Fort McKay First Nation
Traditional Knowledge Report

Parsons Creek Resources Project
Environmental Impact Assessment Application
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Environmental Impact Assessment Application

Prepared for
Fort McKay Industry Relations Corporation

On Behalf of
Graymont Western Canada Inc.,
#200-10991 Shellbridge Way
Richmond, British Colombia

and Inland Aggregates Limited
12640 Inland Way NW
Edmonton, Alberta

Prepared By
FMA Heritage Resources Consultants Inc.
200, 1719 10th Avenue SW
Calgary, Alberta

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1.0 FORT MCKAY FIRST NATION

1.1 Introduction

This report contains information gathered during meetings and discussions with members of Fort McKay First Nation (FMFN) regarding Graymont Western Canada Inc.’s and Inland Aggregates Limited’s proposed Parsons Creek Resources Project (‘the Project’). The collection of FMFN traditional land use information (TLU) and traditional ecological knowledge (TEK) was facilitated by FMA Heritage Resources Consultants Inc. (FMA).

1.2 Terms of Reference

As per Section 9 of the Project Terms of Reference, this report must describe the following:

“a) historical and current traditional use of the Study Area(s) by First Nations and Métis, including fishing, hunting, trapping, plant harvesting and any other traditional or cultural uses as identified by Aboriginal groups;

b) Parsons Creek Resources’ consultation with Aboriginal Stakeholders to determine their concerns regarding project development on traditional use of the Study Area(s); and

c) the effects of the Project on First Nations and Métis traditional land use and culture, and identify possible mitigation strategies.

d) how Traditional Environmental Knowledge (TEK) will be incorporated into the Environmental Impact Assessment; and

e) how TEK will be utilized during operations i.e. using TEK in reclamation plans.

Provide map(s) of appropriate scale(s) showing the traditional land use areas of Aboriginal peoples (Alberta Environment 2007).”

1.2.1 Objectives

The objectives of the study are to:

- to provide a summary of FMFN perspectives on potential effects from both previous developments and the Project;
- to provide an environmental effects assessment of the Project on FMFN TLU;
- to provide a cumulative effects assessment of the Project on FMFN TLU;
- to provide recommendations for the mitigation of potential effects on FMFN TLU; and
- describe the types(s) of TEK collected.
1.2.2 Intellectual Property

Since the information discussed during participant interviews constitutes the intellectual property of participants, and, collectively, of FMFN, the study was designed in consultation with, and is subject to the approval of, FMFN participants and FMFN representatives. Any interview information, including notes, GPS readings and/or photographs taken of traditional sites, be it in tape, transcribed or electronic form, is considered the property of FMFN and will be returned to the FMFN Industry Relations Corporation (IRC) for archival upon completion of the study. Information has been provided with the understanding that, apart from the submission of reports for the regulatory process, no copies of, or distribution of any documents produced, will take place without the express permission of the FMFN IRC.

Information provided during work for the Project is intended for the one-time use of the assessment application, and the Project described therein, only.

1.3 Methods

The methods section describes how the work was conducted. It outlines the assessment approach to and participant involvement in the study.

1.3.1 Assessment Approach

This section describes how information is collected and used in the environmental assessment context, and how participants were involved in the study.

1.3.1.1 Framework

The Aboriginal concept of ‘the land’ is integral to the assessment process as it “encompasses their personal and cultural identities, their histories, and their religions embedded within complex oral traditions” (Oakes et al. 1998). The ‘land’ is the matrix containing communities of plants, animals, and humans created by spiritual beings. Humans are integral parts of those communities, not set apart from them. The cosmologic view is holistic. No one place in a landscape is more significant than any other. All are significant to the individual and collective psyche and worldview (Oakes et al. 1998). “Many of Canada’s Indigenous people define themselves in terms of the homelands that sustained their ancestors. These are the places where their spiritual roots lie. Drawing from their natural surroundings, Aboriginal groups have developed powerful metaphors, symbols and narrative traditions to express their religious and philosophical views. Some groups named the features of the landscape to recall important events in their individual and collective lives. In effect, the land was their history book” (Ray 1996).

The emerging future, with its rapidly changing technologies and demand for resources, is resulting in changes to cultures and their people the world over. Nowhere is this change more evident than in Aboriginal cultures. The assessment of effects of a proposed resource extraction project on traditional land use is of cultural, environmental and, ultimately, socio-economic relevance, because it pertains to
the social and physical well-being of not only a community, but of the individuals within that community (Figure 1, McCullough & McCullough 2005).

Cultures, past and present, are dynamic entities shaped from within as well as by outside influences. Changes are inevitable but ultimately each culture’s goal is to maintain its identity and well-being by adapting to the forces of change rather than being subsumed by them (Figure 2, McCullough & McCullough 2005). Mitigation measures serve to support this process of adaptation.

1.3.1.2 Study Facilitation

This assessment approach takes into account the perceived effects of a proposed development on traditional lands as well as the direct effects these changes may have on the culture, practices and lifestyles of Aboriginal peoples whose homeland is being affected. The Aboriginal community’s perceptions of the proposed development’s interactions in combination with past and existing projects are also documented. Recommendations for mitigation of any perceived adverse project effects are reported as provided by study participants.

Project personnel serve as facilitators, working collaboratively with Aboriginal community members to collect information about a project’s perceived effects on occupancy and use, and cultural practices and traditions from the participants’ perspective. This includes information that Elders consider to be relevant for providing a cultural and environmental context. Observations and concerns are fully documented and reported to the project’s proponent. Although a proponent may add responses in the report, original recommendations and comments are not changed. Upon completion of the draft assessment report, Aboriginal participants are provided with the opportunity to review study results to ensure their observations and concerns have been accurately reported. Follow up processes ensure that the communities and participants know how their input has contributed to a proposed project and allows them to review, correct, and potentially add to the information collected. It can also provide an opportunity for community members to review proposed mitigation, follow-up and monitoring activities.

1.3.1.3 Nature of the Information

Aboriginal peoples who have ‘lived on the land’ have vivid and detailed memories and perceptions related to cultural conditioning in which accurate perception and memory of environmental features and changes is essential for survival. Traditional knowledge is passed on orally and current observations can often have a time perspective that is multi-generational. Information collected from Aboriginal participants is primarily qualitative and is based on sensory data, oral traditions and cultural norms and values. Traditional knowledge “is generally grounded in specific uses of particular ecosystems. It is inseparable from landforms, environmental quality, survival of particular species, and subsistence activities. Knowledge is taught, learned, tested and expanded through traveling and using a specific territory. Modifying the landscape, biodiversity or human ecology jeopardizes knowledge” (Battiste and Youngblood 2000).

Two types of information are collected during environmental assessment – occupancy and use information, and ecological knowledge. Occupancy and use information focuses on locations and sites of cultural significance that may be impacted by a proposed development. Aboriginal ecological knowledge is the wisdom and understanding of a particular natural environment that has accumulated over countless generations and can serve to aid Western scientific disciplines in analyzing project
Community Wellness and Identity
effects. It can be relevant to a proposed project (e.g., design, safety, noise, visual aesthetic, mitigation, reclamation and abandonment), to the environment (e.g., wildlife, vegetation, fisheries and aquatic resources, hydrogeology, geology and terrain, climate, soils, palaeontology and air quality), and to Aboriginal culture (health, socio-economics, traditional land use, archaeology and heritage). It also relates to the cumulative effects of past and existing activities to both culture and the environment (Table 1 and Figure 3).

Table 1 Traditional Ecological Knowledge Information Categories

<table>
<thead>
<tr>
<th>Project</th>
<th>Environment</th>
<th>Culture</th>
<th>Cumulative Effects</th>
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<tbody>
<tr>
<td>• project design</td>
<td>• fisheries and aquatic resources (inland and marine)</td>
<td>• traditional land use</td>
<td>• effects on culture</td>
</tr>
<tr>
<td>• safety</td>
<td>• wildlife</td>
<td>• socio-economic factors</td>
<td>• effects on environment</td>
</tr>
<tr>
<td>• reclamation</td>
<td>• vegetation</td>
<td>• archaeology</td>
<td></td>
</tr>
<tr>
<td>• abandonment</td>
<td>• hydrogeology (groundwater)</td>
<td>• heritage</td>
<td></td>
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<tr>
<td></td>
<td>• hydrology (surface water)</td>
<td>• community well-being</td>
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<td></td>
<td>• geology and terrain</td>
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<td>• paleontology</td>
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<td>• visual aspects</td>
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</tbody>
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1.3.1.4 Effects Assessment

The effects assessment addresses the primary and secondary effects the Project may have during construction, operations and abandonment phases. The perceived cumulative effects of past and existing activities within the Regional Study Area (RSA) are also considered, as are potential positive effects.

Primary Effects

*Construction*

Potential effects to occupancy and use during the construction phase are directly related to the Project footprint and typically include primary impacts to Aboriginal dwellings, spiritual sites, gravesites, trails, resource harvesting locales, or specific resource (e.g., wildlife, vegetation) habitats or features (e.g., bear dens).

*Operations*

At the operations phase the potential primary effects that are considered relate to the environment, health and well-being of the resources, and the health and well-being of the Aboriginal peoples whose traditional territories may fall within the RSA. Included are all aspects of life that the Aboriginal group feels may be affected by the facilities and/or by its by-products over the project's lifespan. They are not usually site-specific.
Traditional Knowledge and Environmental Assessment Process

Acknowledgements:
Original drawing by AXYS Environmental Consultants Ltd.
and PMA Heritage Resource Consultants Inc. 
**Abandonment**

Effects considered for this phase relate to decommissioning activities and overall reclamation or restoration as it pertains to Aboriginal use and well-being. Perceived effects typically address both site-specific and cumulative effects.

**Secondary Effects**

Secondary effects include perceived changes in land use that arise from changing social and economic conditions related to Project construction, operations and abandonment. These effects can include demographic shifts, land use restrictions, increased outsider access and changes to the local and regional economy.

**Cumulative Effects**

Cumulative environmental effects include the Aboriginal group's perceptions of the proposed Project's interaction with past and existing projects and activities over a period of time within a designated region. An Aboriginal community's sense of cumulative effects is likely broader than the standard project inclusion list used in environmental impact assessments (EIAs), and may include activities such as sport hunting, forestry, dams and/or pulp and paper mills for example.

**Potential Positive Effects**

Assessment work carried out using the approach outlined above offers potential for creating positive effects, one of which is the opportunity to better understand Aboriginal history, traditional practices and cultural perspectives. There is also much to be learned from knowledgeable Elders about a region’s biodiversity (passed on through generations) which can lead to innovative models of sustainability.

**Mitigation**

Project-specific mitigation measures may include site avoidance, buffering, enhancement, further studies, monitoring or co-management programs, restoration or conservation measures, or compensatory action. Irreversible changes to cultural traditions necessitated by changing economic and environmental circumstances over time (cumulative effects) may require long-term mitigation strategies to assist in developing alternate livelihoods (economic systems) congruent with the values and worldview of the Aboriginal group (Figure 1). Mitigation of cumulative effects can sustain the cultural identity, heritage and well-being of the group. Determining appropriate mitigation measures requires the participation of the community, governments and industries operating within the traditional territory.

**Spatial Considerations**

The following describes the local study area (LSA) and RSA parameters for the study.
**Local Study Area**

The local study area (LSA) for the assessment is defined as the Project lease area, and includes two islands adjacent to the Project as a result of TEK information provided by FMFN participants regarding potential impacts to critical moose habitat (Figure 4).

**Regional Study Area**

The RSA encompasses areas of FMFN intense, moderate and low traditional use based on a culturally significant ecosystems model (Figure 5, McKillop 2002). It does not reflect the entire territorial range of the Fort McKay peoples. This model was derived from FMFN’s Traditional Land Use and Occupancy Study, in which 67 Elders were interviewed (FMFN 1994).

**Temporal Considerations**

This study considers both current, past (‘time immemorial’), and potential future traditional use. Future use pertains to the opportunities for descendants (‘our children’s children’) of FMFN members to practice a way of life and maintain traditional cultural and spiritual values. Based on the perspectives of FMFN participants, the temporal boundary against which incremental changes in time are being compared in this study is 1960.

### 1.3.2 Participant Involvement

Discussions for the TEK-TLU study were semi-directed and focused on the following topic areas:

- patterns of traditional use, resource management strategies and ethic, and location of traditional sites (e.g., trails, burial sites, significant landmarks, sacred/spiritual sites, gathering/meeting/camping places, cabins, special use sites);
- changes in the landscape, and in TLU;
- environmental concerns, both with regard to the proposed Project and other resource development projects in the region (e.g., air and water quality);
- plant and animal health, fish quality and overall environmental health;
- social and human health concerns;
- issues and concerns based on participants’ views of potential Project impacts; and
- mitigation measures and recommendations.

Participants were encouraged to lead the discussions into topics they deemed to be important, and to make recommendations regarding the concerns that they had raised.
Discussions with participants were aided with the use of plotter-sized (approximately 2x3’) Digital Elevation Model (DEM) and National Topographic System (NTS) background maps of the region overlain with the Project lease boundary and Registered Fur Management Areas (RFMAs). Any specific sites, features or areas of importance identified by participants were recorded on the maps for inclusion in the draft report, subject to participant consent.

Throughout the report, except in the case of specific statements by elected representatives, participant names and comments have been coded to protect their identity and privacy (e.g., FM1, FM2, etc.). All of the FMFN community members who participated in the study are listed in the relevant sections below.

1.3.2.1 Pre-scoping Meeting

A pre-scoping meeting was held between FMA facilitators (Sherri Labour and Kelly Davison) and Jean L’Hommecourt, the person charged with environmental matters and trapper consultation at FMFN’s IRC, on May 30th, 2007, prior to meeting with FMFN community members. Discussions focused on Project introduction and overview, regulatory application schedule, the identification of preliminary issues and concerns for FMFN members, as well as potential workplan and schedule. It was determined that work should begin with the usual initial introductory, scoping meeting with the Elders’ Advisory Group, and would likely require a site visit with Elders. Project proponent representatives were requested to be present during this work.

1.3.2.2 Elders’ Advisory Group Meeting

On July 31, 2007 FMA facilitators (Sherri Labour and Kelly Davison) met with the FMFN’s Elders’ Advisory Group to discuss the TEK-TLU requirements for the Project. (In Fort McKay, and for the purposes of work with industry, Elders are considered to be people 50 years of age or older.) Jeff Higgs with Graymont, Joe Dubovsky from Inland and Ron Wrigley (Brown and Associates) were present to provide Elders with Project information and the opportunity for face-to-face discussion with proponent representatives. Catering was provided by FMFN. A site visit by boat was conducted after the meeting and an at-home interview was scheduled with FMFN members who trapped in the study area for many years.

The intent of the meeting with the Advisory Group was to determine the extent and nature of FMFN traditional knowledge and land use in the study area, obtain TEK information relevant to the Project, and discuss any questions or issues and concerns that participants may have with respect to potential Project effects.

Attending members of the Elders’ Advisory Group include:

- Celina Harpe;
- Dora L’Hommecourt;
- Maggie Bouchier;
- Murray Harpe; and
- Jean L’Hommecourt (IRC).
Arthur Boucher, Peggy Lacorde and Henry Scott are also members of FMFN’s Advisory Group for the proposed Project, but were unfortunately unable to attend the July 31st meeting and site visit.

1.3.2.3 Site Visit

A visit to the Project lease area was made by boat directly after the Elders’ Advisory Council Meeting on July 31, 2007. Site visits centred on the location of moose calving grounds and Métis trapping cabins on RFMA #1790 identified by community members.

FMFN members who participated in the site visit include:

- Ed Cooper;
- Celina Harpe;
- Dora L’Hommecourt;
- Maggie Bouchier;
- Jean L’Hommecourt (IRC);
- Murray Harpe (boat pilot); and
- Gabriel Desjarlais (boat pilot).

1.3.2.4 Home Interview

An at-home interview was conducted on November 7, 2007 in Fort McKay with members of the family that historically held and used RFMA #1790. FMA facilitators Sherri Labour and Kelly Davison conducted the interview.

1.3.2.5 Report Review and Verification

A copy of the final draft of the report, including maps, was reviewed and approved by a representative from FMFN’s IRC prior to release to the proponent.

1.4 Baseline Information

Baseline information collected for study includes a summary of background literature reviewed for the Project, as well as descriptions of FMFN culture and lifeways, TEK and TLU. TEK-TLU was collected and is presented in the context of potential Project effects.

1.4.1 Literature Review

The review of background literature includes:

- TLU work conducted for impact assessments;
- historical and ethnographic literature;
- TLU, and TLU and occupancy studies;
- socio-economic analyses and reports;
- academic texts on resource development and Aboriginal peoples, with a focus on northern Alberta;
- land and resource use surveys; and
• biophysical research incorporating local Aboriginal peoples' TEK.

1.4.1.1 Project-Specific Environmental Impact Assessments

• Access to and conduct of traditional activities remains a vital part of Aboriginal culture and daily life; traditional use is of vital cultural importance to the region's people (Golder Associates 2002a, 2002c, 2002d, 2005, 2007; AXYS 2004; FMA 2005a, 2005b, 2005c);

• Cumulative effects related to resource development in the area are having a major impact on the current and potential future availability of traditional lands and traditional use (Golder Associates 2002c, 2002d, 2007; AXYS 2004, FMA 2006);

• FMFN feels strongly that access management issues need to be addressed in their traditional territory (FMES and AGRA 1997, AXYS 2004; FMA 2005a, 2005c, 2006);

• Aboriginal communities in the region maintain a strong connection to the land and highly value environmental integrity (Golder Associates 1997, FMA 2005a);

• Traditional users feel that their participation and input into regional projects is not being considered, and thus not respected (FMA 2005a);

• Respectful, sustained and meaningful consultation and communication is required (AXYS 2004; FMA 2005a, 2005b);

• Water quantity and quality is very important to the traditional lifeways of Aboriginal communities; cumulative effects to water quality and quantity are already felt to be significant (AXYS 2004; FMA 2005a, 2005b, 2005c, 2006; Golder Associates 2007);

• Air quality has degraded with the development of industry; Aboriginal peoples perceive this as having a negative effect on their health, as witnessed by the development of cancers and shorter lifespans in the community (Golder Associates 2002c; AXYS 2004; FMA 2005a, 2005b, 2006);

• Concern regarding the disturbance, health and disrespectful treatment of animals (e.g., meat quality, sport hunting, removal of beavers); increased incidences of disrespectful treatment of traditional resources by non-Aboriginal harvesters (AXYS 2004; FMA 2005a, 2005b, 2005c, 2006);

• Concern that forestry, oil sands development and recreational activities are disturbing, damaging and restricting access to the land and its resources to such an extent that it is limiting Aboriginal peoples’ ability to maintain their traditional culture and lifeways (FMA 2005a, 2005c, 2006; Golder Associates 2005, 2007);

• Increased incidences of trapline theft, vandalism and intrusion are being documented; this is linked to the growth in regional populations (AXYS 2004; FMA 2005a, 2006; Golder Associates 2005, 2007);

• Concern that development is damaging local ecosystems, and that once the damage is done, things will not return to pre-development conditions (AXYS 2004; FMA 2005b, 2005c, 2006);

• Current reclamation practices and strategies that are inadequate or piecemeal; profound doubt that land can be ‘put back’ or restored; the “sacredness of the land” has been destroyed (Golder Associates 2002b; AXYS 2004; FMA 2005b, 2006);

• Concern about the amount of water used by regional industry (FMA 2005a, 2005b, 2006);
• TEK views increased water contamination as seriously affecting the health of humans, animals and vegetation in the area (AXYS 2004; FMA 2005a, 2005b, 2005c, 2006);
• Dissatisfaction with accepted environmental regulatory standards governing development as related to air and water pollution (Golder Associates 2002c, 2002d);
• An environment of distrust from communities towards industry (FMA 2005a); and
• Union employment and training are issues; companies make lots of promises about jobs with little result; Aboriginal people experience a lot of discrimination when it comes to hiring (AXYS 2004; FMA 2005b, 2006).

The EIA reports completed on FMFN TLU record a substantial and ongoing loss of traditional areas, access and use over the past 40 years, and many conclude that ‘strong’, ‘substantial’ or ‘significant’ negative effects have already occurred to FMFN TLU as a result of oil and gas developments (FMES and AGRA 1997, 1998; Golder Associates 1997, 2000, 2002a, 2002b, 2002c, 2002d, 2003; AXYS 2001; FMA 2005a, 2005c, 2006).

1.4.1.2 Traditional Land Use, Historical or Cultural Studies

FMFN’s TLU and occupancy study describes the TEK and “functional land base” of the Chipewyan, Cree and Métis who live in Fort McKay (FMFN 1994: 16). For the Elders who contributed to this study, the most important reason to be involved was to provide a “living record of how the bush economy functioned and still functions in the Fort McKay First Nations’ traditional land use and occupancy region” that could be used in the schools and the community for educational purposes (FMFN 1994: 8). As stated in an introductory letter by Chief Mel Grandjamb, study results were also intended to be used for co-management, and to assist in the implementation of a “new system of land use decision-making”.

Contained in the study are accounts of life in the community and in the bush before and after the beginning of development in the region. It stresses the importance of land-based resources to the culture and well-being of community members, as illustrated in the following quote:

"It means more than just a place to harvest furs for sale on the commercial market [the trapline]. It means the territory where people hunted, fished, picked berries, gathered duck eggs and trapped furs for local domestic consumption and trade. The trapline was the community food supply … it was and 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 elders as carriers and teachers of traditional environmental knowledge; and with cultural sustainability (FMFN 1994:2)."

A report focusing on similar issues published by FMFN some ten years earlier, explained that Fort McKay’s experience with “oil sands development to date has not been a positive one" (FMTA 1983: 5). This report makes it clear the FMFN feels that the historical context must be considered to understand present day environmental effects and issues. The “fundamental differences in values, social organization, human ecology and community life” between Euro-Canadians and Aboriginal peoples have led to many “misconceptions” and a “legacy of impacts” (FMTA 1983: 20).
### 1.4.1.3 Other Reports and Analyses

Other reports and analyses related to regional oil sands development and regional traditional use that were reviewed as part of the baseline research for the Project include:

- culturally significant ecosystems model (McKillop 2002);
- land and resource use surveys (FMES 1997a, 1997b; FMFN IRC 2000);
- reclamation and land management practices (FMFN IRC 2004);
- analyses of the impacts of development to traditional economies (Fox and Ross 1979, Tanner et al. 2001);
- legislative background and consultation appropriate in the context of resource development (Passelac-Ross and Potes 2007, Ross 2003, McKillop 2002); and

Various studies conducted outside the context of project development indicate that Aboriginal peoples have a high level of interest in maintaining ties to the land, consuming traditional foods and in being able to practice traditional land use activities, notwithstanding the effects of resource development that are occurring around them (Bill et al. 1996, NRBS 1996a, 1996b, FMA 2005b).

A land use survey conducted by the FMFN IRC in 2000 found that more than 50 percent of community members (67 to 87 percent) want to carry out traditional land use activities, but less than 50 percent see themselves being able to do so. The only traditional activity that the majority of people foresaw themselves being able to take part in was Gatherings (FMFN IRC 2000). This survey also found that reclamation is not viewed as an effective restoration measure for future traditional land use activities. A more recent document published by the FMFN IRC (2004) specifically addressed reclamation and land management practices. It states that while the people of Fort McKay recognize the economic benefits of development and do not wish to “halt” it, the “earth has been damaged and wounded” and it “needs to be healed”.

Other surveys, which discussed the traditional foods consumed by Fort McKay residents, found that country foods are highly valued and widely used by community members (FMES 1997a, 1997b). Moose is eaten daily “by virtually every individual in the community” (FMES 1997a). Berries are another favourite traditional food.¹

Socio-economic studies of impacts to traditional use show that a range of traditional activities, such as trapping (Fox and Ross 1979) and hunting and gathering have been negatively affected by resource development in the region (Tanner et al. 2001). Tanner’s study (2001) points out that the areas of most intense oil development are also the areas of most intense traditional use. McKillop’s (2002) work on culturally significant ecosystems (CSE) provides a framework within which high, moderate and low traditional use areas can be analyzed, and the potential impact of resource development assessed.

¹ A full list of traditional foods consumed by Fort McKay community members is provided in the consumptive use study (FMES 1997a).
Figure 6 illustrates where the proposed Project is located within the CSE framework, which is based on regional data from FMFN’s 1994 traditional land use and occupancy study, There is Still Survival Out There. According to this model, the Project falls entirely within a ‘high’ traditional use area (Figure 6).

Other reports (Passelac-Ross and Potes 2007, Ross 2003, McKillop 2002) discuss the value and importance of appropriate consultation with Aboriginal peoples, and its legal context with respect to resource development in Alberta. The need for TEK to have an “effective role” in environmental studies and management is recommended in several studies (Bill et al. 1996, NRBS Board 1996a, 1996b, Farr et al. website 2004).

Other background literature discusses environmental effects and management from a TEK perspective. In the fall of 2005, the Cumulative Effects Management Association conducted a series of workshops with Elders from various Aboriginal communities in the Athabasca oil sands to obtain TEK regarding wildlife movements (FMA 2005d). The resulting report revealed that Elders view ‘intact’ and undisturbed landscapes to be critical for the future survival of animal species and for ensuring that traditional lifeways can be carried out in the future. FMFN Elders participated in these workshops, and outlined the areas shown in Figure 7 as critical ‘survival areas’ necessary to the maintenance of traditional lifeways and healthy wildlife populations.

In September 2006, DehCho First Nations hosted a conference entitled, “Keepers of the Water: Watershed Gathering” in Fort Simpson. Representatives of FMFN and Athabasca Chipewyan First Nation were present and were interviewed for an article published in the New York Times. The FMFN representative, Jean L’Hommecourt, stated that water levels in the Athabasca River had dropped and that residents cannot drink the water or eat the fish from it. She is quoted as saying, “I’m not sure what can be done to replenish the water again, because that’s something that probably can’t be fixed unless all the industry stops taking water from the Athabasca River to produce their oil” (Jones 2006).

### 1.4.2 FMFN Traditional Values and Lifeways

The following section includes information from both background literature and participants’ information on FMFN traditional values and lifeways.

#### 1.4.2.1 The People

Fort McKay residents are of Dene, Cree and Métis ancestry (FMFN 1994). The Dene living in Fort McKay were and are closely related to K’ai tailé Dene in Fort Chipewyan and other Dene peoples in the Athabasca region (Coutu and Hoffman-Mercredi 2002). The fur trade introduced Cree and Métis peoples to the Athabasca region. The first recorded fur trade activity here occurred in 1719 when the Hudson’s Bay Company had a Cree man by the name of Wa-pa-su initiate trade in the Athabasca area (McKillop 2002). Prior to recorded fur trade activity, Cree and Métis peoples had pushed northwest into the Athabasca region, warring with the Dene inhabitants. When Euro-Canadians arrived, the Cree and Dene peoples had made a peace treaty. The combined effects of epidemics, starvation, and the uptake of lands for the confederation of Canada all but forced Aboriginal people to sign treaties during the late 19th and early 20th centuries. Since then, legislation designed to assimilate Aboriginal people and anglicize their cultures was instituted, and the lives of Dene, Cree and all Aboriginal people have since been intertwined.
1.4.2.2 The Homeland

Fort McKay and Fort Chipewyan were first occupied and settled during the fur trade era, and represent sites within traditional areas of use, meeting and trade utilized by the Aboriginal peoples who have occupied the surrounding territory since the retreat of the last ice age. At the time of contact with Europeans, the Dene lived and occupied a vast area between Great Slave Lake and Hudson’s Bay (Dempsey 1997, ACFN 2003a and 2003b). The Aboriginal peoples who eventually settled in Fort McKay used an extensive territory that ranged to the west of Chipewyan Lake and east to the Saskatchewan border, north of the Birch Mountains and to the Thickwood Hills in the south (FMFN 1994, Figure 5).

The first fur trading post in the Fort McKay area was built in 1821 by the Hudson's Bay Company and was closed shortly thereafter. Another post, the Old Red River House or Little Red River, known as Terascha to the Dene, was opened near present-day Fort McKay in 1870 (FMES 2000). As explained by a Dene Elder from Fort McKay, “The Indian name for Fort McKay was Red Clay. That’s what people put on their houses (Victoria McDonald quoted in Meili 1991: 179). Other than the trading post, however, there was no real permanent settlement at Fort McKay until the late 1960s when mandatory schooling was implemented (FMES 2000).

With the addition of 9,308 ha of Treaty Land Entitlement (TLE) reserve lands in 2006, FMFN now has seven reserves, totalling 18,138.6 ha (INAC 2006b). IR 174 is located directly across the Athabasca River from the community of Fort McKay; three additional portions of reserve land around the community of Fort McKay and IR 174 were added as part of the TLE settlement. Two of the reserves (IR 174A and IR 174B) are located in the Birch Mountains along the shores of Buffalo (Namur) and Moose (Gardiner) Lakes. IR 174C contains “very significant oil sands deposits” (INAC 2006b) and is slated to be developed into a “large scale commercial project” (INAC 2007). In December 2007, Fort McKay had 630 registered members, with about half of them living off reserve (INAC 2006a). Current reserve lands are illustrated in Figure 8.

1.4.2.3 Worldview

The Aboriginal worldview is permeated with the importance of, and respect for, the community, the environment and all of creation; it stresses the interdependent nature of creation (Sioui 1989) and conceptualizes all components and inhabitants of creation as connected in a ‘Sacred Circle’ of life. This worldview contains balance, reciprocity and respect for creation (Venables 1980, Coutu and Hoffman-Mercredi 1999). While worldviews vary from nation to nation among North American peoples, a common thread shared by many is the belief that, “Humanity has an important role in the perpetuation of the natural processes of the world. Every ‘thing’ is animate and has a spirit” (Cajete 1999: 65).

Kinship ties, economic systems and overall social organization are supported by traditional activities. The culture and identity of Aboriginal peoples is therefore intimately linked to their relationship with the surrounding environment (Momaday 1976, NRBS 1996a). This is a concept poorly understood by Euro-Canadians, as explained in a treatise by FMFN: “Our systems of using the land and our economy were not seen, understood, and least of all respected by the ‘outsiders’. Their notion of hunting and trapping was much like that of having a farm; that is a defined plot of land where everyone did everything” (FMTA 1983: 31). The identity of Fort McKay peoples is rooted in time and place to the land. “Since
McDonald and James Grandjambe in Meili 1991). In the words of Fort McKay people:

From our view, the history of the Fort McKay people is inseparable from our history on these lands. Indeed we are part of these lands which were given us by the Creator to care for, and to safeguard the well-being of all the creatures and living things it nurtures. You cannot separate our economy from our culture. Nor can you separate either of these from the land (FMTA 1983: 18).

Prophecy plays a profound role in the worldview of many Aboriginal peoples. Today, many people in Fort McKay speak of the prophecies foretold by the Elders. Cree Elder James Grandjambe speaks of one old woman’s prophecy of how white people would “come and break the land” (In Meili 1991: 233).

1.4.2.4 Social Relationships

Aboriginal social relationships, like those with the land, are based on the concepts of respect, reciprocity, sharing and personal and community responsibility. Respect for Elders, family, other community members and guests in the community are very important. Elders are the “living embodiments of Aboriginal traditions and cultures” and “keepers of spiritual knowledge that has sustained people through thousands of years” (INAC website 1996). Elders hold knowledge, experience and wisdom that is critical for guiding both the community as a whole, as well as for individuals seeking guidance. For this reason, community decision-making requires the direct consent and input of Elders.

1.4.2.5 Gatherings

Gatherings are social and political events that play an important role in the cultural and social life of Aboriginal peoples. Traditionally, it was a time of sharing and social interaction, for the transmission of traditional knowledge, the building of political consensus, of conducting marriages, and of storytelling and trade (Coutu and Hoffman-Mercredi 2002). The locations of Gatherings were often central and become significant places because “gathering places were like the centre cores in the circle of life which integrated the Dene clans” (Coutu and Hoffman-Mercredi 2002: 110). In the summer of 2006, FMFN hosted its first annual Regional Gathering. For many First Nation communities, Treaty Days or religious events (e.g., Lac St. Anne pilgrimage) may also function as ‘gatherings’. In Denesuline territory, a different community hosts the Dene Gathering each year. The cultural and political tenor of these modern Gatherings remains true to the traditional roots of such events (English River First Nation 2006).

1.4.2.6 Livelihood

The traditional economy of the northern Dene and Cree peoples was based on a seasonal cycle of hunting, gathering and trapping. In the lower Athabasca region, wood buffalo were the primary large game resource while, to the north, herds of woodland caribou were integral to the lives and existence of the peoples. Small family bands would disperse in the late fall to traditional winter hunting grounds, coming together in the late summer to early fall when the plentiful resources of the region could support large gatherings. Archaeological and ethnographic evidence records a significant traditional gathering place used for thousands of years at Ena K’erring K’a Tuwe (Cree Burn Lake or Isadore’s Lake) near Fort McKay. This location was rich in plant and animal resources, is located along water travel-routes,
afforded a commanding vantage point and was defensible, and is located near landforms that could be used for bison pounds (Coutu and Hoffman-Mercredi 2002).

Over time, the seasonal cycle of dispersal and congregation slowly changed as Euro-Canadian presence increased in the region. Trading posts, such as Fort McKay and Fort Chipewyan, became the loci of seasonal gatherings. The establishment of missions and schools contributed to the gradual settlement of the families of previously nomadic Aboriginal hunters and trappers. Roman Catholic missionaries visited the Fort McKay and Fort McMurray area by 1853, although a mission was not built there until 1902. Contact with the world beyond the Athabasca region increased as barges and steamboats plied the rivers, passing through the communities of Fort McKay and Fort Chipewyan in the late 19th and early 20th centuries. The Klondike Gold Rush in 1897 significantly increased the outside population in the Athabasca region as Klondikers passed through, bringing with them “drunkenness, immorality, and every other accompanying vice peculiar to modern civilization” (Fumoleau 2004: 39).

In the late 19th century, the increased demands of the fur trade led to a rapid decline of both furbearers and large game animals in the Athabasca region, and in 1896 the Game Act was implemented. This law prohibited the hunting of wood bison, which were central to the livelihood of Aboriginal people in the Athabasca region who were already suffering due to the decline in fur-bearers (Fumoleau 2004: 46).

In 1899, the Dene and Cree of the Fort McKay, Fort Chipewyan and Fort McMurray regions signed Treaty 8 (Dempsey 1997). There was a general refusal to sign the treaty unless the Crown guaranteed protection of Aboriginal rights to their traditional way of life of making a living from the land (Fumoleau 2004, Coutu and Hoffman-Mercredi 2002). The treaty also provided reserves, although there was no expectation that people had to live on them.

Years of famine and hardship followed the signing of Treaty 8. In 1928, a devastating influenza epidemic decimated the population of the Athabasca region. In the 1930s, the registered trapline system was introduced in northern Alberta (FMES and AGRA 1997). Many Aboriginal people were unable to secure traplines in the traditional use areas that their families had managed throughout fur trade history. In 1968, the Department of Indian Affairs suspended the practice of paying the trapline fees of Treaty Indians and from 1968 to 1973 approximately 170 trapping areas ceased to be held by Treaty Indians (ATRCA 1980). When the fur market collapsed in the 1980s, it was no longer possible for most people to make a living solely from the land.

The traditional, or ‘bush’, economy of the Aboriginal peoples of the Athabasca region was based on a continuous cycle of five seasons: dry-meat hunt, early winter hunting and trapping, late winter hunting and trapping, spring beaver hunt and the “summer slack” (FMTA 1983:78-86). Small family bands would disperse in the late fall to traditional winter hunting and trapping grounds, coming together in the late summer to early fall when the plentiful resources of the region could support large gatherings. Prior to the establishment of the registered fur management system, four to five families would use an area for trapping and hunting (ACFN 2003a). Families were stewards, not owners, of their traplines. They conducted inventories of animal populations and surveyed the resource capacity of their lands to inform their land management decisions (FMTA 1983).

The fur trade had introduced a market economy to the hunting-gathering peoples of the Athabasca, however, the extent to which the Aboriginal peoples became dependent on the market economy is debatable. Although the seasonal round changed slightly to accommodate harvesting furs for trade and
annual trips to the post, the traditional ‘bush’ economy of Fort McKay combined both income and traditional resources, continuing to be based on a seasonal cycle of hunting, gathering and trapping (FMTA 1983). In the 1960s, a more sedentary seasonal round pattern was established as the peoples in the Fort McKay area changed from being semi-nomadic to semi-sedentary (FMTA 1983). This shift coincided with the introduction of mandatory education for children, which required permanent housing for the women and children. Family allowance payments and permanent federal government housing were introduced to help facilitate this. Although many people began to conduct their hunting and trapping from a single base camp at Fort McKay, the animals that were harvested and the harvest seasons remained the same (FMTA 1983). The economy, however, became more of a mixed harvesting and wage-earning economy after 1960 (FMTA 1983).

Oil and gas developments began in the late 1950s, and are located within the traditional use areas of the Aboriginal peoples of Fort McKay. In the late 1980s, a pulp mill was opened near Fort McMurray and logging now occurs on both sides of the Athabasca River. These developments have brought an increase in population, increased presence of the market economy and related goods, increased access to traditional lands and increased pollution (FMES 1997a). Although most people here no longer make their living solely off of the land, traditional use still occurs and remains integral “to their history, their culture and their present existence” (FMES 1997a: 6). While FMFN actively pursues economic and business opportunities for its members to ensure their future financial and economic independence (FMFN 2006), and many FMFN members are employed in the oil and gas sector, Fort McKay peoples continue to have a strong connection with the land which provides not only natural renewable resources, but also opportunities for social activities ensuring cultural continuity and a place for individual spiritual renewal (FMFN IRC 2004, FMA 2005d).

1.4.2.7 Traditional Foods and Materials

Traditional foods, while not always readily available, are highly valued by FMFN members. An extensive list of the types of species traditionally trapped, fished, hunted and gathered by FMFN members is provided in their TLU study (1994).

A consumptive study conducted in Fort McKay indicated that the “consumption of moose far exceeds that of any other species” and is “eaten by virtually every individual in the community, almost every day” (FMES 1997a: 4). Community consumption of mammals, in declining order of preference, includes: moose, snowshoe hare, beaver, whitetail deer (much preferred over mule deer), mule deer, muskrat, and wood bison (not a regular staple). Birds eaten, in order of preference, include: ducks, geese, swans, grouse (sharptailed, ruffed and spruce) and ptarmigan (not really popular) (FMES 1997a).

The study also revealed that, “… virtually everyone interviewed consumes berries or plants of certain kinds” (FMES 1997a: 11). Blueberries, cranberries and rat root are “the three species which were consumed the most by far”, although mint is also used with a “fair amount of regularity” (FMES 1997a: 11). The most commonly consumed plants are: blueberries, cranberries (highbush and bog), rat root, mint, chokecherry, saskatoon, rose hips, hazelnut and labrador tea (FMES 1997a).
1.4.3 FMFN Traditional Ecological Knowledge

TEK information and mitigation recommendations shared by participants are presented in this section. Information provided by participants that applies to a specific impact assessment discipline (e.g., air quality, wildlife) is outlined under the appropriate heading. Other TEK information that describes a potential Project effect (e.g., traffic), and which may be relevant to several disciplines, is listed under a generic title describing the content of the concern. (In the case of traffic, for example, there may be information that is of relevance to both the wildlife and the socio-economic assessments). In all cases, the TEK information was collected where it may be found useful for Project planning purposes, and/or regional resource management strategies.

1.4.3.1 Air Quality

Questions regarding dust from the proposed Project and potential associated effects to visibility along Highway 63 and deposits to surrounding vegetation and the river were raised (FM5).

The community of Fort McKay is surrounded by industrial plants, refineries and mining projects. Air quality is a major concern for community members, who have reported increased instances of asthma and other respiratory ailments in the past (Golder Associates 2002c; AYXS 2004; FMA 2005a, 2005b, 2006). In this study, participants reported that sulphur blows off of uncovered storage piles at industry facilities, turning the snow yellow and creating an unpleasant odour in the community (FM2). One participant has previously confronted industry regarding this issue, stating, "Why don’t you guys cover it? Because every time the wind blows this way we get all that sulphur over here" (FM2).

Participants also link air pollution to poor berry production in the region (Section 1.4.3.4 and 1.4.4.5), and also liver problems in wildlife (Section 1.4.3.3).

1.4.3.2 Water Quality and Quantity

FMFN community members have observed a marked decline in both water quality and quantity in the Athabasca River over the last 50 years. They have grave concerns regarding ongoing development in the region and potential impacts to water. One of the first questions that arose regarding the proposed Project centered on water management and potential contamination to the river from seepage (FM5).

Elders in this study recalled a “sad” time in the 1960s, shortly after oil sands plant operations began, when they were instructed to stop drinking water from the Athabasca River, their only source of potable water at the time (FM1, FM2). Today, water is trucked into the community, but there was a time when community members were forced to pay for potable water themselves (FM2).

FMFN members are finding it increasingly difficult to navigate the Athabasca River, as its levels continue to fall. “[The Athabasca River] used to have lots of water (FM2).” One of the participants noted that he could not access some traditionally used areas this past summer due to low water levels, even with his jet boat (FM1). He also stated that water in the Athabasca River was low during the site visit on July 31st, 2007. Low river levels are generally attributed to industrial water uptake in the oil sands region.
1.4.3.3 Wildlife

Participants discussed changes in wildlife populations and wildlife health in the region, as well as wildlife habitat on and near the Project.

Wildlife Populations
There is a concern among Advisory Group members about wildlife population levels in the region. Overall, population levels have declined drastically, with one or two notable exceptions. One Elder who used the area for trapping said he has hunted and trapped a wide variety of animals, but stated that, “…there is no more wildlife now” (FM1). For example, he has not seen a single porcupine in the region in 40 years. He explained that this has been “…since the plants started up. The last [porcupine] I saw, you know the divided highway there, where they put that overpass? Right in that jackpine…the last one I saw was ’67” (FM1).

After an approximately 30-year absence, rabbits are starting to appear again in the region (FM1, FM2). Elders explained that “long-hair” furbearers like fox, wolf and lynx rely heavily on rabbits for food, and that they may also ‘come back’ now that the rabbit population is increasing (FM1, FM2). Rabbits will fatten up quickly when they are feeding “in the willows”, but not when they are feeding in areas with a lot of spruce (FM1, FM2).

Deer and coyote populations, on the other hand, have increased dramatically in the last 30 years (FM7). One Elder explained that, “when I was a teenager, there were very few deer. Now there are a lot. There is so much difference in the deer population” (FM2). Fishers are also more common than they used to be. One Elder who has trapped in the Project area for many years has observed an increase in the fisher population since the late 1960s: “…there was no fishers here before” (FM1). FM2 added that fishers prey on small beavers, and that this is the reason there are no small beavers on her current trapline on the Clearwater River.

Wildlife Health
Participants have observed spots on the livers of rabbits and moose, and attribute this to pollution. As one participant explained, “…something to do with the pollution. Because even when the rabbit get over-populated, they start getting sick and they start getting spots on their liver. Then you know it’s sick. It’s no good, so we don’t eat it” (FM2). FM1 stated that there is a similar phenomenon in moose, but that it occurs less frequently: “…same thing with the moose…the odd one, but not a lot. I check it all the time” (FM1).

Wildlife Behaviour
FM7 has witnessed changes in the behaviour of marten and moose, explaining that they seem disoriented and are displaying erratic behaviour. She stated that moose are sleeping in clearings, and that she has seen moose tracks that display abnormal “back and forth” patterns. She stated that this is atypical and is related to the increased number of roads that “just appear” seemingly overnight in the animals’ territory.

Wildlife Habitat
Participants identified moose and beaver habitat within and near the lease, including “marshy areas” used by both species, and moose-calving grounds on the islands adjacent to the lease (FM1, FM2, Figure 9). One Elder stated that the marshy areas and “sloughs” in the northern portion of the Project
lease are ideal moose and beaver habitat, and that there are “old [moose] trails” that are still visible on the lease (FM2). “There was lots of beavers in there too, beaver and moose habitat” is how the north area was described (FM2). In fact, ‘all along the lease is good moose country’ (FM1, FM2).

During meetings and site visits, participants identified the location of moose calving grounds on islands in the Athabasca River adjacent to the Project lease area (FM1, FM2, Figure 9). It was explained that, “the moose go to the islands to birth” to avoid predation by wolves (FM1). Beavers also used to be present on this island; “Every spring or fall time that’s where they [the beavers] built their house…well, it’s always been there that house, but they use it…every year” (FM1).

One participant indicated that moose are a safety hazard for drivers of Hwy 63, informing facilitators of a recent incident where “one boy hit a moose and died” (FM2). Elders explained that moose will ‘come back down’ off the hills in late December and January to low areas (FM1, FM2). This results in a lot of vehicle-animal collisions. A moose movement corridor exists across the lease between the Thickwood Hills to the west of Hwy 63 and the islands previously described (FM2, FM5, Figure 9), and vehicles “usually hit the moose in that stretch” (FM2).

Mitigation measures discussed during proponent meetings included reclamation planning to preserve the wildlife habitat in the northern portion of the lease, and traffic management measures to increase public awareness and safety.

1.4.3.4 Vegetation

Participants have observed a marked decrease in berry abundance, and attribute this change to industry emissions. One participant said that even if berry populations were still healthy, they would still not be edible due to air pollution: “...we can’t even find one berry here. But I mean, even if there was, it wouldn’t be good to eat anyways, because we got all that stuff; all that emission from the stacks. I mean… you can’t eat berries from around here” (FM2).

1.4.3.5 Conservation and Reclamation

During the July meeting and site visit, proponent representatives discussed potential reclamation strategies with participants. TEK information shared indicated that the northern portion of the lease is critical habitat for moose and beaver, and that FMFN members use the area year-round for moose hunting. Participants recommended that at least the north half of the lease be reclaimed as close as possible to its original state in an effort to encourage moose to return there after development.

The proponent suggested that the area would be reclaimed to as ‘natural’ a state as possible, with human recreational use being a priority. FMFN members pointed out that there is a difference between what humans and wildlife consider ‘natural’, stating “you can’t mix the two” (FM5). Land that would be of ‘recreational’ value to humans, would likely not be good moose habitat. If Graymont is going to make recreational land, it would be better done closer to the City of Fort McMurray,” is the opinion of one Elder (FM2).

Proponent representatives stated their commitment to continuing to work with FMFN to ensure that their TLU and TEK concerns regarding conservation and reclamation are addressed.
1.4.3.6 Traffic

FMFN members are concerned with the amount of traffic and safety on Hwy 63 stating, that it is “…terrible. Traffic is unbelievable” (FM2). Participants indicated that the proposed truck stop/staging area will help reduce the potential impacts on traffic (FM2). Participants also commented that the net reduction in the number of trucks on Hwy 63 as a result of the proximity of the Project to major sites of gravel and cement utilization is a positive aspect of the Project (FM2).

1.4.4 FMFN Traditional Land Use

The proposed Project falls within the traditional territory of FMFN.

1.4.4.1 Travel and Access

A major concern that participants reported is the feeling that they are intruders on their own traditional land, including traplines. FM7 spoke of one instance where she was stopped on her trapline and interviewed by an industry worker as though she had no right to be there. She stated that she was made to feel as though she were an intruder, but instead stated that “they are the intruders” (FM7).

Participants informed facilitators that it is becoming increasingly difficult to navigate traplines because of the number of new cutlines and roads being constructed. FM7 indicated that it is now easy to ‘get lost’ when travelling on the trapline.

Participants indicated that it is becoming increasingly difficult to navigate the Athabasca River due to falling water levels (FM1, FM7). The Athabasca is used for travel between the community of Fort McKay, traplines, traditional settlement areas such as Poplar Point, and cities and towns such as Fort McMurray or Fort Chipewyan. Many people also travel on the river to conduct traditional activities such as hunting, fishing, camping and gathering.

One Elder recalled when he, his brother and his father used dogs for travel on their trapline. He stated that each man had four dogs, and that it was not until the late 1970s that snowmobiles started to become a primary mode of transportation for Aboriginal people in the region (FM1).

1.4.4.2 Hunting

Participants indicated that the northern end of the lease is a popular moose hunting area for Fort McKay members because of its productivity (FM1) and proximity to the community (FM2). FM2 explained that it is a popular hunting location among community members because “you don’t have to go far for moose there. Just a little ways” (FM2). This area is used year-round by hunters from Fort McKay (FM2, FM5).

The trapper who used the area commented that, “Where Syncrude and Suncor [are] was where our hunting grounds was” (FM1).

Elders stated that they used to enjoy bear meat but can no longer do so because bears are consuming
too much garbage (FM1, FM2).

1.4.4.3 Traplines

The area in which the proposed Project is situated was traditionally used by a Métis family. The eldest remaining member of the family currently resides in Fort McKay with his wife. He, along with his siblings, was raised in the area that is now known of as RFMA #1790 (Figure 9). The Cooper family’s use, however, was historically not confined to the RFMA boundaries, but also covered areas north and south of RMFA #1790, as well as the eastern banks of the Athabasca River. The Cooper matriarch held a trapping area from the ‘Help Prevent Forest Fires’ sign to the point just up and across the river from RMFA #1790 (roughly what is now RFMA #1582). He and his wife currently hold RFMA #274 on the Clearwater River (FM1, FM2).

The brothers of the Métis trapping family built the cabins that can now be found on RFMA #1790. The trapline was passed on to the participant’s brother by his father; and to him by his brother. Prior to these cabins, the family used a cabin along the river located just to the south of where Sunset Salvage is now located (Figure 9). The Elder interviewed for this study lived at that cabin as a child; when he was a teenager, the family moved north to RFMA #1790. In the early 1940s, he moved to ‘Mac Island’ (MacDonald Island) in Fort McMurray and he hunted and trapped from there throughout the year. He and his brother each had four-dog sled teams that they used for trapping (FM1).

FM1 explained that trapline regulations led to his trapline being taken away from him. It was his intention to give his trapline to his son, but during the time that he still held a trapline, the government would not let people have a full-time job and hold a trapline license. FM1’s trapping license was not renewed because of his full-time employment, and he was forced to pass ownership of the trapline to his partner at the time. The regulations have since been relaxed, and people now maintain full-time jobs and hold traplines (FM2). Traplines could also only be held by someone 18 years of age or older, which is why FM1’s mother leased RFMA #1582. She took it to pass on to one of her sons (FM1).

1.4.4.4 Camps, Cabins and Settlements

The site visit on July 31st, 2007 allowed FMA facilitators to document and photograph the cabins on the Project lease (Appendix I). The cabins lie within the buffer zone restricting development near the Athabasca River. The cabin site includes two main cabins, a shed, outhouse, garden enclosure, and various associated structures such as smoke houses and drying racks. The cabins are located on RFMA #1790, which is currently held by a non-Aboriginal person, but which used to belonged to a Métis family until “about 20 years ago” (FM1). Participants in this study include three members of the family. The Elder interviewed for this study grew up and lived on the trapline, helped build the cabins, and trapped in and around the lease area (FM1).

In mid-July 2007, an FMA archaeological team documented the cabins visited for this study, and two other “use sites” in the Project lease area. All five of these sites were deemed too recent to be of archaeological significance, and the cabins were undamaged and undisturbed (FMA 2007). Site visits for this study undertaken on July 31st, 2007, however, recorded extensive vandalism to the cabins (Appendix I). Windows were broken, screens were pulled out, and objects associated with the cabins were strewn about both indoors and out. One member of the Métis family, expressed his extreme disappointment at the destruction stating, “…it’s a crying shame” (FM7).
Other camps, cabins and settlements in the region discussed during the study include habitation sites of some “30 families” along on the banks of the Athabasca River between the Project lease and Fort McKay (FM2), one cabin built near the south portion of Project lease area where the sawmill currently operates (FM1, Figure 9), and an historic hamlet of FMFN member families at Moose (Gardiner) Lake (FM2). A number of families that currently reside in Fort McKay used to live in a hamlet at Moose Lake: “…we had a hamlet there… a little settlement. We lived there… I remember” (FM2). Families who lived there include the Harpes, the MacDonalds, the Orrs, the Rollands and the Bouchers. FM2 also stated that the Grandjambes lived in the area, at Sunny River, “about ten miles away” (FM2).

1.4.4.5 Berry-Picking Sites

Berries are an important component of the traditional diet, and were once abundant in the region. When describing the berries that were once available in the Project lease area, one Elder stated that, “Ah, there used to be so much berries there. Oh, just berries, berries, berries. I tell you there was so much berries. Blueberries and cranberries” (FM2). However, participants have observed a decrease in berry populations since oil sands development began (FM2).

Fort McKay residents also used to pick berries along the banks of the Red (McKay) River near Fort McKay. One participant shared that “we used to have lots and lots of berries. We just go in the bush here [from Fort McKay]…all the way out there. All along the edge of the Red River” (FM2). Other types of berries participants used include chokecherries and pincherries” (FM2). FM1 stated that the banks of the Athabasca River used to be lush with berries: “…there [was] always saskatoons and everything. [You could] stop any place on a bank, they were right up there like that” (FM1). Berries were dried or preserved for winter months, and were also used in pies, but berry production has declined since development began in the region (Section 1.3.3.4). As one Elder explained, “My mom canned berries. We would have berries all winter long. We used to bake pies and stuff you know and use it for dessert. Now I don’t think you can even find one berry in this area here” (FM2).

FM7 also reported that chokecherry populations along the banks of the Athabasca River have decreased dramatically in the last 30 years. She recalled that, as a child travelling with her family on the river, her father used to stop at certain places so that they could harvest a branch of chokecherries. She recalls them hanging down ‘like grapes’. She still travels on the river today, but can no longer find productive chokecherry bushes.

1.4.4.6 Consultation

Participants did not express any concerns regarding consultation with respect to the proposed Project. However, one participant did express her concerns surrounding consultation and the meaningful involvement of Aboriginal peoples in the decision-making process in the approval of regional oil sands developments:

What can we say when the government says to go ahead? We have no say. We cannot stop the different companies from doing what they want to do because the government gives them the go ahead... I mean even if we protested. We say, “No, we don't want it.” They will still go ahead and do it anyways. That's what I say when we are at meetings. It's only after, when it's signed sealed and delivered, that you guys let us know, but not before.
We usually don’t get any information about any leases here and there and wherever until it’s all been done and dealt with and getting the approval from the government. Then we know about it. So then, what can we do when the government says, “Go ahead?” We can’t fight the government…. There’s no way (FM2).

1.4.4.7 Compensation

FMFN members feel that they are not being compensated adequately for development in the oil sands region: “…[we] don’t get compensated for all the oil they take from our land” (FM2). One Elder likened the compensation provided by modern companies to that of the trading practices of the historic Hudson’s Bay Company during the fur trade:

The almighty dollar is their God…. It’s just like [when] the Hudson Bay Company first moved in - when the first Europeans came into Canada. They gave us little trinkets. One little trinket, one beaver pelt, and that’s the way it was. They were taking away the fur from the Indian people for one little trinket. And the oil companies are doing the same to us now, you know. They give us a pack of cigarettes, we get a meal, and a measly $150…. You know how much money they take out of our land for oil? ...it’s just about $100 a barrel [for] oil right now (FM2).

Despite being surrounded by development, and contrary to popular belief, Fort McKay is not a rich First Nation. As explained by one Elder, many members are living in poverty:

…believe it or not, I would say about a quarter or maybe a little bit more than that. At least a quarter for sure. The people are so poor, it’s not even funny. You know I’ve been saying this for a long time, and pretty soon I will do it. I will call a journalist from Edmonton Journal and McMurray Today and I’ll bring them to McKay and I’ll have them interview all the poorest people here in Fort McKay. They live in poverty. You don’t know what it’s like, and they’re so poor (FM2).

1.4.4.8 Cumulative Effects on Traditional Land Use

The following quote from a FMFN Elder summarizes community concerns regarding cumulative effects on traditional land use:

This was our land. This was our livelihood, and they destroyed everything we had. They destroyed our water. They destroyed the air. They destroyed the bush. Like they cut all the trees down and chased all the animals away. You know? And we can't just kill a moose anywhere around here close by. You got to go a long way to get a moose because there's no moose around here because there's too many oil companies. Moose is not stupid enough to come around where there are activities going on. They run away from people. You know? Animals run away from people...they're not going to stick around when there are people around. That's why we don't have any fur...(FM2).

1.5 Application Case Assessment

The issues and concerns raised by FMFN participants with regard to existing and Project-specific
effects are summarized into two categories: environmental management and protection and traditional land use. Mitigation recommendations provided by participants are provided as well. Project-specific mitigation measures are noted as such. Other recommendations may need to be addressed at regional or governmental levels.

1.5.1 Environmental Management and Protection

1.5.1.1 Air Quality

Air quality is very important to FMFN community members. Elders have reported links between poor air quality and decreasing animal and berry populations, as being responsible for making regional berry crops inedible, and as adversely affecting human health. Sulphur from storage piles at oil and gas developments is blowing into the community of Fort McKay and is having an impact.

Questions regarding potential impacts associated with the creation of dust from the Project arose, but no mitigation measures were forthcoming.

**FMFN Mitigation Recommendation**

Cover storage piles, including sulphur piles, where there is potential for blow-away.

1.5.1.2 Water Quality and Quantity

Potential impacts to water quality from dust and/or seepage were mentioned by FMFN participants, as were concerns regarding low water levels in the Athabasca River. These issues were discussed directly with the proponent.

**FMFN Mitigation Recommendation**

Following discussions with proponent representatives, no specific mitigation recommendations regarding water quality and quantity were forthcoming from participants.

1.5.1.3 Wildlife and Traffic

FMFN members indicated that the planned truckstop/staging area will help reduce the danger associated with travel on Hwy 63 as a result of industrial traffic. However, there is a concern regarding the number of vehicle-moose collisions, especially near the north end of the Project area.

**FMFN Mitigation Recommendation**

Erect ‘moose’ signs, similar to those found in British Columbia, along Hwy 63 in order to increase awareness and reduce collisions with moose.

1.5.1.4 Wildlife Habitat Conservation and Reclamation

The northern portion of the Project lease was identified as important habitat for moose and beaver.
FMFN members stated that reclaimed wildlife habitat and human recreational land cannot be mixed.

**FMFN Mitigation Recommendation**

Participants recommended that the northern portions of the Project lease be reclaimed to wildlife habitat and that only southern sections of the Project area be reclaimed for recreational purposes.

### 1.5.1.5 Vegetation

Participants noted that berries are no longer abundant in the region, and link this decline to pollution from industry.

**FMFN Mitigation Recommendation**

No mitigation measures were forthcoming.

### 1.5.2 Traditional Land Use

Existing impacts to TLU are considered significant by participants. Regional issues, such as consultation, compensation and cumulative effects are very important to participants and arise in almost every meeting regarding development. In the case of the proposed Project, these issues were discussed by participants. However, no specific suggestions for mitigation were offered. Project-specific issues and mitigation recommendations regarding potential impacts to traditional use are described below.

#### 1.5.2.1 Hunting

FMFN members frequently use the Project lease area, particularly marshy areas in the north of the lease, for moose hunting

**FMFN Mitigation Recommendation**

Structure mining, land use, access and reclamation plans such that the northern areas of the lease can continue to be used for hunting by FMFN members.

#### 1.5.2.2 Vandalism to Cabins

Cabins that are currently on the Project lease, and which were formerly the home to members of FMFN, were found to be vandalised during the July site visit. The trapline and cabins are currently owned by a person who is not a member of FMFN.

**FMFN Mitigation Recommendation**

No mitigation measures were forthcoming from participants.

### 1.6 Cumulative Effects Assessment
The cumulative effects assessment for the application considers existing effects in conjunction with potential Project and future effects. As FMFN perspectives largely address either existing or Project-specific effects, the discussion of potential ‘cumulative effects’ is presented in the Application Case Assessment, which addresses both Baseline and potential Project effects.
1.7 References Cited

1.7.1 Literature Cited


FMA Heritage Resource Consultants Inc. (FMA) 2005d. Traditional Environmental Knowledge


Fort McKay Environment Services Ltd. (FMES) 1997b. Report on Summer Field Reconnaissance to determine the General Composition of Floral and Faunal Groups present in the former Alsands Lease and their Relation to Traditional Resources used by Members of the Community of Fort McKay. Prepared for Shell Canada Ltd. December 1997. Fort McKay, AB.

Fort McKay Environment Services Ltd (FMES). 2000. Welcome to the Community of Fort McKay: An Introduction to Fort McKay by Members of the Community. Fort McKay, AB.

Fort McKay Environmental Services (FMES) and AGRA Earth and Environmental. 1997. Traditional Land Use Study for the Petro-Canada Oil and Gas SAGD Mackay River Project. Fort McKay, AB.

Fort McKay Environmental Services (FMES) and AGRA Environmental. 1998. Traditional Land Use Study for the Shell Muskeg River Mine Project. Fort McKay, AB.

Fort McKay First Nation (FMFN). 1994. There is Still Survival Out There. Fort McKay, AB.


Fort McKay Tribal Administration (FMTA). 1983. From Where We Stand. Fort McKay, AB.

Fox, M. and Ross, W. A. 1979. The Influence of Oil Sands Development on Trapping in the Fort McMurray Region. Alberta Oil Sands Environmental Research Program. Faculty of Environmental Design, University of Calgary. Calgary, AB.


Northern River Basins Study (NRBS) Board (Canada). 1996a. Traditional Knowledge (Section 3.4). Northern River Basins Study: Report to the Ministers. June 1996. Edmonton, AB.

Northern River Basins Study (NRBS) Board (Canada). 1996b. First Nations/Métis Issues Recommendations to the Northern River Basins Study Board (Section 5.2). Northern River


1.7.2 Internet Sites


1.7.3 Appendix I: Photographs of Site Visits
Appendix I  
Graymont Parsons Creek Resources  
Fort McKay First Nation  
Site Visit Photos  
July 31st, 2007

Plate I.1 – Preparation for boat trip
Plate I.2 – Fort McKay Boat Launch

Plate I.3 – “Fire Sign” on east bank of Athabasca River.
Plate I.4 – Island adjacent to north portion of lease; example of moose calving area.

Plate I.5 – Moose calving island.
Plate I.6 – Cabin site from boat.

Plate I.7 – West bank of Athabasca River at cabin site. View north.
Plate I.8 – Photo of cabin 1. Taken by Archaeology crew, mid July, 2007.

Plate I.10 – Trade receipt.