Double Check Recording Equipment _____

23. Remember to Introduce Cassette Side _____

24. Record Last Code Sequence Number _____

25. Check Data Along Map Edges _____

26. Ask Participant if Ever Trapped _____

27. Administer Country Food Harvest Survey Portion _____

28. Close Interview _____

29. Date and Sign Maps _____

30. Fill Out and Sign Honorarium Forms _____

31. Turn Off Recording Equipment _____

CLEANING UP AFTER INTERVIEW

32. Print Name and PIN on Maps _____

33. Print Date on Maps _____

34. Print PIN Again on Maps _____

35. Print Map Sequence Number on Maps _____

36. Add Permanent Cassette Side Labels _____

37. Fill Out Interview Record Form _____

38. Double Check Labels and Record Form _____

# Horse Lake First Nation

# 2011 Traditional Land Use Survey

## PERMISSION FORM

The Traditional Land Use Survey (TLUS) is a community research project being undertaken by the Horse Lake First Nation (HLFN). The purpose of this project is to map our people's historic, current and ongoing use of our traditional lands.

The information gained from this research project will help preserve the record of our use of our lands, support consultations on proposed projects, help to identify impacts on our culture and rights from development and support HLFN's efforts to preserve, protect and assert our treaty and aboriginal rights and title.

I, _____ agree to participate in the traditional land use survey. I agree that the Horse Lake First Nation may use the information gained from my interview for the preservation, protection, assertion and advancement of our rights.

Interview Participant Signature:_____

Interviewer Signature:_____

Date:_____

HORSE LAKE FIRST NATION

## CONFIDENTIALITY DIRECTIVE

**Whereas the Horse Lake First Nation is:**

Undertaking this Traditional Land Use Survey (TLUS) to provide a snapshot of how community members have and continue to use lands and resources

Undertaking one–on –one interviews with some community members to document some of their land use activities and practices on maps, audio tapes and interview transcripts as examples of overall community land and resource use patterns

Supporting this important community research project to help preserve the record of our use of our lands and resources, support consultations on proposed projects, help identify impacts on our culture and rights from development and support HLFN's efforts to preserve, protect and assert our Treaty and Aboriginal Rights and Title, and

Documenting land and resource information with the goal of sharing portions of research with external parties such as government agencies and companies to support HLFN's participation in consultations, environmental assessment studies, land use studies, environmental and cultural and regulatory hearings, and

**Therefore this HLFN Administration Directs and Commits:**

That each participating community member will be assigned a Personal Information Number (PIN) so that their names and personal information will not be shared with outside parties

That HLFN will only share general maps showing overall community use data with outside parties only where there is an appropriate information sharing agreement in place, and

That the personal Map Biographies and interview recordings and transcripts of a community member will only be shared and viewed with outside parties where that community member agrees and provides their consent

**Chief Rick Horseman: Horse Lake First Nation**

# CONFIDENTIALITY DIRECTIVE

**Whereas the Horse Lake First Nation is:**

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Documenting land and resource information with the goal of sharing portions of research with external parties such as government agencies and companies to support HLFN's participation in consultations, environmental assessment studies, land use studies, environmental and cultural and regulatory hearings, and

Implementing the appropriate measures and controls to safeguard community members personal information, confidential and sensitive information they share during this research

**Therefore this HLFN Administration Directs and Commits:**

That only the consolidated TLUS maps and data (general maps showing overall community data) will be reviewed and shared with external parties only where there is an appropriate information sharing agreement in place, and

That research participant's Map Biographies (their personal maps), Audio Recordings and Transcripts of their interviews will not be shared with external parties. These materials will only be viewed and shared with external parties with each participant's agreement or consent.

**Unsigned Copy**

_____

**Chief Rick Horseman: Horse Lake First Nation**

# Horse Lake First Nation

# 2011 Traditional Land Use Survey

PIN:_____

## HONORARIUM FORM

I,_____ have agreed to participate in the Horse Lake First Nation Traditional Land Use Survey and acknowledge that I will be paid for my participation in the survey.

I acknowledge and accept that I will be paid on the date that HLFN generates cheques following the date of this interview.

Participant Signature: _____

Interviewer Signature:_____

Date:_____

# INTERVIEW RECORD FORM

1)Interview Date_____ 2) PIN_____

3)Participant Name_____

4) Spelled _____Correctly ___Incorrectly

5) Interview Location: Community_____ Building_____

6)Lead Interviewer_____

7)Other Interviewers_____ None_____

8)Observers_____ None_____

9)Cassette SIDES used (circle) 1 2 3 4 5 6 7 8 9 10 10) Duration_____MIN

11)Map Sheets Used_____

---

12)Map Biography Completed _____Y_____N

13) Parts **NOT** Done:_____

_____

14) Departures from standard methodology:_____Y_____N

If Yes Specify_____

_____

15) Comments (Use back of page if necessary):_____

_____

_____

16) Use and catch all codes____Y _____N If yes, list them and specify:

_____

17) List 1st and Last codes numbers:_____

18) Interviewer Signature_____

# Appendix I

# Data Collection Manual

# Horse Lake First Nation

# 2011 Traditional Land Use Survey

# Data Collection Manual

**Community Interviewer Training and Interview Guide**

**Matthew General 2011**

**Based on DCM Outline set out in "Living Proof" by T. Tobias (2009)**

**NOTE: ORIGINAL PAGE NUMBERS OF DCM DO NOT CORRESPOND WITH THIS VERSION OF THE DCM GIVEN ITS INCORPORATION INTO METHODOLOGY REPORT**

**Contents**


| | |
|---|---|
| Assigning Respondent Numbers | Pg. 3 |
| Permission Form | Pg. 5 |
| Confidentiality Directive | Pg. 6 |
| Honorarium Form | Pg. 7 |
| Interview Procedure | Pg. 8 |
| Interview Procedure Checklist | Pg. 19 |
| Using Your Questionnaire | Pg. 22 |
| The Questionnaire | Pg. 26 |
| Guidelines for Coding and Marking Data | Pg. 38 |
| Category Codes | Pg. 46 |
| Labelling Audiocassette Sides | Pg. 48 |
| Interview Record Form Template | Pg 50. |
| Index for Base Maps | Pg 51 |
| Examples of Mapping Products / BIOMAPS | Pg 52 |

## ASSIGNING COMMUNITY PARTICIPANTS PIN NUMBERS

We will assign PIN Numbers – Personal Identification Numbers to HLFN members participating in the TLUS. Each community member will have their own number. No one else will have the same number.

Each interviewer will be assigned a separate block of PIN numbers that they will use during their interviews and assign / give to participants:

**HLFN TLUS Interviewers**

| | |
|---|---|
| Interviewer 1: | 1 – 100 |
| Interviewer 2: | 101 – 200 |
| Interviewer 3: | 201 – 300 |
| Interviewer 4: | 301 - 400 |

Each interviewer will assign / give a new PIN number to each community participant starting with their first number, then moving onto the next.

**Example:**

Let's say Karen Horseman has been assigned PIN numbers 101 – 200. In her first interview, she will assign PIN 101 to her first interview participant. She will then assign PIN 102 to her next interview participant, then PIN 103, to the next and so on.

If Rick Horseman was her first participant to be interviewed, she would assign PIN 101 to Rick Horseman. If Bill Horseman was the next participant to be interviewed, Karen would assign him PIN 102.

Never change the PIN number during this survey. Each participant should always keep this PIN number for any future research. (e.g. Rick Horseman will always be PIN 101)

PIN Numbers are critical and will be written on people’s forms, maps and audiocassette tapes to ensure that all parts of the participants map biography can be found and cross – referenced.

# Horse Lake First Nation

# 2011 Traditional Land Use Survey

## PERMISSION FORM

The Traditional Land Use Survey (TLUS) is a community research project being undertaken by the Horse Lake First Nation (HLFN). The purpose of this project is to map our people's historic, current and ongoing use of our traditional lands.

HLFN needs to record if, how, when and where community members have used the land in their lifetime. We are asking community members to identify as many sites where they have killed animals, fish and birds, where they have gathered wood and plants, camping sites and other important cultural sites they have first hand knowledge of. Your interview along with other community members will help identify those important sites.

The information gained from this research project will help preserve the record of our use of our lands, support consultations on proposed projects, help to identify impacts on our culture and rights from development and support HLFN's efforts to preserve, protect and assert our treaty and aboriginal rights and title.

I, _____ agree to participate in the traditional land use survey. I agree that the Horse Lake First Nation may use the information gained from my interview for the preservation, protection, assertion and advancement of our rights.

Interview Participant Signature:_____

Interviewer Signature:_____

Date:_____

# CONFIDENTIALITY DIRECTIVE

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That research participant's Map Biographies (their personal maps), Audio Recordings and Transcripts of their interviews will not be shared with external parties. These materials will only be viewed and shared with external parties with each participants' agreement or consent.

**Unsigned Copy**

_____

**Chief Rick Horseman: Horse Lake First Nation**

# Horse Lake First Nation

# 2011 Traditional Land Use Survey

PIN:_____

## HONORARIUM FORM

I,_____ have agreed to participate in the Horse Lake First Nation Traditional Land Use Survey and acknowledge that I will be paid for my participation in the survey.

I acknowledge and accept that I will be paid on the date that HLFN generates cheques following the date of this interview.

Participant Signature: _____

Interviewer Signature:_____

Date:_____

# INTERVIEW PROCEDURE

## Setting Up For the Interview

It is important that interviewers be prepared and organized for each new interview. You need have your tool kit ready so you can focus on what the participant is saying and so that the interview does not run on past two hours. Having all the proper tools at the ready, will ensure that you follow the same important procedures in every interview.

**Step 1 –** Put Base Maps in Order – Your set of based maps consists of 25 base maps. Make sure it is organized in a way that allows you to easily find the maps you need.

**Step 2** – Select Audio Cassette – Use the first available blank cassette side to start the interview. It doesn't matter whether it's SIDE A or SIDE B. Use a new audio cassette for each new interview participant.

**Step 3 –** We will be using Sony recorder with good internal mikes in this project. Take your fresh audio tape out of storage box. Label with temporary small masking tape - - "1" and "2" on the other side. Insert the audiocassette. Ensure that volume button is turned up to maximum volume. Make sure the AVR is always set on "OFF". Record at NORMAL speed. Make sure that your batteries are working. Make sure that you have spare batteries on hand. Check to make sure the recorder is off. Whenever the recorder is off, place the split sock over top of the recorder. Sock on = Recorder OFF. Sock off = Recorder ON. Have masking tape handy (for temporary cassette – side labels).

Make sure the tape timer is set at zero every time you start the interview. Note the tape time on your scribble pad.

**Step 4-** Organize the rest of the Tool – Kit – Here are the toolkit items you should have ready:

- Index Map on the wall (showing the 25 base maps that can be chosen)
- All of your NTS base maps 1 - 25)
- Mylar overlays to cover the base maps 1 - 25
- Audio cassette
- Spare audio cassette
- Tape recorder
- Baby sock
- Masking tape

Now make sure you also have the following:

- 8 Fine Nib marker pens (GREEN, RED and BLUE)
- 2 Medium Nib marker pens (BLACK)
- Scribble pad
- Ballpoint pen
- Magnifying glass
- Game pieces – code markers
- Pencil (for participant to use a pointer)

And make sure you have all the forms and documents you are going to need:

- Data Collection Manual
- Interview Package Forms – that include:

    - Permission Form
    - Honorarium Form
    - Interview Record Form
    - Interview Checklist

Step 5 – Organize Interview Space – Tidy the interview table / work space. Make sure the index map is up on the wall where the participant can view it at the outset of the interview.

Step 6 – Assign Starting Code Sequence Number for Interview - Start with code sequence 1, then 2, then 3, then soon as you mark the features.

Example:

After you do Part 1) of the interview (Biographical Information), you will move on to Part 2) of the Questionnaire. At the start of Part 2, you ask Rick Horseman about if and where he killed moose? His first moose kill site would then be MO1. His second moose kill site would be MO2:

**CODE**

| **CATEGORY (MOOSE)** | **SEQUENCE** |
|---|---|
| **MO** | **01** |
| **MO** | **02** |

Mark the starting Feature Code number on your scribble pad – “1”.

Step 7 – Assign the Participant’s a PIN Number – For example if Rick Horseman is your first participant – his PIN number will be 101.

Example:

**Rick Horseman: PIN 101**

Mark his name and PIN number on your scribble pad along with the date.

## CONDUCTING THE INTERVIEW

(after the participant arrives)

Step 8 – Review the Permission Form – Review the Permission Form with the respondent. This is important. Respondents must know, understand about the research project they are to participate in, what end uses the data will be used and agree to participating in it of their own free will.

Review the Permission Form and let the participant sign the form.

Step 9 – Review the Honorarium Form – Tell the respondent that HLFN wishes to pay people for their time, expertise and knowledge.

Review the Honorarium Form with respondent. If they agree with the proposed term, let them sign the form.

Step 10 – Review the Confidentiality Directive – Review the Directive with each respondent. It is important that the respondents know that HLFN has built in safeguards to provide a high level of confidentiality in the survey. While maps will be produced and shared showing all the community's combined data (sites), the respondents personal map biography, interview transcript or audio tape will not be shared with anyone without their permission. The PIN – Number also protects provides a measure of confidence.

If the respondent agrees with the principles and safeguards, let the person sign their form.

Step 11 – Identify the Base Maps Needed – Ask the participant to look at the Index Map on the wall and let them tell you which maps are needed. (E.G. Maps 9, 8 ,4 and 3 or Maps 2 and 3 or all of the maps) Ask which area they have and continue to use the most? Ask about other areas they have been. Select these maps. If they are unsure of where to start, perhaps start with the maps around the Horse Lake reserve.

Write the starting maps you are going to use on the scribble pad. Arrange the base maps.

Step 12 – Tape the Mylar overlays to your base maps – with white border at the bottom and squared with the right hand bottom corner of the map. Use two small pieces of tape and tape the edge of the Mylar to the base map. Do not wrap tape around back of side of the map.

Mark your registration marks on the four corners of your Mylar overlays. The registration marks are the four red circles in all four corners.

Each of your base maps is marked with a number in the top right hand corner of your map. Example 1, 2, 3, 4 etc. Trace over top of this number on your Mylar overlay so that your Mylar has the same number as your base map. Example: If your base map has the number “6” on it. Trace the “number” 6 on the Mylar.

(NOTE - YOU CAN DO THIS BEFORE THE INTERVIEW STARTS and have all your base maps ready to go)

Step 13 – Give participant a Pencil – Tell the participant that you want them to use the pencil as pointer so that they can point to sites as carefully as possible. Also give them the magnifying glass, so that they can use it to look at areas in more detail if they want.

Step 14 – Check the Recording Equipment – Ask if the participant is ready to start the interview. If they are, check the recording equipment. Take the sock off the recorder. Turn the record button on. In a normal voice say “Testing, One, Two, Three. Testing One, Two , Three”. Rewind and listen to the playback. If the playback is weak or you hear static, change the battery and repeat. Once you get the right volume and clarity hit the “STOP” button on the recorded. Then hit “RECORD” and start the interview.

Keep the recorder between yourself and the interview participant with the mike pointing towards you. Keep it as close to both of you as possible. Use the recorder stand that we have built out of the Mylar role end to ensure the recorder and mike is always pointed upwards towards your voice and the voice of the respondent.

Step 15 – Introduce the Session – Start the interview by making an introduction. Include:

- Your name – the Interviewer;
- Interview Date;
- Participant’s Name;

- That you've reviewed the Permission Form'
- The interview location;
- Other's present such as an assistant or observer;
- That we are doing a map biography interview;
- That we will be marking data on 1:250,000 base maps, and
- The maps that we will be starting with are numbers.....

EXAMPLE:

"My name is Jayme Savard. Today is Monday, May 12 – 2011. I have just reviewed the permission form with Rick Horseman that he's just signed. We are in the Horse Lake First Nation community hall. We are here to do a map biography session. I will be marking data on Mylar overlays sitting over top off 1:250,000 paper base maps. We will be starting with maps 5, 9, 12 and 24.

Step 16 – Administer Questionnaire – Turn to the Questionnaire on **Page 26.** Administer questionnaire.

Step 17 – Verbally Anchor Data – You must verbally anchor every feature you mark. Read the feature's code out loud, as you are marking it on the map. This is so that each feature is highlighted on the audiocassette. It is important to verbally anchor all features that you mark. If you wish to add some detail as to the location of the site, do so. (Example – Rick Horseman has just identified a moose kill site on the north end of Cardinal Lake. I'm now marking this site as M014...Moose Kill Site 14".

**(See Items 1 and 2 on PG 41)**

Step 18 **–** Use Codepiece **–** Move the codepiece every single time you mark the feature code on a map. This helps you remember your last Feature Code.

**(See Item 3 on Page 38)**

Step 19 – Use Scribble Pad – The pad already shows a record starting code number. (Step 6) and the base maps indentified by the participant (Step 11). Use it to keep track of loose end, Catch All Codes or other things that seem important to you – items you'll want to come back to later in the interview or to discuss with Matt.

Step 20 – Remove Audio Cassette Side Tabs – Each time you take a tape out of the machine – either to flip and re-insert it or to replace it with a new one – break the cassette's plastic tab. The tab on the TOP LEFT side (as the tape comes out of the machine) is the one to remove. Do this immediately.

Step 21 – Add Temporary Cassette Side Labels – Immediately after removing a cassette add a temporary label. The label is simply a small piece of masking tape just big enough to write a number on. The interview's first cassette is labelled "1". The second is labelled "2" and so on.

Step 22 – Double Check Recording Equipment – Each and every time you flip and re-insert a cassette or replace it with a new one, check the recording equipment. Say again, "Testing, One, Two, Three, Testing One, Two, Three" Rewind and listen to make sure it's working.

Step 23 – Introduce Each Cassette Tape – Each time you flip and re-insert the cassette or replace it with a new one, make a one sentence introduction. Specify the cassette side, interview type, participant and date. For example:

"This is the beginning of the 2nd cassette of the traditional land use survey interview with Rick Horseman on May 15, 2011"

Step 24 – Record Last Code – Sequence Number – When it's been decided to end the session, the codepiece will be left standing beside the last (highest) code number that was used. Write that number down on the scribble pad.

Step 25 – Check Data Along Map Edges – Check all polygons and line features that cross from the edge of one map sheet onto the other. Place the two maps together and make sure the lines and polygons line up directly.

Step 26 – Ask if Participant Ever Trapped – Ask whether the participant ever set snares or traps for fur bearers. Ask them if they are any member of their family holds or held a

trapline, registered fur management area. Ask him or her to name any HLFN member that did.

Write the information down on the scribble pad.

Step 27 – Administer Country Food Harvest Survey portion of the questionnaire.

Step 28 – Close Interview – Close the interview by repeating the same basic information that you provided when introduced the start of the interview. For example:

“We’ve just completed the traditional land use survey interview with Rick Horseman in the HLFN community arena. We’ve marked data on four 1:250,000 maps using Mylar overlays.”

Step 29 – Date and Sign Maps – Date and sign each map on which data and information was marked. Have the participant sign each map. Also say:

“The last thing we are going to do is to date and sign the maps. I’m writing the date – May 21, 2011 – and signing my name – Karen Horseman – near the date, on each of the maps. I’m now asking you Rick, to also sign the maps next to my name.”

Step 30 – Fill Out the Honoraria Form – Fill in the person’s name, PIN number and dollar amount.

Step 31 – Turn Off Recording Equipment – Switch off the audio cassette machine. Turn of the recorder. Put the split sock back over top of the mike.

## CLEANING UP AFTER THE INTERVIEW

(after the participant leaves)

Step 32 – Print Name and PIN Number on Maps – Print the participant's name and PIN on each map, on the appropriate lines in the map's bottom margin. (The interviewer prints his or her name on the interviewer line. Print and print in letters 1 inch high. Use the BLACK medium size nib pen.

Step 33 – Print Date on Maps – Print the date on each map, on the appropriate line in the map's bottom margin. Print and print in letters 1 inch high. Use the BLACK medium size nib pen.

Step 34 – Print PIN again on Maps – Print the PIN once more, this time in large characters, somewhere on the map that doesn't display TLUS data. Using a medium marker, print in upper case, 4 inch high letters.

Step 35 – Print Map Sequence Number on Maps – Print the map sequence number on the appropriate line in the map's bottom margin. Start with **"BIOMAP 1**". It doesn't matter which map gets which sequence number. Indicate the assigned map number and also the number of maps in the set. For example **"BIOMAP 1 OF 4, BIOMAP 2 of 4, BIOMAP 3 of 4, BIOMAP 4 of 4."** Using the BLACK medium marker, print in upper case, inch high letters.

Step 36 – Add Permanent Cassette – Side Labels – Replace the temporary cassette labels (Step 21) with permanent ones. Each label must indicate six (6) pieces of information:

- The participant's name
- The participant's PIN
- The Project Title
- The Date
- The Number of Tape Side in the sequence of tape sides (E.G.1of 2, 2 of2). The project assistant will later add the TAPE ID number to each of the tape's two sides.

Print the information using a ballpoint pen, Make sure there's daylight in the loops of numbers and letters. Spell the respondent's name correctly and don't use nicknames. Print the name or abbreviation for month.

Look at the example tapes in the tape storage boxes to see how to fill out the tape labels.

Step 37 – Fill Out the Interview Record Form – Make an official record of the interview by filling in an interview record form. All fields must be filled in. Don't forget to transfer both the lowest and highest code numbers from the scribble pad to the form.

Step 38 – Double Check Labels and Interview Record Forms – Check to ensure all maps and audiocassettes are labelled correctly. Make sure your interview record form is complete and consistent with what you see on the maps and cassette side labels.

Place your tape in your tape storage box in order.

Staple all of your interview forms together and place in your file in order in a file folder with the PIN and participants name in a file folder.

## INTERVIEW - PROCEDURE CHECKLIST

The list starting on the next page contains 37 items. Each of them corresponds to a step that's described in the "Interview Procedure". Each of them corresponds to the steps described in the "Interview Procedure" section of this manual on Pages 7 - 15.

Start every interview with a fresh photo copy of the interview checklist. Using a pen, check off the items as you do them.

**SEE NEXT PAGE**

# INTERVIEW PROCEDURE CHECKLIST

## SETTING UP FOR INTERVIEW (BEFORE PERSON ARRIVES)

1.Put Base Maps in Order / Cut Mylars to Size (Pg. 7) _____

2.Select Audiocassette (Pg. 7) _____

3. Set Up Recording Equipment (Pg.7) _____

4. Organize Rest of Tool Kit (Pg. 7) _____

5. Organize Interview Space (Pg.8) _____

6. Note the Starting Code Sequence Number(Pg. 9) _____

7. Assign Participant`s PIN (Pg.9) _____

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## CONDUCTING INTERVIEW (AFTER PERSON ARRIVES)

8. Review Honorarium Form (Pg.10) _____

9. Discuss Confidentiality Directive(Pg.10) _____

10. Sign Permission Form(Pg.10) _____

11. Identify Base Maps Needed (Pg. 10) _____

12. Set Up Mosaic (Pg. 10) _____

13. Give Respondent a Pencil to Use as Pointer (Pg.11 _____

14. Check Recording Equipment(Pg.11) _____

15. Introduce Session (Pg. 11) _____

16. Administer Questionnaire (Pg.12) _____

17. Remember to Verbally Anchor Data (Pg.12) _____
18. Remember to Use the Codepiece (Pg.12) _____
19. Remember to Use the Scribble Pad (Pg. 12) _____
20. Remember to Remove Side Tabs (Pg. 12) _____
21. Remember to Add Tape Side Labels (Pg. 12) _____
22. Remember to Double Check Recording Equipment (Pg. 12) _____
23. Remember to Introduce Cassette Side (Pg. 12) _____
24. Record Last Code Sequence Number (Pg. 13) _____
25. Check Data Along Map Edges (Pg. 13) _____
26. Ask Participant if Ever Trapped (Pg.13) _____
27. Administer Country Food Harvest Survey Portion (Pg.13) _____
28. Date and Sign Maps (Pg.13) _____
29. Close Interview (Pg.13) _____
30. Turn Off Recording Equipment (Pg. 14) _____

CLEANING UP AFTER INTERVIEW

31. Print Name and PIN on Maps (Pg.14) _____
32. Print Date on Maps(Pg.14) _____
33. Print PIN Again on Maps (Pg.14.) _____
34. Print Map Sequence Number on Maps(Pg.14) _____

35. Add Permanent Cassette Side Labels (Pg.15) _____

36. Fill Out Interview Record Form (Pg.15) _____

37. Double Check Labels and Record Form(Pg. 15) _____

38. Place Audio Cassettes in Your Tape Box _____

39. Return Your Base Maps and Tool Kit to Storage _____

40. Return Completed Mylar Overlays to Your Place _____

41. Place Your Scribble Pad Page and Completed
    And Interview Record Forms to the Project Binders _____

## USING YOUR QUESTIONNAIRE

1. The questionnaire has five (6) parts:

Part 1

**Biographical Information** – about participant

Part 2

**Animal Kill – Collecting Sites** – where participant killed or collected animals, fish and birds

Part 3

**Plant, Wood and Earth Material Harvest Sites** – Where participant collected plants, wood and earth materials for community use

Part 4

**Overnight Sites** – Where respondent stayed overnight while trapping, hunting, fishing, gathering, travelling or working in the study area

Part 5

**Cultural Sites –** other significant places that the participant has either used or has knowledge about

Part 6

**Country Food Harvest Survey** – about what types and what amounts of country or bush foods the participant consumes

2. Start every interview with Part 1 of the questionnaire. Follow the questionnaire from start to finish and ask every question of each participant.

3. All participants are to respond to all six (6) parts of the questionnaire. A map biography is completed once the respondent has been asked about all the questions. If the interview is taking a long time and the participant appears to be getting tired or possibly frustrated, then close of the interview and resume again the next day or as soon as possible.

4. The purpose of Part 2. of the questionnaire is to map places where the participant killed animals to feed his or her family. The purpose of Part 3. is to map places where he or she harvested plants and earth materials for their family's direct use. We are mapping KILL and HARVEST sites. *Do not make the common mistake of mapping where you can find the animals and materials. We are not mapping habitats in this study.*

5. The purpose of Parts 2 and 3 is to map where the participant has done harvesting over their lifetime. We are mapping where they have and continue to hunt – even if that hunting is banned in that area.

6. The purpose of Parts 2 and 3 is to map where the participant has done harvesting – even if it's no longer possible to harvest at that site – E.G. If the site area has been flooded, covered with a road or lease site. We still mark those sites.

7. The purpose of Part 2. Is to map the places where the participant killed or collected animals to feed his or her family. The person needed to be directly involved in getting the animal (shooting it, helping cut it up and packing it in and taking the whole kill or a portion of the kill to their household and family). We are also not marking activities undertaken for commercial purposes such as guide outfitting activities.

8. Map all the participant`s use of the area within their living memory (past, historic and recent). We are going to interview people that live on and off the reserve.

9. When starting Part 2), read the following introductory paragraph to the participant:

*``I`m now going to ask you questions about where you killed different kinds of animals – fish, mammals and birds. For this part of the interview we want to map only places where you KILLED animals and took some home for eating purposes. We don`t want to mark a spot where you killed animals for commercial or barter purposes unless you took*

*some of it home to eat. We don`t want to mark spots where you killed animals for tourists while you were guiding, unless you took some of the meat to eat. Also I want to point out that we are only looking to map actual locations where you killed animals. We are not mapping wildlife habitat – the places where you tend to find animals or where you know that animals go. We are marking kill sites."*

The above statement helps explain what we want them to indicate. At first read this in your first few interviews. When you get used to saying it, use your own words.

10. Pay close attention the questionnaire key words. Use the word **`KILL``** for all Part 2 questions about fish, birds and mammals. Don`t use the words ``hunted, fished, trapped. Looked for, tracked, harvested, got and gone for``.

11. When doing Parts 2 and 3, ask only for **``SOME``** of the participants kill sites. Never ask for all sites. This will be too much to map for some people and we don`t want to burn them out. We want to map as much as we can but we can`t get it all.

12. Every questionnaire item – except the first and sixth – contains at least one questionnaire category. For example**,** look on Pg. 46 – each category has its own unique code.

    **(E.G. Moose = MO, Elk = EK, Mule Deer = MD).**

    Each category code is shown in capital letters. When coding a feature on the maps, never guess about the category code. It should almost be impossible for you to get it wrong because the code appears in the right hand margin of the questionnaire. Have a photocopied list of Category Codes on the table when you are mapping. (Pgs 46 – 47).

13. Pay attention to the specific language in each questionnaire question. Key words that you must ask are underlined such as "KILL" and "COLLECTED".

14. Your research instrument is a questionnaire. It is important to ask about all questionnaire categories.

15. Mapped features can be marked as points, lines or polygons depending on which questionnaire part you are working with:

| PART | POINT – POLYGON |
|---|---|
| 1)Biographical Info | Doesn`t apply |
| 2) Animal Kill Sites | Point |
| 3) Plant or Earth Sites | Point, Line or Polygon |
| 4) Overnight Sites | Point |
| 5) Cultural Sites | Point, Line or Polygon |

The questionnaire has built in reminders so you can`t go wrong. These appear in the right hand margin, immediately above the category codes. Each code appears with one of the following reminders:

Points Only = ■ .

Points or Polygons Only = ■ or O

16) Sometimes you`ll see information underlined in the questionnaire.

<u>Information underlined like this is a reminder for you. Read it quietly to yourself.</u>

17) In Part 4 – the section about Overnight Sites. Ask some additional detail such as when the participant built the camp, the exact location, when did they build and who they built it with. In this case, you will be chasing Data Diamonds were you trying to get as much detail about the feature as possible.

E.G. **WHAT** – Have you ever stay overnight in a Tent Site?

**WHERE** – Where exactly was that Tent Site?

**WHO** – Did you stay there by yourself or did someone else stay there with you?

**WHEN** – Can you remember when you stayed at this Tent Site?

18) Every time you mark a feature you must verbally anchor it. This creates a link between the feature you are marking on the map to that tape recording.

# QUESTIONNAIRE

## Introduce Session

My name is _____ and today is_____, 2011. I have just reviewed the Confidentiality Directive, Consent Form and Honoraia Form with _____ that he / she has just signed. We're in the community arena (or other location) at the Horse Lake First Nation reserve to do a traditional land use survey map biography session. Our data will be marked on clear Mylar overlays that are sitting over top of 1:250,000 scale base maps. We'll be starting with map sheets_____.

## PART I

### CATEGORY – BIOGRAPHICAL INFORMATION

1)What is your birth date? Where you were you born? What are your parents names? Where were your parents born? What is your mother's maiden name?

## PART 2

### CATEGORY – ANIMAL KILL SITES

``I`m now going to ask you questions about where you killed different kinds of animals – fish, mammals and birds. For this part of the interview we want to map only places where you KILLED animals and took some home for eating purposes. We don`t want to mark a spot where you killed animals for commercial or barter purposes unless you took some of it home to eat. We don`t want to mark spots where you killed animals for tourists while you were guiding, unless you took some of the meat to eat. Also I want to point out that we are only looking to map actual locations where you killed animals. We are not mapping wildlife habitat – the places where you tend to find animals or where you know that animals go. We are marking kill sites.

Kill sites for all animal categories below are only mapped as points. Not lines or polygons.

**MAMMALS**

2) Did you ever kill MOOSE to feed your family or community? **MO**

Can you show me some spots? ▪ only

3) Did you ever kill CARIBOU to feed your family or community? **CU**

Can you show me some spots? ▪ only

4) Did you ever kill ELK to feed your family or community? **EK**

Can you show me some spots? ▪ only

5) Did you ever kill MULE DEER to feed your family? **MD**

Can you show me some spots? ▪ only

6) Did you ever kill WHITE TAILED DEER to feed your family or Community? **WD**

Can you show me some spots? ▪ only

7) Did you ever kill BLACK BEAR to feed your family or community? **BB**

Can you show me some spots? ▪ only

8) Did you ever kill GRIZZLY BEAR to feed your family or community? **GB**

Can you show me some spots? ▪ only

**BIRDS**

9) Did you ever kill DUCKS to feed your family or community? **DK**

Can you show me some spots? ▪ only

10) Did you ever kill GEESE to feed your family or community? **GE**

Can you show me some spots? ▪ only

9) Did you ever kill GREBES to feed your family or community? **GR**

Can you show me some spots? ▪ only

10) Did you ever kill GROUSE to feed your family or community? **GS**

Can you show me some spots? ▪ only

11) Did you ever kill PTARMIGAN to feed your family or community? **PT**

Can you show me some spots? ▪ only

12) Did you ever kill CRANES to feed your family or community? **CR**

Can you show me some spots? ▪ only

**FISH**

13) Did you ever kill WALLEYE to feed your family or community? **WE**

Can you show me some spots? ▪ only

14) Did you ever kill JACKFISH to feed your family or community? **JF**

Can you show me some spots? ▪ only

15) Did you ever kill DOLLY VARDEN to feed your family or community? **DV**

Can you show me some spots? ▪ only

16) Did you ever kill BULL TROUT to feed your family or community? **BT**

Can you show me some spots? ▪ only

17) Did you ever kill RAINBOW TROUT to feed your family or community? **RT**

Can you show me some spots? ▪ only

18) Did you ever kill ARCTIC GRAYLING to feed your family or community? **AG**

Can you show me some spots? ▪ only

19) Did you ever kill WHITEFISH to feed your family or community? **WT**

Can you show me some spots? ▪ only

20) Did you ever kill GOLDEYE to feed your family or community? **GY**

Can you show me some spots? ▪ only

21) Did you ever kill LINGCOD to feed your family or community? **LC**

Can you show me some spots? ▪ only

## PART 3

## CATEGORY – PLANT AND EARTH SITES

I`m now going to ask you questions about where you collected different kinds of plants, wood and earth materials. Again, we are looking to map only those actual sites and places where you have actually gathered plants, wood and earth materials. We are not mapping places where you tend to find those plants, wood and earth materials.

Plant and earth material sites are to be collected as points, lines or polygons depending on the extent of the area used.

22) Did you ever collect wild BERRIES? Show some spots. **BR**

▪ or O

23) Did you ever collect FOOD PLANTS? Show some spots. **FP**

▪ or O

24) Did you ever collect MEDICINE PLANTS? Show me some spots? **MP**

▪ or O

25) Did you ever collect CONSTRUCTION LOGS? Show me some spots. **CL**

▪ or O

26) Did you ever collect FIRE WOOD to heat your home? Show me some spots. **FW**

▪ or O

27) Did you ever quarry or collect SPECAILTY ROCK? Show me some spots. **SR**

▪ or O

28) Did you ever collected DRINKING WATER to bring back to your house, cabin or camp site? Can you show me some spots? **DW**

▪ or O

## PART 4

## OVERNIGHT SITES

I'm now going to ask you questions about places where you personally stayed out overnight while you were hunting, fishing, gathering, travelling or working in region.

All overnight sites to be mapped as points.

29) Have you ever stayed overnight in a CABIN? Show me the spots. **CB**

Do you know who built the cabin? Is it still being used? ▪only

30) Have you ever stayed overnight in a TENT? Show me the spots. **TT**

▪only

31) Have you ever stayed in a LEANTO? Show me the spots. **LT**

▪only

## PART 5

## CULTURAL SITES

I'm now going to ask you questions about other kinds of cultural sites. For this part of the interview we want map only places that you know for sure have been used in your lifetime or the life times of your parents or grandparents.

The cultural sites below are to be mapped as points, lines and polygons

32) Do you know of any Duncan's or Duncan's family Burial Places? **BP**

Do you feel comfortable in showing me those spots. If so, show the spots. Do you know who was buried at this place?

▪ or O

33) Do you know of any Duncan's or Duncan's family Birth Sites? If so show the **BS**

spots.

▪ or O

34) Do you know of any Old Settlements? If so, show them. **OS**

▪ or O

35) Do you have or have used Cache Sites. Can you show me where these are? **CS**

36) Do you know of any Sacred Sites that you would be comfortable in talking about? Can you show me where these are? **SS**

▪ or O

## PART 6

## COUNTRY FOOD HARVEST SURVEY

I am now going to ask you some questions about the foods that you kill and gather from the land. I am going to ask you what kinds of country foods you eat such as moose and fish and berries, how often and in what amounts. In asking this question, we are trying to get a sense of how important country foods are to you and your family. You need to answer as accurately as you are able.

Fill in the answers below the question in neat printing.

### MAMMALS

37) How many times in a week on average do you eat moose? Or how many times a month on average do you eat moose?

38) How many times in a week on average do you eat deer or elk? Or how many times a month on average do you eat deer or elk?

39)How many times in a month do you eat other animals, but not moose, elk and deer?

40) When you eat wild game what size of portion do you eat? A portion size of one palm, two palms, three palms or more? When I say palm – what I mean is the palm of your hand.

42) In what months do you seem to eat wild game the most?

43) How do you generally prepare / cook wild meat?

44) Do you dry or can wild game? Do you freeze it?

45) Do you share wild meat that you kill with your extended family or the community?

46) How much of a kill do you share with your extended family or the community?

47) Do members of your extended family or the community share what they kill with you? How much of the kill do they share with you?

**FISH**

48) How many times in a week on average do you eat fish? Or how many times a month on average do you eat fish?

49) When you eat fish what size of portion do you eat? A portion size of one palm, two palms, three palms or more? When I say palm – what I mean is the palm of your hand.

50) In what months do you seem to fish the most?

51) How do you generally prepare / cook fish?

52) Do you dry, can or freeze fish?

53) Do you share fish that you kill with your extended family or the community?

54) Do members of your extended family or the community share the fish they kill with you?

54) What species of fish do you eat the most? What species of fish do you enjoy the most.

**BERRIES**

55) Can you tell what types of berries you gather and eat?

56) What type of berry do you eat the most?  What is your favourite type of berry?

57) Do you dry, can or freeze berries??

58) How many times a week do you eat berries? Or how many times a month do you eat berries?

59) When you eat berries, generally how much do you eat in one sitting? One cup? Two cups? Three cups or more?

60) Do you share the berries you gather with your family?

61) Do other people / families share berries with your family?

62) Have you ever trapped for sustenance or commercial purposes? We are not going to map trapping in this specific study but will come in another study to map those places. Did your family actually have a trapline number or can you recall the general areas in which they trapped?

# GUIDELINES FOR CODING AND MARKING

## FEATURE CODES

1) Each feature must be identified by a code. The code is made up of two parts. The first part of the code is a pair of upper case letters representing the Questionnaire Category. The second pair of the code is number that indicated where the feature fits in the sequence of data marking. When you do the interview a participant you start with 1, then 2, then 3 and so on.

**DIAGRAM A**

**MO1**

**Questionnaire Category / Sequence**

**MO2**

**MO3 and so on**

2) The code sequence for each interview ascends or goes up, starting with the number “1”. The sequence follows the ascending order that features are mapped, regardless of whether you are jumping back and forth between questionnaire categories, or back and forth between base maps or between points, lines and polygons. The first feature marked during an interview number 1. (example: MO1). The second feature indicated is two (MO2). The third feature is three (MO3). The fourth is four (CB4). The fifth is five (MO5)

**DIAGRAM B:**

ORIGINAL DIAGRAM NOT PROVIDED IN THIS VERSION OF THE DCM

3) There cannot be – for any given participant – duplicate sequence numbers. For instance, the same person's maps should never display two MO12's or two CB5's. Ideally, if the 250 features are mapped during an interview with sequence would go from 1 – 250.

   Get in the habit of using the codepiece. Every time you mark a feature code, place the codpiece beside it. This will make it easy for you to keep track of the last sequence number used. If you forget to use the codepiece and find you've lost track of the assigned number, don't worry about trying to determine precisely where it was. Simply skip ahead a few to a number that you know for sure is not a duplicate. It is okay to have breaks in sequence continuity, but not duplicate code numbers.

4) The code is always attached to the feature with a line called a "leader". (Do not create floating codes). The feature, its code and its leader are always marked in the same colour ink.

**DIAGRAM C:**

ORIGINAL DIAGRAM NOT PROVIDED IN THIS VERSION OF THE DCM

5) Whenever you code a line feature you must underline the code. This lets the digitizers (the people that will do the computer mapping) know that a feature is a line and not a polygon. Usually this is obvious but not always. Sometimes a line feature joins back on itself, in which case it's not clear whether it's a line or a polygon. Perhaps a respondent indicates that she has picked berries all along the trail that loops back on itself. The absence or presence of the oval tells the digitizer how to process the feature.

**DIAGRAM D**

**Line Feature** **Line Feature that Loops Back on Itself**

ORIGINAL DIAGRAM NOT PROVIDED IN THIS VERSION OF THE DCM

6) If you go back to the same participant to do a second interview – a follow up session – you must pay close attention to the last code assigned. These will be recorded on the last code assigned. These will be recorded on the interview record form (Pg. 48). (Also Matt will have a master list of respondents, PINS and last assigned feature numbers). Start the follow up interview with the next available 3 digit "hundreds value" plus 1). For instance, if the last feature number assigned during Rick Horseman's 1st interview is 185, the first number assigned during his 2nd session would be 200 plus 1 = 201.

7) Sometimes a mapped point feature represents more than one questionnaire category. For instance, the participant might have killed "Moose" (MO) and Grouse (GS) at the same site. Or maybe he indicated a particular Cabin (CB) also as a Tent (TT). All such features require multiple codes. The number of codes must match the number of categories.

   A variety of leader configurations can be used. When possible, use a single leader and a string of codes, with each separated by a comma. Having options provides flexibility that minimizes crowding.

   In the diagram below, the moose (MO) kill site shown in the example above was the interview's 45th coded item, while the Tent Site (TT) was the 46th. This can also be drawn in another way – with one site, with two leaders extending from the site to two separate feature codes.

   **DIAGRAM E**

   ORIGINAL DIAGRAM NOT PROVIDED IN THIS VERSION OF THE DCM

8) Sometimes a mapped polygon or line feature represents more than one questionnaire category. An example below represents a site where the participant harvested both Berries (BR) and Medicine Plants (MP). A polygon is appropriate in this case. Note, this is not underlined. Another shows a trail along which the person picked Food Plants (FP) and Berries (BR), then returned to the same pointThe features and their respective codes and leaders are always the same colour.

**DIAGRAM F) Polygon with Multiple Categories / Line with Mutliple Categories**

ORIGINAL DIAGRAM NOT PROVIDED IN THIS VERSION OF THE DCM

VERBAL ANCHORING

9) Every time you mark a feature on a map you must verbally anchor it. This means speaking the code out as you mark it. As your pen is actually laying down the line of ink for “MP 59”, “the words” medicine plant eighty six” should be passing your lips. Speak clearly and in a normal voice when you anchor sites. Don’t mumble, and don’t drop your voice as you do it.

MORE BASICS

10) Each feature marked on a map will take one of three forms: point, line or polygon (area). Each point is 2mm in diameter – large enough to recognize from the leader but not so big to cause imprecision. When using a line code – ensure that you are underline the feature code, so that it can be distinguished from a polygon. Only use polygons where necessary and for a small area. The polygon must be drawn as accurately as possible to capture the activity being undertaken. Note – polygons are not underlined.

**DIAGRAM G**

ORIGINAL DIAGRAM NOT PROVIDED IN THIS VERSION OF THE DCM

11)Each polygon must be completely closed. The line forming each boundary must come back on itself, creating a closed loop. If it doesn’t, you’ve got two dangling ends. Sometimes a polygon will end abruptly at the edge of a map sheet, creating dangling ends. Make sure that before the session is over you take out the adjoining map and complete the polygon.

12) Make sure that any polygon or line that covers parts of two or more base maps lines up at the edges correctly. Make sure the feature is coded the same on all maps on which a portion is drawn. If a polygon or line covers parts of two sheets, the same code

should appear twice, once on each sheet. If it covers parts of three maps, it should appear three times.

CLARITY - PRINTING CLEARLY

Each of the dozens of hundreds of codes you mark during a map biography has to be readable, at a glance. This guaranteed if you acquire the following habits:

13) Print all letters. Do not write.

14) Use only upper case capital letters.

15) Make sure you can see “daylight” in the loops of your letters (B, D, R and so on) and numbers 6, 8 and 9. This ensures that your codes are printed large enough.

16) Be conventional with your printing. Don’t add punctuation or make it fancy with mysterious loops and wild flourishes. No extra markings.

17) Use pens that are in good shape. Permanent markers with fine nibs are the only acceptable instruments when it comes to marking data. When a nib starts to flatten from overuse or the pen begins to run out of ink, discard it.

CLARITY – COLOUR

In our system, colour is only used to enhance clarity. Colour does not signify any particular questionnaire category.  However, let’s agree to use RED, BLUE AND GREEN for marking our feature codes.

We will only use the BLACK medium markers for marking the PIN numbers, BIOMAP #, dates and signatures on maps

18) Make sure each feature and its code and leader are the same colour.

19) Take advantage of the four pen colours included in your toolkit. Whenever a portion of a map starts to get the slightest bit busy or crowded, switch colour. Variety makes a tremendous difference in readability, especially in areas where there are clusters of data.

20) Make sure overlapping polygons and lines that cross are different colours.

CLARITY - LEADERS

21) Mark leaders neatly. Attach them to features in a consistent, crisp manner. Each leader should connect to – actually touch – the feature; don't leave gaps. There should, however, be a small gap between the other end of the leader and the code.

22) Avoid crossing leaders. If you find it necessary to draw a leader across another one, make sure there are different colours.

23) When marking data along the base map's linear features – rivers, shorelines, roads, and so on – mark the leaders perpendicular (at right angles) to the linear features.

24) Mark each leader an appropriate length. This caries depending on how much data you have already marked. Leaders can be too long. Sometimes, it's OK to use to use a really long leader. The right length for a leader is one the minimizes clutter.

**DIGARAM H) Examples of correct recording of feature codes and labelling**

ORIGINAL DIAGRAM NOT PROVIDED IN THIS VERSION OF THE DCM

CLARITY – SECOND MAP

It sometimes happens that clarity of mapped data is inadequate even after careful use of the conventions governing legibility, use of colour, and leader placement. At some point it can become difficult to read the information due, simply, to the quantity of the data. It's important to develop a sense for when you are approaching that point, and to do something about it before you get there. Consult with Matt, to learn how to recognize how much on a single map is too much.

25) That "something" is to replace the map you've been using with a clean on. It's OK, if necessary, to even use a third map.

ACCURACY

26) You should be the person marking the data on the maps. It's good for the respondent to have a pencil in hand, so that he or she can point out the locations off features as precisely as possible. The participant doesn't mark the data.

27) Make sure the participant indicates – and not just nominally – the location and extent of sites. Have him or her indicate sites using a pencil as pointer, and show you the perimeter or polygons, Ask questions, What part of the bog did you pick medicine plants in"? Do not whip off polygons carelessly. Base them on the participant's information, not your assumptions. What you've marked should make sense to you. Don't settle for things like grouse sites in the lake, burial grounds on the sides of cliffs, or cabins in rivers. If something doesn't make sense, ask questions until it does, or the location is revised.

28) Make sure that sites with multiple codes – especially polygons – are valid. Let's say the participant points out berry site BR 94. When you get to the food plant category she indicates the same site for FP 99. Still after, responding to your questions about medicine plants, the respondent says – "The same place as those other two" and you code it MP 119"

Unskilled interviews – but not you guys – might make unwarranted assumptions, and make the three sites likes this.

The above is an example of interviewer bias, (It would not be interviewer bias if the respondent had clearly specified she'd collected all three categories over the exact same area. Usually, an accurate depiction would show overlapping polygons, perhaps as seen below. Its your job to be as accurate as you can.

29) Use the "approximate convention" – add a capital A to the end of the code – to indicate locations the participants is unsure about. Use it when the person either cannot point to the site, if a polygon's involved, cannot show you its perimeter. This convention is used to indicate that the respondent is confident the site is in the general vicinity, but not necessarily at the precise spot marked.

30) Pay attention to the questionnaire specifications that tell you a particular category must be marked as a point, or whether it can be marked as point, line or polygon.

## LARGE POLYGONS

Avoid using large polygons.

## CORRECTING MISTAKES

If you are making any kind of mistake when marking data – or and revision is needed – simply cover the error with diagonal hatching. Do this using a colour that's different than that of the original. Then add the correction using the same colour as the original.

# CATGEGORY CODES

## ANIMAL KILL SITES

## Questionnaire Part 2

### MAMMALS

| | | | |
|---|---|---|---|
| MO | moose | CU | caribou |
| EK | elk | MD | mule deer |
| WD | white tailed deer | BB | black bear |
| GB | grizzly bear | XM | other mammal |

### BIRDS

| | | | |
|---|---|---|---|
| DK | ducks | GE | geese |
| GR | grebes | GR | grouse |
| PT | ptarmigan | CR | cranes |
| XB | other bird | | |

### FISH

| | | | |
|---|---|---|---|
| WE | walleye | JF | jackfish (northern pike) |
| DV | dolly varden | BT | bull trout |
| RT | rainbow trout | AG | arctic grayling |
| WT | whitefish | GY | gold eye |
| LC | ling cod (burbot) | XF | other fish |

## PLANT and EARTH SITES

### Questionnaire Part 3

| | | | |
|---|---|---|---|
| BR | berries | FP | food plants |
| MP | medicine plants | SP | sacred plants |
| CL | construction logs | FW | fire wood |
| SR | specialty rock | DW | drinking water |
| XP | other plant/earth site | | |

## OVERNIGHT SITES

### Questionnaire Part 4

| | | | |
|---|---|---|---|
| CB | cabin | TT | tent site |
| LT | lean to | XOS | other overnight site |

## CULTURAL SITES

### Questionnaire Part 5

| | | | |
|---|---|---|---|
| BS | birth sites | BP | burial places |
| OS | old settlements | CS | cache sites |
| SS | sacred sites | XCS | other cultural site |

# LABELLING AUDIO CASSETTE SIDES

For purposes of labelling cassettes and keeping records, it's important to be very clear about these terms:

- MAP BIOGRAPHY
- INTERVIEW or SESSION
- Audiocassette side

1) The participants MAP BIOGRAPHY is completed when all six (6) questionnaire parts have been completed. That it, it's done when he or she has been asked about all six categories. The average participant should complete his or her biography in less than two hours. However, there will be some who require more than one interview. In other words, some map biographies will require more than one interview – more than one session.

2) An INTERVIEW is the same thing as a SESSION. These words refer to the time spent interviewing a participant on a given day, regardless of how many breaks in the interviewing process there are on the particular day.

   For instance, let's assume Jayme starts interviewing Rick Horseman on the afternoon of May, 14. That's when he starts Rick's map biography. Then Jayme and Ricky take a break, go and have supper, and come back to continue the interview and map biography in the evening. When they stop working on the evening of the 14th, Rick's biography is not complete. But his first interview session is over. Because Rick's map biography isn't finished, Jayme needs to do a follow up interview with him. Let's assume he does that follow up on the morning May 15. By the time they break for lunch on 15th, the second interview is completed and Rick's biography is complete. Rick Horseman's interview then requires two sessions – one on the 14th and one on the 15th. He does two interviews.

   THE INTERVIEW or SESSION, NOT THE MAP BIOGRAPHY IS THE UNIT TO KEEP IN MIND FOR PURPOSES OF LABELLING AUDIOCASSETTES.

3) Each audio cassette or cassette tape has two sides. Each audio cassette SIDE needs to be labelled. The cassette tape cover does not need a label because we

are using translucent plastic covers that you can see through. All map session are recorded on standard 90 minute tapes (45 minutes per side) analogue audio cassettes.

Any given audiocassette side is to be used for only a single map session. Do no record portions of different sessions – different interviews – on the same tap side.

THE CASSETTE SIDE - NOT THE CASSETTE - IS THE UNIT TO KEEP IN MIND FOR PURPOSES OF LABELLING AUDIOCASSETTES.

4) Label the audiocassette sides right after the session is finished. Do not leave the labelling for the following day.

5) Print the information on the cassette-side label. Do not write. Make sure you can see daylight in the loops of all letters and numbers.

6) The label you make for each audio cassette side needs to indicate six (6) pieces of information:

- The participants PIN
- The participants name
- The Survey Project Title – HLFN TLUS
- Interview date – (do not use a number to represent the month
- Cassette – side number
- Total number of cassette sides used to record the session

# INTERVIEW RECORD FORM

1)Interview Date_____ 2) PIN_____

3)Participant Name_____

4) Spelled _____Correctly ___Incorrectly

5) Interview Location: Community_____ Building_____

6)Lead Interviewer_____

7)Other Interviewers_____ None_____

8)Observers_____ None_____

9)Cassette SIDES used (circle) 1 2 3 4 5 6 7 8 9 10 10) Duration_____MIN

11)Map Sheets Used_____

---

12)Map Biography Completed _____Y_____N

13) Parts **NOT** Done:_____

_____

14) Departures from standard methodology:_____Y_____N

If Yes Specify_____

_____

15) Comments (**Use back of page if necessary**):_____

_____

_____

16) Use and catch all codes____Y _____N If yes, list them and specify:

_____

17) List 1st and Last codes numbers:_____

18) Interviewer Signature_____

# Appendix I

# Transcript Example

Note: Respondent Name and Portions Eliminated to Meet Confidentiality Standards

# Horse Lake First Nation

## Traditional Land Use Study 2011

### Interview Transcription Detail

Interview Participant PIN: 007

Interview Participant: XXXXXXXXXX

Interview Date: May 30/11

Interviewer: Karen Horseman

Base Maps Used:

Interview Transcriber: Jenny Geernaert

K: My name is Karen Horseman and today is May 30, 2011. I have just reviewed the permission form with XXXXXXthat he has just signed. We're in the community hall at the Horse Lake First Nation reserve to do a traditional land use survey map biography session. Our data will be marked on clear Mylar overlays that are sitting over 1:250,000 scale base maps. We'll be starting with map sheet 7

What is your birth date? Where you were you born? What are your parents names? Where were your parents born? What is your mother's maiden name?

D:  I was born in Horse Lake right behind Davis'

Parents were XXXXXXXXXX and XXXXXXXX

Don't know where they were born

K:  `I`m now going to ask you questions about where you killed different kinds of animals – fish, mammals and birds. For this part of the interview we want to map only places where you KILLED animals and took some home for eating purposes. We don`t want to mark a spot where you killed animals for commercial or barter purposes unless you took some of it home to eat. We don`t want to mark spots where you killed animals for tourists while you were guiding, unless you took some of the meat to eat.``

K: Did you ever kill MOOSE to feed your family or community?

D:  yes

K:  Starting with map 7

D:  Strait west of Hudson Hope and on the south side of the dam there's a road that goes right the  mountains that's where we pick berries

K:  Along that road, huckleberrys

D:  ya

K:  I'm marking a small polygon where XXXXXXpicked Huckleberries BR1

D:  Pick strait west of Moberly Lake

K:  I think we might have to switch

D:  Kakwa Pass that's where we have to go to get there

K:  I'll get this other map for you, Moberly is on there

D:  Ok, here's the road, is this the north side

K:  ya

D:  Moberly, that road used to go northwest, this is that road, pass road, stayed off the main part of the road cross Moberly River it was in this area

K:  I think we'll have to look at a different map, adding another map to our interview adding map 12

D:  ya, whatever…

K: Okay XXXXXX is looking for some more berry picking sites maybe hunting

D: Consulting map…along that creek picked huckle berries

K: Did you camp there too

D: Ya

K: We will mark that too , marking a berry picking spot BR2, where did you camp then

D: In this big opening alongside the road in a trailer

K: marking it as XOS3 camping in a camping trailer, anymore spots

D: That's it, is there Silver Sand anywhere there past Chetwynd

K: On this Highway

D: consulting map…

K: consulting map…

D: that's where we camped, that's where we turned off….

K: Crossing the highway or before

D: We stayed there for about 4 days, one day we picked berries there

K: I'll mark that as Br4 and X0S5, that's it for that area

D: Ya we'll switch to over near Tumbler or BC side

K: this is tumberidge..telling him lakes and towns

D: consulting map..trying to place that there's no other roads go to Tumbler

K: He said one of those roads now goes straight through maybe this one connected it

D: tumblerridge, wheres that road does towards..this one here

K: Ya this point goes back towards Kelly Lake

D: K Red willow area we hunt a lot there, west of Kelly Lake we hunt a lot in there North west of Kelly Lake

K: Ya all the roads are not here

D: We used to camp here, there's a moose lick in here

K: I will be marking this as XP6 for a Moose Lick and your camp is on the other side of it?

D: With a travel trailer that time we made dry meat in there

K: X0S seven, so did you have a meat rack there

D: Ya

K: That's a cultural site then, XCS8Cultural Site Meat Rack for drying moose meat where did you get it at that Moose Lick

D: Killed it right there, and then another moose, we shot a bear too

K: Marking Moose there

D: That bear wouldn't leave us alone

K: did you eat it

D: We just took the hide and give the meat to those guys in Kelly Lake

K: Marking BB10 and there was a moose there too

D: Same place where that moose lick was

K: you said there was another one

D: Oh ya, southwest of the camp on that road there

K: Marking another Moose kill MO11

D: that Road that goes in there before we turn in there I killed two there

K: marking two moose kill sites there MO12 and MO13

D: Red willow. *Consultingmap*..go south on this road I killed two elk or this other one

K: on this other one..

D: Right about here I killed two elk

K: I'm marking two elk EK14 and EK15

D: After right on the road that one another moose had to be

K: Marking a moose kill site MO16

D: By the river couple of sites there

K:  what did you get there

D:  Two Moose

K:  MO17 & MO18

D:  Red Willow towards Kelly Lake

K:  at the campground

D:  Thunder Mountain we had a camp right around here we picked berries at that time we camped in a tent, my mother was alive we were with her

K:  Tent TT19 and BR20 and you had everything with you there

D:  Killed a Grizzly bear there too other side of the road where we were picking

K:  Okay Grizzly GB21

D:  The road that goes strait south from there, that's where we pick mushrooms and huckleberries

K: That's on a different map you want to switch maps

D:  How about Tumbler ridge, we went hunting that's gotta be the road, this side of the turnoff pretty well at the end of this road were we picked berries I shot 2 caribou

K:  Berries BR22 and on the other side of the road I'll mark Caribou CU23 & 24

D:  That road goes straight through and goes to those falls

K:  that's the other one I got ready, that's the road you were talking about

D:  This has to be the one, that road that goes straight through, River down there somewhere, there's a camping area there where we have meat racks Kelly Lake People come here

K:  Wapiti River, right here

D:  Camping spot has to be here

K:  Higher up?

D:  that road you go strait, that time we were picking Huckleberries and Mushrooms

K:  Berries and Mushrooms BR25 and FP26, did you drive right through, or what did you tell me you camped there

D: Kelly Lake people they come and make dry meat there it's an Elders Camp too

K: what did you camp in

D: Sleep in a tent

K: XOS27 and CS28 for the meat rack

D: It was right by the road, supposed to go straight west

K: MonkmanProvincial Park

D: That Waterfall there go straight west

K: consulting map with Doug…..

D: Some guys had quads and went up there, there's no road in there

K: I know there's supposed to be

D: Went camping there, that's Nose Mountain…on top there's a river…we camp and trap over there went all the way to the border, we used to trap on that trap line all through there

K: Who has that trap line now

D: That I do not know

K: This follows Wanihandie

D: Ya

K: Going around this narrow way river follow this trap line

D: Ya that's it

K: You want to take a break..

K: Were back in the Kawkwa Falls area

D: Stoney Lake we had a cabin there in this area it was called five cabins some of them fell down now

K: Would you say it was a settlement then..*side flip..*

D: On Monkmon Pass, Kunoso Falls Area

K: That's the falls you were talking about

D: Cabins were in this area somewhere and Dave Grey…

K: So the settlement was in this area somewhere close to the falls

D: ya

K: There's a park there now maybe

D: There's a forks there that's where the cabins are

K: Marking this as OS29, there was a site called Five Cabins, now he's going to tell me where XXXXXXXhad a cabin

D: At the Turn off away from the road on the west side of Honeymoon creek

K: Marking as CB30

D: Anyways from there there's another turnoff…I remember the steep mountain where we turn off there was another cabin, Its gotta be right here cause we climbed that mountain with

K: Who owned it

D: My brother XXXXXXX

K: Cabin CB31

D: We killed a moose right close to that cabin

K: Marking a moose kill MO32

D: About it for that one, where's that mushroom picking berry picking….ya that's it

K: which one would you like to Saddle Hills Area

D: Ya that's our traditional area

K: explaining locations….

D: Where's La Glace

K: right here

D: Spring Lake pass there……on the high point of this mountain we turn there

K: *consulting map with XXXXXXXX…*

D: White Mountain Tower just a ways from there we used to have a camp in there, this road we go hunt there, people from Cadotte come hunting there too

K: Overnight camping site XOS33 for a hunting camp, did you kill anything there

D: A little ways from there we killed a moose and rabbits we used to kill there too on the west side of the road

K: Marking MO34 and XM35 for rabbits

D : Anyways from there in this area here we killed a couple moose there

K: Two moose there, the same spot

D: ya

K: marking MO36 and MO37

D: Past that gas plant that road here goes west before that turn of on that road here we killed a couple more there

K: Just trying to figure where

D: ON that Tower road near the gas plant….

K: there's the turn off

D: strait west

K: Moose and elk in the same place

D: ya cause its wide open there

K: marking EK38 and MO39 for the moose

D: Down this road and the first road you go south…

K: marking a moose kill site MO40

D: On that same road there was another road goes east there there's a salt lick in there

K: Moose Lick

D: It's a real nice moose lick that one

K: Marking as XP41 Moose Lick

D: We were packing at that time me had no motorbikes we killed moose in there

K: In the moose lick MO41 MO42 and MO43

D: gas plant then we go onto this road here

K: It doesn't join up on my map, Pouce Coupe river is here

D: There's a really big swamp in there, this creek here there's a really big camp spot in there lots of dry meat rocks are set in there too

K: BY the river here, that's a camping spot and cultural site. I'll mark that as other mark that as other culture site XCS45 and camping, who used that place

D: Natives from here about three meat racks there all kinds of people go there

K: I remember going up there they used it

D: There's another road that goes up there there's another camp spot that's a place where we used to kill moose too

K: This road where the camping

D: Down below

K: camping in a tent

D: yes at that time and down below a salt lick where we camped

K: Marking TT46 for camping. XP47 for other earth site for Moose Lick and you killed moose in there MO48 and MO49

D: That spot and a turn off on this road we got one moose there to

K: MO50. Where are we here

D: this one here

K: consulting map with XXXXX…that's where you wanted to put a moose ion there

D: Ya, two moose

K: Marking MO51 and MO52

D: just about where that curve is

K: Marking Moose kill site MO53

D: go down that hill then go right here

K: By that lake there's supposed to be a curve here, what did you get here

D: Moose

K: Marking a moose kill MO54

D: Back towards tower

K: consulting map with XXXXXX…

D: by this curve here

K: people use those towers for markers

D: That's a ranger cabin, right along that whole lake that was XXXXXX trap line

K: I'm going to mark that down, did you ever have a trap line

D: I used to go with my grandpa and this old man Wanihandi right on Nose Mountain. Passed Demmitt we'll go that way again. Lots of places. Strait north of Demmit that first road there about five places we shot 5 there

K: Swan Lake

D: North of the lake, then one on that cut line, by that lease, two there

K: Okay, I'll mark all those. Marking some moose kill site MO55, MO56, MO57 and MO58

D: that road that goes strait west of that corner just past that lake we killed one there

K: Marking a moose kill site MO59

D: And from here there's one road that goes, supposed to be a road here

K: It goes part ways

D: there's that little curve there there's a cabin there

K: Cabin there by that creek. Marking CB60. Who owns it

D: Some mooniow used to be Delamow's I don't know who's got it now. Right here you go straight north there's a small cabin there. Right on this curve there's a cabin there, there's a salt lick right down below

K: Marking a salt lick

D: We killed moose there too

K: XP61 Salt lick

D: Couple of Moose there

K: MO62 and MO63 out of that small moose lick just marked a small polygon there

D: Used to be a cut line but now there's roads all over

K: I this area over here

D: Supposed to cross the creek over here

K: this is Gundy road and it joins up here

D: That's where that farmer is, cause we used to travel with horses we'd go right through his yard, we used to go up there and hunt. I think that's enough places

K: You didn't do Grande Cash yet

D: There's lots of other places

K: tired

D: Dizzy

K: Let's take a lunch break or come back tomorrow

D: There's still Lymburn…Kelly Lake….

K: Stop then?

D: ya

BREAK IN INTERVIEW

K: we had to leave the building because of a gas leak on Friday now we're back to continue XXXXXXXX

D: I thought of a few more places I missed, at that White Mountain Tower road turning west

K: I had to change Tapes continue of tape 2 of XXXXXX'sinterview. Is this what you were looking for. There's Hilltop Lake right there

D: go east a little bi then you west there, doesn't show

K: on these lease roads

D: there's a cabin, down this road we killed a moose here

K: Mark that as

D: Down below we got an elk

K: MO62 and down below EK63

D: then you go back, go west, about this creek here, there's a cabin there

K: what side of the creek

D: West

K: marking a cabin CB64

D: go west on that road

K: break for a second..k back there's a cabin there now where

D: consulting map….killed on past that hill right on top that same hill

K: We got that, Last time you were talking about Lymburn area

D: Westmark road instead of turning off there we go on this side a little bit, there's nice salt licks in there

K: Woking, there's salt licks in there? Marking a moose lick as other earth site XP65 saltlick

D: Did you get spring lake area

K: yes we did

D: On this road here we went a lot over there, turn north in there killed quite a few

K: there's the tower

D: Just on this tower here down below here there's a nice lick in there we killed about three there

K: right around here

K: Marking salt lick XP66 and moose kill MO67 and MO68

D: Around here down below that tower here we killed moose there too

K: I'll just put them all…marking a moose MO69 MO70

D: one time we were driving down that same road we came around the corner there was a bull moose right in the middle the horns were chopped right off it was right on the road, below that tower there about five years ago

D: That's not the only one, there was a cow moose just shot right on the lease just soft laying there, maybe someone thought it was a bull

K: Lymburn you were going to tell me on Friday

D: Strait west of Lymburn go in there, just north of here there's a salt lick in there I must a got maybe four, then on the other side there's another salt lick there we got moose in there too

K: Can you still use that salt lick

D: Oh ya it right on the cut line, both of them same area

K: Right there that's one of them, then the other one right there

D: ya

K: marking two salt lick XP71 and XP72 two moose in each?

D: Something like that

K: MO73, 74, 75 and 76

D: Right there we go up this way…consulting map We killed moose there too about three

K: Along the creek there

D: ya, real nice moose country in there

K: marking with a polygon marking three moose coming out of the same area MO77, MO78 and MO79

D: There's a bunch of leases in there, we killed moose in there too

K: All kinds of leases in there..lakes too

D: *consulting map*…this area there's moose another salt lick there

K: this road here, there's a Y

D: There's a lot of leases out there, right close to that, a lot of roads in there now

K: You got a moose in there

D: Ya about three not at the same time though

K: I will mark along the road there was three different moose kills at three different times MO80, MO81 and MO82

D: there's another road going there that's where we kill moose too

K: It shows it on here, is that at the end of this road

D: ya, there's another lease in there

K: There's a lot of cutlines in there

D: Strait north of there

K: What did you get there moose

D: two

K: marking two moose kills MO83 and MO84

D: I didn't mark anything in Horse Lake the back of my place

K: There's moose there

D: five all together

K: Marking moose kills along HorseLake

D: one time there was four at once

K: MO85, MO86, MO87, MO88 and MO89

D: One came right to my step, Alvina said shoot it..I said no your not supposed to kill a moose from your front yard that's what my grandpa used to say

K: I heard that to

D: we were just taking Pictures of it then it went away, Goodfare area, we hunt there too

K: big lake in there

D: This road turn, must be somewhere here we killed a moose here too

K: marking a moose kill MO90

D: a lot of moose kill but we gave a lot away, XXXXXX and XXXXXXwent hunting moose came in front of them that moose walked right up to Mavis in the car she says, is that a moose? Lol. Where's that gas plant…

K: consulting map with XXXXXXX

D: on that road , there's a lease in there…..we killed a couple moose in there

K: Running out of places. Marking moose kill MO91, that's a lot of moose

D: I think I missed a lot yet

K: were going to switch maps to grand cash area..telling Doug where main locations are

D: This is all valley down here

K: Forestry Trunk road is close to grand prairie and then you switch to the other map

D: We went hunting up there some white hunters said there was some white elk up there albinos we didn't see any

K: there's the simonette river, there's a lookout….

D: East side of the river, we went camping in there

K: Simonette

D: after you get into that area the road turns into a valley

K: want did you find down there

D: we killed an Elk but we were looking for the albino, we killed one

K: where would you say….smokey river

D: Ya, that's where we cast right on the bank

K: What did you camp in

D: RV

K: Moose kill MO92 and overnight camping XOS92

D: K, go on that road

K: Grovedale

D: Chinook that's where me and Paul were trapping, Nose mountain Lee LaGlace

K: okay

D: We used to trap a lot there, that's his trapline there

K: yes I wrote that down…

D: Aspen road lots of native people live there, we drove passed the people theres quite a bit of high bush blueberries

K:  Marking a small polygon for berry picking, okay, were done, now we have to sign the maps

K:  Did you ever kill CARIBOU to feed your family or community?

D:  Yes, showed you the spots

K: Did you ever kill ELK to feed your family or community?

D:  Yes, showed you the spots

K:  Did you ever kill MULE DEER to feed your family?

D:  Yes, showed you the spots

K:  Did you ever kill WHITE TAILED DEER to feed your family or

Community?

D:  Yes, showed you the spots

K: Did you ever kill BLACK BEAR to feed your family or community?

D:  Yes, showed you the spots

K: Did you ever kill GRIZZLY BEAR to feed your family or community?

D: NO

K:  Did you ever kill DUCKS tofeed your family or community?

D:  no

K: Did you ever kill GEESE to feed your family or community?

D:  no

K: Did you ever kill GREBES to feed your family or community?

D: no

K: Did you ever kill GROUSE to feed your family or community?

D:  yes showed you the spots

K: Did you ever kill PTARMIGAN to feed your family or community?

D: Yes

K:  Where do you want me to mark it

D:  on the BC side Silver Sands area while berry picking

K: Did you ever kill CRANES to feed your family or community?

D: NO

**K:** Did you ever kill WALLEYE to feed your family or community?

D: NO

K: Did you ever kill JACKFISH to feed your family or community?

D: YES, in Kelly Lake

K: Did you ever kill DOLLY VARDEN to feed your family or community?

D: no

K: Did you ever kill BULL TROUT to feed your family or community?

D: no

K: Did you ever kill RAINBOW TROUT to feed your family or community?

D: no

K: Did you ever kill ARCTIC GRAYLING to feed your family or community?

**D: yes, in Dease Lake where I was Guiding**

K:  Did you ever kill WHITEFISH to feed your family or community?

D: no

K: Did you ever kill GOLDEYE to feed your family or community?

D: no

K:  Did you ever kill LINGCOD to feed your family or community?

D: no

K: I`m now going to ask you questions about where you collected different kinds of plants, wood and earth materials.  Did you ever collect wild BERRIES? Show some spots.

D:  YES, SHOWED YOU

K:  Did you ever collect FOOD PLANTS? Show some spots.

D:  no

K: Did you ever collect MEDICINE PLANTS?

D:  yes

K: Would you like to show me some spots

D:  We got a long ways to go, When I run into them I just pick it when I see it when I'm out in the bush

K: Did you ever collect CONSTRUCTION LOGS?

D: NO

K: Did you ever collect FIRE WOOD to heat your home? Show me some

spots.

D:  YES, SHOWED YOU

K: Did you ever quarry or collect SPECAILTY ROCK? Show

me some spots.

D: NO

K: Did you ever collected DRINKING WATER to bring back to your

house, cabin or camp site? Can you show me some spots?

D:  YES, SHOWED YOU

K:  I'm now going to ask you questions about places where you stayed out overnight while you were trapping, hunting, fishing, gathering, travelling or working in region.

Have you ever stayed overnight in a CABIN?.

D:YES SHOWED YOU

K: Have you ever stayed overnight in a TENT? Show me the spots?

D:  YES, SHOWED YOU

K: Have you ever stayed in a LEANTO? Show me the spots.

D: Yes anywhere where we used to trap cause usually when it starts to get dark and theres wood ther we'll set up our leanto

K: I'm now going to ask you questions about other kinds of cultural sites. For this part of the interview we want map only places that you know for sure have been used in your lifetime or the life times of your parents or grandparents.

Do you know of any Horse Lake family Burial Places?

Do you feel comfortable in showing me those spots. If so, show the spots. Do you know who was buried at this place?

D: yes, Theres one grave that we found just on the north end of Braindord lake

K: Can you mark it

D: Acroos the creek between the lake and the highway. We seen three there, a long time ago, everything is down, buried with trees

K: Burial spots BP95, BP96 and BP97,

K: Do you know of any Horse Lake family Birth Sites? If so show the

spots.

D: yes, mine behind where XXXXXused to live

K: Marking Birth site BS98

K: Do you know of any Old Settlements? If so, show them.

D: yes, showed you

K: Do you have or have used Cache Sites. Can you show me where these

are?

D: NO

K: Do you know of any Sacred Sites that you would be comfortable in

talking about? Can you show me where these are?

D: NO

## COUNTRY FOOD HARVEST SURVEY

K: I am now going to ask you some questions about the foods that you kill and gather from the land. I am going to ask you what kinds of country foods you eat such as moose and fish and berries, how often and in what amounts. In asking this question, we are trying to get a sense of how important country foods are to you and your family. You need to answer as accurately as you are able.

How many times in a week on average do you eat moose? Or how many times a month on average do you eat moose?

D: Once a day, I can't eat beef everyday

K: How many times in a week on average do you eat deer or elk? Or how many times a month on average do you eat deer or elk?

D: no

K: How many times in a month do you eat other animals, but not moose, elk and deer?

D: once a year

When you eat wild game what size of portion do you eat? A portion size of one palm, two palms, three palms or more? When I say palm – what I mean is the palm of your hand.

D: Has to be a big steak cause I have a big hand

K: In what months do you seem to eat wild game the most?

D: every month

K: How do you generally prepare / cook wild meat?

D: Dry meat, boil, soup out of it, bbq, fry some too not that much

K: Do you dry or can wild game? Do you freeze it?

D: all

K: Do you share wild meat that you kill with your extended family or the community?

D: YES

K: How much of a kill do you share with your extended family or the community?

D: YES, just about all

K: Do members of your extended family or the community share what they kill with you? How much of the kill do they share with you?

D: NO, because they don't hunt

K: How many times in a week on average do you eat fish? Or how many times a month on average do you eat fish?

D:once a month

K: When you eat fish what size of portion do you eat? A portion size of one palm, two palms, three palms or more? When I say palm – what I mean is the palm of your hand.

D: 1 PALM

K: In what months do you seem to fish the most?

D:Buy it

K: Can you tell what types of berries you gather and eat?

What type of berry do you eat the most? What is your favourite type of berry?

D: Huckle, rasp, cranberries, blueberries

K: Do you dry, can or freeze berries??

D: freeze

K: How many times a week do you eat berries? Or how many times a month do you eat berries?

D: three times a month, have it with pancakes

K: When you eat berries, generally how much do you eat in one sitting? One cup? Two cups? Three cups or more?

D: 1 CUP

K: Do you share the berries you gather with your family?

D: YES, just with my kids

K: Do other people / families share berries with your family?

D: no

K: Have you ever trapped for sustenance or commercial purposes? We are not going to map trapping in this specific study but will come in another study to map those places. Did your family actually have a trapline number or can you recall the general areas in which they trapped?

D:  yes, lots,  there was no family allowance back then

# Appendix K)

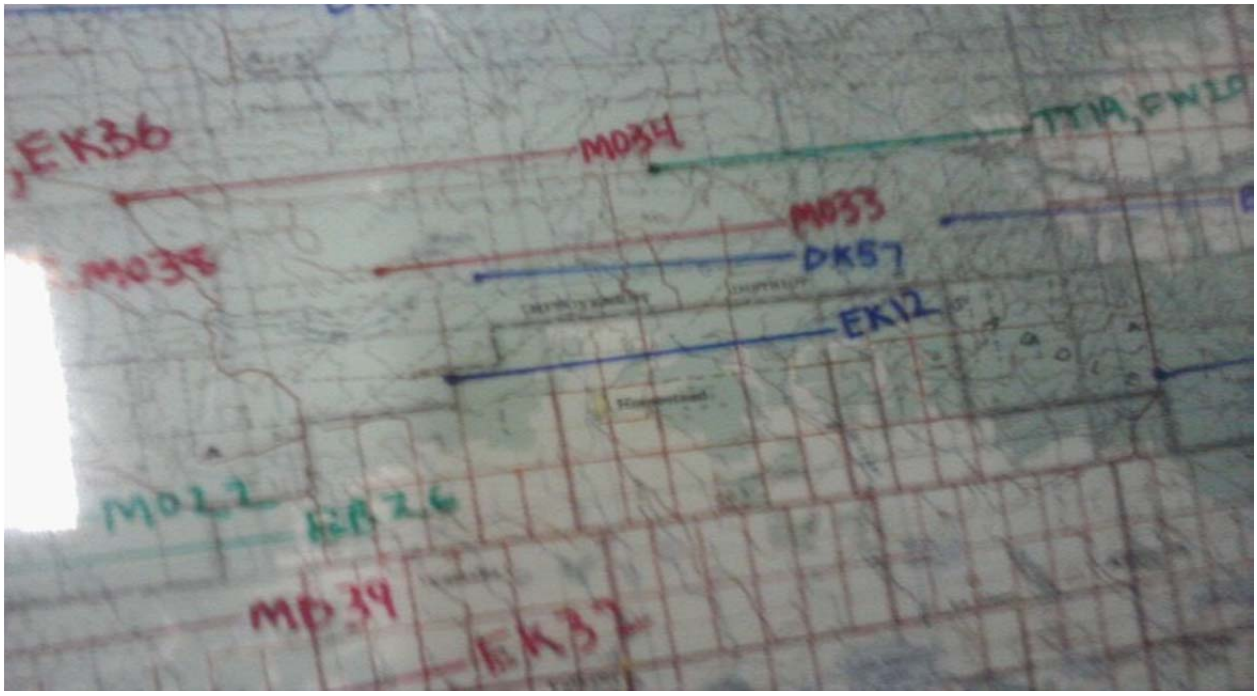
# PHOTOS FROM COMMUNITY TRAINING WEEK
# And Map Sort

**Training: Focused on understanding need for methodological approach in all aspects of research implementation**

**Community Researchers receive hands on instruction on use of tool kit and application of tools and conventions**

**Community Researchers: Training by Interviewing Each Other and Observing Research Director Conduct Interviews**

**Community Researchers: Observed and Receive Instruction in their Initial Interviews by Research Director**




**Example of Feature Codes Marked on Bio Map**

**Bio Map Check – Every Map Re - Checked for Application of Conventions**

# APPENDIX L)

# INTERVIEW MASTER LIST

**(Note: Version Without PINS to Address Confidentiality Provisions)**

# APPENDIX M)

# Maps

# Hodgepodge Map

**(HLFN All Sites Map)**

# Category Maps

# Category Map:
# Moose Kill Sites

# Category Map:
# Elk Kill Sites

# Category Map:
# Deer Kill Sites

# Category Map:
# Jackfish (Northern Pike) Kill Sites

# Category Map:
# Walleye Kill Sites

# Category Map:
# Bull Trout Kill Sites

# THEMATIC MAPS

# THEMATIC MAP:
# CULTRUAL SITES

# THEMATIC MAP:
# OVERNIGHT SITES

# THEMATIC MAP:
# PLANT AND EARTH MATERIAL GATHERING SITES

# THEMATIC MAP:
# FISH KILL SITES

# THEMATIC MAP:
# BIRD KILL SITES

# THEMATIC MAP:
# MAMMAL KILL SITES

DRAFT

N

Fort Nelson

Fort Vermilion

Fort McMurray

Saskatchewan

British Columbia

Alberta

Fort St. John

Taylor

Hudson's Hope

Dawson Creek

Chetwynd

Grande Prairie

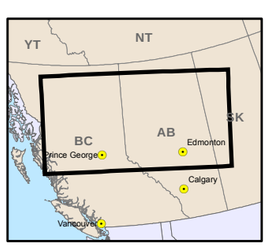
Mackenzie

Fort St. James

Prince George

Edmonton

Lloydminster




Map Notes:
1. Datum/Projection: NAD83/UTM Zone 10N
2. First Nation Reserves from Canadian Lands Administrative Boundary, NRCan
3. Hydrography from National Topographic Data Base, NRCan
4. Road Network from National Road Centreline, NRCan
5. Protected areas and other data from the Governments of BC and Alberta

- Traditional Land Use Sites
- First Nation Reserves
- Protected Areas, Provincial Parks, and Ecological Reserves.
- Highways

1:3,500,000

0 100 Km

This map is one of a series of maps produced by the Horse Lake First Nation and should be viewed and considered along with the full set of maps produced as part of the HLFN TLUS 2011 Project and the supporting documents entitled the "HLFN TLUS Methodology Report" and "HLFN TLUS Community and Public Report".

This map and the HLFN TLUS 2011 Project is a living document and is intended to be amended and refined over time. This map is the property of the HLFN and is not to be reproduced, reprinted, copied or published without the express permission of the HLFN.

Map produced by BC Hydro for the Horse Lake First Nation – February 2012

HORSE LAKE FIRST NATION

INDUSTRY RELATIONS CORPORATION
HORSE LAKE FIRST NATION

| | |
|---|---|
| Date | February 22, 2012 |

Horse Lake First Nation
Traditional Land Use
Survey Project 2011

**Hodgepodge Map**