

Within the proposed areas, priority protected areas that target specific purposes (e.g., key habitat, valued harvesting sites) could be developed to preserve traditional land use values and provide areas within which to continue traditional practices. Fort McKay has identified two areas within their TLE lands, Creeburn Lake and Moose Lake, as high priority for 'preservation of culture'. ***It is essential to the Community to have protected areas in close proximity to and easily accessible from the hamlet of Fort McKay.***

There are several constraints to the development of new protected areas:

- Existing and approved projects already cover about 30% of the proposed protected areas (Figure 9-9).
- The remaining land is already fragmented by linear development. Landscape fragmentation is extensive; the current undeveloped area within the proposed protected areas (1,048,608 ha) is fragmented into 3,180 areas/polygons. Only 559 are 100 ha in size or bigger. This constraints the size and ecological integrity of potential protected areas. More linear development is likely as currently there are no limits on linear development.
- A large amount of disturbance is already located near the Community. In fact the Community is surrounded by development with the exception of small areas directly to the west and the southeast of Fort McKay (Figure 9-9).
- Most of the land within the proposed protected areas is already tenured and if developed, up to 78% of the proposed protected area could be lost (Figure 9-10).

The disturbance associated with Shell's proposed Projects would add another 1.5% to the disturbed area within Fort McKay's proposed protected areas. More importantly, Shell's proposed Projects are located near the Community and would further constrain the potential for protected areas to be developed near the Community.

## 9.6 Shell's Proposed Mitigation and Management Measures

Shell's assessment is based on the assumption that reclamation is mitigation for land disturbance impact. While reclamation is necessary and Fort McKay needs to be involved in determining end land uses, Fort McKay does not consider reclamation to be mitigation for lost traditional use opportunities. There are a number of reasons for this perspective including: the time period between disturbance and possible use of reclaimed land by Fort McKay, which is more than one generation and up to several generations of Fort McKay community members; uncertainties regarding potential reclamation success; lack of current technology to reclaim peatlands, which support important traditional resources; potential long-term health, safety and environmental risks (e.g., process-affected seepage, water quality in end pit lakes); and irreplaceable losses (e.g., loss of spirit associated with

the land, loss of specific harvesting sites). Fort McKay has many concerns regarding reclamation and these are discussed in detail in [Section 10 - Reclamation](#).

Shell's stated mitigation measures for access include controlling access to the site (Shell 2007, Volume 5). Site access control is of course essential, however, it does not mitigate the numerous access issues described above. Most of these issues need to be addressed through government policy (see recommendations below).

## 9.7 Overall Conclusions and Recommendations Regarding Disturbance and Access

### 9.7.1 Summary and Conclusions

Prior to oil sands development direct and linear disturbance in Fort McKay's traditional lands was minimal. Access to traditional lands was generally not impeded by industrial development with the exception of the Trapline system that restricted where individuals could trap.

Current and approved developments account for over 188,000 ha of disturbance within Fort McKay's Traditional Lands. This disturbance and access assessment has demonstrated direct and indirect impacts to Fort McKay's key resource harvesting areas (for big game, birds, fish, traditional plants (berries), fur bearers, all traditional uses, and Traplines). Other sections of the Fort McKay Specific Assessment have documented impacts on many specific land-based traditional resources including wildlife [moose populations and habitat, Canada lynx, fisher marten, and beaver ([Section 6 - Wildlife](#))], vegetation communities [including wetlands, uplands, and traditional plants ([Section 7 - Vegetation](#))], fish and fish habitat ([Section 5 - Water Quality and Fisheries Resources](#)) and biodiversity ([Section 8 - Biodiversity](#)).

While Fort McKay uses its entire Traditional Lands there are a few key areas where resource harvesting has been concentrated and these area along the Athabasca River valley and its tributaries, around Gardiner (Moose) and Namur (Buffalo) Lakes, and to a lesser extent the southwest corner of Fort McKay's traditional Lands (near Chipewyan Lake) and in the Birch Mountains (see [Appendix 9-2](#), Figures 1 to 6).

Due to the overlap of the oil sands mineable area and the existing/approved developments with the Athabasca River valley and tributaries, impacts to key resources and Fort McKay's harvesting areas occur disproportionately within areas of high and intense traditional use versus areas of low use, as well as near the Community of Fort McKay and Fort McKay's TLE lands that are located along the Athabasca River. From Fort McKay's perspective this intensifies the impacts to Fort McKay.

In addition to direct loss of land, there is substantial linear development throughout Fort McKay's Traditional Lands as shown in Appendix 9-1 ([Figure 2](#) and [Figure 3](#)),

which fragments the landscape affecting biodiversity, habitat and wildlife populations. There are currently no access management plans in place.

The large disturbances, extensive linear development on the landscape and various other aspects of oil sands development (e.g., noise, odours) significantly adversely affect Fort McKay community member's access to the remaining resources. Traditional trails have been lost. Industrial developments restrict access within active project sites and also substantially impede access to areas on the other side of the development. The huge influx of people into the region causes conflicts and competition for those remaining resources.

Another aspect of access is the changing land use patterns. And the fact that people have to adapt quickly to these. Miles of seismic lines and changing roads, loss of traditional trails, large portions Traplines lost; all of this leads to confusion, frustration and impediments to access the resources that are remaining.

Shell's proposed projects area would add another 22,796 ha of direct disturbance to the 188,893 ha of disturbance from existing and approved developments; following the same pattern of impacts mainly high and moderate use areas. There would also be associated linear disturbance (e.g., pipelines, transmission lines, access roads, new bridge over the Athabasca River etc.) related to the Pierre River Mine. These disturbances would incrementally add to an already adversely affected situation. The proposed Jackpine Mine Expansion would result in additional losses in the Muskeg River watershed, which already has substantial development (see [Section 4 – Surface Water Resources](#) and [Section 5 – Water Quality and Fisheries Resources](#)). In contrast, the Pierre River Mine will impact an essentially pristine area and expand mining development further to north of Fort McKay. Both of these projects are a concern to Fort McKay.

The Planned Development Case is untenable when put in context of an already unacceptable situation. It would add another 67% more disturbance (127,400 ha) as well as expand the extent of oil sands development and linear development as more in-situ projects come into play, particularly in the leases around Moose Lake.

### 9.7.2 Recommendations

Fort McKay's recommendations related to land disturbance and access address two levels of impacts. Project-specific recommendations are aimed at improving the performance of Shell's Projects, in the event they are approved and proceed. The greatest and most of the adverse impacts on Fort McKay arise from the cumulative effects of Shell's Projects combined with other existing, approved and planned projects. The mitigation and accommodation of cumulative effects requires strategies and measures beyond the project-level. The mitigation and accommodation of cumulative effects requires strategies and measures beyond Shell's control or authority (in most cases); they require governmental authority and action. In many cases, Shell can act in concert with other industry or government to implement the cumulative effects recommendations. These two

categories of recommendations overlap because Shell's Projects contribute and form part of the cumulative effects.

With respect to disturbance and access, Fort McKay's recommendations are in keeping with the Community's Healing the Earth Strategy and focus on:

- retaining land for traditional uses;
- retaining existing access;
- improving access that has been negatively affected (e.g., access management);
- reclaiming disturbed land (see [Section 10 – Reclamation](#)); and
- offsets (e.g., protected areas) for land/access that have been adversely affected.

### 9.7.2.1 Project-Specific Recommendations

- A maximum area permitted to be disturbed at any one time at both the Pierre and Jackpine Mine Expansion, should be established with further disturbance being permitted only upon successful reclamation of previously disturbed areas.
- Lease/project specific access management plans be developed to facilitate access of Fort McKay community members to Traplines and other traditional use areas.
- Shell address specific trappers issues related to Fort McKay Community members Traplines that occur within the Jackpine Mine Expansion development area.
- Shell develop with Fort McKay a mitigation and offset plan in relation to the adverse effects and loss of key cultural and traditional use areas that would be affected by the Jackpine Mine Expansion and Pierre River Mine.
- Regulators develop with Fort McKay a mitigation, compensation and accommodation plan in relation to the adverse effects and loss of key cultural and traditional use areas that would be affected by the Jackpine Mine Expansion and Pierre River Mine.

### 9.7.2.2 Cumulative Effects Recommendations

- The regulators should need to ensure that land-uses adjacent to the Community of Fort McKay and Fort McKay's TLE lands are compatible with land-uses identified by Fort McKay and do not adversely impact Fort McKay's lands. In particular, the regulators need to consult with Fort McKay regarding TLE lands that have been identified by Fort McKay, through its internal land use planning process, for preservation of culture (e.g., Moose Lake area, Creeburn Lake) or residential activities (e.g., Community of Fort McKay, proposed new sub-division located near the Muskeg River) to ensure that these lands will not be adversely affected by industrial activity.

- The regulators should establish limits on the amount of development (i.e., ground disturbance) that can occur within the Fort McKay Traditional Lands and oil sands region and any one time.
- The regulators should establish limits on the amount of development (i.e., ground disturbance) and flow changes that can occur within watersheds within Fort McKay's Traditional Lands and the oil sands region at any one time.
- The regulators should establish, in consultation with Fort McKay, protected areas within Fort McKay Traditional Lands that protect a range of traditional uses and values, including the biodiversity necessary to preserve traditional land use. All protected areas need to be accessible to Fort McKay and a portion of protected areas need to be located near the Community.
- The regulators ensure that access management plans are developed within Fort McKay's Traditional Lands, in consultation with Fort McKay including but not limited to areas that have been identified by Fort McKay as high priorities for access management (Moose Lake corridor, East Athabasca Highway Corridor, Richardson Backcountry). Fort McKay should be involved in the implementation of these access management plans.
- The regulators should set limits on motorized access for non-Fort McKay members within Fort McKay's Traditional Lands.
- The regulators should ensure that Fort McKay's access to their traditional lands be restored and maintained in the face of increasing industrial development. This includes preferential access and modes of access for Fort McKay community members, where access may be restricted for non-Fort McKay community members.
- The regulators should set limits the density of linear features that can be allowed within Fort McKay's Traditional Lands at any given time, in consultation with Fort McKay. Density limits would require successful implementation of Integrated Landscape Management (coordination of access features between users) and would prevent further construction of access features once limits are reached.
- The regulators should ensure that access management plans allow appropriate uses within designated areas. For example, designated high-impact recreation areas – given the interest of a component of the Lower Athabasca Region's population in high-impact recreation (e.g., "quad" usage as a motor-sport, rather than as a means of back-country access), and the damage done to ecologically sensitive areas through this mode of recreation, Fort McKay believes that it may be desirable to designate high-impact recreation areas in areas whose ecological function and integrity may already be compromised. Examples of candidate areas might include quarries, gravel pits and mine waste areas.

- Fort McKay should be made aware of economic opportunities arising from recreation and tourism associated with access and/or land use management plans.
- A mitigation, compensation and accommodation plan should be developed in consultation with Fort McKay in relation to the adverse effects and loss of traditional land use opportunities within Fort McKay's Traditional Lands.
- Development of a co-management strategy with Fort McKay for the management of access and protected areas within Fort McKay's traditional lands.

## 9.8 References

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