

INTEGRAL ECOLOGY GROUP LTD.

KWUSEN RESEARCH & MEDIA LTD.

Dover Commercial Project Traditional Use Update Report

Prepared by: Ann Garibaldi, Integral Ecology Group &
Towagh Behr, Kwusen Research & Media

Prepared for: Energy Resources Conservation Board on behalf of the
Community of Fort McKay (Fort McKay First Nation and Fort McKay Métis
Nation)

March, 2013

ERCB Application No. 1673682



Limitations and Terms of Use

This Traditional Use updated report was prepared by Integral Ecology Group and Kwusen Research & Media. All intellectual property rights to traditional knowledge presented in this report are held by the Fort McKay Sustainability Department on behalf of the Fort McKay First Nation and Fort McKay Métis Nation. Research results contained herein are specific to the Dover Commercial Project and are not intended to be used by any other parties or for any other purposes. This report is not suitable or intended to be used in assessment of any other projects or in the assessment of any other existing or future developments in Fort McKay traditional territory. Any use, reliance, or decisions made by third parties on the basis of this report are not condoned by the report authors and are the sole responsibility of such third parties. This report was written without prejudice to issues of treaty rights, aboriginal rights and/or other interests of the Community of Fort McKay.



Acknowledgements

We would like to thank the Fort McKay Community members who so graciously shared their time and knowledge with us. We would also like to thank Community elders and land users for sharing their time and expertise during preparation of the Overview Level Traditional Land Use Study and this report.

Executive Summary

PetroChina International Investment Company Ltd. and Athabasca Oil Sands Corporation, through the Dover Operating Corporation (Dover), have filed an application to develop the Dover Commercial Project (the Project). The Project is located within the traditional territory of the Community of Fort McKay, approximately 42 km west of the settlement of Fort McKay, approximately 8 km south of Fort McKay's current and historic settlement on Moose (Gardiner) Lake¹ Reserve 174a and immediately adjacent to Fort McKay First Nation's Buffalo (Namur) Lake Reserve 174b.

The objective of the *Dover Commercial Project Traditional Use Update Report* (TU Update Report) is to supplement the *Overview-Level Traditional Land Use Study for the Dover Commercial Project* (Overview TLUS) with up-to-date traditional use information. The Overview TLUS was completed by Integral Ecology Group Ltd. (IEG) and Kwusen Research and Media (KRM) on behalf of the Fort McKay Industry Relations Corporation (IRC; now the Fort McKay Sustainability Department; FMSD) on September 30, 2010 and was submitted for inclusion in Dover's Environmental Impact Assessment for the Project (Garibaldi and Behr 2010). The Overview TLUS was completed with a limited time period of four days of community interviews and five weeks of data compilation, community validation and analysis. This limited timeframe was a consequence of a late request to the FMSD for a TUS by Dover and resulted in key Community elders or knowledge holders not being available for participation in the study.

¹ The Community of Fort McKay's names for Gardiner Lake and Namur Lake are, Moose Lake, and Buffalo Lake, respectively – though Community members often say "Moose Lake" when referring to the entire area around both Buffalo and Moose Lake. The two Fort McKay First Nation reserves located on the east side of these lakes are officially called Namur River 174A and Namur Lake 174B. Throughout this report, community names for the lakes (i.e. Moose and Buffalo Lakes) are used. Additionally, the area around both Moose and Buffalo Lakes is referred to within this report as the Buffalo and Moose Lake reserves. The permanent campsite located on the south end of Moose (Gardiner) Lake is referred to as the Moose Lake Camp.



Since that time additional interviews have been conducted and further research has been completed both of which represented in the TU Update Report. The TU Update Report includes updated information that allows for a more representative assessment of current impacts to the Community of Fort McKay's treaty and aboriginal rights from both the Project and cumulative development perspectives.

Both the Overview TLUS and the TU Update report demonstrate that the Dover Project creates adverse negative impacts on Fort McKay TU Values and contributes to a significant adverse situation with respect to cumulative effects. The TU Update report identified over 424 TU Values impacted within the Project Reporting Area and 593 TU Values impacted within 20km of the Fort McKay's Buffalo and Moose Lakes Reserves. The most serious Project effects to TU Values and traditional land use opportunities are:

- 1) loss of traditional use of a cluster of lakes that are highly valued for cultural purposes and are positioned within the centre of the Project lease area. While not entirely overlapping with the Project development, the lakes are surrounded by the Project lease and as such the ability to continue to use these sites would be seriously impacted;
- 2) loss of subsistence sites (e.g., hunting and trapping areas) as a result of direct and indirect Project effects. Due to currently existing and planned development on the west side of Fort McKay's traditional territory this will significantly affects trappers and other traditional land users;
- 3) negative effects on woodland caribou (classified as Threatened under the Species at Risk Act) and moose populations, both of which are culturally important and already experiencing a decline in numbers; and
- 4) the proximity of Project development to their Buffalo and Moose Lake Reserves which will hinder Community member use of the area – land they consider the best remaining area within their traditional territory for cultural pursuits and to carry out treaty and aboriginal rights.

In the absence of adequate mitigation and accommodation measures, the preliminary results of the assessment of the Dover Commercial Project on the treaty and aboriginal rights of the Community of Fort McKay, including their ability to meaningfully carry out traditional practices, are considered significant and adverse. The proximity and impacts of the Dover Project on Fort McKay's Buffalo and Moose Lakes Reserves are especially troubling to the Community. Further, as a number of Project-related effects articulated in the TU Update and



the Overview TLUS cannot be completely mitigated by Dover, the post-mitigation residual effects of the Project will add to the already significant and adverse cumulative effects of development.

Community members have stated very clearly that a buffer around the Buffalo and Moose Lakes Reserves is most desired offset to mitigate both Project-related and cumulative effects from a cultural and traditional use perspective. According to Fort McKay's cumulative effects study one of the four critical management strategies to ensure ecological integrity and maintenance of traditional land use opportunity is to anchor the protected area network in a culturally and environmentally relevant manner. This protected area will serve as a biological refugium that will help maintain nearby landscape diversity. A buffer surrounding Buffalo and Moose Lakes will help provide this function for the reserve land allowing people to be able exercise treaty and aboriginal rights by shifting the edge of the undeveloped land away from the reserve and thereby decreasing 'edge effect'.



List of Acronyms

| | |
|------------------|--|
| CSE | Culturally Significant Ecosystem |
| CKK | Community KnowledgeKeeper |
| EIA | Environmental Impact Assessment |
| FM IRC | Fort McKay Industry Relations Corporation (currently the Fort McKay Sustainability Department) |
| FMSD | Fort McKay Sustainability Department (formerly the Fort McKay Industry Relations Corporation) |
| FM TTUS | Fort McKay Territory-wide Traditional Use Study |
| IEG | Integral Ecology Group |
| LSA | Local Study Area |
| KRM | Kwusen Research & Media |
| MLB | Moose Lake Buffer |
| Overview TLUS | Overview-level Traditional Land Use Study for the Dover Commercial Project |
| RA | Reporting Area |
| RFMA | Registered Fur Management Area (equivalent to a trapline) |
| RSA | Regional Study Area |
| SAGD | Steam-assisted Gravity Drainage |
| TEK | Traditional Ecological Knowledge |
| TLU | Traditional Land Use Studies |
| TUS | Traditional Use Studies |
| TU Update Report | Traditional Use Update Report (this report, update from the Overview TLUS) |
| TU Values | Traditional Use Values |



Table of Contents

| | | |
|-------|---|----|
| 1 | Introduction | 1 |
| 1.1 | Data Sources | 2 |
| 1.2 | Report Constraints..... | 3 |
| 1.3 | Study Areas | 3 |
| 2 | Traditional Use in Fort McKay’s Traditional Territory | 6 |
| 2.1 | The Community of Fort McKay..... | 6 |
| 2.2 | Traditional Territory and Seasonal Rounds..... | 6 |
| 2.2.1 | Fall..... | 8 |
| 2.2.2 | Winter | 10 |
| 2.2.3 | Spring..... | 11 |
| 2.2.4 | Summer | 12 |
| 2.3 | Trapline System in Fort McKay | 13 |
| 2.4 | Significance of the Moose Lake Area | 17 |
| 3 | TUS Interview Methods | 20 |
| 3.1 | Data Management and Verification | 21 |
| 4 | Background: Overview TLUS Objectives and Findings..... | 23 |
| 4.1 | Overview TLUS Objectives | 23 |
| 4.2 | Overview TLUS Key Results..... | 24 |
| 4.2.1 | Overview TLUS: Project-specific TU Effects Assessment Results..... | 27 |
| 4.2.2 | Overview TLUS: Residual Effects Assessment Results | 27 |
| 4.2.3 | Dover Application: Traditional Land Use Assessment Results | 27 |
| 5 | TUS Update Report: Impacts of Dover lease on TU Values | 34 |
| 5.1 | TUS Results..... | 34 |
| 5.1.1 | A Note about TU Mapping..... | 35 |
| 5.2 | Anticipated Effects of Dover Project on TU Values..... | 36 |
| 5.2.1 | Site-specific and Non-site-specific Subsistence Values..... | 36 |
| 5.2.2 | Site-specific and Non-site-specific Habitation Values | 40 |



5.2.3 Site-specific and Non-site-specific Trapping/Commercial Values 43

5.2.4 Site-specific & Non-Site-Specific Critical Wildlife/Ecological Values 43

5.2.5 Site-specific & Non-site-specific Transportation Values 44

5.2.6 Site-specific and Non-site-specific Cultural/Spiritual Values..... 47

5.2.7 Site-specific & Non-site-specific Indigenous Landscape Values 48

5.2.8 Anticipated Effects on Fort McKay Reserves 174a and 174b 49

5.2.9 A Note about Cumulative Impacts..... 59

5.3 Dover Project Mitigations in Application 61

5.3.1 TU Assessment 67

5.3.2 Assessment Criteria 67

5.3.3 Significance Thresholds..... 68

5.3.4 Preliminary Cumulative Effects Assessment on TU 70

6 Conclusions..... 72

7 References 74

[99 – 100] Traditional Knowledge Documentation 79

[101 – 104] Reclamation, Traditional Plant Harvesting & Wildlife..... 80

[105 – 106] Mitigation 82

[107 – 110] Proximity to Moose Lake and Access..... 85

[111 – 112] Communication 88

Tables

Table 2-1: Summary of Key Fall Activities, September through December 9

Table 2-2: Summary of Key Winter Activities, January through March 11

Table 2-3: Summary of Key Spring Activities, April through May 12

Table 2-4: Summary of Key Summer Activities, June - August 13

Table 5-1: TU Values 35

Table 5-2: Distance of LARP Conservation Areas from Fort McKay 60

Table 5-3: Existing, Approved and Planned Development within Fort McKay’s



Traditional Lands 61

Table 5-4: Project-Specific Residual Effects Assessment Summary 68

TU Report Figures

Figure 1-1: Dover Project Area 3

Figure 1-2: Dover Project Study Areas 4

Figure 2-1: Fort McKay Seasonal Round 15

Figure 2-2: Fort McKay Traditional Territory with Traplines 16

Figure 4-1: Overview TLUS: All TU Values within the Reporting Area in 2010 25

Figure 5-1: TU Update: All TU Values within the Reporting Area in 2013 37

Figure 5-2: Buffered Subsistence Values within the Reporting Area 38

Figure 5-3: Buffered Habitations Values within the Reporting Area 41

Figure 5-4: Buffered Trapping/Commercial Values within the Reporting Area..... 42

Figure 5-5: Buffered Critical Wildlife/Ecological Values, Cultural/Spiritual Values and
Indigenous Landscape Values within the Reporting Area 45

Figure 5-6: Buffered Transportation Values within the Reporting Area 46

Figure 5-7: All TU Values in the Moose Lake Buffer Area in 2013 51

Figure 5-8: Buffered Subsistence Values within 20 km of Buffalo and Moose Lake 52

Figure 5-9: Buffered Habitation Values within 20 km of Buffalo and Moose Lake..... 53

Figure 5-10: Buffered Trapping/Commercial Values within 20 km of Buffalo and Moose
Lake 54

Figure 5-11: Buffered Critical Wildlife/Ecological Values, Cultural/Spiritual Values and
Indigenous Landscape Values 20 km of Buffalo and Moose Lake 55

Figure 5-12: Buffered Transportation Values 20 km of Buffalo and Moose Lake 56

Figure 5-13: Existing, Approved and Planned 100 Metres Distance Buffer (from
Lagimodiere 2013) 63

Figure 5-14: Existing, Approved and Planned 200 Metres Distance Buffer (from
Lagimodiere 2013) 64

Figure 5-15: Existing, Approved and Planned 300 Metres Distance Buffer (from
Lagimodiere 2013) 65



List of Appendices

Appendix A - Review of Dover OPCO Traditional Land Use Study

Appendix B – Moose Lake Buffer Area

Appendix C – Detailed Criteria for the Assessment of Traditional Use



1 INTRODUCTION

PetroChina International Investment Company Ltd. and Athabasca Oil Sands Corporation, through the Dover Operating Corporation (Dover, the Proponent), have filed an application to develop the Dover Commercial Project (the Project). The Project is located within the traditional territory of the Community of Fort McKay, approximately 42 km west of the settlement of Fort McKay, approximately 8 km south of Fort McKay's current and historic settlement on Moose (Gardiner) Lake² Reserve 174a and immediately adjacent to Fort McKay First Nation's Buffalo (Namur) Lake Reserve 174b (see Project location in Figure 1-1).

The objective of the *Dover Commercial Project Traditional Use Update Report* (TU Update Report) is to supplement the *Overview-Level Traditional Land Use Study for the Dover Commercial Project* (Overview TLUS; (Garibaldi and Behr 2010)) with up-to-date traditional use information from the Community of Fort McKay. The Overview TLUS was completed by Integral Ecology Group Ltd. (IEG) and Kwusen Research and Media (KRM) on behalf of the Fort McKay Industry Relations Corporation (IRC; now the Fort McKay Sustainability Department; FMSD) on September 30, 2010 and was submitted for inclusion in Dover's Environmental Impact Assessment (EIA) for the Project (Dover OPCO 2010). The Overview TLUS, was completed with a limited time period of four days of community interviews and five weeks of data compilation, community validation and analysis. This limited timeframe was a consequence of a late request to the FMSD for a TUS by Dover and resulted in key Community elders or knowledge holders not being available for participation in the study. Since that time additional interviews have been conducted and further research has been completed both of which are represented in the TU Update Report. The TU Update Report includes updated information that allows for a more representative assessment of current impacts to the Community of Fort McKay's treaty and aboriginal rights from both the Project and cumulative development perspectives.

The TU Update Report builds on findings from the Overview TLU to assess impacts to the Community of Fort McKay's treaty and aboriginal rights from both the Project and cumulative

² The Community of Fort McKay's names for Gardiner Lake and Namur Lake are, Moose Lake, and Buffalo Lake, respectively – though Community members often say "Moose Lake" when referring to the entire area around both Buffalo and Moose Lake. The two Fort McKay First Nation reserves located on the east side of these lakes are officially called Namur River 174A and Namur Lake 174B. Throughout this report, community names for the lakes (i.e. Moose and Buffalo Lakes) are used. Additionally, the area around both Moose and Buffalo Lakes is referred to within this report as the Buffalo and Moose Lake reserves. The permanent campsite located on the south end of Moose (Gardiner) Lake is referred to as the Moose Lake Camp.



development perspectives. The TU Update report takes into account previously recorded information (e.g., community Traditional Use Studies; TUS) as well as data collected since the submission of the Overview TLUS.

The proposed Project will use steam assisted gravity drainage (SAGD) technology and will be constructed in phases to reach a design capacity of approximately 39,747 m³/d (approximately 250,000 barrels per day (bpd)) of bitumen production. The Project is designed to extract an estimated 636 million m³ (4 billion barrels) of bitumen over its estimated 50 years of operation. Over the operating life of the Project, two processing facilities will be built: Dover North Plant and Dover South Plant. Figure 1-2 depicts the proposed Project design details as provided by Dover.

Project details include the plant sites, well pad sites, well pad access routes, borrow pits, approved camp locations and the planned McKay Access Road. Dover communicated that it would establish two camps to serve the Project, with each camp having an approximate capacity of 700 people. Additional details of pipelines, transmission lines and water sources, and any additional Project details or ancillary developments were not available from Dover prior to the completion of this report.

1.1 Data Sources

Fort McKay has derived a large portion of site-specific information for the TU Update Report from interviews conducted for both the Overview TLUS and the Fort McKay Territory-wide Traditional Use Study (FM TTUS). The FM TTUS is a multi-year community-guided TUS designed to engage Community researchers in documenting – through mapping interviews and field validation – Fort McKay Community members' life on the land including places where they have lived (and currently live), travelled, gathered resources and conducted ceremonies.

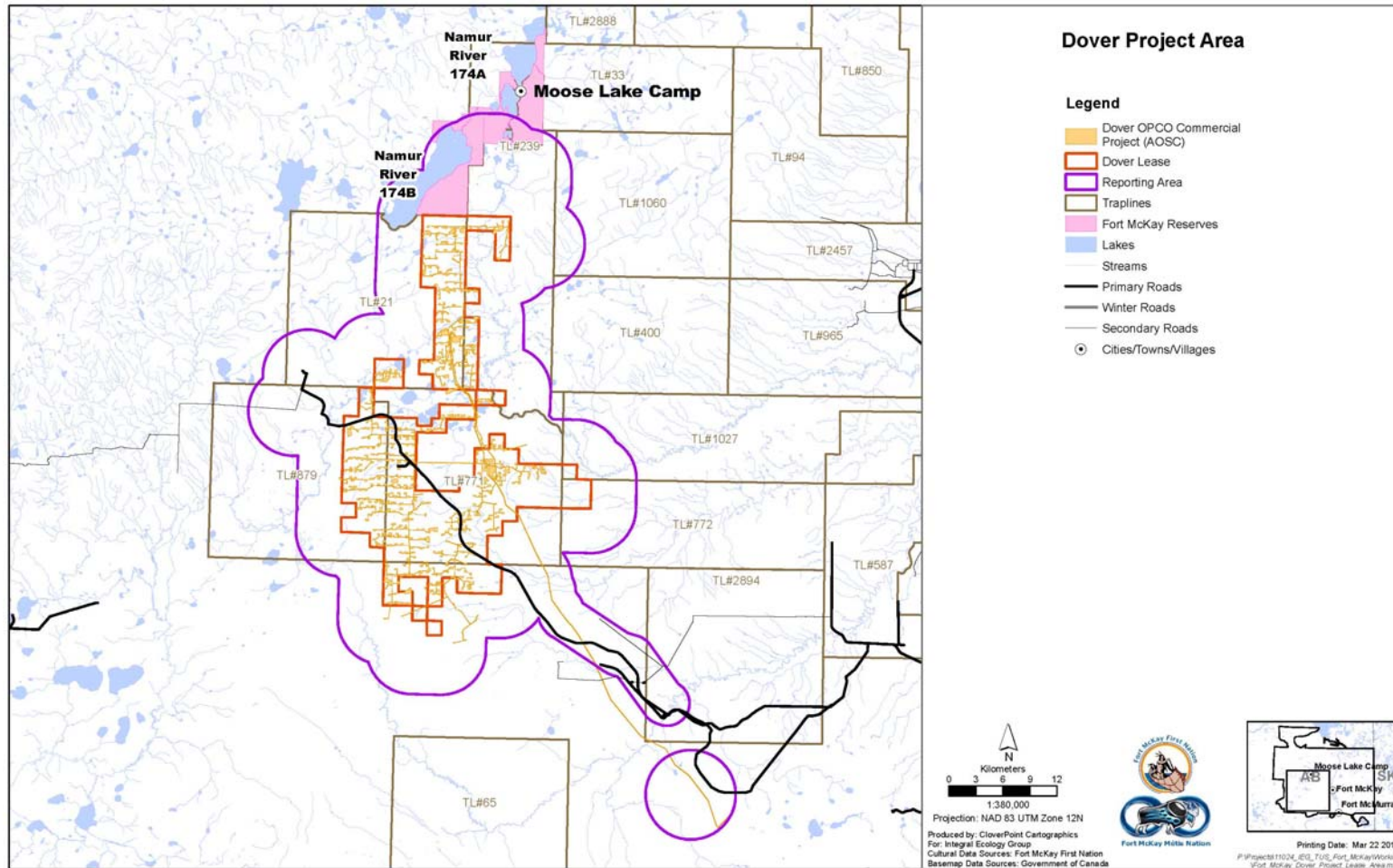


Figure 1-1: Dover Project Area

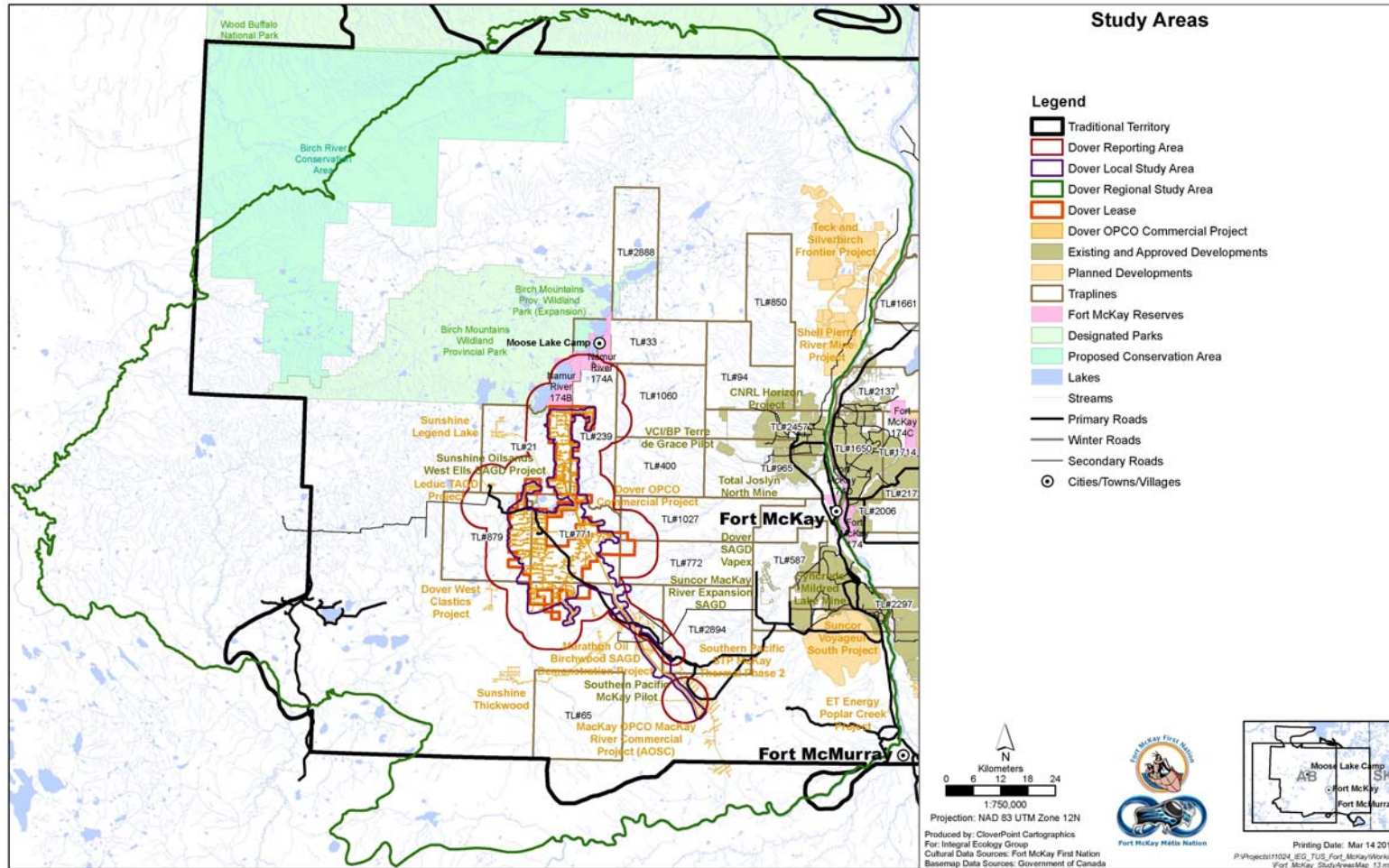


Figure 1-2: Dover Project Study Areas



The FMSD retained the services of KRM and IEG to provide technical support, project management and research assistance for the FM TTUS. The FM TTUS is currently ongoing and new information is still being gathered and added to the Community TUS database (Community KnowledgeKeeper; CKK). As a result, while information recorded through the FM TTUS provides a valuable contribution towards traditional use information for Fort McKay's traditional territory, it does not represent a comprehensive accounting of the Community's entire knowledge base. Therefore traditional knowledge information used to assess Project-related and cumulative impacts on treaty and aboriginal rights is conservative as TU Values are underrepresented. Dover's reliance on the McKillop analysis (McKillop 2002) for their TLU assessment is problematic. Limitations of their study are further discussed in Section 1.2.

Information from the Overview TLUS and the FM TTUS was augmented with TU sites recorded in previous Fort McKay TU studies, namely *From Where We Stand* (Fort McKay Tribal Administration 1983) and *There is Still Survival Out There* (Fort McKay First Nation 1994), as well as other community research.

Information reviewed for the TU Update report can be categorized into the following areas:

- Ethnographic and historical literature;
- Project-specific TUS;
- Territory-wide TUS and Occupancy Studies;
- Fort McKay traditional economy studies and land use surveys; and
- Regional multi-stakeholder research with an emphasis on Traditional Ecological Knowledge (TEK).

Key sources of information referenced in the TU Update Report are listed below.

- *From Where We Stand* (Fort McKay Tribal Administration 1983)



- *There is Still Survival Out There* (Fort McKay First Nation 1994)
- *Some Effects of Oil Sands Development on the Traditional Economy of Fort McKay* (Tanner, Gates and Ganter 2001)
- *Fort McKay Specific Assessment Cultural Heritage Assessment Baseline* (Fort McKay Industry Relations Corporation (IRC) 2010b)
- *Traditional Fisheries of the Fort McKay First Nation* (Stanislawski 1998)
- *Toward Culturally Appropriate Consultation: an Approach for Fort McKay First Nation* (McKillop 2002)
- *Survey of Consumptive Use of Traditional Resources by the Community of Fort McKay* (Fort McKay Environmental Services (FMES) 1997)

It is important to note that the TUS Update Report does not assess cumulative impacts to Fort McKay's Traditional Land Use Culturally Sensitive Ecosystems (CSEs) as defined by McKillop (McKillop 2002). Her model aggregates TU information from *There is Still Survival Out There* (Fort McKay First Nation 1994) by density or clusters of sites in a given area, and categorizes them as "high", "moderate" or "low" based on a 95%, 75% and 50% utilization distribution.

Indeed, while particular areas might have a higher volume of use than others (for the Community of Fort McKay this is often around lakes and rivers) in no way does this higher intensity of use imply a lower value or priority for other areas. Both the Dene and Cree have used and travelled large areas within the boreal forest and understood the value and need for a diversity of landscapes, both upland and woodland. The CSE model cleaves this understanding by assigning a third-party non-Aboriginal ranking on land values, despite the fact that it was informed by traditional knowledge.

Further, the data used for McKillop's analysis is derived from a one data source (Fort McKay First Nation 1994), and therefore utilizes a limited data set recorded almost two decades previously and does not take into account more current traditional land use practices. Cultural activities are always responding to environmental parameters, both natural (such as fire events



or animal migrations) as well as anthropogenic (such as industrial development). Therefore assessing traditional use priorities based on a static historic data set omits current practice and utilization. In addition, McKillop's dataset consisted of 1557 TU locations (McKillop 2002). Fort McKay currently has over 3,500 TU sites in their Community KnowledgeKeeper (and this data set is expanding as additional community interviews are completed), so the McKillop analysis highly underrepresents TU in the territory.

1.2 Report Constraints

It is important to note that no TUS is able to document the full breadth and depth of a community's knowledge regarding a project location or within a traditional territory. This report is designed to provide a reasonable account of Community traditional land use interests in the area of the proposed Project given the constraints of Community members' health, availability, research funding and time.

1.3 Study Areas

The following study areas discussed in the TU Update Report are shown in Figure 1-2.

- **Local Study Area.** The Local Study Area (LSA) is derived from the Dover LSA for terrestrial disciplines. The LSA includes Project facilities and infrastructure plus a 500 m buffer from this disturbance. The LSA is used to indicate how many *currently documented* traditional use sites will be impacted if Project development proceeds. The LSA is 62,026 ha (620 km²) in size.³
- **Reporting Area.** The Reporting Area (RA) was delineated for the Overview TLUS, and is defined as the Dover lease boundary, a portion of the Dover West Access Road and approved camps plus a 5 km buffer. The buffer was based on Community member feedback that experiencing nuisances (odours, noise and visual impacts) has a strong negative impact on their traditional use activities. Five kilometers was estimated to minimize noise, odour and visual disturbances. The RA represents the area Community members will experience

³ Note: This differs from the LSA in the Overview TLUS which was based on Community traplines that overlap the Project Lease Area. Traplines are logical parameters for interviews from the Community's perspective and were a valuable way to focus interviews, particularly in the short timeframe allotted to conduct the work.



key direct and indirect impacts from the proposed Project development. However, it does not take into account all negative impacts from the Project such as access-related issues and other cumulative impacts. The RA does not represent a buffer for all cultural values such as Cultural or Spiritual Values and some other cultural values. The RA is 180,541 ha (1805 km²) in size.

- **Moose Lake Buffer.** The Moose Lake Buffer represents a 20 km area of land surrounding Fort McKay's Reserves 174a and 174b. This buffer represents an area of land that most Community members feel is necessary to ensure their reserve land at Buffalo and Moose Lakes are free from nuisances (noise, odour and most visual disturbances) as well as development activity that could negatively impact the cultural integrity of the reserve land and surrounding area. See Appendix A for figure of the Moose Lake Buffer area.
- **Regional Study Area.** The Regional Study Area (RSA) is equivalent to the Fort McKay traditional territory boundary, which is 3,896,193 hectares (38,961 km²) in size. The RSA is used to discuss the amount of land that is unavailable, or sterilized, for traditional use opportunities from existing and planned development.

Note: It is important to clarify the meaning of the "Community proposed protected area" discussed in the Overview TLUS (see p. 45, *Protected Areas* and p. 47, *Preliminary Assessment*). Fort McKay has long identified the need for increasing the protective status of land within their traditional territory to ensure there is meaningful opportunity to carry out their treaty and aboriginal rights.

At the time the Overview TLUS was prepared, Fort McKay had identified a target of protecting 40% of traditional lands for conservation and traditional use. This target was based on work completed for the Terrestrial Ecosystem Management Framework (TEMF) developed by the Sustainable Ecosystems Working Group (SEWG) of the Cumulative Environmental Management Association (CEMA) (CEMA-SEWG 2008) in which this multi-stakeholder organization concluded that a suite of actions, including establishment of protected areas, were required to maintain the ecological integrity of land in the oil sands region (Cumulative Effects Management Association (CEMA) 2008). Keenly interested in ecological integrity, as it forms the foundation for people's ability to exercise treaty and aboriginal rights, the FMSD (FM IRC at the time) aligned their protected area target with that articulated in the TEMF and identified a



high-level protection zone that was based on cultural as well as ecological interests. The locations of desired protected areas within Fort McKay's traditional territory have been refined since then, however locations with special significance to the Community remain the same. The land adjacent to Fort McKay Reserves 174a and 174b at Moose and Buffalo Lakes is one notable example requiring high-level protection based upon cultural and ecological interests. The Overview TLUS was noted to say that Community members consider this area to be essential for cultural heritage and traditional land use (Garibaldi and Behr 2010).⁴

⁴ Page 34



2 TRADITIONAL USE IN FORT MCKAY'S TRADITIONAL TERRITORY

2.1 The Community of Fort McKay

The Community of Fort McKay is comprised of Dene (Chipewyan), Cree and Métis people and is situated on the Athabasca River in the Regional Municipality of Wood Buffalo, approximately 65 km north of Fort McMurray. As of 2013, the registered population of the Fort McKay First Nation is 778 (Aboriginal Affairs and Northern Development Canada (AANDC) 2013), with approximately 520 people residing in the settlement. The Fort McKay Métis Community has approximately 80 members with half of the members living in the settlement (pers. comm., Peter Fortna 2013). The primary languages spoken in Fort McKay are Cree and Dene Suline (Chipewyan).

2.2 Traditional Territory and Seasonal Rounds

We are people of the land – hunters and gatherers. Without the land we feel lost. Without the land we are nothing. (Human Environment Group 2009)⁵

In what became known by the Government of Canada as the Athabasca District, the Dene (Chipewyan) and Cree lived self-reliant and independent lives. Their social organization typically consisted of small family groups who followed a seasonal rotation around a recognized territory to gather resources as they became abundant in an annual cycle ((Smith 1981a); (Smith 1981b)). Group sizes often remained small and varied according to the necessities of harvesting practices and resource abundance. However, larger gatherings of neighbouring families occurred for social gatherings and celebrations. As one elder explained (Fort McKay First Nation 1994):⁶

Everybody visited each other in the bush, and when anybody killed anything everybody got some.

Fort McKay's traditional territory (see Figure 1-2 includes more than 38,961 km². The collective traditional use map data and descriptions of land use available through *From Where We Stand, There is Still Survival Out There* and FM TTUS reveals a rich and geographically diverse land

⁵ Page 1

⁶ Page 58



base used by the people of Fort McKay. These findings are also consistent with Fort McKay's project specific TU studies for Dover Commercial Project and the Teck and Silverbirch Frontier Mine application (Fort McKay Sustainability Department (FMSSD) 2011a).

Over the past centuries, the entire land base has been necessary to maintain populations of moose and caribou, as well as multiple species of furbearers and fish essential for the survival and maintenance of traditional culture. A large area of land is required to support key populations (e.g., woodland caribou) and processes (e.g., fire, hydrology and species migration). People would travel as necessary to hunt and gather these resources informed by a detailed and sophisticated body of indigenous knowledge of animal population cycles, movement and behavior (Fort McKay Tribal Administration 1983).

Following a seasonal rotation (see Figure 1-2), the people of Fort McKay hunt and trap a wide variety of animals throughout their traditional territory including, moose, caribou, bison, bear, lynx, wolf, fisher, muskrat, ermine, fox, beaver and mink. As many of these animals require large areas of land to sustain their populations, people need access to these same large tracks of land. Family trapline areas often doubled as hunting areas, where people work as a unit to prepare for the dry meat hunting season and the spring hunt (Fort McKay Tribal Administration 1983).

The importance of living off the land to the Fort McKay culture cannot be overstated (Fort McKay Tribal Administration 1983):

Our hunting and harvesting of meat is at the very centre of the Fort McKay way of life.

As hunters, trappers, fishers and gatherers, harvesting is important economically, culturally and socially. Time spent on the land is crucial to the passing of skills, knowledge and traditions among the Fort McKay people. From harvesting to processing of animals, hunting (as well as trapping) has involved the entire Community of Fort McKay while supporting the sharing of cultural teachings. Fort McKay traditional harvesting activities, from time immemorial to the present, provide food, reaffirm the continuing vitality of their culture and strengthen the kinship links (Fort McKay Tribal Administration 1983) through which harvesting is organized.

and wild food distributed (Fort McKay First Nation 1994).



It is important to note that traditional activities are currently practiced by many people from Fort McKay whenever possible. However, as recently documented in the *Fort McKay Specific Assessment* (Fort McKay Industry Relations Corporation (IRC) 2010b):⁷

The people of Fort McKay believe that industrial development is limiting their ability to carry out cultural activities within their traditional lands and that this has significant adverse effects on the maintenance of their cultural heritage.

While people have and continue to experience the effects of land being unavailable for traditional use through both direct and indirect impacts, the importance of the land has not diminished.

2.2.1 Fall

Key traditional activities in the fall include hunting, berry picking, preparing for trapping and some fishing (Tanner, Gates and Ganter 2001). From September to October relatives often set up camp in hunting areas where their family has seasonally returned for many generations. While individual family hunting area boundaries sometimes overlap, there is a general understanding and respect for the primary family that hunts in each area year after year.

Moose consumption far exceeds, both historically and currently, that of any other animal (Tanner, Gates and Ganter 2001), fish or bird (Fort McKay Environmental Services (FMES) 1997). According to a traditional economic resource study conducted on behalf of Fort McKay, as recently as in the 1960s each family needed a productive moose hunting area that was at a minimum approximately 375 km² (37,500 ha) to put away enough moose meat for the year (Tanner, Gates and Ganter 2001)⁸.

Generally small groups of men would spread out over a hunting territory in search of moose while women and young children would stay at a centrally located camp to complete the work of processing moose meat, drying meat and tanning hides. Through drying meat on racks over

⁷ Page 17

⁸ Tanner, et al. have estimated a pre-development per family subsistence annual moose harvest of 8.2 – 10.4 moose per year (2001: 61), a moose density of 0.24 per km² (2001: 29), and an annual harvest rate of 10% of moose in a given area. Thus at a harvest rate of 0.024 moose per km² a family would need exclusive hunting rights to 375 km² in order to harvest an average of 9 moose per year.



slow smoldering fires, and more recently by filling freezers, each family would preserve eight to ten moose in the autumn to last throughout the year.

During an interview recording during a moose hunting trip, one Community member explained the importance of moose as (Fort McKay Sustainability Department (FMSD) 2011a):⁹

[I]t's our way of life. Moose was always our favourite diet. ...ever since, far back as I can remember.

The fall is also time to repair trapline cabins, cut firewood for the winter, and make general preparations for the winter months on the trapline. This includes taking supplies out to cabins, preparing food, storing supplies, building meat caches, and in the recent past, catching and preserving fish for dog food.

While moose have been, by volume, the most heavily consumed animals in Fort McKay people also hunt other animals such as caribou and buffalo. Prior to industrial development impacting their traditional territory, a small family in Fort McKay of 6.6 people harvested between 9.5 and 16.5 caribou per year. In contrast, that same small family would have harvested between 8.2 and 10.4 moose.

These animals might be harvested opportunistically while out on moose hunting trips or less often on trips specially intended to hunt these animals. It is also common to hunt "chicken" (grouse and ptarmigan) and snare rabbits throughout the year – particularly when people desire fresh meat or when larger game is scarce.

Table 2-1: Summary of Key Fall Activities, September through December¹⁰

| | |
|------------------------------|------------------------------|
| Trapping | Net/Ice fishing |
| Hunting moose and small game | Picking berries |
| Snaring rabbits | Gathering wood |
| Tanning hides | Building cabins |
| Making animal stretchers | Making dry meat and dry fish |

⁹ Page 14

¹⁰ (Tanner, Gates and Ganter 2001)



2.2.2 Winter

In the recent past when trapping was a larger portion of income for most families in Fort McKay, people would leave the settlement in winter and disperse to areas where fur-bearing animals were abundant. Even before the fur trade, small mammals were an important source of food, furs for clothing, tools and, in some cases, medicine.

While the fur trade had undoubtedly transformed the local economy and supplemented family incomes, few people today see trapping as an income-producing occupation in and of itself. In fact, in most cases, what is “earned” in the bush is rarely treated as “income” (Fort McKay Tribal Administration 1983).

As discussed in greater detail below (Section 3.3), Fort McKay winter harvesting and trapping areas have been altered by a registered trapline system since it was imposed in the 1940s. Prior to the government-enforced system, people trapped where resources were available while respecting other family trapping areas. As one Community member shared (Fort McKay Sustainability Department (FMSD) 2011a):¹¹

We didn't exactly have boundaries, we trapped where there was game.

Fort McKay's 1994 TLUS calls traplines “trapping homesteads” as the winter seasons spent on the traplines emphasized subsistence activities, or *bush life*. However, commercial trapping was also undertaken on traplines. This is still the case. Many animals trapped for fur are eaten and provide fresh meat in the winter as well as income from the fur.

In addition to trapping, hunting and ice fishing are also winter pursuits. Trapping season comes to a close mid-March for longhaired animals and late May for beaver and muskrats (Tanner, Gates and Ganter 2001).

¹¹ Page 15



Table 2-2: Summary of Key Winter Activities, January through March¹²

| | |
|---|----------------------------|
| Trapping | Hunting big and small game |
| Ice net fishing | Travelling to traplines |
| Picking cranberries still on the shrubs | Gathering wood |
| Tanning moose hides | Making stretchers |
| Making fish nets and snares | |

2.2.3 Spring

The spring beaver hunt (April through May) traditionally focused on beaver, muskrat, otter, waterfowl and moose (Fort McKay Tribal Administration 1983).¹³ In the spring, berries remaining on the bushes from the fall are harvested as a good source of early spring vitamins. People still hunt waterfowl in the spring and until recently many people harvested duck eggs and made loon and pelican bags. At this time people also begin preparations for summer activities, including repairing fishnets, making hide stretchers and until recently, building meat caches.

Before most Community members began to live in Fort McKay full time, this short transitional season involved people preparing to move from the winter harvesting locations to the summer gathering places.

Because more than half of the traditional territory is comprised of peatlands (muskeg), spring breakup makes travel difficult. In the recent past when people spent the winter on the traplines, most people waited until the rivers were free of ice before travelling long distances.

¹² (Tanner, Gates and Ganter 2001)

¹³ Page 81



Table 2-3: Summary of Key Spring Activities, April through May¹⁴

| | |
|--|-----------------------------|
| Trapping (beavers, muskrats) | Hunting big and small game |
| Ice net fishing | Hunting ducks and geese |
| Snaring rabbits | Collecting duck eggs |
| Picking cranberries still left on the shrubs (more historic practice) | Gathering wood |
| Tanning moose hides | Making dry meat |
| Making stretchers | Making fish nets and snares |

2.2.4 Summer

Summer activities include hunting, fishing, berry picking and medicinal plant harvesting. During this time meat, fish and plants need to be processed for preservation. In the recent past, people would also use the summer to build and repair canoes, gather wood for fire and other technology and prepare animal hides (this is still done today though not to the same extent it was in the past).

Fishing starts in May and can continue until freeze-up in November or December, depending on the weather and location within the traditional territory. In the 1960s, fishing was still a widespread activity and played an important role in the Community’s culture and economy (Stanislawski 1998). Gatherings at summer fish camps along places such as the Athabasca River, Moose and Buffalo lakes became hubs of social interaction and a place to pass on traditional skills, knowledge and where the next year’s harvest activities would be planned. Annual summer gatherings centred primarily on trading resources, exchanging knowledge of the land and socializing. There are numerous locations in Fort McKay’s traditional territory where summer gatherings took place including the Buffalo and Moose lakes area, the settlement of Fort McKay and along the Athabasca River. Fishing camps were set up at these traditional locations to smoke and dry fish for human consumption, provide stores of dog food and bait for trapping furbearers (Stanislawski 1998).

The volume of fishing occurring today has notably declined from the 1960s. This is a result of industrial uptake of land as well as people’s perception of health risk attributed to pollution

¹⁴ (Tanner, Gates, & Ganter, 2001)



(Stanislawski 1998). A large portion of current fishing activities occurs at the Buffalo and Moose Lakes area.

As in many other Aboriginal communities, berry picking is an important summer activity in Fort McKay. Highly valued berries include multiple species of cranberries, blueberries, raspberries, Saskatoon berries and chokecherries (Fort McKay First Nation 1994). The nutritional and cultural importance of berry picking is exemplified by the fact that during the annual traditional harvest, on average, each Fort McKay family spent about 34 days picking and drying approximately 202 pounds of berries (Tanner, Gates and Ganter 2001).

While important in terms of their medicinal and nutritional value, Fort McKay Community members also associate many social and cultural values with berries and berry harvesting. Dene and Cree people in the region have traditionally managed berry patches by selecting areas for harvesting, limiting harvest quantities and using fire to increase long-term yields.

Table 2-4: Summary of Key Summer Activities, June - August¹⁵

| | |
|----------------------------|------------------------------------|
| Hunting big and small game | Fishing |
| Hunting ducks and geese | Picking and processing berries |
| Gathering wood | Tanning moose hides and bear hides |
| Making dry meat | Making dry fish |

2.3 Trapline System in Fort McKay

Locations of currently held traplines by the Community of Fort McKay (Figure 2-2) are shaped by historical and cultural connections to the area. The entire traditional territory has and continues to provide valuable and necessary resources to support the people living in the area. Patterns of land use reflect regional dispersal of resources and a self-governing system in which people worked primarily in small family units that respected other family hunting and trapping areas. Resources were shared and people worked cooperatively to distribute meat, fish, berries and other resources within the family and in some instances to other family units. People still structure themselves this way, albeit in a manner that is influenced by the government regulated trapline system. For instance, trapline holders restrict their trapping activities to the boundary of the trapline, but cooperatively hunt in other portions of the traditional territory.

¹⁵ (Tanner, Gates and Ganter 2001)



One Community member, whose trapline is on the east side of the Athabasca River, discusses hunting west of the Athabasca River in the Birch Mountains:

Our grandfathers used to hunt around here, so we'd be picking up that stuff [traditional knowledge] all the time. Now it's us, and now it's going to be down to [the next generation]...in another year. I remember I've been helped here [by this land] for a long time. (Fort McKay Respondent #03, FM TTUS, June 12, 2011)

Imposition of the government trapline system occurred in 1939, which created restrictions on traditional land use that continue to be felt today. The trapline system required traplines to be registered by individuals instead of family groups and ran contrary to the system of seasonal rounds and its associated conservation strategies. As one Fort McKay elder shared,

People, they stick together...out in the bush, found out a good place where to trap, they all trap together. Until the forestry come in there and start marking the traplines. When they start marking the traplines you don't go bother that guy...the trapline where his traplines are...you could charged [be] for that too, for killing his fur. It's okay if the trapper says you can go it's okay. (Fort McKay Sustainability Department (FMSD) 2011a)¹⁶

¹⁶ Page 24

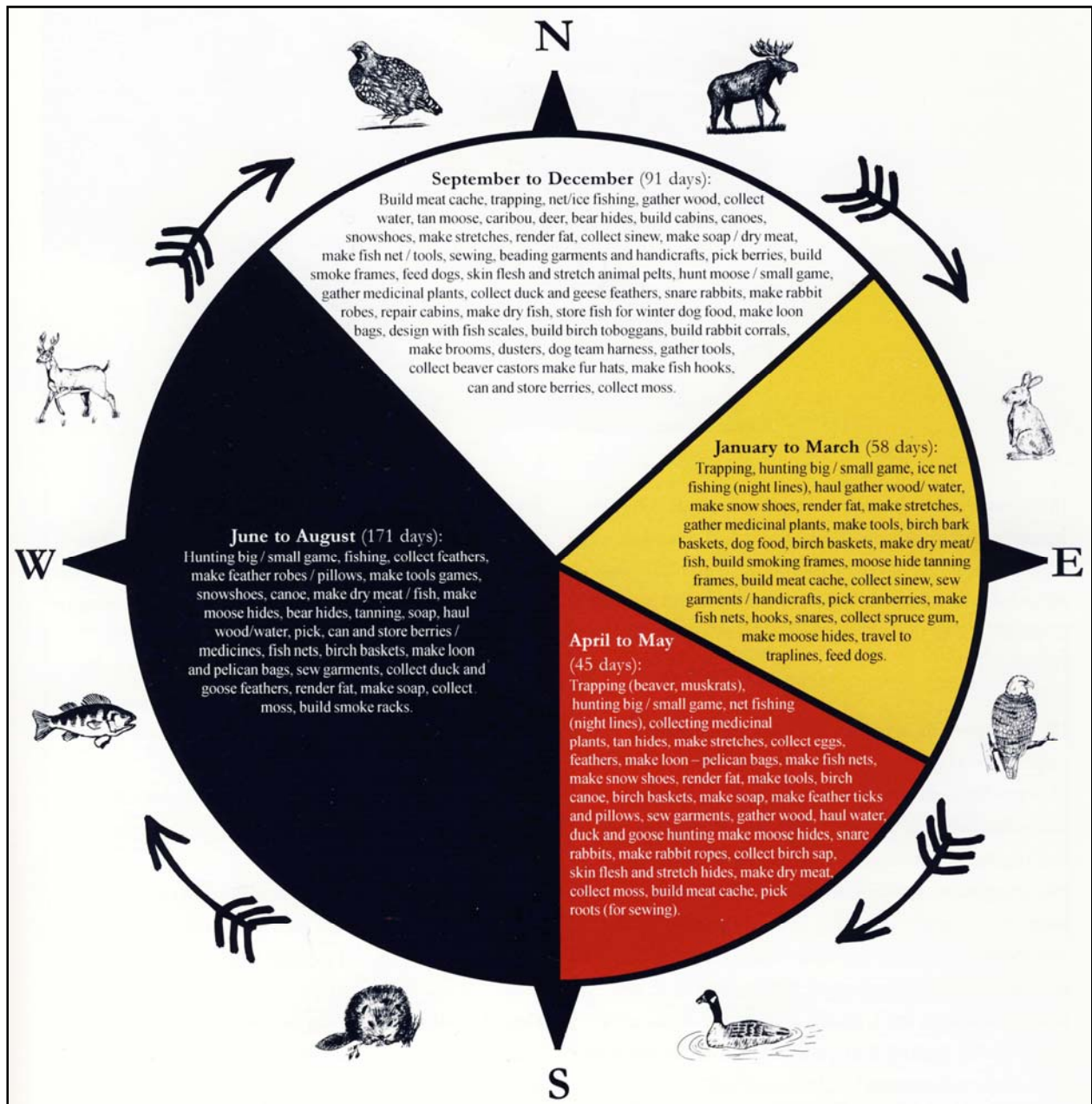


Figure 2-1: Fort McKay Seasonal Round¹⁷

¹⁷ (Tanner, Gates and Ganter 2001:47)

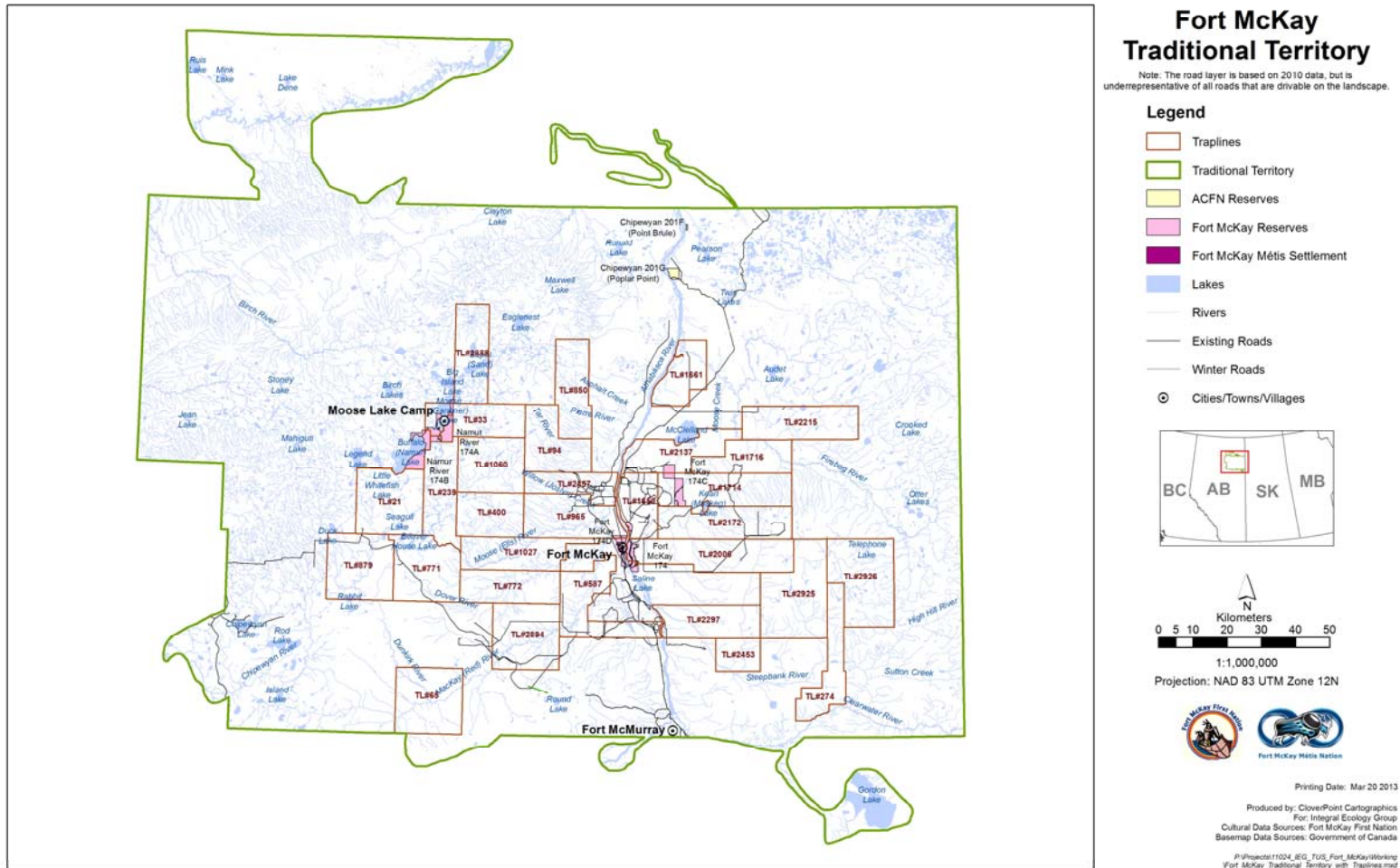


Figure 2-2: Fort McKay Traditional Territory with Traplines



People continue to participate in traditional activities or ‘bush life’ as described in *There is Still Survival Out There* (Fort McKay First Nation 1994) but the context within which they conduct those activities has shifted. For many, the focus of these activities became the trapline and trapline cabin:

[A trapline] means more than just a place to harvest furs for sale on the commercial market. It means the territory where people hunted, fished, picked berries, gathered duck eggs and trapped fur for local domestic consumption and trade...it is synonymous with meat for the table; with stewardship of all natural resources; with extended family sharing; with the socialization of children; with the role of the elders as carriers and teachers of traditional environmental knowledge; and with cultural sustainability. (Fort McKay First Nation 1994)¹⁸

Trapline locations “formalized what had been usufruct rights held by the community to those areas prior to 1939-1940” (Fortna and Maillie 2013). The initially identified trapline locations as well as the ones today reflect a legacy of generations of land use and management. Despite the restrictions of the trapline system today, harvesting has never been completely abandoned in other parts of the traditional territory; the trapline does not completely constrain traditional activity as evidenced on Traditional Values mapped in *From Where We Stand* (Fort McKay Tribal Administration 1983), *There is Still Survival Out There* (Fort McKay First Nation 1994) and number interviews conducted for Fort McKay’s Territory-wide Traditional Use Study.

2.4 Significance of the Moose Lake Area

Fort McKay’s Indian Reserves at Buffalo and Moose Lakes are the historical centre of their community and an anchor for both current and past land use practices. Fort McKay oral history (including oral traditions for the place names) and archaeological artefacts provide evidence of the importance of this area prior to European contact (Fort McKay Respondent #16, July 29, 2011). Families living in the area between the late 1800s and early 1900s included the Boucher, McDonald, Grandjambe, Ahyasou and Orr families. Overall population numbers for the community at Buffalo and Moose Lakes are difficult to determine and would have fluctuated seasonally as people went to other gathering and harvesting locations. FM TTUS and Overview TLUS interviews indicate that within the Buffalo and Moose lakes area there were small clusters of cabins and tents located near key resource areas such as valuable fishing locations.

¹⁸ Page 2



The Moose and Buffalo Lakes area is valuable for the abundant and diverse resources it sustains. Many people were aware of the bounty available at Buffalo and Moose Lake are reported to have historically come to the area from Fort Chipewyan, the east side of the Athabasca, and Chipewyan Lakes to access these abundant resources. In the era before motorized transportation, the abundant supply of white fish at Moose Lake not only provided human sustenance, it more importantly provided the dog food required to keep dog teams fed throughout the long winter months. In fact, many people in the Community still rely on fish from Buffalo and Moose Lake to supplement their families' diet. Due to their different characteristics, the two lakes support different types of fish. Buffalo Lake is known for its large stocks of char and lingcod (ling, maria) and Moose Lake supports valued stocks of walleye (pickerel), jackfish (great northern pike) and whitefish (Affidavit of Mel Grandjambe sworn March 21, 2013. Paragraph 9).

One TUS respondent spoke of this fishery in the time of his late father:

Oh man, in the evening, one fish used to weigh a hundred pounds so you were played right out. And he wants a thousand. I mean that is for food and for feeding our dogs. And we used to bring it down and have it all...You know, that's when spawning, so everybody just get their fish. And they used to get 1500 to a thousand. (Fort McKay Respondent #75, March 8, 2013)

The people living in the Buffalo and Moose Lakes settlements were not untouched by flus and epidemics that affected so many aboriginal communities in Canada. Near the turn of the 20th Century, European-introduced diseases swept through the community resulting in mass burials due to the large number of Community members who died. As one Community member shared:

All I know is that when there was that big disease that came through that killed a bunch of people, that's the reason that they buried five people all together in one grave. They didn't have enough time to dig graves because people were dying every day, so they buried five people in the same grave. (Fort McKay Respondent #40, August 19, 2012)

A Fort McKay Elder noted that in the era following these epidemics, during the 1940s there were 30-40 Community members living at Moose Lake (Fort McKay Respondent #42, 2012). At this time, though some families lived year-round in Fort McKay, most spent their winters on traplines spread throughout the traditional territory, trading furs at Fort McKay, and in the summer and late fall they travelled to Buffalo and Moose Lake to fish, pick berries, and attend social gatherings.



It wasn't until the 1950s when a school opened at Fort McKay – with mandatory attendance for all children – that the majority of women and children relocated from Buffalo and Moose Lake to Fort McKay. However, the Buffalo and Moose Lake area has remained an important area for traditional resource gathering and cultural practices, and for many families it is the heart of their ancestral homeland. As one Fort McKay Elder recently said:

Moose Lake is like home for me even though I live here. I live in Fort Mckay, but Moose Lake I feel right at home. I can't express myself how important Moose Lake is to me. I think it is God's country, it is beautiful. The water is still clean. (Fort McKay Respondent #16, February 6, 2013)

More recently, as development has rapidly increased in Fort McKay's traditional territory, the Community has placed added importance on the Buffalo and Moose Lake area as a retreat to escape from the industrialized landscape around Fort McKay:

Our water in Fort McKay is no good, we can't drink it and we can't eat the fish whereas Moose Lake we can drink the water and we could eat the fish. There is a few moose still and there is beavers and ducks. Lots of berries. So it is a good place to living off the land in Moose Lake, that's why I think it is important to me. (Fort McKay Respondent #16, February 6, 2013)

As industrial development encroaches on Fort McKay, an increasing number of Community members have been looking to the reserves at Buffalo and Moose Lakes as the area where their children and grandchildren will be able to continue their traditional land use activities in the future. Community members have plans to increase the amount of available cabins in the area so that they support the Community demand for staging locations when they hunt, fish, trap, and gather plants and berries in the Buffalo and Moose Lake area free from concerns of resource competition and health risks of industrial pollution. For the Community of Fort McKay, the Buffalo and Moose Lake area is not only an important part of their history and identity, it is also critical to the future survival of their culture.



3 TUS INTERVIEW METHODS

The methods used by KRM and IEG to record and manage TU interview information utilized map-based interviews guided by, though not restricted to, standardized interview questions. Mapped data was recorded in GoogleEarth software¹⁹ and archived in an online secure database held by the Community of Fort McKay (the Community KnowledgeKeeper). Participation of interview respondents in the TUS interviews was contingent upon a documented indication of informed consent. These letters of informed consent are on file with the FMSD.

TU interview information spans three time periods:

- past (living memory to ten years before present),
- present (within ten years of present), and
- planned future use.

“Traditional Use Values” (TU Values) are used to represent information shared by participating community members and refer to a place, resource or knowledge that is considered important for the ongoing practice or maintenance of community interests and rights. A site-specific TU Value is one that is associated with a unique location that can be spatially represented (e.g., cabin location). A non-site-specific value is one that, while important, cannot be represented spatially (e.g., observations of animal health). The following seven categories are used for both site-specific and non-site-specific TU Values:

- Cultural/Spiritual Values: Includes gathering places, burial locations, ceremonial sites, locations of oral traditions, etc.
- Habitation Values: Places of dwelling that include cabins, camps and village sites

¹⁹ Interviews conducted for the Overview TLUS were mapped on 1:50,000 scale paper maps. Recorded information was digitized following the interview (see Section 3 of the Overview TLUS for a complete description of interview methods for that study).



- Subsistence Values: Includes locations for procurement of animal resources, fish, plant resources, water sources as well as locations for processing these resources
- Trapping/Commercial Values: Includes sites for trapping, guiding/outfitting, tourism and timber
- Critical Wildlife/Ecological Values: Includes calving grounds, mineral licks, spawning areas and other special habitats
- Transportation Values: Includes trails, water transportation corridors, historical migration routes, etc.
- Indigenous Landscape Values: Includes place names, orientation points, boundary markers, etc.

Although our methodology includes the ability for people to include potential future land use, currently only one site in our entire data set is a potential future site (in this case a planned location for a future cabin). As traditional use is an evolving and adaptive process, inclusion of planned future use is a valid and valuable consideration; to be successful resource users need to be able to anticipate changes in populations and habitat. However, dramatic changes within the traditional territory from resource development significantly alters people's ability to plan and predict potential future locations of resource use, such as cabin building sites.

3.1 Data Management and Verification

GoogleEarth software is used during the interviews to map Traditional Use values as points, wherever possible and appropriate, and as polygons where necessary. Lines are used to indicate trails and transportation corridors. Hand-written field notes as well as audio and video recordings are kept. The mapping interview protocol is designed to maintain data integrity so that data could be traced to an individual.

All recorded land-use information is confirmed with interview participants during the interview process. Each mapped location or value is associated with a letter code (or codes),



followed by a site sequence number and a TUS identification code indicating the source participant.

Upon the completion of each interview, information that is recorded in hand-written interview notes is transferred into a digital format. Interview notes are also typed into Microsoft Excel spreadsheets and organized according to site-specific and non-site-specific TU Values codes. All of the information collected through the TUS interviews, along with previous TUS data and archival information has been compiled for use and storage in the Fort McKay CKK – a confidential web-based system for data management, mapping, and archiving traditional land use information.



4 BACKGROUND: OVERVIEW TLUS OBJECTIVES AND FINDINGS

The Overview TLUS was completed in response to a request from Dover that the FMSD (formerly the Fort McKay Industry Relations Corporation) completes a TUS for the Dover Commercial Project. Due to the very limited timeframe available to complete the study for inclusion in the Project EIA²⁰, an “overview-level” rather than “operational-level” study was completed.

An overview-level study is more limited in scope and detail than an operational-level study and targets the most significant traditional use sites and values within a proposed project area. An overview-level study might be chosen if the timeframe to complete the study is brief or if TUS information is to be used to inform preliminary project planning (after which an operational-level TUS might be warranted).

If TU sites are ground-truthed at all in an overview-level TUS, site visits tend to be limited to the most critical physical sites such as cabins and graves. Ideally, all available community members with knowledge of the project area would participate in a TUS. However, in an overview-level TLUS interviews are limited to provide information on key sites of significance, rather than a more comprehensive documentation. As a result of the time constraints to complete the Overview TLUS, some key knowledge holders were not available to participate in the study. Therefore, the study represents some key sites of significance, rather than a more comprehensive documentation.

4.1 Overview TLUS Objectives

Key objectives of the Overview TLUS were to:

- Document site-specific and non-site specific TU Values potentially impacted by the Project;
- To map site-specific TU Values;

²⁰ Dover requested the FMSD complete a TUS for the Project within a 3-month time frame. The study was completed in approximately one week of community research and five weeks of data compilation, validation workshop, analysis and report writing.



- To document potential Project-related impacts; and
- Assess Project effects and recommend appropriate mitigation measures. These mitigation measures were not listed in the report, rather the FMSD requested a specific meeting to discuss Community recommended mitigation steps.

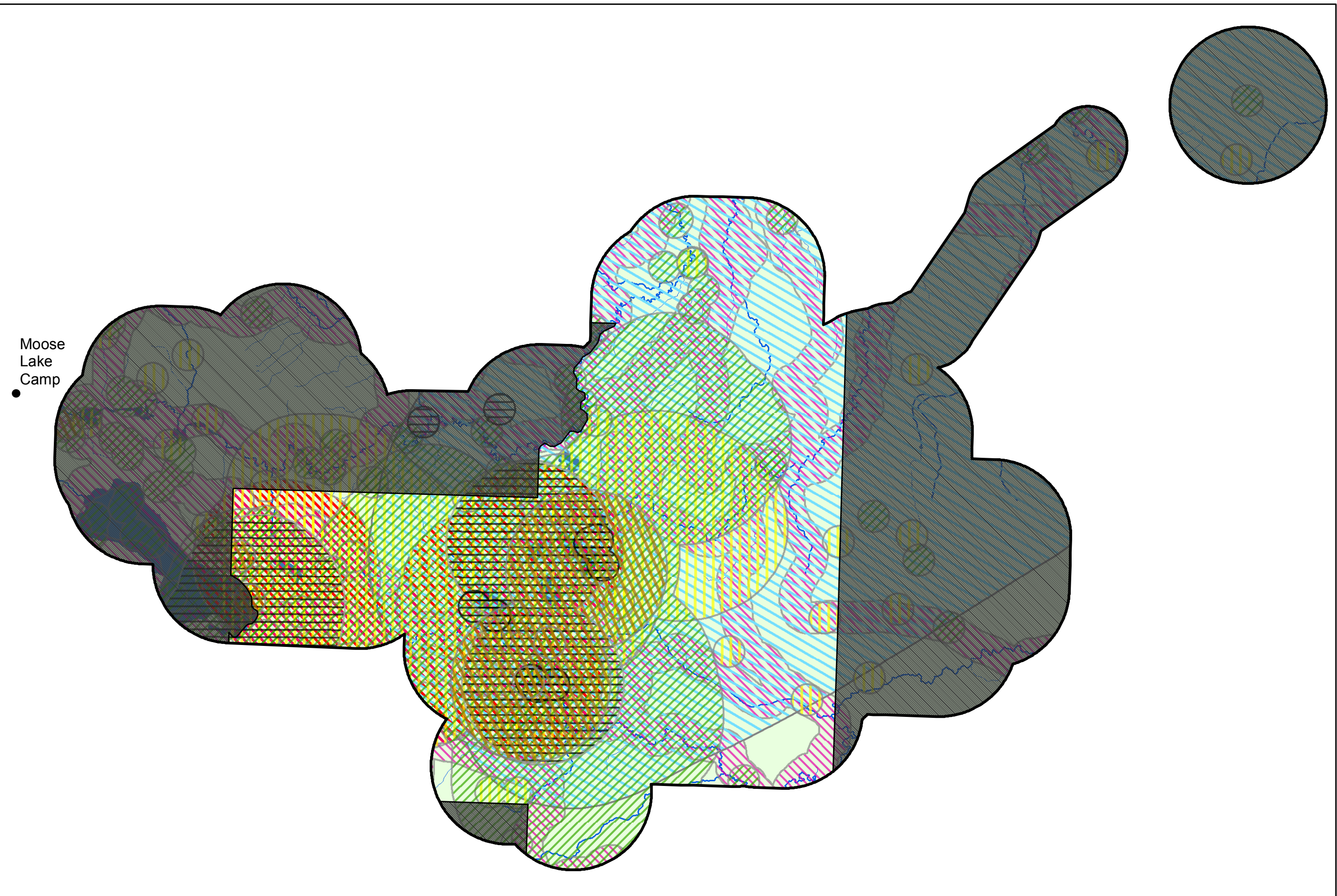
4.2 Overview TLUS Key Results

The study revealed more than 234²¹ site-specific TU Values within the RA (see Figure 4-1). Fifty-two of the 234 site-specific values were identified through interviews conducted for the Overview TLUS, while the remaining 191 sites were previously recorded in *There is Still Survival Out There* (Fort McKay First Nation 1994). A breakdown of the TU values for the RA includes:

- Subsistence Values = 73 total values
- Habitation Values = 14 total values
- Trapping and Commercial Values = 43 total values
- Critical Wildlife/Ecological Values = 4 total values
- Transportation Values = 84 total values
- Cultural/Spiritual Values = 7 total values
- Indigenous Landscape Values = 9 total values

A one-day helicopter flyover was the only time available for ground-truthing information recorded during study interviews. Five of the 52 sites recorded in the Overview TLUS were located from the air and site assessment forms, photographs and GPS coordinates were recorded.

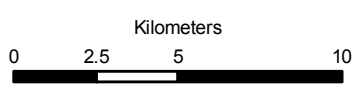
²¹ There was a typographical error in the Overview TLUS, which indicated the total number of site-specific TLU Values was 243 (see FM IRC 2010a: iii and 17).



- Legend**
- Moose Lake Camp
 - Streams
 - Small streams
 - Reporting Area
 - Insufficient data
 - Lakes
 - Traditional Territory; Regional Study Area

- Feature Buffers**
- Cultural/Spiritual Values
 - Habitation Values
 - Subsistence Value
 - Trapping/Commercial Value
 - Wildlife/Ecological Values
 - Transportation Values
 - Indigenous Values

Moose Lake Camp



1 : 230,000

Projection: NAD 83 UTM Zone 12N

Fort McKay Overview-level TLU for the Proposed Dover Commercial Project

Figure 3: Traditional Land Use Values in the Reporting Area



During interviews and the validation workshop, Community members expressed many concerns about Project development including:

- Impacts on critical caribou habitat;
- Proximity to the Moose and Buffalo Lakes Reserves, including increased access to the area by non-Aboriginal people;
- Project-specific and cumulative effects taking up of land;
- Trapper and Community member access to the lease area throughout the life of the Project, and the inability to use the Project area for traditional use;
- Negative effects on trapping and hunting opportunities within both the Project lease and surrounding land (particularly because of wildlife impacts from Project development);
- Use of surface and ground water sources and Project impacts on the withdrawal and contamination of those sites (these sites are currently in use);
- Changes to traditional trails through both removal of trails by development and cleaving trails into sections rendering them unusable;
- Noise from Project activity and increased road traffic are a deterrent for wildlife and for people's sense of peace and safety when out on the land;
- Fragmenting the land, which ultimately impedes wildlife movement; and
- Impacts of value of cabin and camp sites from direct disturbance and from negative impacts on important subsistence and trapping values adjacent to cabins.



4.2.1 Overview TLUS: Project-specific TU Effects Assessment Results

In the Overview TLUS, Fort McKay found that the proposed Project is anticipated to have significant adverse effects on all TU Values in the RA²². In all instances, the Project was predicted to reduce the quality of traditional resources, the opportunity to carry out traditional practices, and exercise of treaty and aboriginal rights. Indicators used to help inform this assessment were first identified and applied in the *Cultural Heritage Baseline Report for Fort McKay Specific Assessment* (Fort McKay Industry Relations Corporation (IRC) 2010b).

These 23 indicators linked Community concerns with environmental and cultural parameters to help assess their performance and provide the Community with additional information with which to judge risk. These indicators as well as professional opinions based on interviews and workshops conducted with Community members were used to inform the determination of Project effects on traditional use opportunities and treaty and aboriginal rights.

4.2.2 Overview TLUS: Residual Effects Assessment Results

In 2010, Fort McKay determined that cumulative effects to their cultural heritage and traditional land use opportunities – as well as on their treaty and aboriginal rights – were significant and adverse. This was evidenced by a detailed community-based study that considered cultural and ecological information to formulate this determination (Fort McKay Industry Relations Corporation (IRC) 2010b). The Overview TLUS concluded that Dover’s proposed Project, and the subsequent Projects that will occur within their traditional territory in the “Planned Development Case”²³ will exacerbate this already strained situation. The Overview TLUS reconfirmed the original effects assessment determination of significant and adverse residual Project-related effects.

4.2.3 Dover Application: Traditional Land Use Assessment Results

In contrast to the Overview TLUS, the TLUS in the Dover application (Dover 2010, Volume 6, section 2) does not include a clear and concluding statement on the effects of the Project on TU

²² TU Values are categorized as: Subsistence, Trapping/Commercial, Habitation, Cultural/Spiritual, Transportation, Critical Wildlife/Ecological, and Indigenous Landscape.

²³ The Planned Development Case (PDC) refers to current development conditions plus the proposed Project plus regionally planned projects at the time the application was written.



Values or opportunities (Dover Operating Corp. 2010). Further, Dover's TLUS underrepresents the impacts on Fort McKay's traditional uses, treaty and aboriginal rights. Instead the Dover TLUS contains, in part, the following statements below with relation to traditional land use.

Hunting, trapping and wildlife:

Dover states:²⁴

Project-related disturbances to hunting and trapping areas area expected to remain during the construction and operations phase of the Project...values of traditional use plant potential, and large game and furbearer habitat are expected to be replaced at reclamation.

However, Dover also states:²⁵

First Nations believe that reclamation often takes place in the distant future, and that harvesting and passing on TK to younger generations is disrupted during the operations phases of the project.

Dover also predicts that environmental consequences from the Project on wildlife abundance prior to reclamation are negligible for all KIRs, with the exception of moose and woodland caribou. Moose and woodland caribou populations are currently in a state of decline and Dover concluded that Project effects on their populations will be moderate for moose and high for woodland caribou. Dover has proposed implementing a regional predator management (wolf kill) program as part of their mitigation plan. Dover also states that:²⁶

Hunting and trapping of wildlife is an integral component of the way of life for some residents of the RA. As such, the abundance and health of wildlife are a primary concern. Hunting and trapping animals is also an integral part of traditional livelihoods.

Dover indicates that:²⁷

Following reclamation, the residual effects of the Project on woodland caribou and moose abundance are expected to be positive in direction and high in magnitude within the region.

²⁴ Dover 2010, Volume 6, Section 2.7.4: 2-30

²⁵ Dover 2010, Volume 6, Section 2.7.4: 2-25

²⁶ Dover 2010, Volume 5, Section 4.1.7: 4-8

²⁷ Dover 2010, Volume 6, Section 2.7.4: 2-31



Traditional Use Implications

Dover construction and operations phases are currently predicted to last for over 65 years²⁸. From a traditional use perspective, the inability to utilize the land and transfer knowledge to younger generations during that time sterilizes it for traditional use. Reclamation that takes several decades is not mitigation from a traditional land use perspective. Further, successful reclamation of organic wetlands within Fort McKay's traditional territory has yet to be proven and therefore the ability of the reclaimed landscape to support animal populations, particularly for key cultural species such as caribou and moose, is uncertain. If animal populations are not sufficient to provide a continuous harvestable supply then ability to exercise treaty and aboriginal rights would be severely and permanently impacted. Dover does not identify mitigation options for this impact.

Fort McKay Community members want to maintain an intact functioning and diverse ecosystem that includes populations of animals in their range of natural variation prior to industrial development (Nishi, et al. 2013). It is highly unlikely that Community members will accept the targeted reduction of one species to support the maintenance of another when the driver for increasing the population decline is Project development. Further, wolf kill programs alone are not going to address Fort McKay Community concerns regarding declines in moose populations. Community members continue to voice the negative impacts of elevated hunting pressure by increasing numbers of non-Aboriginal lands users and that this hunting pressure and that this is significantly increased by additional access.

There is a substantial time lag (in most cases many decades) between the initial disturbance and the completion of wildlife habitat reclamation, and for that period of time the wildlife populations and habitats that sustain them are unavailable for Fort McKay. As a result, Community members remain skeptical of future reclamation success and whether reclamation will support traditional use. Also, as reclamation occurs on small tracts of land rather than across a larger area, it is unlikely that Community members will be interested and willing to utilize many reclaimed sites as soon as they are certified if adjacent areas are still in operation. Rather, people need safe access to functional intact ecosystems that support culturally valued species to carry out traditional activities.

²⁸ Dover 2010, Volume 1, Section 1.3: 1-7



These observations and concerns reinforce Fort McKay's belief that establishing a protected area around the Buffalo and Moose Lakes Reserves is essential to ensure they have – now and far into the future – land where they can exercise their treaty and aboriginal rights.

Fishing

Dover states:²⁹

The LSA is in an area that appears to have low use for traditional fishing.

They base this determination on the total percentage of the McKillop CSE's that the Project overlaps.

Traditional Use Implications

It is problematic to use the McKillop CSEs as an overall determination of the traditional use value of an area.³⁰ During the Overview TLUS it was determined that several culturally important lakes with Subsistence TU Values (including: Spruce Lake, Seagull Lake, Muskeg Lake, Beaverhouse Lake, Wolf Lake and Long Lake) will be severely impacted by Project development and render them unusable. (See Figure 2 and 3 from Overview TLUS and Figure 4-1 and Figure 5-1 from this report.)

In addition, Buffalo and Moose lakes are two of the best remaining places where people fish in the traditional territory. Many people still make multiple annual trips to these lakes to fish for their families and other members of the Community. As one Community member states:

We are like everyone else, we travel to other places, but when it comes time, the right time for fishing, we go up there [Buffalo Lake] and when it is the right time for hunting we go up there. Berries we go up there. It is a very important place to us because one of the intentions of building the cabins is that it is something that I can pass on to my kids, right? And hopefully they can pass it on to their kids and it stays in the family and they continue to go out there and hunt and fish and collect berries and set snares and stuff like that. (Fort McKay Respondent #73, March 6, 2013).

²⁹ Dover 2010, Volume 6, Section 2.7.4: 2-31

³⁰ See Section 3.1 for a discussion on limitations of McKillop's analysis.



People are very concerned that the fish will decline at Buffalo and Moose lakes from competition with increasing resource users whose accessibility to Buffalo and Moose lakes is further facilitated by the Dover Project. People have already noticed a decline in fish numbers and are very concerned that they will continue to decline ((Garibaldi and Behr 2010); Community member, Fort McKay Moose Lake Focus Group Sessions, October 2011). People are also concerned about the impacts of the Dover Project on water resources at Buffalo and Moose lakes, and how this will impact fish health ((Garibaldi and Behr 2010); Community member, Fort McKay Moose Lake Focus Group Sessions, October 2011).

Plant Harvesting (Berries)

As with fishing, Dover uses the McKillop analysis to determine impacts to berry harvesting (Dover does not assess impacts to harvesting other plants, such as medicinal plants). Dover concludes:³¹

Although the LSA is shown to be in an area that has subsistence value for the FMFN...the LSA appears to have a low use for traditional berry harvesting.

Traditional Use Implications

Dover does not comment on the impact the Project will have on berry harvesting, rather it only states that the percentage of CSEs that overlap with the Project and will therefore be disturbed. The Overview TLUS concludes that the “Project will cause significant adverse effects on Fort McKay Subsistence Values”,³² which include berry harvesting. Community members harvest berries within the LSA and as a result of Project development the ability to continue this practice will diminish or be removed altogether.

Access

In the Project application TLUS, Dover states:³³

³¹ Volume 6, Section 2.7.4, Section p. 2-32

³² p. 49

³³ Volume 6, Section 2.7.4, p 2-35



Access in the LSA will change over the life of the Project but will increase overall, creating more opportunities for both traditional and non-traditional activities in the Dover Leases, which will be viewed both positively and negatively by traditional resource users.

It also indicates that areas will become more accessible when aboveground infrastructure, such as pipelines and well pads, are removed.

In relation to changing access affecting the availability of resources through increased competition, Dover states:³⁴

The residual effects classification for wildlife abundance...determined that the Project's effects on woodland caribou, moose and fisher abundance due to increased hunting, trapping or predation were negative in direction and low in magnitude.

Traditional Use Implications

Fort McKay community members frequently discuss the increasing number of land users as having significant and negative effects on such things as competition for resources, vandalism (both on reserve land and traplines), snares being robbed and noise. There are also reported cases of poaching and mistreatment of animals evidenced by leaving large amounts of meat left to rot (offensive in traditional culture). Community members have already experienced this in many parts of their traditional territory and the proposed Project will not only cause these impacts in the LSA but people feel that development from the Dover Project will initiate the decline of the integrity of their reserves at Buffalo and Moose Lakes.

Cabins and other Culturally Important Areas

Dover simply states that the Overview TLUS identified 14 habitation values within the RA, and that while the Community identifies the Buffalo and Moose lakes area as key for cultural heritage the Dover Leases do not overlap with the reserves.³⁵

Traditional Use Implications

Dover makes no assessment or impact prediction of Project development on habitation sites. Cabin sites are selected, in part, based on their proximity to subsistence and trapping areas and

³⁴ Volume 6, Section 2.7.4, p. 2-35

³⁵ Dover 2010, Volume 6, Section 2.7.8, p. 2-35



an impact – both direct and indirect – can severely affect not only a person’s ‘bush home’ but their ability to carry out traditional practices.

See Appendix A, *Review of Dover OPCO Traditional Land Use Study*, for additional critique of Dover’s TLUS.

Without clear conclusions of Project effects on traditional-use opportunities and linkages with mitigation actions to address impacts where they occur, Dover’s EIA does not provide adequate information for Fort McKay to determine the Project impacts on treaty and aboriginal rights. As a community-guided study that documents both spatial TU Values as well as detailed Community concerns and proposed mitigation options, the Overview TLUS coupled with this Update Report are the most reliable reference on Project impacts on treaty and aboriginal rights in the LSA and adjacent areas.



5 TUS UPDATE REPORT: IMPACTS OF DOVER LEASE ON TU VALUES

5.1 TUS Results

Since the time of completion of the Overview TLUS, 191 additional TU sites have been identified within the RA for a total of 424 TU Values recorded within the RA at the time of this reporting. As interviews for the FM TTUS continue, undoubtedly additional TU values will be mapped within the RA, so the aforementioned number underrepresents the totality of Fort McKay TU Values for this area.

Mapped information and the associated description of development impacts on TU Values are presented for three areas:

- Reporting Area (TU maps and TU Value count data)
- Lease Area (TU Value count data)
- Moose Lake Buffer area (TU maps and TU Value count data)

The RA represents the area where Community members will experience key direct and indirect impacts from the proposed Project development. As this was also used in the Overview TLUS it will allow for direct comparison with information identified during that study.

The Project lease area represents land that will provide significant access challenges for the Community. Even with a plan developed by Dover to facilitate movement across the lease, there are significant obstacles for Community members to meaningfully and reasonably use the land for traditional purposes. Hunters who gain access to the lease site for hunting, for instance, are only permitted to hunt where the land is not visibly incompatible with hunting (i.e., there are facilities built there) or where it is safe to do so (i.e., where there are no people or facilities). This issue renders the lease area unusable for traditional purposes and is therefore an appropriate area within which to record impacts to TU Values.

The Moose Lake Buffer area represents a 20 km area of land surrounding Fort McKay's Reserves 174a and 174b. This buffer represents an area of land that Community members feel is



necessary to ensure their reserve land at Buffalo and Moose lakes is free from nuisances (noise, odour and most visual disturbances) as well as development activity that could negatively impact the cultural integrity of the reserve land and surrounding area.

Table 5-1: TU Values

| | Reporting Area- Overview TLUS | Reporting Area- TU Update Report | Dover Lease Area | Moose Lake Buffer Area |
|---|----------------------------------|--|---------------------|---------------------------|
| Subsistence Values | 73 | 131 | 17 | 285 |
| Habitation Values | 14 | 59 | 5 | 102 |
| Trapping/Commercial Values | 43 | 55 | 17 | 86 |
| Critical Wildlife/ Ecological Values | 4 | 23 | 4 | 26 |
| Transportation Values | 84 | 95 | 4 ³⁶ | 20 ²⁸ |
| Cultural/Spiritual Values | 7 | 35 | 1 | 45 |
| Indigenous Landscape Values | 9 | 26 | 6 | 28 |
| TOTAL | 234 | 424 | 54 | 592 |

5.1.1 A Note about TU Mapping

The following maps depict TU Values as recorded in multiple Community interviews conducted both for the Dover Commercial Project and as part of multiple Territory-wide traditional use studies. Data is recorded in three formats: points, lines and polygons. The nature of the data and the precision of mapping in an indoor setting, influences which mapping format is selected. The mapped information is shown with a 1 km buffer in which point data centre points have has been randomized. This is done for two key reasons:

1. Protects confidential information of the Community

³⁶ Does not include trail data from *There is Still Survival Out There* in Transportation Value count



2. Accounts for a margin-of-error from indoor mapping.

The intent of these maps is to depict the general locations and diversity of TU values within both the Moose Lake Buffer Study Area and the Reporting Area.

In the maps for the Moose Lake Buffer area, the reserve land as well as Buffalo and Moose lakes are designated as “All TU Values”, and individual TU Values are not represented. As reserve land protected for Fort McKay First Nation by Treaty 8 and the *Indian Act* for their collective use and benefit in perpetuity, the specifics of traditional use of the reserves is not required to assess Project impacts on traditional use.

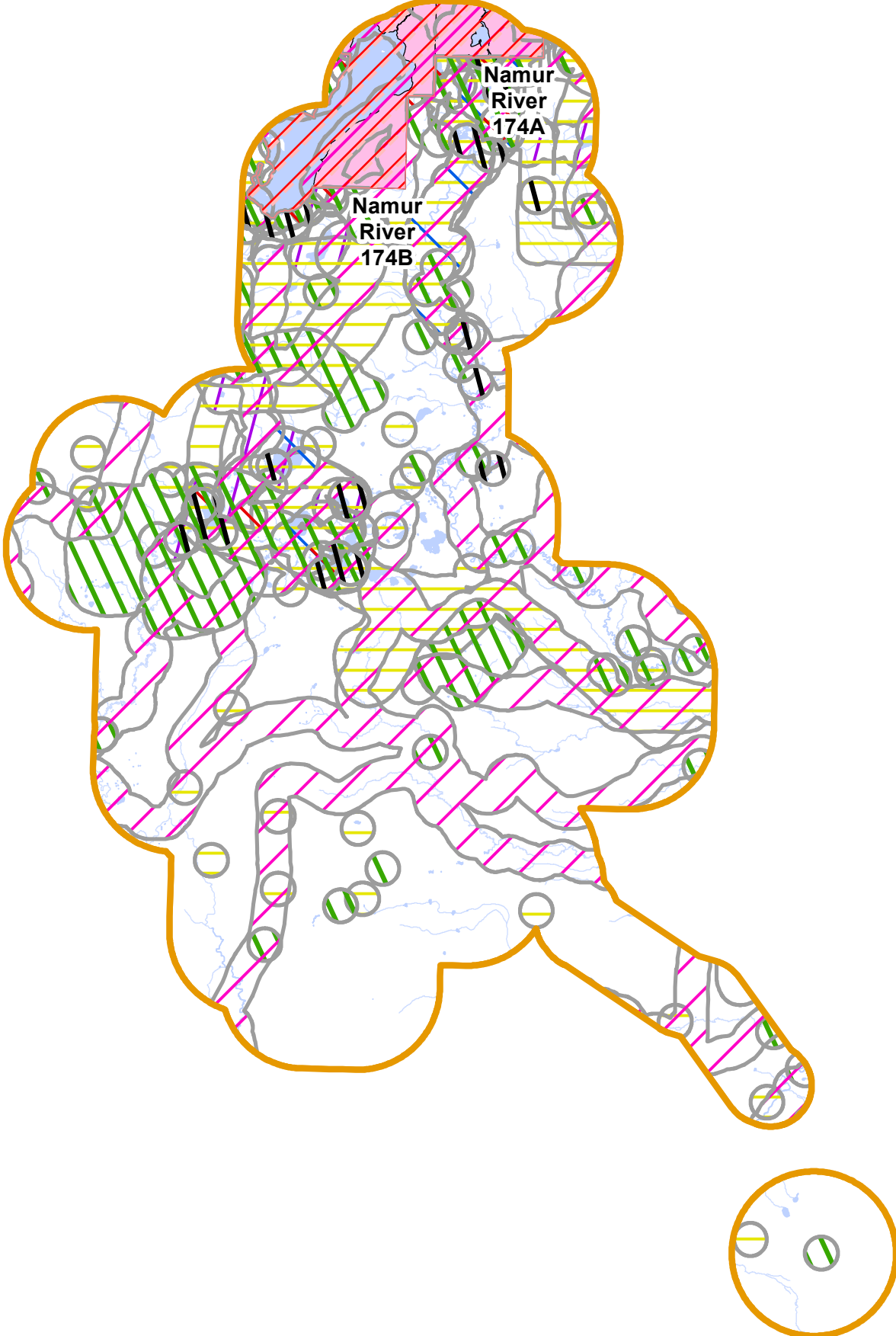
All TU information must be considered in a larger ecological and cultural context. Kill sites represent location a resource was obtained but it does not emphasize the habitat necessary to sustain the animal population nor the human access required to encounter the animal. Characterizing Fort McKay’s TU sites is a work in progress and as we continue to interview people and gather data the recorded body of knowledge evolves. In addition, people continue to modify their land use patterns to accommodate the rapidly changing landscape as new development encroaches on their normal hunting, gathering and fishing sites. People might be forced to use land that was less frequently used in the past as core areas are taken up and sterilized from use. This is one way in which traditional use is a living body of knowledge.

5.2 Anticipated Effects of Dover Project on TU Values

5.2.1 Site-specific and Non-site-specific Subsistence Values

All Overview TLUS and TTW TUS interview participants emphasized the importance of subsistence activities cultural, economic, social and spiritual reasons. The RA is specifically noted as good habitat for hunting moose and caribou, though other animals are also hunted in the area such as ducks and grouse. The RA is also used for fishing, harvesting eggs, picking berries and medicinal plants, and gathering wood. The subsistence areas represent activities that have been carried out by individuals or groups for multiple generations, and are informed by long-term and evolving traditional knowledge of the environment.

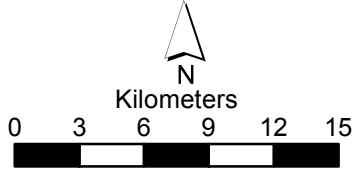
Buffered Traditional Use Values within the Dover Reporting Area



Legend

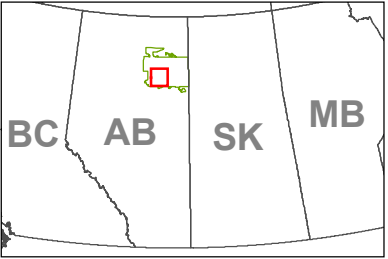
- Dover Reporting Area
- Lakes
- Fort McKay Reserves
- All TU Values
- Rivers

- Cultural/Spiritual Values
- Habitation Values
- Indigenous Landscape Values
- Subsistence Values
- Transportation Values
- Trapping/Commercial Values
- Critical Wildlife/Ecological Values



1:350,000

Projection: NAD 83 UTM Zone 12N



Produced by: CloverPoint Cartographics
 For: Integral Ecology Group
 Cultural Data Sources: Fort McKay First Nation
 Basemap Data Sources: Government of Canada

Printing Date: Mar 19 2013

P:\Projects\11024_IEG_TUS_Fort_McKay\Working
 Fort_McKay_FMBDHP13_DoverRABufferMap_11b.mxd

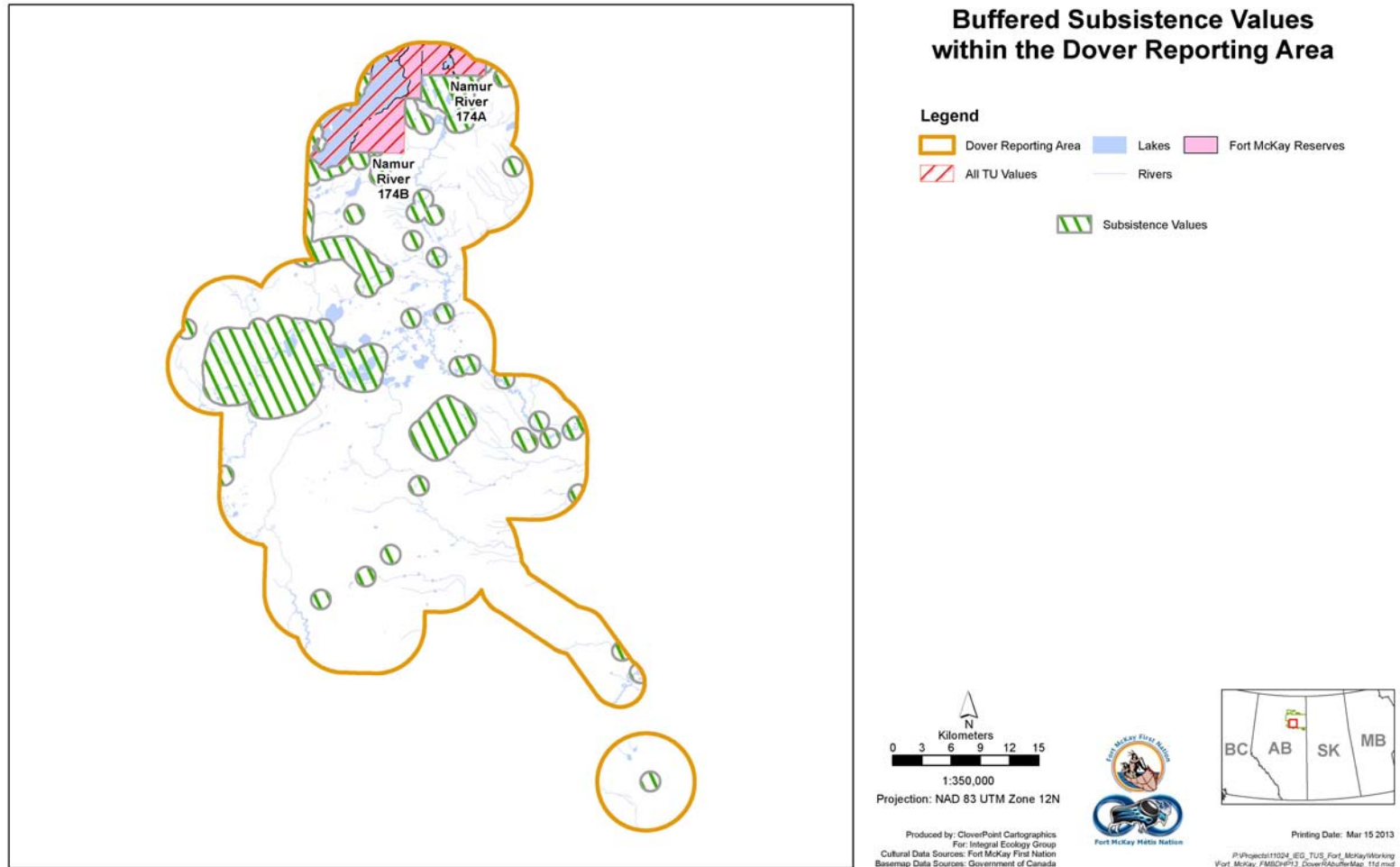


Figure 5-2: Buffered Subsistence Values within the Reporting Area



There are 131 Subsistence Values identified within the RA (see Figure 5-2), and 17 Subsistence Values identified within the Project Lease Area. Sites located within the Project lease area that will experience direct impacts from Project development, destroying them or rendering them unusable, include berry picking, hunting and medicinal plant harvesting sites. As an animal with extreme high significance, or as one Community member states, "It's our way of life. Moose was always our favorite diet" (Garibaldi and Behr 2010), the availability of moose to hunt is paramount to the maintenance of Subsistence Values.

However, as shown in Fort McKay's cumulative effects study (Nishi, et al. 2013), moose populations are currently at the low end of their natural population range in a pre-development situation. Within the next ten years they will decline below this range unless changes in land management practices are implemented, including establishment of protected areas. Dover's wildlife assessment indicates aspects of the project will have negative effects on moose (and caribou) abundance. A further decline in moose populations will have significant negative implications for Fort McKay's Subsistence Values.

Indirect effects on TU sites within the RA include:

- noise (from roads, power plants and well pads);
- decline of animals due to habitat loss and changes in behavior;
- visual impediments (people not wanting to or being able to hunt adjacent to well pads and roads); and,
- safety concerns with hunting near infrastructure or workers;
- accessibility (there will be significant changes to way people are able to move within or across the LSA); and,
- reluctance to hunt, trap, fish and gather adjacent to industrial development due to health concerns



Because of these direct and indirect effects, undeveloped land that is surrounded by Project development will be rendered no longer usable for traditional practices.

5.2.2 Site-specific and Non-site-specific Habitation Values

Habitation Values include cabins and camps, and serve as a core location from which people carry out multiple traditional activities, and people expect these cabins to be free from development effects and places of quiet where they can connect with the land. Trapline cabins are often sites for processing wild meat and fish, setting snares for small game such as rabbits and squirrels and harvesting berries. Valued cabin or camp locations tend to be areas with mature trees for shelter and construction materials with close proximity to drinking water and ideally located on ridges with good views, river and stream confluences, areas adjacent to good fishing areas and lake edges. Site-specific habitation values associated with the RA include historic cabin locations, currently used cabins, one planned future cabin site, and campsites.

Fifty-nine (59) Habitation Values are found within the RA (see Figure 5-3), and five (5) within the Project Lease Area. Ground-truthing activities during the Overview TLUS located seven habitation sites within the RA. Habitation sites within the Project development area will no longer be useable by the Community if the proposed Dover Project proceeds, and cabin and camps adjacent to or surrounded by development will also have limited or no value for use particularly when planned future development is taken into account.

In addition to the potential for direct interactions between Project construction and habitation sites, there might be indirect affects to affect habitation sites. Cabins and camps are usually located in close proximity to areas that are abundant in subsistence and trapping resources. Adverse Project-specific (and also cumulative) effects on traditional subsistence and trapping sites also adversely affect the viability of habitation sites used as staging grounds to access those sites.

Maintenance of Habitation Values for Fort McKay requires land free from development, on which Community members can continue to set up camps and build cabins to harvest resources and practice cultural activities. The Dover Project renders the area within the Project development area unusable for habitation and people are likely to be severely impacted if their cabin is contained within the RA, particularly if they can hear, see or smell development.

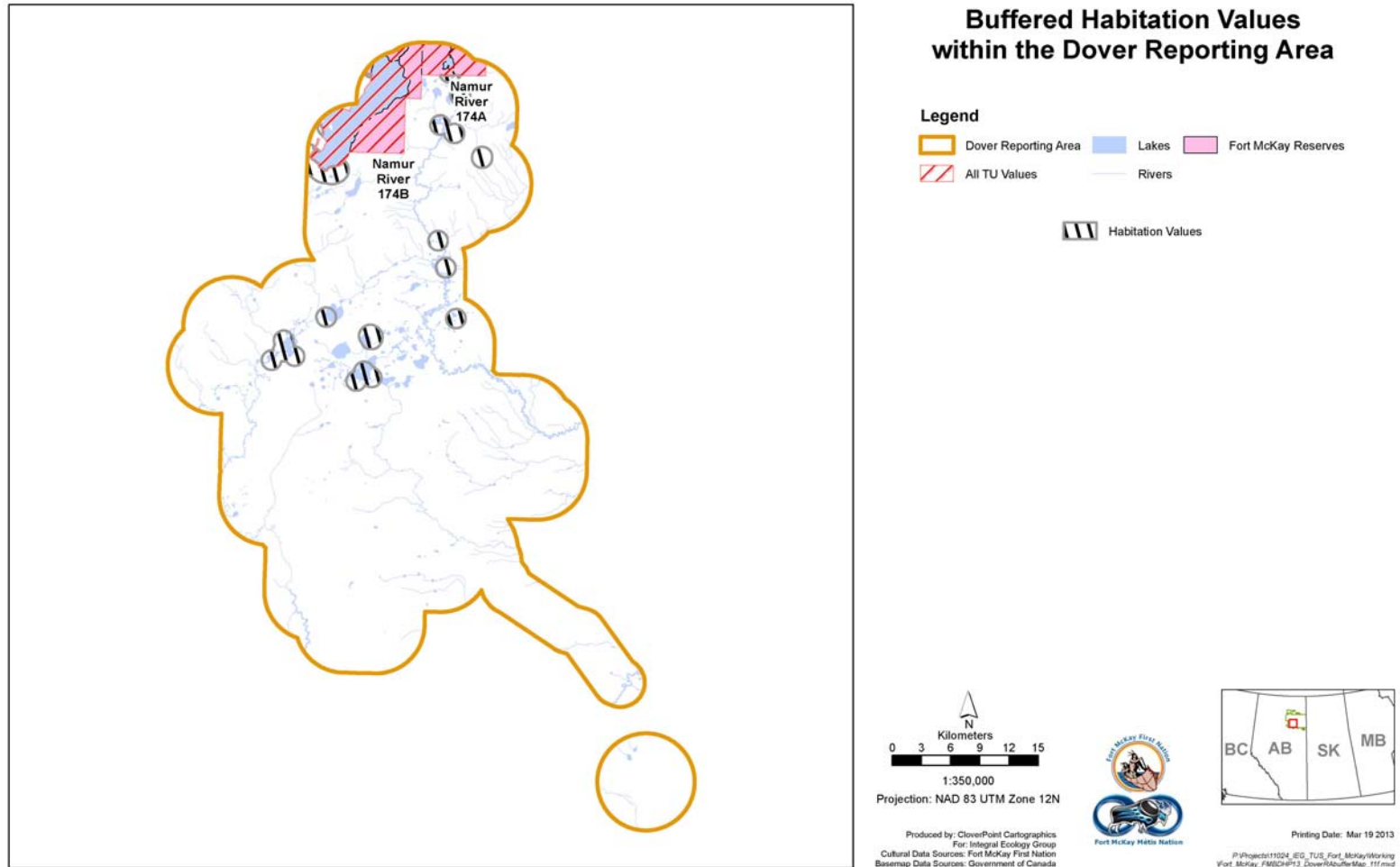


Figure 5-3: Buffered Habitation Values within the Reporting Area

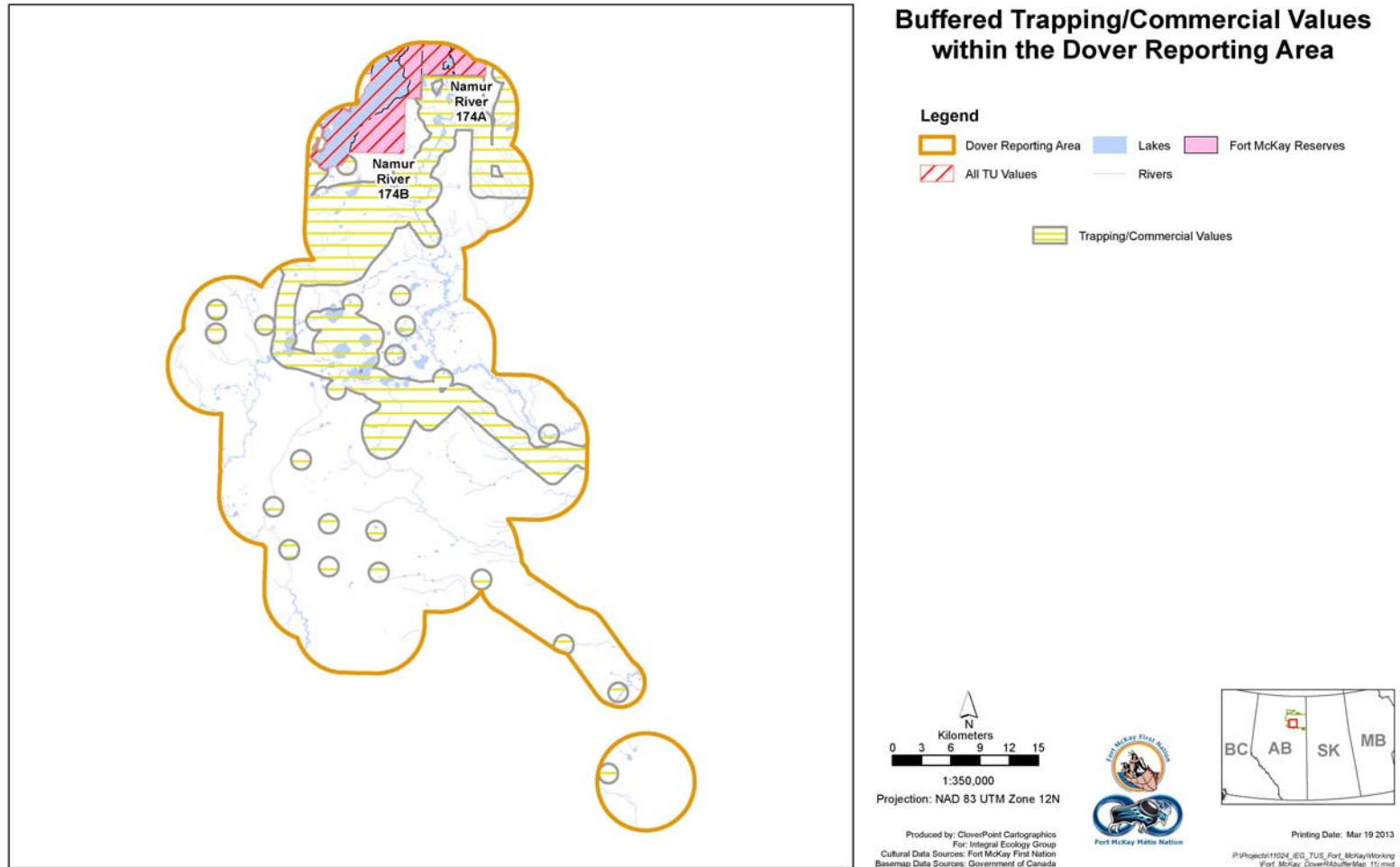


Figure 5-4: Buffered Trapping/Commercial Values within the Reporting Area



Further, the portion of reserve land that is adjacent to the Dover Project will likely not be used for cabin building or camping due to its proximity to development – rendering it unusable from a traditional use perspective.

5.2.3 Site-specific and Non-site-specific Trapping/Commercial Values

Trapping and Commercial Values refer to locations on the land where people set traps for furbearing animals for economic and subsistence use. Meat from trapped animals is not wasted; people often have and often still eat meat from such animals as beavers.

All interview respondents for the Overview TLUS are trapline holders. Forty-three (43) Trapping/ Commercial Values are associated with the RA (see Figure 5-4) and 17 within the Project Lease Area.

Community members note that development activities will impact wildlife both as a result of Project-related land clearing and therefore removal of habitat, and landscape fragmentation. These impacts on wildlife will impact people's ability to successfully trap. As one Community members shared, once the land is cleared for the Dover Project "all the animals are going to be gone...and it is the trappers that are going to be most affected" (Garibaldi and Behr 2010).

5.2.4 Site-specific & Non-Site-Specific Critical Wildlife/Ecological Values

Critical wildlife/Ecological Values include locations of key significance to wildlife such as salt licks, calving areas, and fish spawning locations. Community members feel that the entire RA is valued wildlife habitat - particularly as at the time the Overview TLUS was completed little development had taken place in the area.

Twenty-three (23) Critical Wildlife/Ecological Values have been identified within the RA (see Figure 5-5) and four (4) within the Project Lease Area. These include critical caribou, moose and jackfish habitat. Impacts to caribou habitat remain a key Community concern (Garibaldi and Behr 2010), Community member, Fort McKay Moose Lake Focus Group Sessions, October 2011; FMSD 2012) as do concerns about loss of caribou and moose through harvesting competition from non-Aboriginal hunters. Because of the location of the Dover Project in relation to the culturally invaluable land at the Buffalo and Moose Lakes Reserves, negative impacts to moose and caribou populations within the LSA area – particularly when coupled with other planned



development – might also impact Subsistence and Wildlife/Ecological TU Values at the reserves.

Development impacts to Critical Wildlife/Ecological Values are similar to those for Subsistence and Trapping/Commercial. Habitat for animals for forage, calving, access mineral sources such as salt licks, and water connectivity for fish are all ecological wildlife requirements. The Dover Project will contribute to further decline of these TU Values in the RA.

5.2.5 Site-specific & Non-site-specific Transportation Values

Transportation Values include pathways people use to move across the landscape and include an extensive land-based trail network and many rivers and creeks. Originally cut by hand, these land-based trails might be traversed by foot, snow machine and historically by dog team and horse. Trails are inherently challenging to quantify as they continuously branch and connect with other trails. In the Overview TLUS the number of Transportation Values (i.e., trails) was derived from the counting the segments of trails from *There is Still Survival Out There* which resulted in 80 Values. When combined with trails identified in TU interviews, 4 Values, the total was reported as 84 Transportation Values. However, in this TU Update we do not add in trail data from *There is Still Survival Out There* when reporting on TU Values in the Project lease area and the 20 km zone around the Buffalo and Moose Lakes Reserves (however, they are shown in the maps). In this way, the Transportation Values are higher than quantified.

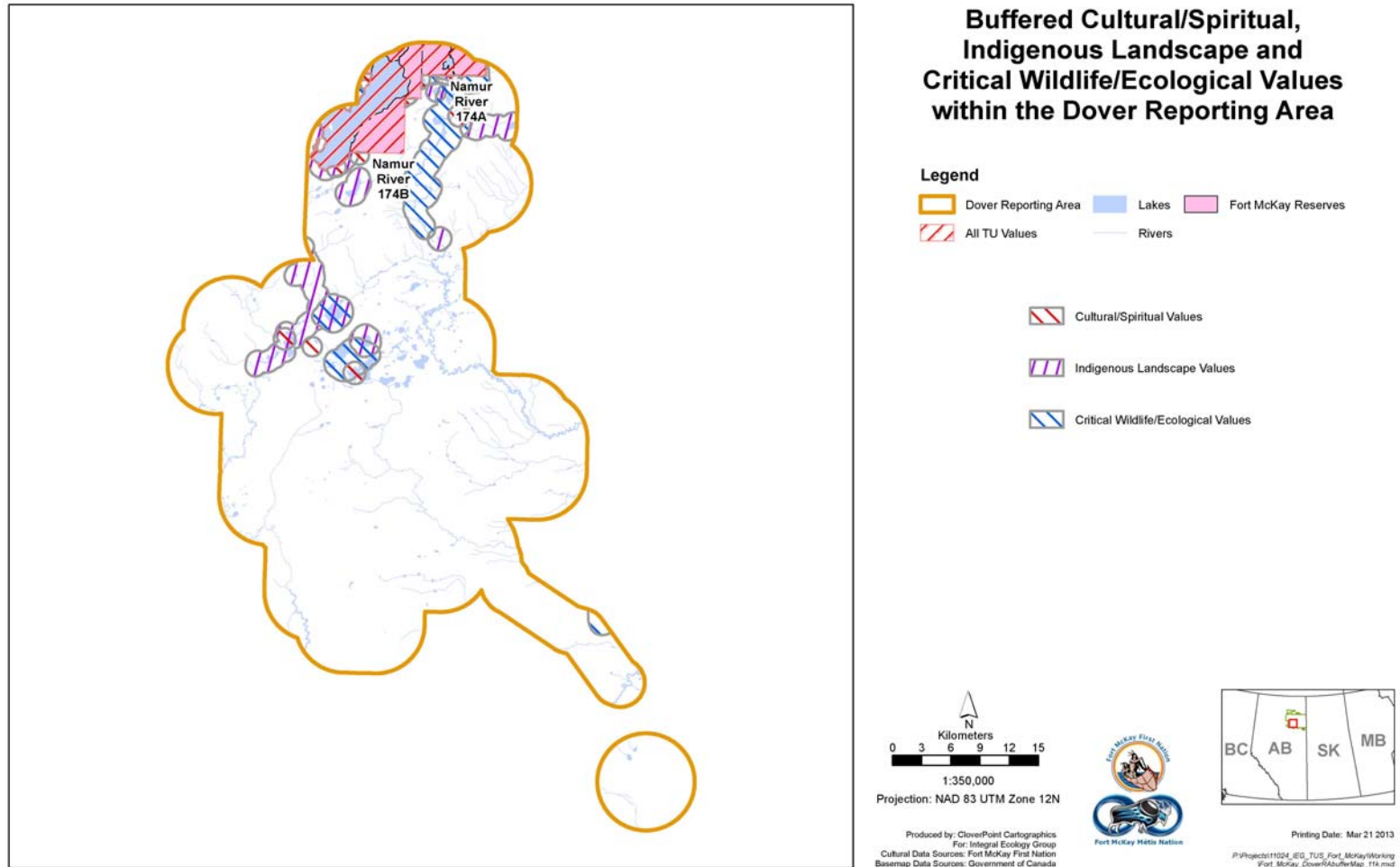


Figure 5-5: Buffered Critical Wildlife/Ecological Values, Cultural/Spiritual Values and Indigenous Landscape Values within the Reporting Area

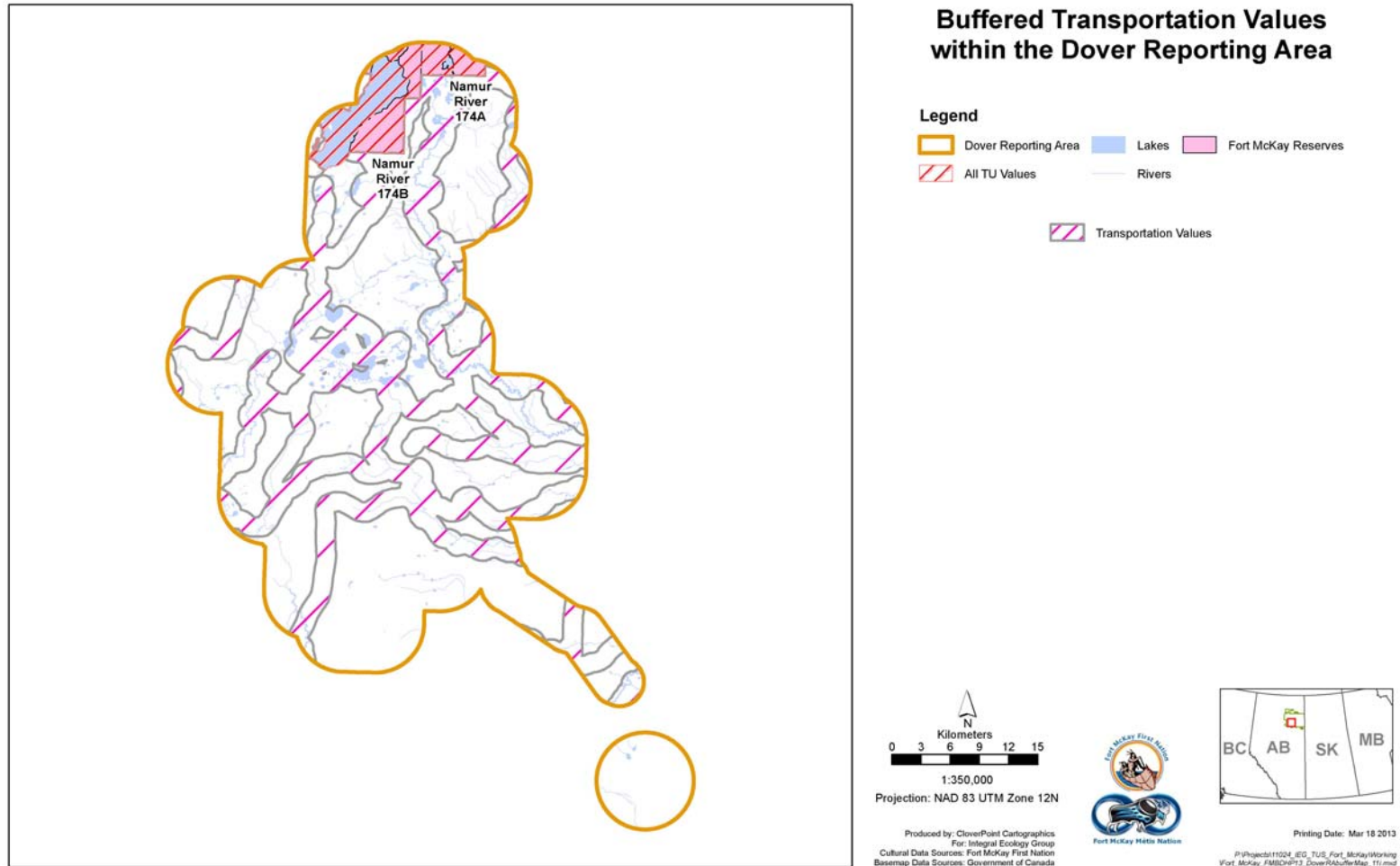


Figure 5-6: Buffered Transportation Values within the Reporting Area



Ninety-five (59) Transportation Values have been identified in the RA³⁷ (see Figure 5-6) and four (4) within the Project Lease Area³⁸.

Community members have expressed concern over the changes to these networks, particularly the loss of control over determining how they are used. Community members have observed companies using existing Community trails as their access routes, and frequently rendering them unusable to Community members in the process. They “upgrade” a trail and change its name, removing it from Community member use with little or no regard to its history and value to Fort McKay members.

In many instances, long-established traditional trails used in snow-free months follow high-ground in a landscape that supports high cover of muskeg. These same areas are desired by companies, particularly if a route has been previously established. As one Community member shared, “They lay claim to old trapline trails” (Garibaldi and Behr 2010).³⁹ While all portions of these trails might not be disturbed through Project development, if trails within the RA are missing sections it is likely to render the rest of the trail unusable, significantly impacting Transportation Values. This loss of traditional trails, coupled with changing access across in and around the Project development area, and in fact the entire RA, is of high concern to Community members.

5.2.6 Site-specific and Non-site-specific Cultural/Spiritual Values

Cultural/Spiritual Values include burial sites, gathering sites and ceremonial areas. Thirty five (35) Cultural/Spiritual Values have been identified within the RA (see Figure 5-5) and one within the Project Lease Area. These include burial sites, a historic site and an area that is of key importance to a traditional story.

Community members believe it is very difficult to share traditional knowledge with younger people when there is so much development occurring within the traditional territory. As more

³⁷ The number of Transportation Values in the Reporting Area does include the trail information from *There is Still Survival Out There*

³⁸ The number of Transportation Values in the Project Lease Area does not include trail information from *There is Still Survival Out There*

³⁹ Page 42



land becomes unavailable, fewer people have the opportunity to learn the traditional ways of hunting, gathering, trapping and fishing. Knowledge, skills and traditions can only be passed on when in an active setting out on the land. For example, Community members indicate that during berry picking excursions, it is common for elders and knowledgeable adults to share stories of past experiences in the bush. As one Community member shared, “Kids today, all their learning is from books, it’s all in [their minds]. Unless you learn things on the land, you can’t know it from [your heart]” (Fort McKay Industry Relations Corporation (IRC) 2010b).

Support for Cultural and Spiritual Values requires land undisturbed by development-related, noise, sounds and visual obstructions. Quiet contemplative places to carry out spiritual practices are extremely important to the Community. As well, there is a strong inextricable connection between subsistence activities and Cultural and Spiritual Values, which means that these areas must support healthy viable pre-development level populations of animals and plants. As noted in the Fort McKay Specific Assessment (Fort McKay Industry Relations Corporation (IRC) 2010a):⁴⁰

Picking berries gives you a good feeling. You are looking after yourself. You have quiet time to think...it matters to me that we can't go picking...that was bonding and builds respect⁴¹.

We need to go hunting to keep spirituality going⁴².

Both the RA and the adjacent Buffalo and Moose lakes Reserves serve as locations where Cultural/Spiritual Values are maintained. Dover Project impacts will negatively affect the maintenance and transmission of these Values.

5.2.7 Site-specific & Non-site-specific Indigenous Landscape Values

Indigenous Landscape Values refer to local place names or knowledge about geographic or spatial features. They express how people know, use and understand the land by indicating a local resource (e.g., Moose Lake), site history (e.g., the story behind the name of Buffalo Lake), landscape function and social-ecological relationships.

⁴⁰ Page 46

⁴¹ Community member, Fort McKay Workshop, September 2008

⁴² HEG 2009: 30



There are 26 Indigenous Landscape Values within the RA (see Figure 5-5) and 6 within the Project Lease Area. All of these are Cree language place names of lakes and streams.

Areas that are removed or developed lose their Indigenous Landscape Values – their place names are no longer relevant or meaningful - and as Dr. Enrique Salmon states, “When the language disappears, the sum of cultural cognition of the landscape is lost” (Salmon 2012). Through the displacement of Community members from parts of their traplines, and the collective inability of Community members to actively use the cluster of lakes surrounded by the project lease, the Dover Project will contribute to the decline in the Indigenous Landscape Values associated with the RA.

5.2.8 Anticipated Effects on Fort McKay Reserves 174a and 174b

There are 592 TU Values identified within the Moose Lake Buffer area (See Figure 5-7 through Figure 5-12) and are categorized as:

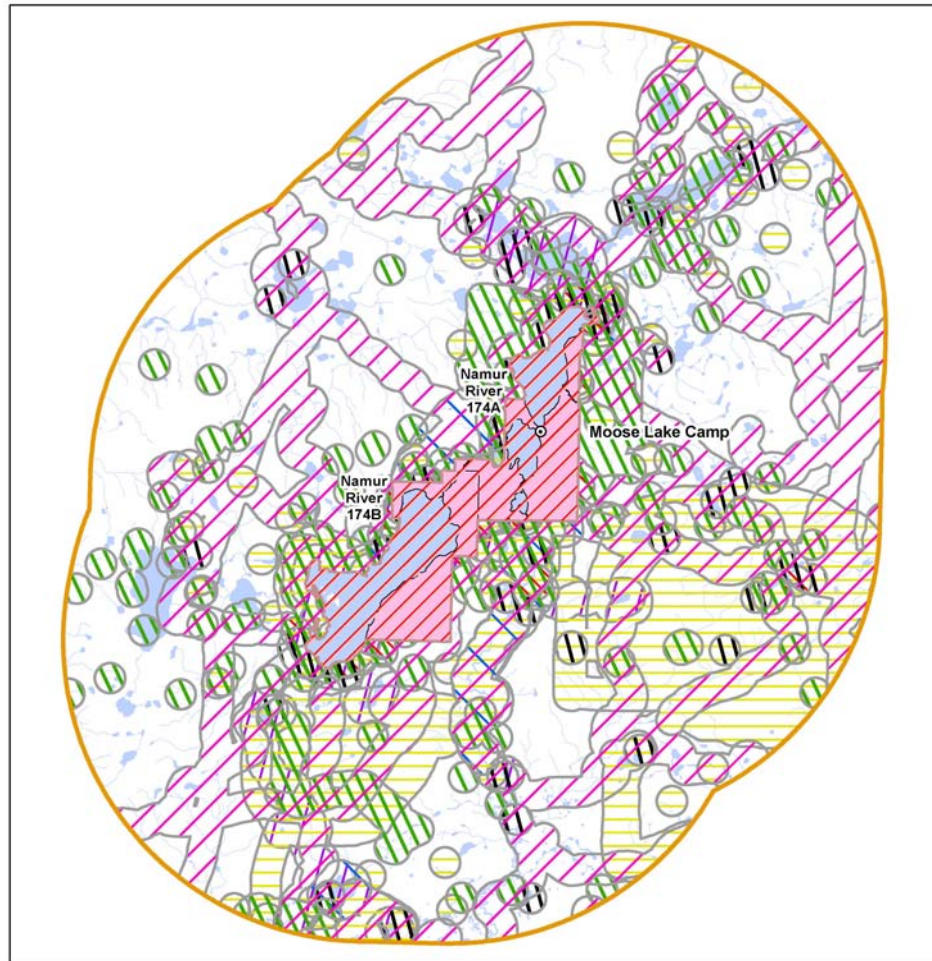
- Subsistence Values = 285 total values
- Habitation Values = 102 total values
- Trapping and Commercial Values = 86 total values
- Critical Wildlife/Ecological Values = 26 total values
- Transportation Values = 20⁴³ total values
- Cultural/Spiritual Values = 45 total values
- Indigenous Landscape Values = 28 total values

Community members continue to stress the connection they feel between the impacts of the Dover Project area on the Buffalo and Moose Lakes Reserves ((Garibaldi and Behr 2010), (Fort McKay Sustainability Department (FMSD) 2011a); Community member, Fort McKay Moose

⁴³ Does not include trail data from *There is Still Survival Out There* in Transportation Value count



Lake Focus Group Sessions, October 2011). The Moose (Ells) River that flows out of the area is the source of the Community's drinking water.

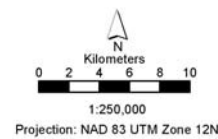


Buffered Traditional Use Values within 20 km of Moose Lake

Legend

- 20km Buffer
- Lakes
- Fort McKay Reserves
- All TU Values
- Rivers
- Cities/Towns/Villages

- Cultural/Spiritual Values
- Habitation Values
- Indigenous Landscape Values
- Subsistence Values
- Transportation Values
- Trapping/Commercial Values
- Critical Wildlife/Ecological Values

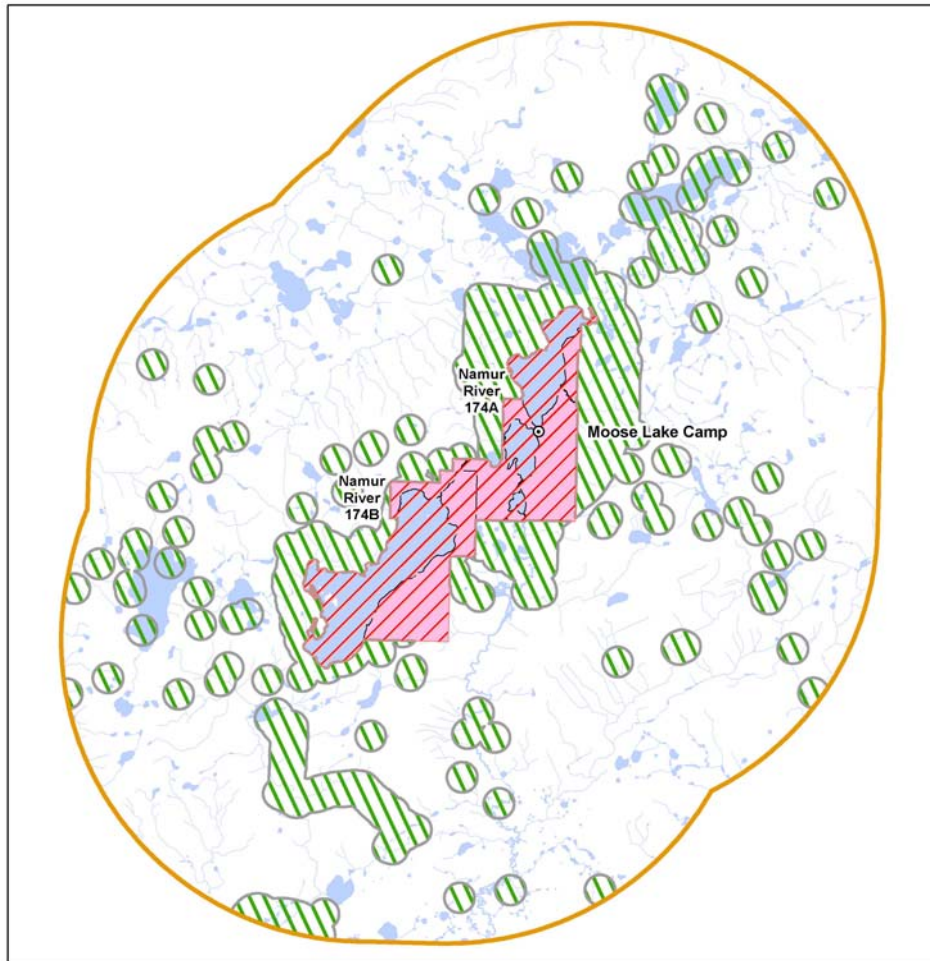


Printing Date: Mar 19 2013

Produced by: CloverPoint Cartographics
For: Integral Ecology Group
Cultural Data Sources: Fort McKay First Nation
Basemap Data Sources: Government of Canada

P:\Projects\11024_EG_TUS_For_McKay\Working
For_McKay_FMS\CHP1_MooseLakeBufferMap_120.mxd

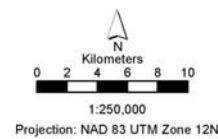
Figure 5-7: All TU Values in the Moose Lake Buffer Area in 2013



Buffered Subsistence Values within 20 km of Moose Lake

Legend

- 20km Buffer
- Fort McKay Reserves
- Lakes
- All TU Values
- Cities/Towns/Villages
- Rivers
- Subsistence Values



Produced by: CloverPoint Cartographics
 For: Integral Ecology Group
 Cultural Data Sources: Fort McKay First Nation
 Basemap Data Sources: Government of Canada

Printing Date: Mar 15 2013
 P:\Projects\11024_EG_TUS_Fort_McKay\Working
 Fort_McKay_FMSCHP12_MooseLakeBufferMap_123.mxd

Figure 5-8: Buffered Subsistence Values within 20 km of Buffalo and Moose Lake

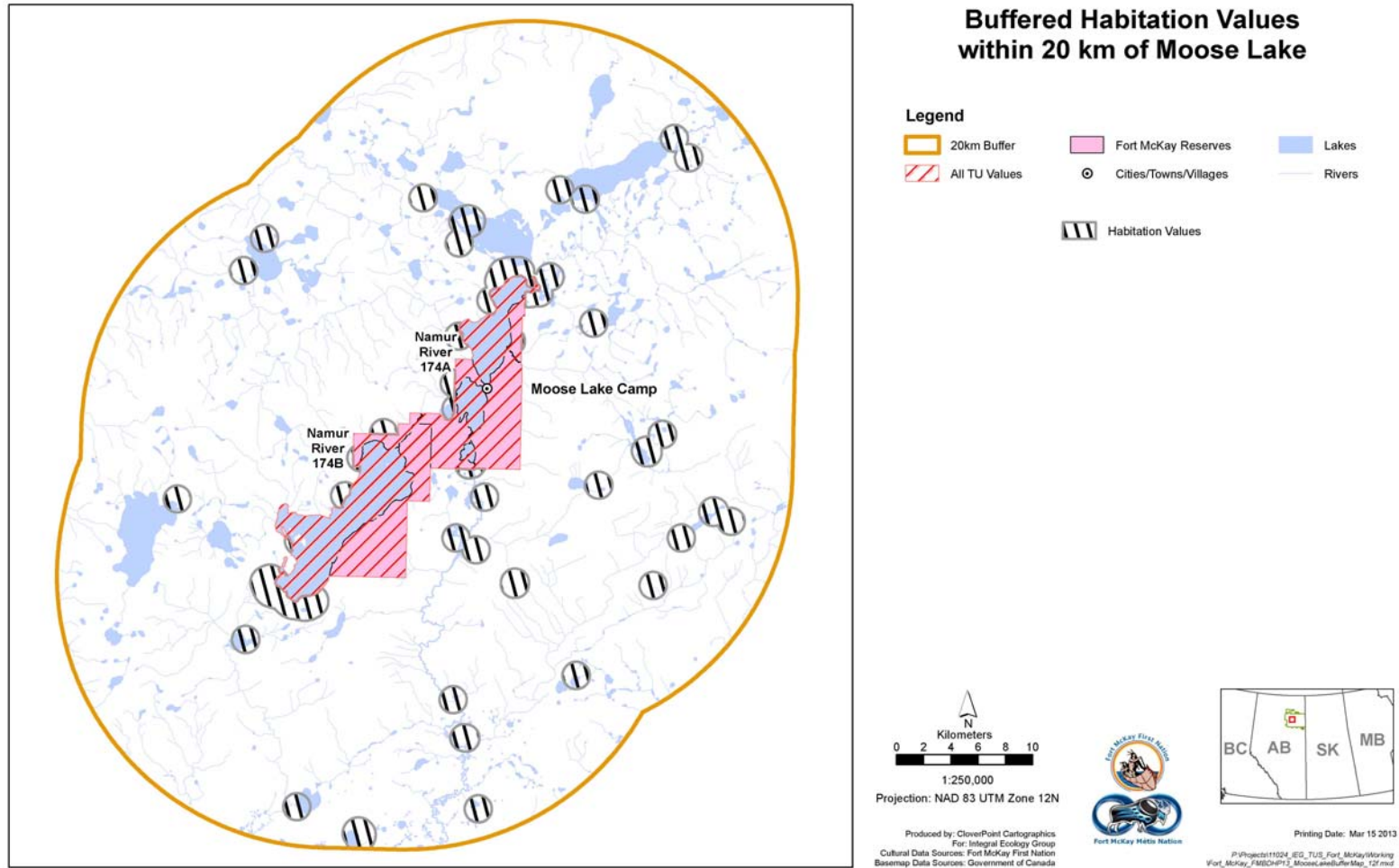


Figure 5-9: Buffered Habitation Values within 20 km of Buffalo and Moose Lake

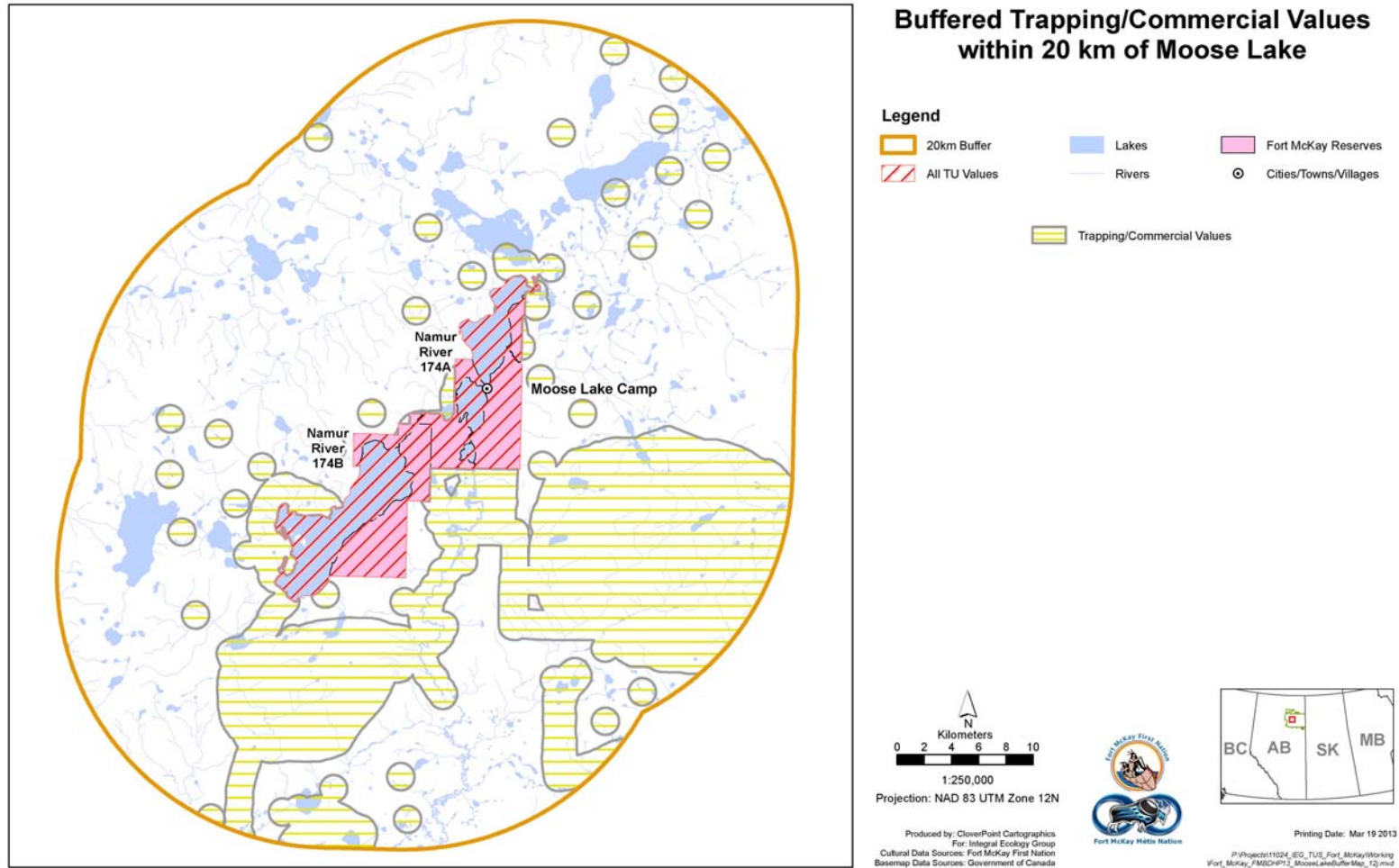


Figure 5-10: Buffered Trapping/Commercial Values within 20 km of Buffalo and Moose Lake

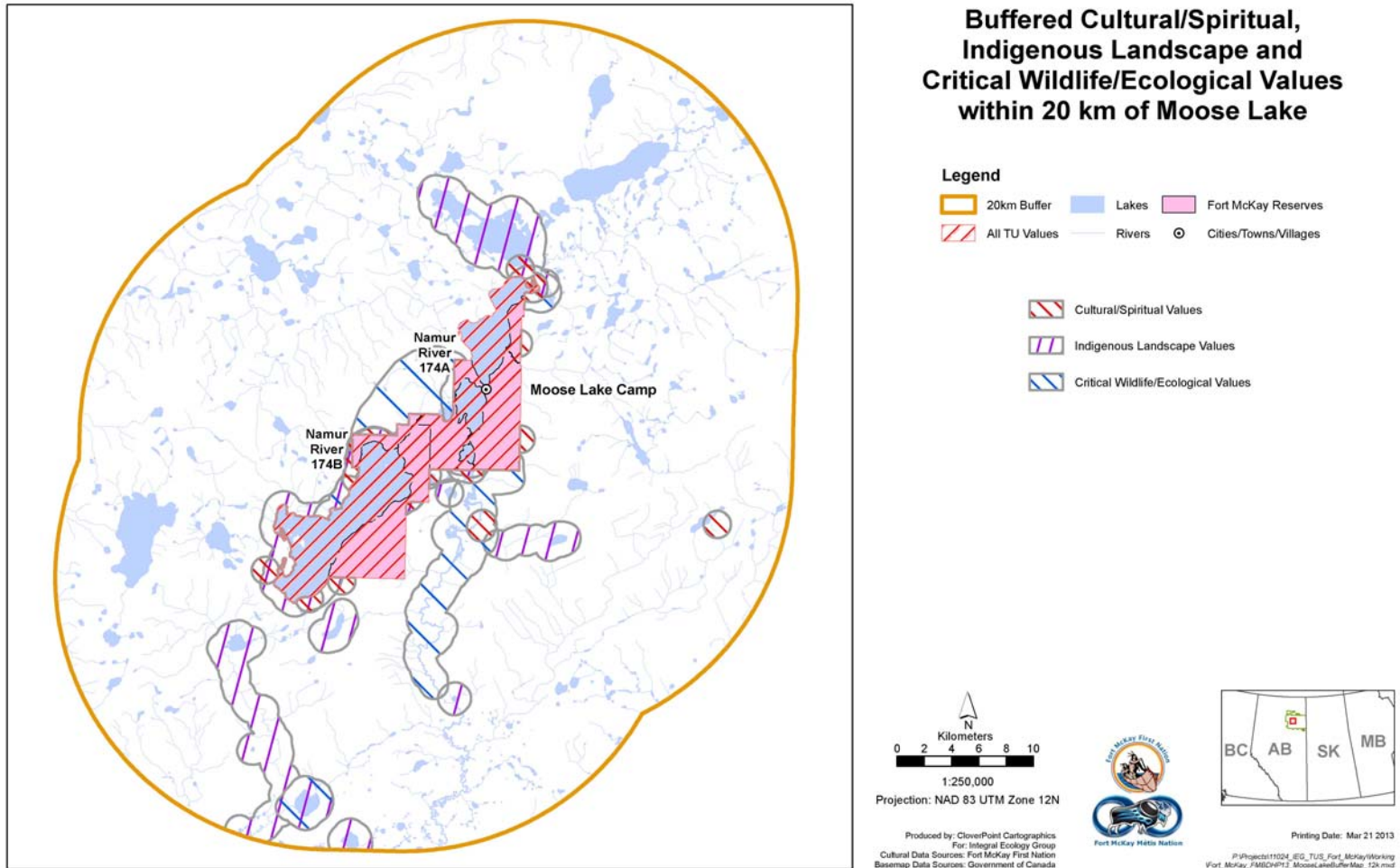


Figure 5-11: Buffered Critical Wildlife/Ecological Values, Cultural/Spiritual Values and Indigenous Landscape Values 20 km of Buffalo and Moose Lake

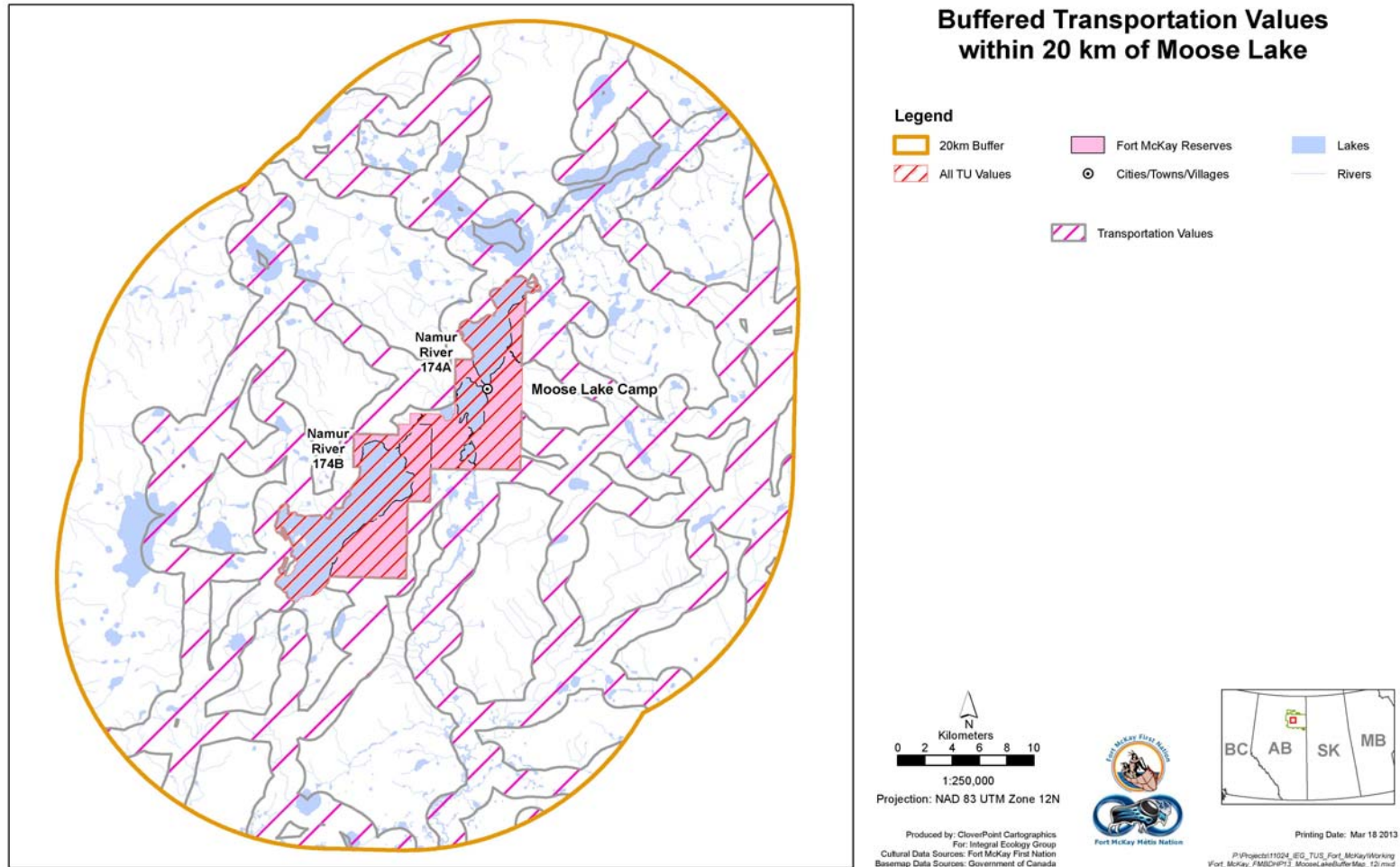


Figure 5-12: Buffered Transportation Values 20 km of Buffalo and Moose Lake



Gathering medicine, harvesting plants, and collecting drinking water, are all activities that require people feeling like they have a safe place to carry out these activities (Community member, Fort McKay Moose Lake Focus Group Sessions, October 2011). As one elder shares, “Moose Lake is our last little piece of land where we can learn and teach our children, and the future generations how to be native. How to be traditional...” (Fort McKay Respondent #99, February 6, 2013). The proximity of the Project to the reserve land that many consider their refuge from the impacts occurring throughout their traditional territory and surrounding the settlement of Fort McKay is unacceptable to Community members.

Moose Lake is one of the last places in the area that people from Fort McKay can practice their traditional culture. And the importance of Moose Lake is immeasurable. Losing Moose Lake to the industry would impact our community in ways that I don't think anyone else will ever understand. (Fort McKay Respondent #103, February 13, 2013)

The Buffalo and Moose Lakes Reserves are the location where many Community members truly feel it safe to carry out traditional activities. Imbued with a strong historical and current spiritual connection to the land surrounding Buffalo and Moose lakes, the area is more than a location to procure resources—it provides critical links to their cultural history that help maintain their cultural identity. As one Community member states (Fort McKay Respondent #58, February 6, 2013):

It's not just another piece of land, it's a sacred piece of land that ties their very existence to who they are as a First Nations Person.

The Community's ability to adapt to environmental change while simultaneously supporting their TU values is linked with maintaining or regaining sovereignty over how associated issues are addressed. University of Victoria Psychology Professor Christopher Lalonde recently examined cultural resilience and identity formation in Aboriginal communities and found that (Lalonde 2006):

When communities succeed in promoting their cultural heritage and in securing control of their collective future – in claiming ownership over their past and future – the positive effects reverberate across many measures of youth health and well-being.



The significance and value of being able to meaningfully continue to carry out traditional practices at the culturally unique Buffalo and Moose Lakes Reserves cannot be overstated.

Community members have shared that as more development occurs in the land surrounding Buffalo and Moose lakes, the negative effects on the cultural heritage, health and social wellbeing of the Fort McKay people will be crippling.

It's kind of like we're losing, well, we're losing our language, we're losing our land, we're losing our culture. You know, so, that's a lot of loss for us. And nobody is paying out. Like whether or not it's money, or education, or employment and stuff like that, we're really losing. (Fort McKay Respondent #99, Fort McKay Cumulative Effects Workshop 2, 2012)

The preservation of the reserve land at Buffalo and Moose Lakes – which, to the Community means establishing a protective buffer – is key to their cultural survival.

We need to have, we need to be able to do, work together as a community to decide these things in order for us to be able to take it to the table, to leadership, or to industry, and say o.k., this is what we want. This. And it's going to benefit the whole community. Not just us today, but our grandchildren and our great grandchildren. Because seriously if we start giving, if we lose Moose Lake, we may as well not call ourselves Indians because we won't be able to hunt, we won't be able to trap, we won't be able to fish, we won't be able to live off the land. We gave up everything. We will not be Indians. (Fort McKay Respondent #99, Fort McKay Cumulative Effects Workshop 2, 2012)

In addition to providing an ecological buffer to support animal habitat (Nishi, et al. 2013); (Stelfox, Nishi, et al. 2013), a buffer provides peace and a sense of safety for Community members who are otherwise so negatively affected by development adjacent to their homes in Fort McKay and in many instances to their trapline cabins.

One Community member whose cabin is located on Buffalo Lake, can currently see the lights of drilling rigs from a project located approximately 20 km away. As he moved closer to the area he noted that he could hear the development activities when he was approximately 2 km away. This experience has him concerned for impacts from the Dover Project on reserve land surrounding Buffalo Lake.



The significance of Fort McKay's Buffalo and Moose Lakes Reserves as a refuge from development activities has intensified over the past decades. "We can't say the oil company never helped the community, but when they first started we thought, you know, that's the only little place they're going to be. They're not going to be bothering us in our area. But now...we have no place to go" (Fort McKay Respondent #01, January 25, 2013). However, in reference to increasing development within the traditional territory the Community responded by stating "it is impossible for us to continue to withdraw and still have enough land to serve as an economic base for us in the ways that we choose" (Fort McKay Tribal Administration 1983).⁴⁴ The entire traditional territory is culturally and environmentally important and for that reason Fort McKay is requesting best management practices (Nishi, et al. 2013) for portions of the traditional territory that is experiencing development. However, due to existing and further planned development surrounding the settlement of Fort McKay, the reserves at Buffalo and Moose Lakes has become a refuge from the stress and pressure of development where people feel safe to carry out traditional pursuits. It is a communal space that the entire Community has rights to and is essential as a teaching place for younger people.

5.2.9 A Note about Cumulative Impacts

The effects of cumulative impacts on Fort McKay's traditional use and cultural heritage has been documented and assessed in detail in the *Fort McKay Specific Assessment (FMSA)*, (Fort McKay Industry Relations Corporation (IRC) 2010a). Key environmental stressors were classified in the FMSA as:

- **Loss of Land.** Selected impacts of this stressor include - limited opportunity and capacity to hunt, trap and gather. Loss of land around Fort McKay has limited opportunities for cross-generational transfer of knowledge.
- **Pollution.** Selected impacts of this stressor include – decreased quality of traditional foods and medicine. Concerns over pollution decrease motivation to consume wild meat, fish and berries, reducing times spent hunting, fishing and gathering.
- **Reduced Access to Land.** Selected impacts of this stressor include – reduction in the ability to hunt, trap, gather and fish.

⁴⁴ Page 34



Accessibility to existing protected areas (i.e., parks and Conservation Areas) is limited as these areas are located on the margins of Fort McKay's traditional territory (see Table 6-1). Access to these areas is limited due to physical constraints from development. As discussed in *A Community-led Approach for Landscape Planning* (Berryman, et al. 2013) the existing protected areas are insufficient to ensure the integrity and functionality of the Buffalo and Moose Lakes Reserves to support traditional use activities. Instead a buffer of land around these reserves is needed to ensure the area is able to support both cultural and ecological integrity (Stelfox, Nishi, et al. 2013).

Table 5-2: Distance of LARP Conservation Areas from Fort McKay⁴⁵

| Proposed LARP Conservation Area | Distance from Hamlet of Fort McKay |
|--|---|
| Birch Mountains Prov. Wildlands Park (Expansion) | 65 NW |
| Gipsy-Gordon Wildland Park | 60 SE |
| Richardson Wildland Park | 75 km NE |
| Birch River Conservation Area | 101 km NW |

The report *Disturbance and Access: Implications for Traditional Use Land Disturbance Update* (Lagimodiere 2013) details the implications of cumulative effect development within Fort McKay's traditional territory on traditional use from a land disturbance perspective. Lagimodiere examines disturbance under existing, approved and planned scenarios and discusses the implications of adding a 100 m, 200 m and 300 m buffer to these scenarios to estimate the indirect impacts resulting from Project development. Disturbance, both Project-specific and cumulative, negatively impact traditional use opportunities in a number of ways. Direct disturbance remove portions of the landscape from use entirely. Both open pit mines and in-situ operations render portions of Fort McKay's land unusable. In addition, indirect impacts resulting, in part, from inaccessibility of land due to gates and other access control points, Community concerns over health and safety concerns from harvesting wildlife adjacent to development (due to noise, dust, air quality, odours and personal safety), and development impacts to wildlife populations all result in a decline in traditional use opportunities.

⁴⁵ as per Lagimodiere 2013



Lagimodiere calculated the direct and indirect impacts for existing, approved and planned disturbance (defined as projects formally announced by March 2013) and found the effective landscape disturbance ranges from 20% to 41% when buffers are added – buffers that account for a conservative estimate in indirect Project effects (see 11 x 17 figured included in PDF Figure 5-13 through 11 x 17 figured included in PDF

Figure 5-15). Community land use patterns change in response to pressure from cumulative effects development by forcing people to use undisturbed land even if it is currently less productive or preferred simply because it is not disturbed.

Table 5-3: Existing, Approved and Planned Development within Fort McKay’s Traditional Lands⁴⁶

| Buffer Distance | Disturbance Area (ha) | Percentage (%) of Leases that overlap Traplines |
|---|-----------------------|---|
| Existing and Approved and Planned Projects | | |
| no buffer | 196,559 | 5.0% |
| 100 m | 767,878 | 20% |
| 200 m | 1,207,487 | 31.0% |
| 300 m | 1,547,683 | 40% |
| Integrated moose/fisher buffer | 1,547,683 | 41% |

¹ Some numbers are rounded for presentation purposes. Therefore, it might appear that the totals do not equal the sum of individual values.

² Anthropogenic disturbance does not include cultural land use modifications such as traditional trails maintenance or use of fire for traditional land use purposes.

³ The Total Area of Fort McKay’s Traditional Lands is 3,625,037 hectares.

5.3 Dover Project Mitigations in Application

Dover proposes the following mitigation actions to address the Project impacts on traditional activities:

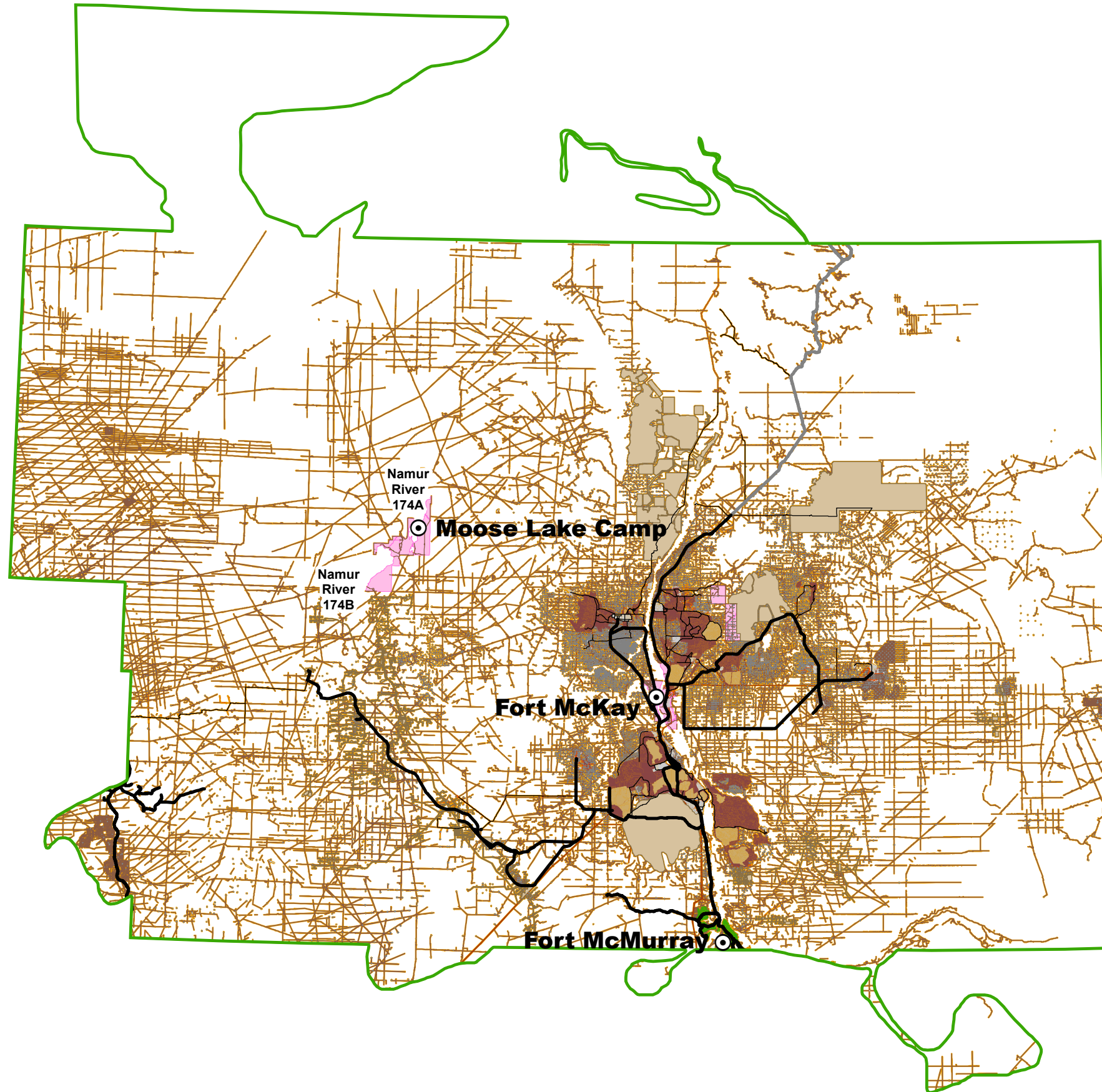
- Continued consultation with key aboriginal groups

⁴⁶ as per Lagimodiere 2013



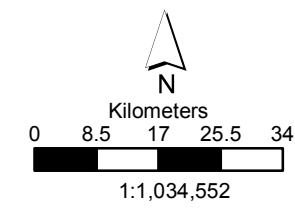
- Access to traplines and traditional use areas (during construction, operations and reclamation)
- Progressive reclamation
- Employee/contractor education

Fort McKay's Traditional Territory Existing, Approved and Planned 100m Disturbance Buffer



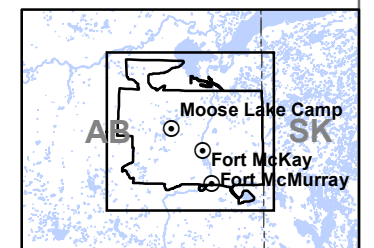
Legend

- 100m Disturbance Buffer
- Fort McKay Reserves
- Planned Developments
- Communities
- Major and Minor Roads
- Oilsands Mine
- Tailings Pond and Disposal Overburden
- Industrial and Gravel
- Wellsites
- Pipelines and Transmission Lines
- Seismic
- Primary Roads
- Winter Roads
- Secondary Roads
- Cities/Towns/Villages



Projection: NAD 83 UTM Zone 12N

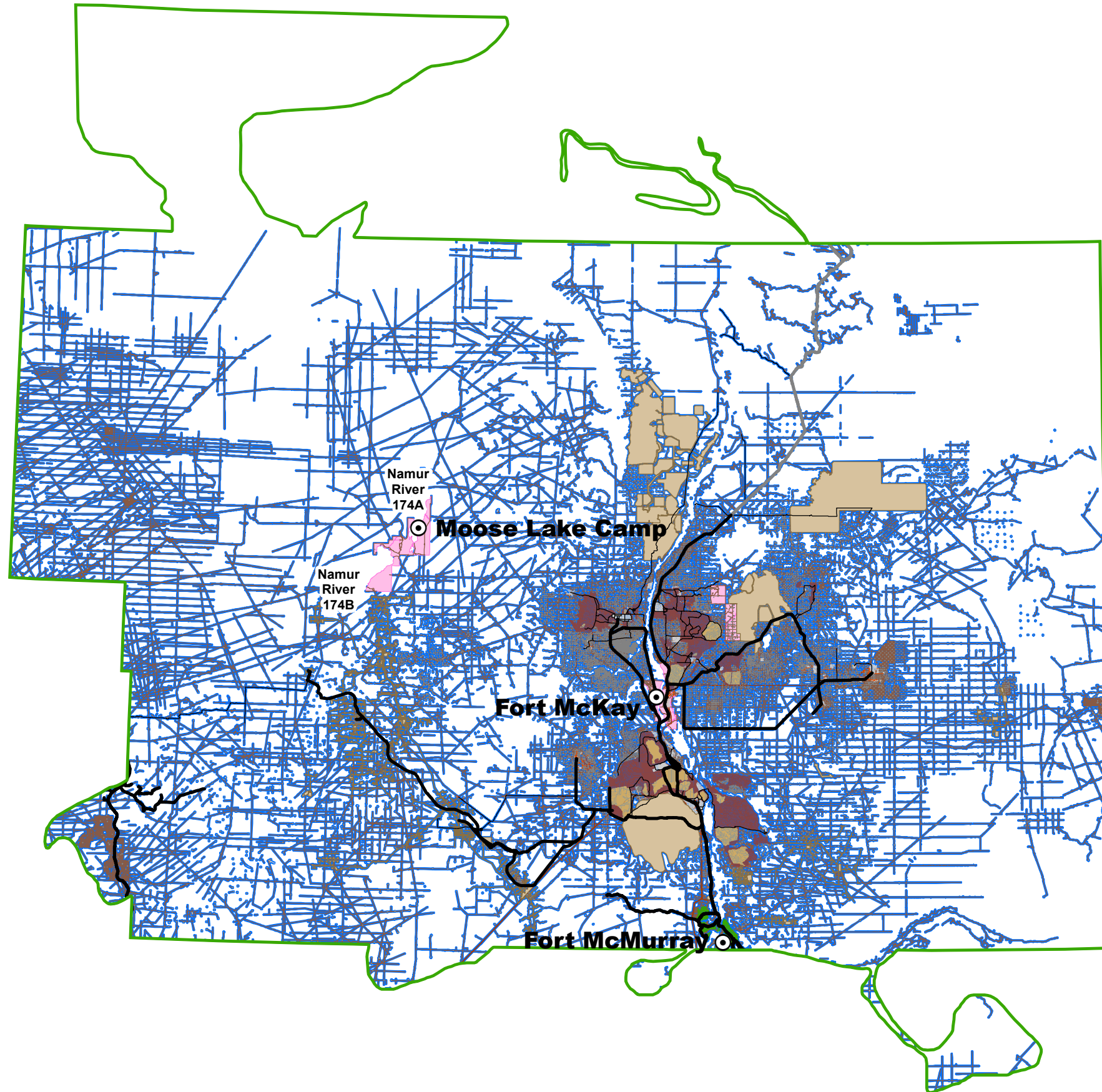
Produced by: CloverPoint Cartographics
 For: Integral Ecology Group
 Cultural Data Sources: Fort McKay First Nation
 Basemap Data Sources: Government of Canada



Printing Date: Mar 13 2013

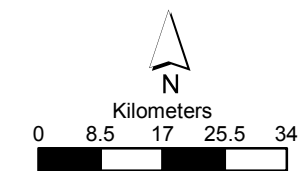
P:\Projects\11024_IEG_TUS_Fort_McKay\Working
 \Fort_McKay_TraditionalTerritoryDisturbanceBuffer_5b1.mxd

Fort McKay's Traditional Territory Existing, Approved and Planned 200m Disturbance Buffer

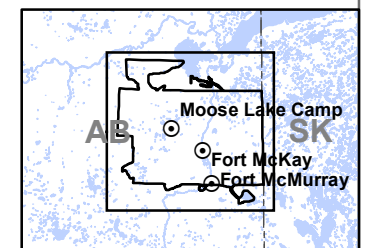


Legend

- 200m Disturbance Buffer
- Fort McKay Reserves
- Planned Developments
- Communities
- Major and Minor Roads
- Oilsands Mine
- Tailings Pond and Disposal Overburden
- Industrial and Gravel
- Wellsites
- Pipelines and Transmission Lines
- Seismic
- Primary Roads
- Winter Roads
- Secondary Roads
- Cities/Towns/Villages



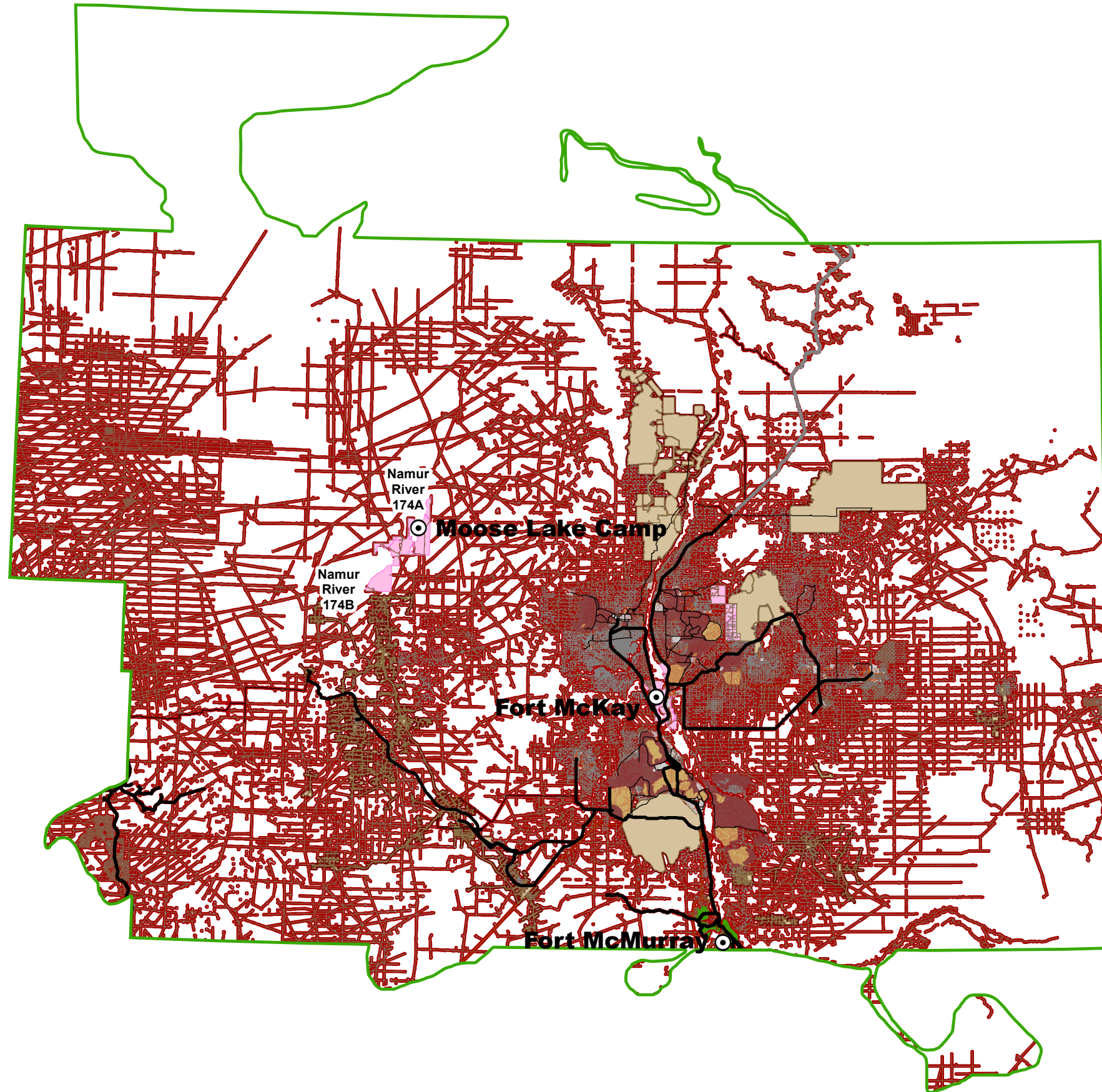
Projection: NAD 83 UTM Zone 12N
 Produced by: CloverPoint Cartographics
 For: Integral Ecology Group
 Cultural Data Sources: Fort McKay First Nation
 Basemap Data Sources: Government of Canada



Printing Date: Mar 13 2013

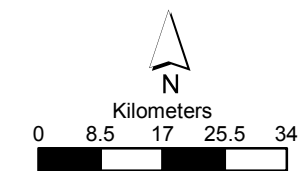
P:\Projects\11024_IEG_TUS_Fort_McKay\Working
 \Fort_McKay_TraditionalTerritoryDisturbanceBuffer_5b2.mxd

Fort McKay's Traditional Territory Existing, Approved and Planned 300m Disturbance Buffer



Legend

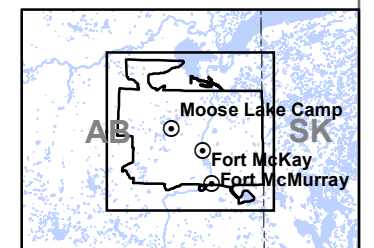
- 300m Disturbance Buffer
- Fort McKay Reserves
- Planned Developments
- Communities
- Major and Minor Roads
- Oilsands Mine
- Tailings Pond and Disposal Overburden
- Industrial and Gravel
- Wellsites
- Pipelines and Transmission Lines
- Seismic
- Primary Roads
- Winter Roads
- Secondary Roads
- Cities/Towns/Villages



1:1,034,552

Projection: NAD 83 UTM Zone 12N

Produced by: CloverPoint Cartographics
 For: Integral Ecology Group
 Cultural Data Sources: Fort McKay First Nation
 Basemap Data Sources: Government of Canada



Printing Date: Mar 13 2013

P:\Projects\11024_IEG_TUS_Fort_McKay\Working
 \Fort_McKay_TraditionalTerritoryDisturbanceBuffer_5b3.mxd



These mitigation actions do not fully address the impacts to Fort McKay's TU Values for the following reasons:

- Consultation is not a mitigation action to offset development activities, rather it is a responsibility delegated by the Crown to Dover. As articulated in the Community-guided TLUS (Garibaldi and Behr 2010),⁵⁰ the Community has identified mitigation strategies to reduce or partially offset the loss of Fort McKay's traditional land use values and treaty and aboriginal rights.
- Dover's offer to "facilitate access across the Dover leases by trappers and traditional land users" might assist some Community members in traversing the Dover lease. However, the Community's access-related concerns extend far beyond movement across the lease area and this mitigation does not adequately address these issues.
- Progressive reclamation that promotes reclaiming land needed for the Project is beneficial but does not adequately address Community reclamation concerns. Dover further indicated that it expects to achieve successful reclamation according to its Conservation and Reclamation plan, and that this plan intends to return "similar values" for traditional use plant potential and representative wildlife species to the disturbed landscape. Dover's Conservation and Reclamation plan contains insufficient planning detail specifics on how traditional land-use values will be incorporated into the reclamation planning process, and how these values will be returned to the post-closure landscape. It is essential to Fort McKay Community members that reclamation plans contain sufficient detail discussing how biological, ecological and landscape parameters in a reclaimed landscape will support traditional land-use values.
- Cultural diversity training awareness training for Dover employees and contractors is positive, but it is unclear how this will address Project impacts on TU Values.

⁵⁰ Section 5.3



5.3.1 TU Assessment

This residual assessment of potential Dover Project effects on Fort McKay's traditional use, treaty and aboriginal rights is based on an evaluation of effects as identified through Community interviews, field verification, literature review and expert knowledge. The known mitigation options for traditional use identified by Dover, as listed above, have been taken into consideration. The assessment considers residual Project-related effects, after application of Dover's mitigation measures, on both site-specific TU Values⁵¹ and non-site-specific Values⁵².

5.3.2 Assessment Criteria

There are four primary attributes used to characterize the effects (see Appendix C for further detail on assessment criteria):

- **Direction.** Indicates if an effect is positive, negative or neutral. Some effects might have positive and negative dimensions.
- **Geographic Extent.** The geographic area within which an environmental effects of a defined magnitude occurs (site-specific, local, regional).
- **Duration.** The length of time over which an impact occurs. This is defined as short (under five years), medium (six to 20 years), and long (beyond 20 years). It is noted that many traditional-use impacts are long-term or permanent, as an effect is likely to permanently change the use and cultural knowledge of the area if effects continue for longer than one generation (defined as 20 years).
- **Magnitude.** Refers to the degree of change that an effect has the potential to produce. Magnitude might be low, medium or high, and is qualitatively assigned based on the value of the affected use and the availability of alternate use locations.

⁵¹ Effects on site-specific TU Values might occur during and as a result of Project construction, operation, reclamation and monitoring. These include both intentional and unplanned events such as operational accidents and spills, human caused accidents.

⁵² Effects on non-site-specific TU Values draws upon Community member concerns of Project development impact on non-spatial features (e.g., the lost opportunity to transmit cultural knowledge within the RA). It is also informed by the Community understanding of the landscape that has already experienced development pressures and the associated effects this has had on Community land use values and cultural heritage.



Table 5-4: Project-Specific Residual Effects Assessment Summary

| | |
|--|----------------------------------|
| Direction | Negative |
| All Project-related residual effects on TU Values are considered negative. While some TU Values may be more heavily impacted than others, all determinable residual Project effects on these values are negative. | |
| Geographic Extent | Local & Regional |
| All TU Values will be negatively affected on the local scale due the destruction of land by Project construction and operation and the inability of people to use the area surrounded by Project development. On a regional scale – particularly in the area of the Buffalo and Moose Lakes Reserves - Subsistence Values, Trapping/Commercial Values, Habitation Values and Cultural/Spiritual Values will be negatively impacted as a result of people modifying their traditional use practices to avoid Project development-related disturbances. | |
| Duration | Long-term & Permanent |
| The vast majority of Project related residual effects on TU Values will commence during construction, continue through the 65 years of operation and subsequent reclamation period. TU Values contained within the Project development area will be destroyed by the Project or rendered unusable because of Project activities. As the Buffalo and Moose Lakes Reserves are the best remaining refuge for Fort McKay people to teach and practice traditional activities, the effects of not using the land surrounding this area would constitute a permanent effect. Project-related effects to cultural knowledge that continue for longer than one generation (defined as 20 years) are permanent and irreversible. | |
| Magnitude | High |
| Because of the increasing lack of alternative locations for the people of Fort McKay to exercise their treaty and aboriginal rights, the importance of the Project area for highly valued woodland caribou and moose habitat and because of the impact the Project will cause at the Buffalo and Moose Lakes Reserves (what the Community considers their ‘refuge’ from development), the magnitude of the residual Project-related effects is considered high. | |

5.3.3 Significance Thresholds

Significance criteria for residual effects on traditional use and treaty and aboriginal rights are as follows:



- **Significant.** Effects are clearly distinguishable, likely to result in strong concern in the Community, and in substantial changes in the overall use of lands and resources.
- **Not significant.** Effects are not clearly distinguishable, are unlikely to result in strong concern, or will not result in substantial changes in the overall use of lands or resources.

Based on best available information, residual Project-related effects are considered negative in direction, occur on both a local and regional scale, are long-term and/or permanent and high in magnitude. The most serious effects⁵³ are expected to occur in the following ways:

- The Project lease area, which overlaps Spruce Lake and encompasses four other highly valued lakes – Beaver House Lake, Muskeg Lake, Wolf Lake and Seagull Lake – will no longer be accessible and useable by Fort McKay Community members. This cluster of lakes has high value for habitation, trapping, hunting, plant gathering and other subsistence activities, and it still actively used. Burial sites are also known to exist near these lakes. The ability to continue practicing these traditional uses will be seriously impacted by Project development.
- Loss of subsistence sites (e.g., hunting and trapping areas) as a result of direct and indirect Project effects. Due to currently existing and planned development on the west side of Fort McKay's traditional territory this will significantly affects trappers and other traditional land users.
- Negative effects by Dover Project development on woodland caribou and moose populations, which are already experiencing a decline in numbers (Athabasca Landscape Team (ALT) 2009); (Environment Canada 2011) will result in further obstructions for Community members to hunt in the area outside of the Project lease. Not only will the Dover lease area essentially be unavailable for hunting due to physical and regulatory, it will be significantly more difficult to hunt moose and caribou in the area surrounding the lease due to further population declines.
- The proximity of Project development activities to Buffalo and Moose Lakes Reserves will hinder Community member use of these reserves which they consider the best remaining

⁵³ Note: this is not a comprehensive account of the Community Project-related concerns.



land within their traditional territory for cultural pursuits and to carry out treaty and aboriginal rights. Traditional activities involve more than simply gathering resources; it necessitates feeling that the resources are safe to consume, available in numbers that do not violate traditional management practices, and the land is free from development noise, sound and smells. Community members are likely to modify their traditional practices within their reserve land adjacent to Buffalo Lake if the Dover Project proceeds. This will have significant effects on TU Values.

Currently available evidence indicates that the Project relates effects will be significant according to the criteria as follows:

1. It is anticipated that the Project effects *will* be clearly distinguishable.
2. Project-related changes to the land and resources will be substantial, particularly the area surrounding the five lakes impacted by Project development for the traditional knowledge holders that were born in and use that area, as well as the Buffalo and Moose Lakes Reserves – used by the entire Community of Fort McKay.
3. There has been substantial concern raised by the Community during both traditional use interviews and in Community consultations that Project-related impacts on the ability of the Community to continue to exercise treaty and aboriginal rights within, and adjacent to the Project lease area, and on land adjacent and within the Buffalo and Moose Lakes Reserves, will be severely impaired.

In the absence of adequate mitigation and accommodation measures, the results of this assessment of the Dover Commercial Project on the treaty and aboriginal rights of the Community of Fort McKay, including their ability to meaningfully carry out traditional practices, are considered significant and adverse.

5.3.4 Preliminary Cumulative Effects Assessment on TU

Over 70% of Fort McKay's traditional territory is leased for development and 16% is designated as parkland or as a Conservation Area (as per the Lower Athabasca Regional Plan; LARP), (Government of Alberta 2012). In addition, more than 98% of traplines currently held by Fort McKay Community members is overlain by leases. This is a staggering number given that in many cases leased land is often rendered unusable for traditional purposes. In 2010, the Community of Fort McKay assessed existing impacts to their cultural heritage and traditional



land use opportunities (from a pre-development baseline) and determined that cumulative effects were significant and adverse (Fort McKay Industry Relations Corporation (IRC) 2010b). Any additional development within the traditional territory, including the Dover Commercial Project, further exacerbates the impacts to TU Values.

As a number of Project-related effects articulated in this TU Update and the Overview TLUS cannot be completely mitigated by Dover (i.e., taking up of lands), the post-mitigation residual effects of the Project will add to the already significant and adverse cumulative effects of development. Further, the proximity and impacts of the Dover Project on Fort McKay's Buffalo and Moose Lakes Reserves (Namur River 174a and 174b) are especially troubling to the Community. The Community of Fort McKay considers the cumulative effects of the Dover Commercial Project with existing and approved development to be significant and adverse.



6 CONCLUSIONS

Both the Overview TLUS and the TU Update report demonstrate that the Dover Project creates adverse negative impacts on Fort McKay TU Values and contributes to a significant adverse situation with respect to cumulative effects. The TU Update report identifies over 424 TU Values impacted within the Project Reporting Area and 593 impacted within 20km of the Fort McKay's Buffalo and Moose Lakes Reserves. The most serious Project effects to TU Values and traditional land use opportunities are:

1. loss of traditional use of a cluster of lakes that are highly valued for cultural purposes and are positioned within the centre of the Project lease area. While not entirely overlapping with the Project development, the lakes are surrounded by the lease and as such the ability to continue to use these sites would be seriously impacted;
2. Loss of subsistence sites (e.g., hunting and trapping areas) as a result of direct and indirect Project effects. Due to currently existing and planned development on the west side of Fort McKay's traditional territory this will significantly affects trappers and other traditional land users;
3. negative effects on woodland caribou (classified as Threatened under the Species at Risk Act) and moose populations, both of which are culturally important and already experiencing a decline in numbers; and
4. the proximity of Project development to their Buffalo and Moose Lake Reserves which will hinder Community member use of the area – land they consider the best remaining area within their traditional territory for cultural pursuits and to carry out treaty and aboriginal rights.

Community members have stated very clearly that a buffer around the Buffalo and Moose Lakes Reserves was the most desired offset to mitigate both Project-related and cumulative effects from a cultural and traditional use perspective ((Garibaldi and Behr 2010); Community member, Fort McKay Moose Lake Focus Group Sessions, October 2011; Community member, Fort McKay Group Sessions, November 2012). According to Fort McKay's cumulative effects study (Nishi, et al. 2013); (Berryman, et al. 2013) one of the four critical management strategies to ensure ecological integrity and maintenance of traditional land use opportunities is to anchor the protected area network in a culturally and environmentally relevant manner. This protected area will serve as a biological refugium that will help maintain nearby landscape diversity. A



buffer surrounding Buffalo and Moose Lakes will help provide this function for the reserve land, allowing people to be able exercise treaty and aboriginal rights by shifting the edge of the undeveloped land away from the reserve thereby decreasing 'edge effect' (Carlson 2013).



7 REFERENCES

- Aboriginal Affairs and Northern Development Canada (AANDC). "First Nations profiles, Fort McKay First Nation." *Aboriginal Affairs and Northern Development Canada*. 2013.
http://pse5-esd5.ainc-inac.gc.ca/fnp/Main/Search/FNRegPopulation.aspx?BAND_NUMBER=467&lang=eng.
(accessed March 2013).
- Athabasca Landscape Team (ALT). "Athabasca Caribou Landscape Management Options Report." Unpublished report submitted to the Alberta Caribou Committee Governance Board, 2009.
- Berryman, S., A. Garibaldi, J. Straker, J. Nishi, and J.B. Stelfox. *Community led approach to landscape planning*. Prepared on behalf of Fort McKay Sustainability Department, Victoria: Integral Ecology Group (Victoria) and ALCES Group (Calgary), 2013.
- Carlson, M. *Protected Area Needs for Maintaining Ecological Integrity in the Moose Lake Region*. Prepared for the Fort McKay Sustainability Department, Fort McKay, Ottawa: ALCES Landscape and Land-Use Ltd., 2013, 31.
- Cumulative Effects Management Association (CEMA). *Terrestrial ecosystem management framework for the Regional Municipality of Wood Buffalo*. CEMA - Sustainable Ecosystems Working Group, 2008.
- Dover Operating Corp. "Application for Approval of the Dover Commercial Project." Environmental Impact Assessment, 2010.
- Environment Canada. *Recovery strategy for the woodland caribou, Boreal population (Rangifer tarandus caribou) in Canada [Proposed]*. Species at Risk Act Recovery Strategy Series, Environment Canada, Ottawa: Government of Canada, 2011.
- Fort McKay Environmental Services (FMES). *A survey of consumptive use of traditional resources by the Community of Fort McKay*. Prepared for Syncrude Canada Ltd., Fort McKay: Fort McKay Environmental Services, 1997.
- Fort McKay First Nation. *There is Still Survival Out There*. The Arctic Institute of North America, 1994.
- Fort McKay Industry Relations Corporation (IRC). *Fort McKay Specific Assessment*. Assessment, Fort McMurray: Fort McKay Industry Relations Corporation, 2010a.
- Fort McKay Industry Relations Corporation (IRC). "Fort McKay specific cultural heritage assessment (CHA) baseline: pre-development (1964) to current (2008)." Fort McKay, 2010b.
- Fort McKay Industry Relations Corporation (IRC). *Overview-level Traditional Land Use Study for the Dover Commercial Project*. Submitted to Dover Operating Corp on September 30, 2010., Fort McKay: Fort McKay Industry Relations Corporation, 2010c.



- Fort McKay Sustainability Department (FMSD). *Traditional land use study for the Teck and Silverbirch Frontier Project*. Submitted to Teck and Silverbirch for inclusion in the Teck and Silverbirch Frontier Project Environmental Impact Assessment, Fort McKay: Fort McKay Sustainability Department, 2011a.
- Fort McKay Tribal Administration. "From where we stand." Fort McKay, 1983.
- Fortna, P., and T. Maillie. "Historical information on Fort McKay traplines in the Moose Lake and Buffalo Lake area." Research Summary prepared for the Fort McKay First Nation, 2013.
- Garibaldi, A., and T. Behr. *Overview-Level Traditional Land Use Study for the Dover Commercial Project*. Prepared for Fort McKay Industry Relations Corporation, Victoria: Integral Ecology Group and Kwusen Research and Media, 2010.
- Government of Alberta. *Lower Athabasca Regional Plan 2012-2022*. Edmonton: Government of Alberta, 2012.
- Human Environment Group. "Indicators of Cultural Change (1960 to 2009): A Framework for Selecting Indicators Based on Cultural Values in Fort McKay." Prepared for Fort McKay IRC, Calgary, 2009.
- Lagimodiere, M. *Disturbance and access - Implications for traditional use land disturbance update*. Update report prepared for the Fort McKay Sustainability Department, Fort McMurray, Fort McKay: Lagimodiere Finigan Inc., 2013.
- Lalonde, C.E. "Identity formation and cultural resilience in Aboriginal communities." In *Promoting Resilience in Child Welfare*, by R.J. Flynn, P. Dudding and J. Barber, 52-71. Ottawa: University of Ottawa Press, 2006.
- McKillop, J.A. *Towards Culturally Appropriate Consultation: An Approach for Fort McKay First Nation*. Masters Degree Project, Faculty of Environmental Design, Calgary: University of Calgary, 2002.
- Molstad and Anderson Consultants Inc. "Dover Commercial Project, Socio-Economic Impact Assessment (SEIA) Review." 2011.
- Nishi, J., S. Berryman, J.B. Stelfox, A. Garibaldi, and J. Straker. *Fort McKay cumulative effects project: Technical report of scenario modeling analyses with ALCES*. Prepared on behalf of the Fort McKay Sustainability Department, Fort McMurray, AB, ALCES Landscape and Land-Use Ltd. (Calgary) and Integral Ecology Group (Victoria), 2013, 126 pp + 5 Appendices.
- Salmon, E. *Eating the landscape: American Indian stories of food, identity and resilience*. Tucson: The University of Arizona Press, 2012.
- Smith, J. "Chipewyan." In *Handbook of North American Indians, Vol. 6: Subarctic*, by J. Helm. Washington: Smithsonian Institution, 1981a.



- Smith, J. "Western Woods Cree." In *Handbook of North American Indians, Vol. 6: Subarctic*, by June Helm. Washington: Smithsonian Institution, 1981b.
- Stanislawski, S. *Traditional fisheries of the Fort McKay First Nations*. Prepared for Alberta Pacific Forest Industries, FRM Environmental Consulting, 1998.
- Stelfox, J.B., J. Nishi, S. Berryman, A. Garibaldi, and J. Straker. *Conserving opportunities for traditional activities by the Community of Fort McKay amongst the industrial landscape of northeast Alberta*. Prepared for the Fort McKay Sustainability Department, ALCES Group (Calgary) and Integral Ecology Group (Victoria), 2013.
- Tanner, J.N., C.G. Gates, and B. Ganter. *Some Effects of Oil Sands Development on the Traditional Economy of Fort McKay*. Fort McMurray: Fort McKay Industry Relations Corporation, 2001.



Appendix A – Review of Dover OPCO Traditional Land Use Study

Traditional Land Use Assessment

Background –Fort McKay Sustainability Department TLUS for the Project

The Fort McKay Industry Sustainability Department conducted a Community-guided overview-level Traditional Land Use Study (TLUS) for the Dover Commercial Project (Fort McKay Industry Relations Corporation (IRC) 2010c). Due to the time-frame that the Proponent defined to conduct the EIA (Fort McKay had three months to conduct this study and finalize the report), resources and availability of Community personnel, the TLUS needed to be completed at an overview-level rather than the desired operational-level. (See Fort McKay IRC 2010 for further discussion on overview-level versus operational-level TLUS).

This overview-level TLUS had three key objectives:

1. identify past (pre-development), present, and prospective traditional use values in the Local Study Area to assist the Community in assessing the proposed Project;
2. build capacity within the Fort McKay Community to conduct TLUS; and,
3. at an overview-level indicate the potential Project related effects on the Treaty and Aboriginal rights and interests of the Community of Fort McKay.

This report was provided to Dover prior to completion of their Environmental Impact Assessment (EIA) for inclusion and consideration in their application. The Community-guided TLUS met the Project Terms of Reference (ToR) and was designed to inform Dover of the Community's assessment of the Project's development effects on Fort McKay's TLU opportunities and Treaty and Aboriginal Rights.

It was Fort McKay's full expectation that their TLUS and associated findings would inform the basis for Dover's TLU assessment as it pertains to the Community of Fort McKay. As the traditional land users for the area that contains the proposed Dover Commercial Project, Fort McKay Community members are in the most informed position to determine the potential development effects on their Treaty and Aboriginal rights and interests.



More than 243 site-specific traditional use values were identified within the TLUS reporting area, and 19 Community concerns of potential effects of the Project were documented. The Community-guided TLUS drew on the Community concerns recorded in TLUS interviews and workshops, along with the indicators and assessment results of the Fort McKay Specific Assessment (Fort McKay Industry Relations Corporation (IRC) 2010a) to assess the potential effects of the Dover Project. A number of mitigation measures were suggested to reduce the effects of the Project on Fort McKay TLU values, Treaty and Aboriginal rights. As noted in the TLUS, Fort McKay requested a meeting with Dover to discuss the Project-specific mitigation measures, which has not yet taken place, but is still anticipated. The recommendations outlined below do not replace the desire of the Fort McKay Sustainability Department⁵⁴ (FMSD) to meet with Dover to discuss the mitigation strategies development through the Community-guided TLUS. However, the Community-guided TLUS findings also indicate that a number of the Project's effects are not fully mitigatable by the proponent; therefore, post-mitigation residual effects of the Project will add to the already significant and adverse cumulative regional effects of development. Fort McKay requests that Dover support Fort McKay in its efforts to address post-mitigation Project-related residual impacts, their contribution to cumulative impacts and their impact to the Treaty and Aboriginal rights held by the community, with the Provincial and Federal governments.

Traditional Land Use Key Concerns and Requests

Note: The following review pertains to the Dover TLUS. The review focuses on concerns that are of highest importance to future consultation, mitigation and attempts to reduce residual Project effects. It should be noted, however, that the reviewer found numerous methodological details in the Dover TLUS that are not in keeping with preferred and best practices methods for TLU research methods of the Fort McKay Sustainability Department.

Background

Dover completed a TLUS to “analyze the potential effects of the Project on the traditional activities of potentially affected First Nations” (Section 2.1, Volume 6). It is Fort McKay's expectation that traditional activities of *Aboriginal* people are assessed, which include Métis as

⁵⁴ The responsibilities of the Fort McKay Industry Relations Corporation have been transferred to the recently formed Fort McKay Sustainability Department.



well as First Nations people (see the Project ToR, Sections 1B and 5A). The Community-guided TLUS addressed both Métis and First Nation concerns collectively (Fort McKay Industry Relations Corporation (IRC) 2010c).

Dover received Fort McKay's TLUS in September 2010. This report was included in its entirety in Appendix A of the TLU Baseline Report. Dover indicates that they based their TLUS assessment on the results from the Community-guided TLUS and additional existing literature. In addition, Dover included a quantitative determination of the land to be directly disturbed by the Project within overlapping RFMAs, the Fort McKay Traditional Territory and the Culturally Significant Ecosystems (CSEs) as defined by Jennifer McKillop for "All Traditional Uses" (McKillop, 2002).

Dover outlined three assessment cases to determine the potential impacts to traditional activities: Baseline Case (existing and approved development), Application Case (Baseline Case + the Dover Project) and Planned Development Case (Application Case + currently planned development). Fort McKay considers it crucial to include a pre-development baseline assessment to understand the realized impacts to traditional use opportunities experienced by Community members due to regional development. This is outlined in the Fort McKay Specific Assessment (Fort McKay Industry Relations Corporation (IRC) 2010a) and in Fort McKay's submission to Alberta Environment regarding the EIA Terms of Reference (September 7, 2010). The Fort McKay IRC also considered pre-development TLU in their TLUS report and assessment (Fort McKay Industry Relations Corporation (IRC) 2010c).

[99 – 100] Traditional Knowledge Documentation

Dover indicated that one of the objectives of the TLUS is to document historical and current land use, by local trappers (Section 2.3, Volume 6). Fort McKay agrees that local trappers are one group of individuals that need to be involved in the TLUS; however, interviews with local trappers alone are not sufficient to document impacts to TLU. Rather, to fully understand the potential impacts of a project on Treaty and Aboriginal rights it is critical that all key land users with knowledge of the area are included in the study.

As discussed in the Community-guided TLUS the temporal constraints (i.e., not having an adequate time-frame to conduct a more thorough operational-level TLUS) necessitated a less in-depth documentation of TLU knowledge. Additional interviews with traditional land users



with knowledge and experience of the Dover lease and adjacent areas would quite likely result in additional site-specific and non-site specific traditional values being recorded for areas in the vicinity of the Project, a more representative sample of respondents, greater accuracy in mapping, records of current conditions of TLU sites, and a more detailed record of Fort McKay TEK.

[99] Request

Dover should commit to supporting Community members' recommendation for documentation of traditional knowledge and land use in the Buffalo (Namur) Lake and Moose (Gardiner) Lake areas, with a particular emphasis on areas of land adjacent to the Dover lease, which would include ground-truthing traditional land use values, where possible.

[100] Request

For any future projects proposed on Fort McKay's Traditional Territory by Dover, there should be a binding commitment to work with the Community to conduct TLUS early in the process and before any field studies are done so that there is ample opportunity to address TLU concerns and consider TEK input.

[101 – 104] Reclamation, Traditional Plant Harvesting & Wildlife

Reclamation. In their concluding TLUS remarks, Dover indicated that they expect to achieve successful reclamation according to their Conservation and Reclamation plan, and that this plan intends to return "similar values" for traditional use plant potential and representative wildlife species to the disturbed landscape. Dover outlined a plan in their EIA that is adequate, but contains insufficient planning detail specifics on how traditional land-use values will be incorporated into the reclamation planning process, and how these values will be returned to the post-closure landscape. It is essential to Fort McKay Community members that reclamation plans contain sufficient detail discussing how biological, ecological and landscape parameters in a reclaimed landscape will support traditional land-use values. Further, Fort McKay Community members would like to be a part of the process of developing reclamation certification criteria and long-term monitoring through Community-based participatory research methods.



See Fort McKay's review of the Conservation and Reclamation Assessment for further discussion and recommendations on Dover's approach and findings.

Traditional plant harvesting. In order to successfully return traditional land-use values to a reclaimed landscape, it is essential to document and understand the pre-disturbed traditional use values of the landscape. To determine traditional plant harvesting potential of the closure landscape, during baseline vegetation surveys Dover assigned each ecosite value for traditional use plant potential value based on:

- observed species during vegetation surveys;
- observed species abundance (i.e., frequency of occurrence and percent cover);
- characteristic species of each ecosite phase; and
- known traditional plant species in the region.

This ranking system does not take into account species that might have low abundance but high cultural value. Such species (e.g., ratroot) are given little, if any, significance in this system. See Fort McKay's review of the Terrestrial Vegetation, Wetlands and Forestry assessment for further discussion and recommendations on Dover's approach and findings.

Wildlife. Calculations were provided for habitat suitability of the reclaimed landscape within the RFMA's with potential to support select animals including moose, fisher and marten populations. However, many animal species beyond those included in the habitat suitability modeling are culturally important to Fort McKay – such as beaver. In addition, Dover predicted significant declines in moose and caribou populations and this is of very high concern to Fort McKay. See Fort McKay's review of the Wildlife Assessment for discussion and recommendation on Dover's approach and findings.

Fort McKay has identified Cultural Keystone Species – species with high cultural salience that play an important role in Community identity: moose (*Alces alces*), beaver (*Castor canadensis*), ratroot (*Acorus americanus*), bog cranberry (*Oxycoccus oxycoccus*), lowbush cranberry (*Viburnum edule*) and blueberry (multiple species). Fort McKay would like these species and their habitat to be expressly considered during reclamation planning and Dover should indicate to Fort McKay how this is being done.



[101] Request

Fort McKay requests that Dover describe how they will reclaim land for traditional purposes, including what plant species and animal habitat will be targeted.

Fort McKay requests AENV require such information for all reclamation plans in Fort McKay's Traditional Territory.

[102] Request

Fort McKay requests that Dover make a binding commitment to directly involve Fort McKay in reclamation planning, including considering Community-based participatory research in the methods to enhance Aboriginal participation.

[103] Request

Fort McKay requests that Dover support reclamation research for Fort McKay's Cultural Keystone Species and ensure that these species are considered in reclamation planning. In addition, Dover should provide regular updates on reclamation research and reclamation progress for these and other species to the Fort McKay Sustainability Department and Fort McKay's Advisory Group for Dover.

[104] Request

Given Dover's predicted declines of moose and caribou populations, Fort McKay requests that Dover and ASRD conduct population and habitat studies for culturally important species that might be impacted by the Project. Fort McKay expects to be involved with the resulting research and monitoring.

[105 – 106] Mitigation

Based on a review of existing literature (including the Community-guided TLUS) Dover identified the following five key concern areas put forth by the Community of Fort McKay (Section 2.7.9.1) and listed the sections within the EIA where these concerns were discussed:



- Existing development has already adversely affected traditional harvesting areas and trails;
- The current loss of trapline area has affected opportunities for traditional activities as well as transfer of traditional knowledge;
- Watersheds have experienced development pressure which has affected traditional activities such as fishing;
- The importance of Moose and Buffalo Lakes as fishing locations has increased due to Community concerns about the health safety of the Athabasca River;
- Increased regional human population and linear development has had a negative adverse effect on traditional resources and the Community's opportunity to access them.

While the above five issues are indeed of concern to the Community, Dover did *not* adequately address these concerns in the EIA through mitigation. Further, as expressed in the Community-guided TLUS, Fort McKay members have many additional concerns with the Project beyond the five listed above. In response to the above concerns, Dover proposed the following four mitigation measures for the Project's impacts on traditional activities (Section 2.4, Volume 6):

1. Continued consultation with key Aboriginal groups. While Fort McKay supports consultation actions with Dover, consultation is not a mitigation action to offset development activities. Rather it is a process that is in place to discuss and commit to mitigation actions. As articulated in Section 5.3 of the Community-guided TLUS (Fort McKay Industry Relations Corporation (IRC) 2010a), Fort McKay has identified mitigation strategies to reduce or partially offset the loss of Fort McKay's traditional land use values and Treaty and Aboriginal rights. Fort McKay requests that Dover meet with Fort McKay to discuss and, where feasible, adopt these mitigation measures.
2. Access to traplines and traditional land use areas. Fort McKay supports Dover's offer to "facilitate access across the Dover leases by trappers and traditional land users". However, Fort McKay's access-related concerns extend far beyond movement across the lease area. Community members are very concerned about increased non-Aboriginal access in the area facilitated by the construction of new roads and exacerbated by permanent and temporary camps established in the area. Competition for resources, increased traffic, vandalism, and littering are among the access pressures that the Community has already observed during the construction and operation of oil sands operations. Access section (issues [104] to [108]) for further discussion.
3. Progressive reclamation. Fort McKay supports Dover's commitment to reclaiming well pads and pipelines that are no longer required for operation. However, this commitment alone does very little to mitigate the comprehensive impacts of the



Project on traditional use values. Further, it assumes successful reclamation, which has yet to be demonstrated for a SAGD project in the oil sands region. See reclamation discussion above and Fort McKay's review of the Conservation & Reclamation plan.

4. Employee/contractor education. Fort McKay supports cultural diversity awareness training for employees and contractors. See Fort McKay's socio-economic review (Molstad and Anderson Consultants Inc., 2011) for related discussion and recommendations.

While Fort McKay generally supports all of the above-listed mitigation measures, these commitments alone fall very short of reducing or partially offsetting the loss to Treaty and Aboriginal rights as articulated in the Community-guided TLUS. The residual adverse effects of this project and others have not been addressed and mitigated by Alberta and no direct consultation with Fort McKay has yet been undertaken by government.

Dover indicated that the results of Fort McKay's TLUS have been considered in this assessment (Section 2.9, Volume 6) and that they will incorporate the results of traditional use consultation in project planning. However, there is very little evidence presented in Dover's TLUS indicating how Project planning and design has been altered to accommodate TLU considerations (e.g., movement of well pad locations to decrease impacts to habitation sites). As articulated in Section 5.3 of the Community-guided TLUS (Fort McKay Industry Relations Corporation (IRC) 2010a) Fort McKay requests a meeting with Dover to discuss mitigation measures, including alterations to project planning to reduce the impacts to traditional use activities.

[105] Request

Fort McKay requests a meeting with Dover to advance and implement mitigation measures outlined in their review of Dover's application as well as mitigation measures developed during the Community-guided TLUS, in addition to implementation of these mitigation measures.

Fort McKay requests that Alberta consult with it regarding the residual unmitigated effects of this project with the intent of negotiating a comprehensive mitigation and accommodation plan for Fort McKay's community and traditional lands.



[106] Request

Fort McKay would like Dover to confirm that it will consult with affected trappers regarding project development and provide compensation or implement mitigation measures as needed following the Fort McKay Trapper Compensation Guidelines.

[107 – 110] Proximity to Moose Lake and Access

In response to Fort McKay Community-member concern that the Project will negatively affect the culturally critical “Moose Lake area⁵⁵”, Dover indicates that “the Dover Leases do not overlap the two IRs [IR 174A and 174B]” (Section 2.7.8 *Cabins and Other Culturally Important Areas*).

Fort McKay agrees that the leases do not overlap with Fort McKay’s reserve land, and this is indicated in Figure 1 and Figure 2 of the Community-guided TLUS. However, the Dover lease area is directly adjacent to Fort McKay IR 174B and the project will have direct and indirect impacts on these reserves and decrease the ability of Fort McKay’s traditional lands to support cultural land use and resources. The areal extent of the area in which traditional land use will be eliminated is also increased by the project.

The proposed development will create access to an area where there was previously no road access. Up to 700 workers will stay in two or more camps and have direct access to IR 174B and the entire Moose Lake area. Fort McKay Community members are highly concerned with the potential for increased competition for resources, vandalism, noise and overall increased direct impacts to vegetation from ad hoc camp sites and trails.

In essence, over the past four decades Fort McKay has watched their capacity to carry out cultural activities within their Traditional Territory severely erode. The Moose Lake area represents the only remaining ecologically intact system with extreme cultural significance to the entire Community. Community members believe that development from the Dover Project will initiate the decline in the integrity of the area.

⁵⁵ Fort McKay Community members refer to the land surrounding Moose and Buffalo lake (including IRC 174A and 174B) as the Moose Lake area.



As emphasized in the Community-guided TLUS, Fort McKay considers changes in access to be one of their key concerns, and expects industry proponents and regulators to meaningfully engage with Fort McKay leadership regarding access concerns. Dover's brief conclusion that their proposed access road (which, with adjoining roads to well pads, will allow access to within a few kilometers of Fort McKay's IR 174B) is both positive and negative highly understates the strong concern Community members have about opening access so close to the Moose Lake area. Dover indicates that:

The proposed access road will provide increased access into the region. The change in access has both the potential to increase access to resources for traditional resource users (considered a positive effect), as well as provide access into the region, and subsequent competition for resources by non-Aboriginal harvesters (considered a negative effect) (Section 2.9, Volume 6).

Fort McKay reviewed a draft of the Dover access section of the TLUS in November 2010 and indicated that:

"...the Fort McKay Specific Assessment states that the Community of Fort McKay considers the cumulative loss of traditional trails to already be "significant" and Fort McKay's TLUS for the Project states that Project effects on "Transportation Values as anticipated to be adverse". With Fort McKay issuing these two statements, it is unclear why the subsection under review has not indicated that Fort McKay considers Project effects on access to be of great concern and adverse in nature (Fort McKay IRC memo to Dover dated November 30, 2010).

It is Fort McKay Community member's belief that the increased access that will be provided through the Dover Commercial Project will significantly impact the movement of people in an area that is of high cultural significance to the Community. The proposed access road, and associated roads to well pads and facilities, will open up access to an area that is currently accessible primarily by all-terrain vehicles and planes.

In addition to Recommendation [104] above, Fort McKay requests the following:

[107] Request

Dover should identify and discuss with Fort McKay opportunities to designate a "development free" zone within the area of their lease that is adjacent to the IR 174B Lake reserve. The intent of this buffer would be to lessen the Project development impacts to this culturally significant reserve area.



[108] Request

Dover should commit to ongoing consultation with Fort McKay trapline holders (and the Fort McKay Sustainability Department) to ensure access protocols are established that allow trapper access on their traplines throughout the life of the Project and minimize non-Community member use of the trapline areas. Options to minimize non-Community member use of the area include a “no hunting and fishing” policy on the Dover lease by Dover employees.

[109] Request

Fort McKay requests that Dover commit to developing an access management plan specific to the Dover Project with Fort McKay. Community members suggested having a 24-hour gate guarded by Fort McKay Community members on the access road to the Dover lease. The gate should be located at the turn from the AOSTRA Road to the MacKay Access Road. This would restrict road access to only those who are supposed to use the road (i.e., people involved in Dover operations and Community members).

[110] Request

Fort McKay requests that Dover discuss with Fort McKay mechanisms to allow movement of wildlife through areas containing pipelines. During the Community-guided TLUS one Community member suggested access corridors or bridges over the pipelines to allow movement through the area. This option, and others, should be discussed with Fort McKay. As requested in Fort McKay’s SEIA review (request k), Fort McKay requests that Sustainable Resource Development and AENV consult appropriately on the Moose Lake Access Management Plan; and Dover notify Alberta authorities in writing of its support for the development of the Plan as a government priority.

Habitation Sites

Dover states that “the locations of the ‘habitation values’ are not shown on Figure 1 in Fort McKay IRC (2010b)” (Section 2.7.8 Cabins and Other Culturally Important Areas). To clarify, all traditional use values, including habitation values, are represented in Figure 3. It should be noted that Figure 3 presents TLU site-specific data in a buffered format to protect confidential



TLU data that will be made public through the EIA application process. It is Fort McKay's intent that traditional use value data outlined in Section 4.3 (presented in Figure 3: Traditional Land Use Values in the Reporting Area) would be used by the Dover and the Crown, in consultation with Fort McKay, to identify issues requiring further consultation to address this potential conflict.

Noise

Fort McKay Community members have experienced increasing noise levels in many parts of the Traditional Territory due to oil sands-related development. Participants in the Community-guided TLUS expressed a concern with potential noise disturbance from the Project on currently used cabin and camp sites (e.g., camp locations along lakeshores) as well as areas where they intend to build and camp. Habitation sites exist within distances anticipated to be disturbed by Project-related noise and the expansive placement of well pads, camps, roads and plant sites severely limits locations where Community members can establish future habitation sites free from noise impacts. Noise disturbance is anticipated to affect existing cabin sites and to also restrict the desired placement of future cabin locations.

Comments and recommendations regarding noise are included in Fort McKay's review of the Noise assessment.

[111 – 112] Communication

Community and trapper concerns span a broad number of categories including noise, air quality, water quality and quantity, and reclamation activities. Mitigation actions have the potential to address some of the issues raised by Community members. However, it is important that Fort McKay receive ongoing updates throughout the life of the Project on the actions implemented by Dover that address those concerns.

[111] Request

Fort McKay requests that Dover enter into a consultation agreement that describes ongoing engagement and collaboration commitments with Fort McKay following project approval (if granted). Activities listed in this agreement should also be included in the First Nation Consultation Plan that is provided to Alberta Environment (a copy should also be supplied to the Fort McKay Sustainability Department).



[112] Request

Given the culturally important location of the Dover Commercial Project development, Fort McKay requests that Dover develop with Fort McKay an appropriate reporting system for Community members to share updated information about Dover’s Project activities and associated mitigation and monitoring.

Table 1: Traditional Land Use Key Concerns and Requests Summary Table

| Number | Fort McKay Key Concern(s) | Recommendation | Category |
|--------|---|--|-----------|
| 99 | Support traditional knowledge documentation | Dover should commit to supporting Community members’ recommendation for documentation of traditional knowledge and land use in the Buffalo (Namur) Lake and Moose (Gardiner) Lake areas, with a particular emphasis on areas of land adjacent to the Dover lease, which would include ground-truthing traditional land use values, where possible. | Agreement |
| 100 | Commit to TLUS for future Dover projects | For any future projects proposed on Fort McKay’s Traditional Territory by Dover, there should be a binding commitment to work with the Community to conduct TLUS early in the process and before any field studies are done so that there is ample opportunity to address TLU concerns and consider TEK input. | Agreement |
| 101 | Reclamation | Fort McKay requests that Dover describe how they will reclaim land for traditional purposes, including what plant species and animal habitat will be targeted. Fort McKay requests AENV require such information for all reclamation plans in Fort McKay’s Traditional Territory. | Agreement |
| 102 | Reclamation | Fort McKay requests that Dover make a binding commitment to directly involve Fort McKay in reclamation planning, including considering Community-based participatory research in the methods to enhance Aboriginal participation. | Agreement |
| 103 | Reclamation and Cultural Keystone Species | Fort McKay requests that Dover support reclamation research for Fort McKay’s Cultural Keystone Species and ensure that these species are considered in reclamation planning. In addition, Dover should provide regular updates on reclamation research and reclamation progress for these and other species to the Fort McKay Sustainability Department and Fort McKay’s Advisory Group for Dover. | Agreement |



| Number | Fort McKay Key Concern(s) | Recommendation | Category |
|--------|---------------------------------------|--|-------------------------|
| 104 | Wildlife population studies | Given Dover’s predicted declines of moose and caribou populations, Fort McKay requests that Dover and ASRD conduct population and habitat studies for culturally important species that might be impacted by the Project. Fort McKay expects to be involved with the resulting research and monitoring. | Agreement Regulatory |
| 105 | Mitigation | Fort McKay requests a meeting with Dover to advance and implement mitigation measures outlined in their review of Dover’s application as well as mitigation measures developed during the Community-guided TLUS, in addition to implementation of these mitigation measures. Fort McKay requests that Alberta consult with it regarding the residual unmitigated effects of this project with the intent of negotiating a comprehensive mitigation and accommodation plan for Fort McKay’s community and traditional lands. | Agreement |
| 106 | Trapper consultation and compensation | Fort McKay would like Dover to confirm that it will consult with affected trappers regarding project development and provide compensation or implement mitigation measures as needed following the Fort McKay Trapper Compensation Guidelines. | Agreement Regulatory |
| 107 | Provide a buffer adjacent to IR 174B | Dover should identify and discuss with Fort McKay opportunities to designate a “development free” zone within the area of their lease that is adjacent to the IR 174B Lake reserve. The intent of this buffer would be to lessen the Project development impacts to this culturally significant reserve area. | Agreement |
| 108 | Access protocols | Dover should commit to ongoing consultation with Fort McKay trapline holders (and the Fort McKay Sustainability Department) to ensure access protocols are established that allow trapper access on their traplines throughout the life of the Project and minimize non-Community member use of the trapline areas. Options to minimize non-Community member use of the area include a “no hunting and fishing” policy on the Dover lease by Dover employees. | Agreement Regulatory |



| Number | Fort McKay Key Concern(s) | Recommendation | Category |
|--------|--------------------------------|--|-------------------------|
| 109 | Restrict road access | Fort McKay requests that Dover commit to developing an access management plan specific to the Dover Project with Fort McKay. Community members suggested having a 24-hour gate guarded by Fort McKay Community members on the access road to the Dover lease. The gate should be located at the turn from the AOSTRA Road to the MacKay Access Road. This would restrict road access to only those who are supposed to use the road (i.e., people involved in Dover operations and Community members). | Agreement Regulatory |
| 110 | Support wildlife movement | Fort McKay requests that Dover discuss with Fort McKay mechanisms to allow movement of wildlife through areas containing pipelines. During the Community-guided TLUS one Community member suggested access corridors or bridges over the pipelines to allow movement through the area. This option, and others, should be discussed with Fort McKay. As requested in Fort McKay's SEIA review (request k), Fort McKay requests that Sustainable Resource Development and AENV consult appropriately on the Moose Lake Access Management Plan; and Dover notify Alberta authorities in writing of its support for the development of the Plan as a government priority. | Agreement Regulatory |
| 111 | Communication and Consultation | Fort McKay requests that Dover enter into a consultation agreement that describes ongoing engagement and collaboration commitments with Fort McKay following project approval (if granted). Activities listed in this agreement should also be included in the First Nation Consultation Plan that is provided to Alberta Environment (a copy should also be supplied to the Fort McKay Sustainability Department). | Agreement |
| 112 | Communication | Given the culturally important location of the Dover Commercial Project development, Fort McKay requests that Dover develop with Fort McKay an appropriate reporting system for Community members to share updated information about Dover's Project activities and associated mitigation and monitoring. | Agreement |

*Request categories:

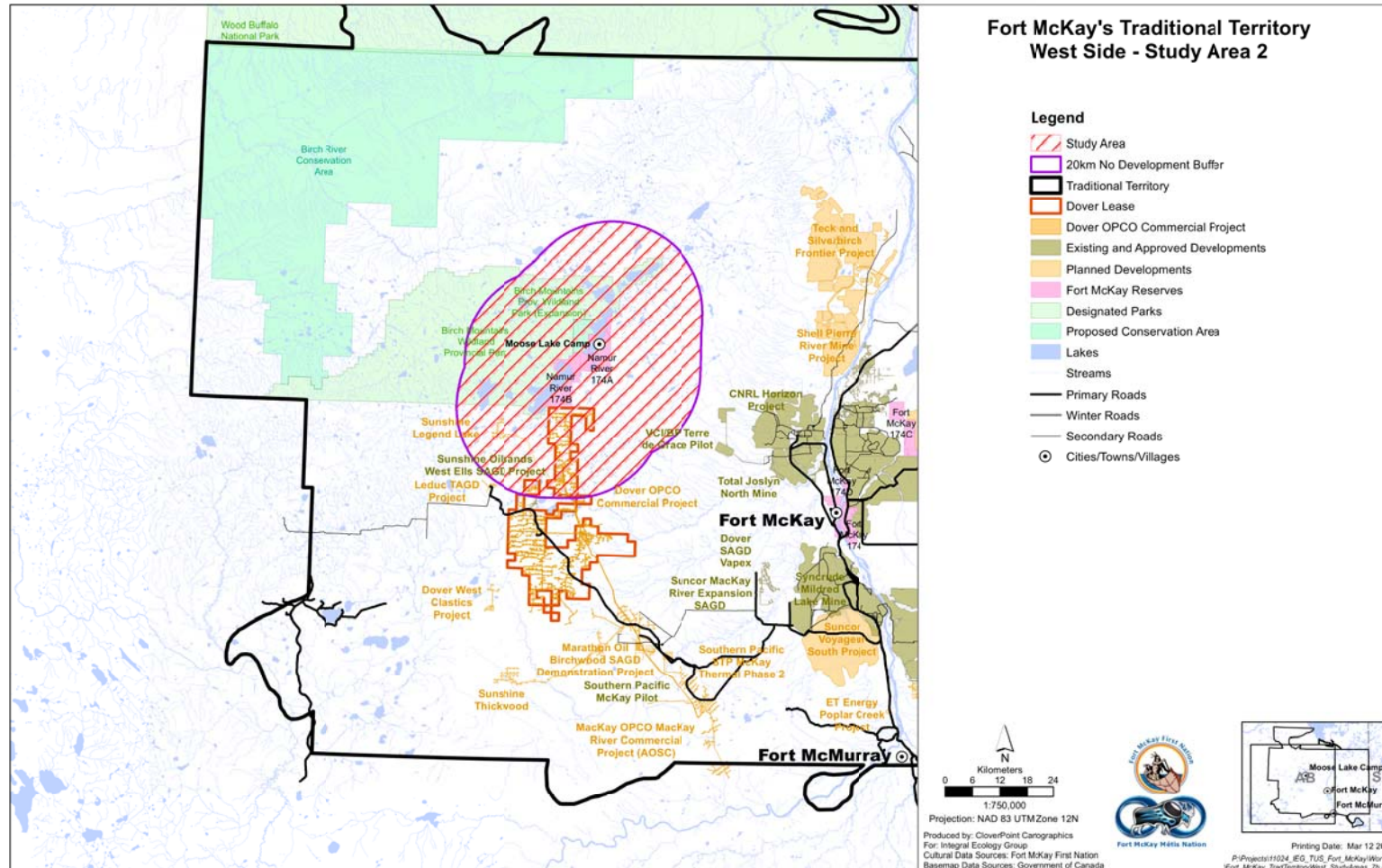
Agreement – requests that Fort McKay consider as an item to negotiate with Dover in their Agreement

Regulatory – request from Fort McKay to the regulators (e.g., potential approval or licence condition, assessment approach)

Response – request from Fort McKay to Dover to provide clarification or more information as outlined



Appendix B – Moose Lake Buffer Area





Appendix C – Detailed Criteria for the Assessment of Traditional Use

| Attributes | Definition |
|--------------------------|--|
| Direction | |
| Positive | Effect is positive (a benefit) |
| Neutral | Effect is neutral |
| Negative | Effect is negative |
| Magnitude | |
| High | Major change from local baseline conditions |
| Medium | Moderate change from local baseline conditions |
| Low | Minor change from local baseline conditions |
| Geographic Extent | |
| Regional | Project effects extend beyond the Local Study Area and are measurable and perceived by stakeholders within the Regional Study Area |
| Local | In the Local Study Area |
| Duration | |
| Long-term/Permanent | Effect continues throughout the life of the Project (>20 years) or longer; for cultural knowledge and practices any duration longer than a generation (20 years) can be considered permanent |
| Medium-term | Effect continue for less than a generation (<20 years) |
| Short-term | Effect continues during construction only (<5 years) |
| Direction | |
| Positive | Effect is considered to be beneficial |
| Negative | Effect is considered to be adverse |
| Neutral | Effect is neither beneficial nor adverse |
| Effects Rating | |
| Significant | Effects are clearly distinguishable, likely to result in strong concern in the Community, and substantial changes in the overall use of lands or resources. |
| Moderate | Effects are not clearly distinguishable, are unlikely to result in strong concern, or will not result in substantial changes in the overall use of lands or resources. |
| Minor | Low-level effects are distinguishable |
| Unknown | Lack of information to enable rating of adverse effect; requires further study |