

# Haste Makes Waste

The Need for a New Oil Sands Tenure Regime

April 2007

OIL SANDS ISSUE PAPER NO. 4



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## **The Need for a New Oil Sands Tenure Regime**

Oil Sands Issue Paper No. 4

**Peggy Holroyd • Simon Dyer •  
Dan Woynillowicz**

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## About the Pembina Institute

The Pembina Institute creates sustainable energy solutions through research, education, consulting and advocacy. It promotes environmental, social and economic sustainability in the public interest by developing practical solutions for communities, individuals, governments and businesses. The Pembina Institute provides policy research leadership and education on climate change, energy issues, green economics, energy efficiency and conservation, renewable energy and environmental governance. More information about the Pembina Institute is available at <http://www.pembina.org> or by contacting [info@pembina.org](mailto:info@pembina.org).



## About the Pembina Foundation

The Pembina Foundation for Environmental Research and Education is a federally-registered charitable organization. The foundation supports innovative environmental research and education initiatives to increase understanding within society of the way we produce and consume energy, the impact on the environment and the consequences for communities, as well as options for the more sustainable use of natural resources. The Pembina Foundation contracts the Pembina Institute to deliver on this work.





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# Haste Makes Waste

## The Need for a New Oil Sands Tenure Regime

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# Haste Makes Waste

## The Need for a New Oil Sands Tenure Regime

### Just the Facts

- The vast majority of Alberta's oil and gas resources are owned by the Crown and managed by the Government of Alberta on the behalf of Albertans. The province leases the right to extract and produce oil sands to private companies, collecting benefits for Albertans through royalties and taxes. The Government of Alberta grants oil companies the initial right to "drill for, win, work, recover and remove" the oil sands.<sup>1</sup> This process is referred to as the oil sands tenure regime.
- The tenure regime for oil sands development is initiated when an oil sands company submits a request to the Department of Energy for a parcel of land to be posted in a public offering. Oil sands rights are then sold to the highest bidder.
- The area of land that has been leased to oil sands companies for exploration and development is growing rapidly. In total, 49,973 square kilometres of land have been leased for oil sands development.
- The granting of oil sands tenures is critical to the way the resource development process manages the future pace, scale and location of oil sands development. However, the existing tenure regime limits the government's ability to effectively manage development since it is not informed by a land use plan, includes no credible environmental assessment and provides no opportunity for public input or comment.



**Oil sands mining operations disrupt vast tracts of land in the boreal region**

Photo: David Dodge, The Pembina Institute

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<sup>1</sup> Government of Alberta, "Oil Sands Tenure," fact sheet for the Alberta Oil Sands Consultation (Calgary, Alberta: Government of Alberta, 2006), <http://www.oilsandsconsultations.gov.ab.ca/docs/Oil%20Sands%20Tenure.pdf>



## Overview of Recommendations

Alberta's oil sands tenure regime needs to be substantially updated to ensure that social and environmental values are reflected in the decision to grant oil sands leases. The Pembina Institute makes the following recommendations to improve Alberta's oil sands tenure regime:

1. The Minister of Energy should implement a moratorium on granting future oil sands rights until the tenure process is changed to reflect economic, environmental and social considerations.
2. Prior to lifting the moratorium, the Ministers of Energy, Environment and Sustainable Resource Development should ensure that land use planning for the oil sands region is completed so that it can inform rights-issuance decisions.
3. The Minister of Energy should adopt changes to the tenure regime to ensure that decisions include:
  - a. environmental assessment (including cumulative impacts) to determine if issuing these oil sands rights is consistent with specific environmental objectives for regional management;
  - b. public notice and opportunities for public comment before tenure decisions are made;
  - c. a public interest decision on whether to grant tenure, based on the information derived from an environmental assessment and public input;
  - d. a review of current tenure requirements, and inclusion of environmental terms and conditions whenever oil sands rights are granted.

For a complete description of the Pembina Institute's recommendations, please refer to the Recommendations section on page 31.



**Operations continue into the evening at the Syncrude oil sands mine**

Photo: David Dodge, The Pembina Institute

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# 1. Introduction

**“We were prepared for sustainable growth, but not the kind of growth that occurred . . .  
It’s not the kind of economy that I would like.  
— Former Premier Ralph Klein, 2006**

**“There’s no such thing as touching the brake . . .  
The economy, growth — that will sort itself out.”  
— Premier Ed Stelmach, 2006**

Large-scale resource extraction of Alberta’s oil sands is proceeding at a feverish pace and on a massive scale. It is exceeding the ability of government regulators and land managers to understand and prevent long-term, irreversible damage to the environment. The challenges of managing the environmental impacts of development are exacerbated by the way the Government of Alberta grants oil companies the initial right to “drill for, win, work, recover and remove” the oil sands. This process, referred to as the oil sands tenure regime, fails to adequately consider environmental impacts and management challenges, and therefore loses a critical opportunity to foresee and proactively manage the cumulative impacts of oil sands development.

The scale and intensity of oil sands development is a key barrier to managing development in ways that avoid irreversible environmental damage and social problems. One of the root causes of these challenges is the Alberta government’s failure to think like an owner. With that mindset, the government would allocate oil sands rights in a way that optimizes benefits to Albertans while also managing the negative impacts of development.

The allocation of oil sands tenures is situated at an opportune time in the development process. It could be used to manage the future pace, scale and location of oil sands development.

Unfortunately, however, the existing tenure regime limits the government’s ability to effectively manage development in a number of ways:

- by granting new tenures without adequate planning (economic, environmental and social/infrastructure) or environmental assessment;
- by failing to adequately and transparently consider the economic, social or environmental implications of future exploration and development activities;
- by failing to provide opportunities for public input;
- by encouraging development through 5-year and 15-year use-it-or-lose-it tenure agreements and through escalating rents, regardless of environmental and social impacts;
- by requiring a minimum level of lease evaluation (geological exploration) without an environmental assessment of the impacts of that evaluation.

The role and responsibility of the Alberta government is to manage oil sands development in a way that protects the environment, minimizes costs, maximizes benefits to Albertans, and provides opportunities for future generations. Although oil sands impacts are already large, 67% of the rights to Alberta’s 149,000 square kilometres of oil sands deposits have not yet been granted. There still exists an important opportunity to ensure that future development proceeds in a more responsible manner. To do so will require reforming how the government plans for and grants oil sands rights.

**From *Wise Words and Wives' Tales*:**

The notion of haste being counterproductive can be traced back at least to the apocryphal *Book of Wisdom* (c. 190 B.C.) by Jesus Ben Sirach, which contained the line, "There is one that toileth and laboureth, and maketh haste, and is so much the more behind." Centuries later, [Geoffrey] Chaucer wrote in *Canterbury Tales* (c. 1387), "In wikked haste is not profit." A longer version of the saying was quoted in John Ray's *A Collection of English Proverbs* (1678): "Haste makes waste, and waste makes want, and want makes strife between the goodman and his wife." [There's] an amusing counterpart in a Chinese proverb on the futility of hurrying — "A hasty man drinks his tea with a fork."

— an excerpt from Stuart Flexner and Doris Flexner, *Wise Words and Wives' Tales: The Origins, Meanings and Time-Honored Wisdom of Proverbs and Folk Sayings Olde and New* (New York: Avon Books, 1993)

In this paper, we seek to explain the oil sands tenure process, to identify the limitations of the current process and the ways in which they contribute to the environmental and social challenges of oil sands development, and finally, to provide recommendations on reforming the oil sands tenure process to ensure that Albertans' expectations of responsible oil sands development can be met.

**Different Symptoms, Same Root Cause**

This report focuses on the failures of the oil sands tenure regime to incorporate environmental values into allocation decisions. The oil sands tenure process represents one of the most striking examples of the breakdown between Alberta's mineral rights allocation regime and environmental management. Although a full review of Alberta's petroleum and natural gas tenure regime is beyond the scope of this paper, the tenure regime is the root of similar conflicts between oil and gas operations and environmental values elsewhere in Alberta.

**Little Smoky and Slave Lake Caribou Herds**

The Alberta Woodland Caribou Recovery Plan, developed to stop the decline in Alberta's woodland caribou herds, identified allocation of oil and gas rights within woodland caribou ranges as a key issue that must be addressed if woodland caribou are to survive in Alberta. The Plan recommended a moratorium on new oil and gas lease sales within the ranges of the critically endangered Little Smoky and Slave Lake caribou herds, until a conservation plan is completed for these caribou ranges.<sup>2</sup> The Alberta Department of Energy has ignored this recommendation.

**Pekisko Landowners Group**

The Pekisko Landowners group has called for a ten-year moratorium on development on the Eastern slope lands of the Pekisko while policymakers consider the effects of cumulative developments in their land use decisions.<sup>3</sup> The group's primary concern is that development continues to proceed without the presence of a plan to protect the ecosystem. The Alberta Department of Energy has exacerbated the conflict by leasing lands for development in the absence of consultation and regional-level planning.

Until the tenure regime can be reviewed and reformed, the government needs to stop granting new oil sands leases. We must rethink the rate of oil sands growth in the context of the stress it places on the region's air, land and water, and the province's infrastructure, economy and social systems. As a precursor to all oil sands development, the oil sands tenure process is a key

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<sup>2</sup> Alberta Woodland Caribou Recovery Team, *Alberta Woodland Caribou Recovery Plan, 2004/05–2013/14*, Alberta Species at Risk Recovery Plan No. 4. (Edmonton, Alberta: Alberta Sustainable Resource Development, 2005).

<sup>3</sup> Pekisko Landowners Group, "Purpose and Specific Goals" (Longview, Alberta: Pekisko Landowners Group, 2006), <http://www.pekisko.ca>

opportunity for managing oil sands growth. A new tenure regime must integrate environmental, social and economic goals as part of all decisions to allocate lands for oil sands development.

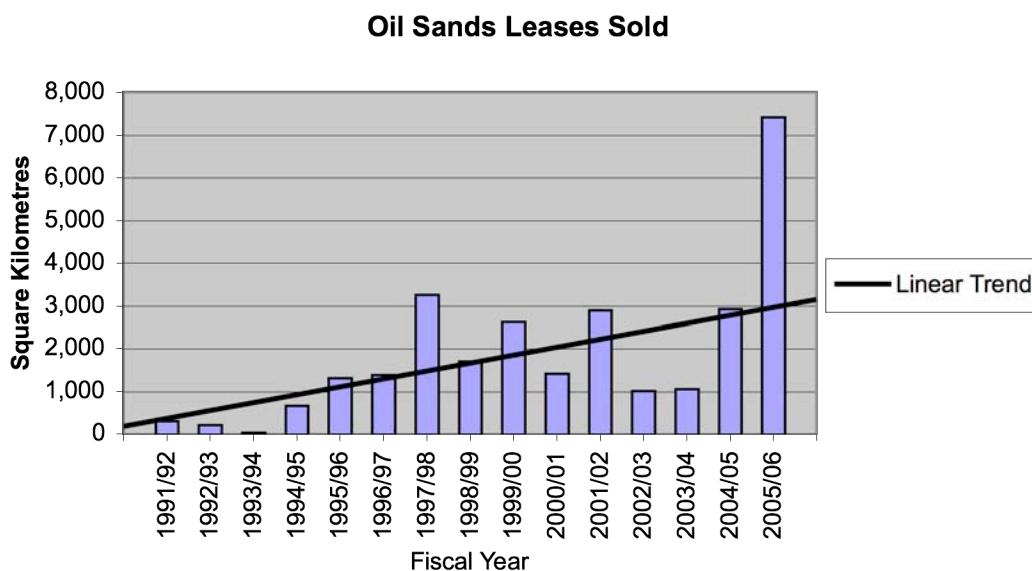
## 1.1 Oil Sands Fever: The Industrial Transformation of Northeastern Alberta

Alberta's boreal forest is under siege due to the growing number of oil companies that are staking claim to the oil sands reserves found below its surface. Public awareness of the environmental consequences of oil sands development is increasing, yet most Albertans remain unaware that the tenure rights process is facilitating the unmanaged pace, scale and intensity of development.

Alberta's current oil sands management framework will result in significant environmental damage and will pose even greater risks if allowed to continue. Although a full description of the current and projected impacts of oil sands development is beyond the scope of this report, some of its environmental and social impacts are outlined here<sup>4</sup>.

### 1.1.1 The Land Rush

The area of land that has been leased to oil sands companies for oil sands exploration and development is growing rapidly, as indicated in Figure 1.1.



**Figure 1.1 Oil Sands Leases Sold by Fiscal Year (1991-2006)**

<sup>4</sup> For a thorough discussion of the major environmental impacts of oil sands development, see the Pembina Institute's 2005 publication, *Oil Sands Fever: The Environmental Implications of Canada's Oil Sands Rush*. Available online at <http://www.oilsandswatch.org>

Since 1991, the province has leased 28,129 square kilometres. 2006 alone saw the disbursement of 15,424 square kilometres.<sup>5</sup> In total, oil sands companies have leased 49,973 square kilometres of land for oil sands development.<sup>6</sup> Once companies secure the rights to the oil sands resource underlying a parcel of land, they begin cutting access roads and seismic lines into the forest and clearing land to drill exploratory wells. Figure 1.2 shows the area leased for oil sands development in northeastern Alberta, as of March 23, 2006.

### 1.1.2 Boreal Forest

Current oil sands mines cover an area of 420 square kilometres,<sup>7</sup> and approvals are already in place for almost 1,000.<sup>8</sup> An area almost four times larger than New York City, approximately 3,000 square kilometres, has been granted for future oil sands strip-mining.<sup>9</sup> The development of existing deeper oil sands leases is predicted to clear an additional 3,000 square kilometres of boreal forest and will require the construction of 30,000 kilometres of roads.<sup>10</sup> Despite nearly 40 years of oil sands development, not a single hectare of land has been certified as reclaimed by the Government of Alberta and returned to Albertans as public land.<sup>11</sup>

### 1.1.3 Wildlife

Woodland caribou in the oil sands region are in steep decline, as a result of the cumulative impacts of development. Under expected oil sands development trajectories, it is projected that woodland caribou will be lost from the oil sands region altogether.<sup>12</sup> Regional-level declines in other fur-bearing mammals — such as lynx, marten and fisher — as well as some forest birds are predicted throughout northern Alberta as a result of the development of existing oil sands leases.<sup>13</sup>

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<sup>5</sup> Department of Energy, “Public Offerings of Crown Oil Sands Rights: Calendar Year 2006” (Calgary, Alberta: Government of Alberta, 2006), [http://www.energy.gov.ab.ca/docs/oilsands/docs/STATS\\_sale\\_2006.xls](http://www.energy.gov.ab.ca/docs/oilsands/docs/STATS_sale_2006.xls)

<sup>6</sup> Department of Energy, “Talk about Tenure: Facts on Oil Sands Tenure” (Calgary, Alberta: Government of Alberta, 2006). Available online at <http://www.energy.gov.ab.ca>

<sup>7</sup> Alberta Department of Energy, “Land Reclamation in Alberta’s Oil Sands Areas,” fact sheet for the Alberta Oil Sands Consultation, (Calgary, Alberta: Government of Alberta, 2006), <http://www.oilsandsconsultations.ab.ca>

<sup>8</sup> Alberta Environment State of the Environment (SOE) website, [http://www3.gov.ab.ca/env/soe/land\\_indicators/41\\_oilsands\\_reclamation.html](http://www3.gov.ab.ca/env/soe/land_indicators/41_oilsands_reclamation.html) Disturbance and approvals areas are for December 2003. This data has not been updated on the Alberta Environment SOE website.

<sup>9</sup> The Pembina Institute, “Death by a Thousand Cuts: Impacts of In Situ Oil Sands Development on Alberta’s Boreal Forest,” fact sheet, (Calgary, Alberta: The Pembina Institute for Appropriate Development and the Canadian Parks and Wilderness Society, 2006).

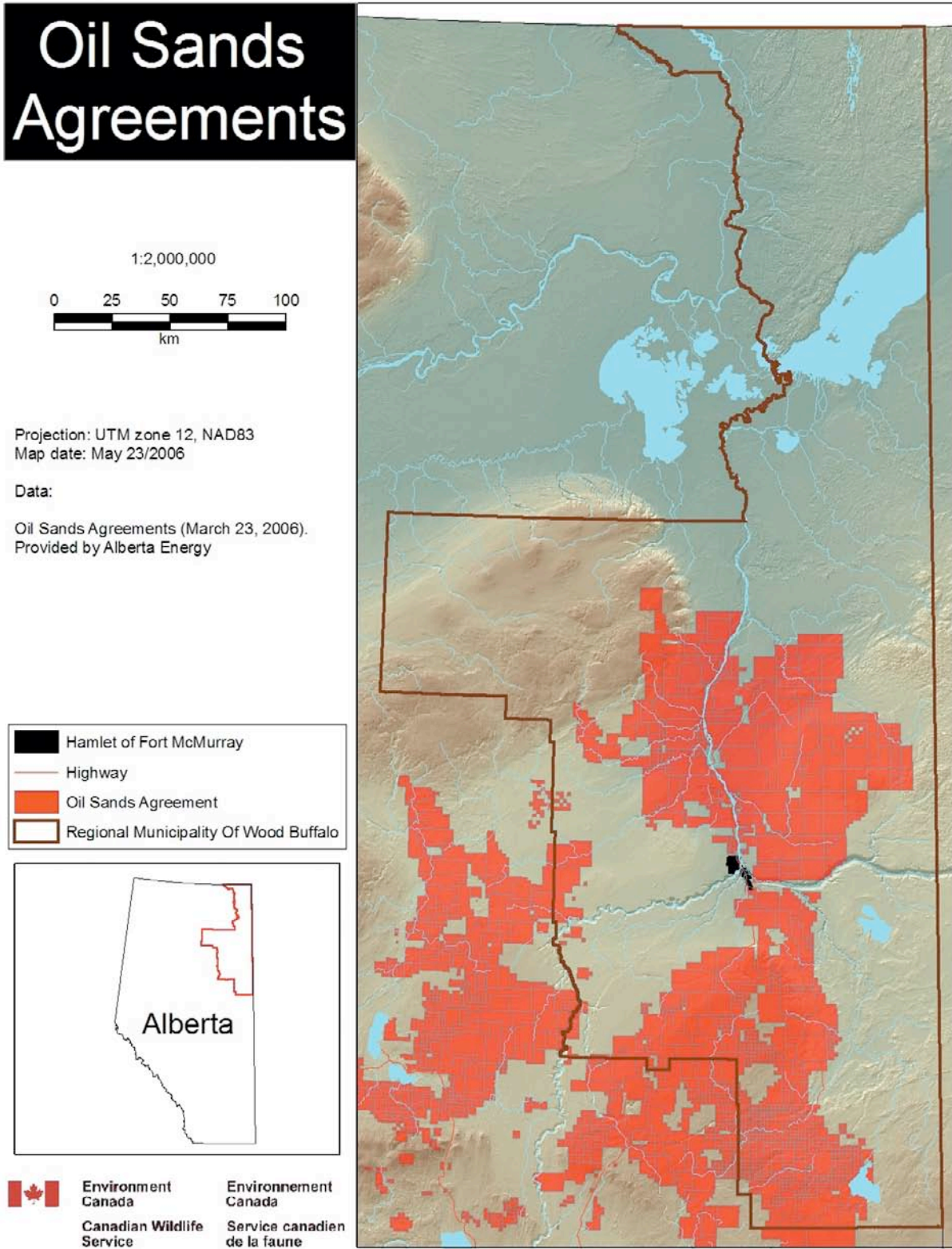
<sup>10</sup> Richard Schneider and Simon Dyer. *Death by a Thousand Cuts: Impacts of In Situ Oil Sands Development on Alberta’s Boreal Forest* (Calgary, Alberta: The Pembina Institute for Appropriate Development and the Canadian Parks and Wilderness Society, 2006), 14.

<sup>11</sup> Alberta Environment State of the Environment (SOE) website, [http://www3.gov.ab.ca/env/soe/land\\_indicators/41\\_oilsands\\_reclamation.html](http://www3.gov.ab.ca/env/soe/land_indicators/41_oilsands_reclamation.html)

<sup>12</sup> Schneider and Dyer, 14.

<sup>13</sup> Ibid. 14.





**Figure 1.2 Oil Sands Agreements (March 23, 2006)**

Source: Government of Canada, 2006. Imperial Oil Kearl Oil Sands Project Hearing in Fort McMurray, Alberta

### 1.1.4 Air Quality

Oil sands operations are some of the largest contributors to air pollution in Canada. Alberta emits more industrial air pollutants than any other province in Canada. According to PollutionWatch, Alberta industry emitted more than one billion kilograms of air pollutants in 2003.<sup>14</sup> Significantly, these pollutants include acidifying emissions such as NO<sub>x</sub> and SO<sub>x</sub>, which have adverse effects on forests, freshwaters, soils and human health. The emissions associated with existing and proposed oil sands developments are expected to result in acid deposition that exceeds critical loads for more than 500 square kilometres of forest lands in northeastern Alberta.<sup>15</sup>

### 1.1.5 Fresh Water

It takes 2–4.5 barrels of water to extract and upgrade a single barrel of bitumen from an oil sands mine<sup>16</sup> and 0.17–0.76 barrels of water to extract a barrel of bitumen through steam-assisted extraction of deep oil sands (including recycling).<sup>17</sup> Approved oil sands mining operations are licensed to divert 349 million cubic metres of fresh water from the Athabasca River per year; they are expected to increase to more than 500 million cubic metres per year if proposed projects are also approved.<sup>18</sup>

During some winter periods, flow in the Athabasca River is low enough to impact fish habitat and fish populations.<sup>19</sup> Oil sands companies are currently allowed to continue withdrawing water even when river levels are dangerously low. Current and proposed projects would be responsible for withdrawing up to 15.7% of the river flow during low flow periods.<sup>20</sup>

Despite bitumen production projections of three million barrels per day by 2015,<sup>21</sup> there has been no regional assessment of groundwater availability to determine whether the water requirements of this rapidly expanding industry can be met.

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<sup>14</sup> PollutionWatch, “Alberta Pollution Highlights,” fact sheet, (Toronto, ON: PollutionWatch, October, 2005), [http://www.pollutionwatch.org/pressroom/factSheetData/PollutionWatch Alberta Overview 2003 - FINAL.pdf](http://www.pollutionwatch.org/pressroom/factSheetData/PollutionWatch%20Alberta%20Overview%202003%20-%20FINAL.pdf)

<sup>15</sup> Albian Sands Energy Inc., “Shell Albian Muskeg River Mine Expansion Application for Approval,” (no. 1398411), (Fort McMurray, Alberta: Albian Sands, 2005), Appendix 2-15.

<sup>16</sup> Mary Griffiths et al, *Troubled Waters, Troubling Trends. Technology Options to Reduce Water Use in Oil and Oil Sands Development in Alberta* (Calgary, Alberta: The Pembina Institute for Appropriate Development, 2006), 16.

<sup>17</sup> Ibid, Table 3.1.

<sup>18</sup> Golder Associates Ltd., *A Compilation of Information and Data on Water Supply and Demand in the Lower Athabasca River Reach*, prepared for the Cumulative Environmental Management Surface Water Working Group, (Calgary, Alberta: Golder Associates Ltd., 2005).

<sup>19</sup> Alberta Department of Environment, *An Interim Framework: Instream Flow Needs and Water Management System for Specific Reaches of the Lower Athabasca River* (Edmonton, Alberta: Government of Alberta, 2006).

<sup>20</sup> Imperial Oil Limited, “Imperial Kearl Oil Sands Mine Application,” (no. 1408771 & 1414891, volume 4), (Calgary, Alberta: Imperial Oil Ltd., 2005), 3–31.

<sup>21</sup> National Energy Board, *Canada’s Oil Sands. Opportunities and Challenges to 2015: An Update* (Calgary, Alberta: National Energy Board, 2006), viii, [http://www.neb.gc.ca/energy/EnergyReports/EMAOilSandsOpportunitiesChallenges2015\\_2006/EMAOilSandsOpportunities2015Canada2006\\_e.pdf](http://www.neb.gc.ca/energy/EnergyReports/EMAOilSandsOpportunitiesChallenges2015_2006/EMAOilSandsOpportunities2015Canada2006_e.pdf)

### 1.1.6 Climate Change

The greenhouse gas intensity associated with the production of synthetic crude oil from oil sands is approximately three times higher than the amount of emissions associated with the production of conventional crude oil.<sup>22</sup> Annual greenhouse gas emissions from oil sands plants in 2007 are expected to be 39.3–41.4 million tonnes of CO<sub>2</sub> equivalent.<sup>23</sup> The oil sands are projected to be the single largest contributor to the increase in greenhouse gas emissions in Canada.<sup>24</sup>

### 1.1.7 Social Costs

A striking component of Alberta's current boom is the way in which it appears to have caught the Alberta government unaware, particularly with respect to the social costs associated with the pace and intensity of oil sands development and its strain on infrastructure, housing and social services. At the recent public oil sands hearings, the President of the Alberta Federation of Labour argued,

They should have seen this coming nine years ago, when the energy industry convinced them to adopt the now infamous one-penny-on-the-dollar royalty that was explicitly designed to set off an investment rush . . . Essentially the government allowed the oil industry to write its own ticket and when they did that, it was like putting our economy on steroids.<sup>25</sup>

While the “steroids” have worked in the short term, we are beginning to see their long-term effects. There is currently considerable debate about whether the present rate of economic growth is desirable, or whether some of the negative aspects associated with rapid oil sands development outweigh the incremental economic benefits.

Although many of the negative social effects of oil sands growth are seen throughout the province, the Regional Municipality of Wood Buffalo (RMWB), which includes the city of Fort McMurray, suffers the greatest strain. In 2006, the municipality took the extraordinary step of intervening in three oil sands regulatory hearings, seeking a delay in oil sands project approvals to allow infrastructure to catch up. Social impacts are expected to worsen as increasing numbers of oil sands companies develop projects based on current oil sands leases.

In February 2007, the Alberta government committed to spend \$396 million over three years on housing and infrastructure needs in Fort McMurray.<sup>26</sup> This spending will target the infrastructure and social services deficit that has resulted from current oil sands activity. However, it will not

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<sup>22</sup> Dan Woynillowicz et al, *Oil Sands Fever: The Environmental Implications of Canada's Oil Sands Rush* (Calgary, Alberta: The Pembina Institute for Appropriate Development, 2005), 22.

<sup>23</sup> The Pembina Institute, *The Climate Implications of Canada's Oil Sands Development: Background* (Calgary, Alberta: The Pembina Institute for Appropriate Development, 2006), 5. Available online: [http://www.pembina.org/publications\\_item.asp?id=213](http://www.pembina.org/publications_item.asp?id=213). This publication includes projected emissions (low and high projections) associated with each oil sands project, and the associated assumptions and caveats for the projections.

<sup>24</sup> *Ibid*, 3.

<sup>25</sup> Gil McGowan, speech to the Oil Sands Hearing (Calgary, Alberta: September 27, 2006).

<sup>26</sup> Government of Alberta, “Funding Helps Meet Urgent Needs in the Oil Sands,” press release, February, 26 2007. <http://www.gov.ab.ca/home/index.cfm?page=1553>

address the city's future needs. To date, the Government of Alberta has not implemented a plan to prevent similar deficits from accruing from new oil sands development.

### **Alberta Oil Sands Tenure**

Of the 149,420 square kilometres of oil sands deposits in the province, approximately 3,224 oil sands lease agreements are in place, totaling 49,973 square kilometres.<sup>27</sup> While an area greater in size than Vancouver Island has already been leased, close to 67% of the area underlain by oil sands is still to be set to be disposed of under the current tenure framework.<sup>28</sup>

In assessing the impact of oil sands development, the RMWB has identified several important social indicators:<sup>29</sup>

- Population growth in the RMWB has averaged 9.3% per year from 1999–2006. Healthy growth rates are typically estimated at 1%–3% per year.
- Fort McMurray has a shortage of 4,000 dwelling units. This situation worsens as new project demands exceed the rate of new home construction.
- The RMWB has the highest debt ratio of any municipality in Alberta. Its critical infrastructure needs include water treatment and wastewater treatment plants as well as educational and recreational facilities.
- Quality of life in Fort McMurray is deteriorating. According to the RMWB, it is deficient in 70 of the 72 quality-of-life indicators identified by the Federation of Canadian Municipalities.

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<sup>27</sup> Department of Energy, “Talk about Tenure: Facts on Oil Sands Tenure” (Calgary, Alberta: Government of Alberta, 2006). Available online at <http://www.energy.gov.ab.ca>

<sup>28</sup> Ibid.

<sup>29</sup> Regional Municipality of Wood Buffalo, Submission of Intervention of Regional Municipality of Wood Buffalo, (Joint Panel Hearing of Applications, Imperial Kearn Oil Sands Project, no. 1408771 & 1414891), (Calgary, Alberta: Regional Municipality of Wood Buffalo, 2006).

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## 2. Granting Oil Sands Rights to Companies: The Process

The vast majority of Alberta's oil and gas resources are owned by the Crown and managed by the Government of Alberta on the behalf of Albertans. The province leases the right to extract and produce oil sands to private companies, collecting benefits for Albertans through royalties and taxes. In the oil sands region, the province manages 97% of mineral rights; the other 3% are privately owned.<sup>30</sup>

After the Government of Canada transferred mineral rights to the province in the 1930s, Alberta developed the oil and gas tenure regime as the regulatory framework to facilitate investment and development of its oil sands resources.<sup>31</sup> Alberta's earliest tenure legislation for surface-mineable oil sands was established for the area near Fort McMurray in the 1950s. Under this tenure legislation, the province granted 3-year exploration agreements that could be converted to 21-year leases.<sup>32</sup> Changes to the tenure process in the 1970s and 1980s were driven by a desire to increase oil and gas activity in the province and to stimulate economic growth.<sup>33</sup>

Alberta issues subsurface mineral rights separately from surface access rights or land ownership, although the issuance of subsurface rights does heavily influence the issuance of accompanying surface rights. Three legal instruments together form the subsurface mineral tenure regime for oil sands: The Mines and Minerals Act, the Oil Sands Tenure Regulation, and the Mines and Minerals Administration Regulation. Under the Mines and Minerals Act, the Department of Energy grants legal tenure rights to Alberta's oil sands deposits.

### 2.1 The Oil Sands Auction: Posting and Bidding on Oil Sands Rights

The tenure regime for oil sands development is initiated when an oil sands company or individual submits a request to the Department of Energy for a parcel of land to be posted in a public offering.<sup>34</sup> The Department of Energy then conducts an internal review to determine whether the oil sands rights are available.

If they are, the request is passed to the Crown Mineral Disposition Review Committee (CMDRC) for recommendations. The CMDRC's "responsibility is to review surface access restrictions relating to the requested lands, and to provide the Department with full information

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<sup>30</sup> Department of Energy, "A Brief History," in *Alberta Oil Sands Tenure Guidelines*: (Calgary, Alberta: Government of Alberta, 2006), 1. [http://www.energy.gov.ab.ca/docs/oilsands/pdfs/GDE\\_ost.pdf](http://www.energy.gov.ab.ca/docs/oilsands/pdfs/GDE_ost.pdf)

<sup>31</sup> Ibid. 1-6.

<sup>32</sup> Ibid. 1-6.

<sup>33</sup> Department of Energy, "Alberta Oil and Gas Tenure," brochure, (Calgary, Alberta: Government of Alberta, 2005), [http://www.energy.gov.ab.ca/docs/tenure/pdfs/tenure\\_brochure.pdf](http://www.energy.gov.ab.ca/docs/tenure/pdfs/tenure_brochure.pdf)

<sup>34</sup> Alternatively, a company may also apply for a direct purchase of oil sands rights although it is not clear how often this occurs. Department of Energy, *Alberta Oil Sands Tenure Guidelines: Principles and Procedures* (Calgary, Alberta: Government of Alberta, 2006), 2-11.

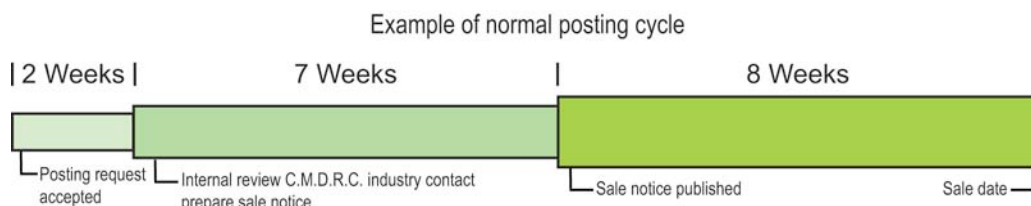


on the nature of the restriction.”<sup>35</sup> The CMDRC initiates an interdepartmental review to identify broad scale surface access or environmental concerns on Crown land, in accordance with current provincial environmental and land use policies related to the surface location. At this stage in the tenure process, the CMDRC is the only group responsible for informing the Department of Energy about potential environmental or social issues associated with the surface location.

**About the CMDRC**<sup>36</sup>

The CMDRC was officially established in 1974 under the Land Surface Conservation and Reclamation Act and continue under the authority of Section 10(2) of the Environmental Protection and Enhancement Act in 1993. Current membership of the Committee is made up of representatives from the Department of Sustainable Resource Development, the Department of Environment, the Department of Tourism, Parks Recreation and Culture, the Department of Energy and the Department of Municipal Affairs and Housing.

After the Department of Energy has decided whether to post the requested parcel, it informs the company that requested the posting. If the company wants to proceed, the government posts a notice of public offering eight weeks in advance of the sale. Depending on what information it has received from the CMDRC, the Department of Energy may append a brief general statement to the public offering notice — “surface access is subject to specific restrictions,” for example, or “is/are within an important caribou range.”<sup>37</sup> In these cases, the interested bidder can contact the government to receive more details about any restrictions. Although these public offerings are referred to as land sales, what takes place is not technically a sale: land ownership continues to be held by the Crown; companies purchase the rights to the land, not the land itself.



**Figure 2.1 The Posting Cycle**

Source: Adapted from the Department of Energy, “Alberta Oil and Gas Tenure,” brochure, (Calgary, Alberta: Government of Alberta, 2005).

To bid on oil sands rights, companies must have an Electronic Transfer System (ETS) account. ETS gives users access to a web-based posting and bidding system. Companies submit bids electronically by 12:00 p.m. on the day of the sale. The oil sands rights are leased to the highest bidder in exchange for payment.<sup>38</sup> The names of successful bidders and the amount paid for each land parcel are published on the Alberta Department of Energy website soon after the conclusion

<sup>35</sup> Department of Sustainable Resource Development, “CMDRC — Crown Mineral Disposition Review Committee” (Calgary, Alberta: Government of Alberta, 2004), [http://www.srd.gov.ab.ca/land/u\\_oilgas\\_exp\\_cmdrc.html](http://www.srd.gov.ab.ca/land/u_oilgas_exp_cmdrc.html) (accessed March 5, 2007)

<sup>36</sup> Confirmed by Department of Energy, personal communication. February, 2007.

<sup>37</sup> Department of Energy, “Public Offering of Crown Oil Sands Rights, Addenda and Contacts Applicable to the 2006, September 06 Public Offering Notice” (Calgary, Alberta: Government of Alberta, 2006), <http://www.energy.gov.ab.ca/FTPOS/20060920OON.pdf>

<sup>38</sup> Department of Energy, *Alberta Oil Sands Tenure Guidelines: Principles and Procedures* (Calgary, Alberta: Government of Alberta, 2006).

of the bidding process.<sup>39</sup> For competitive reasons, oil sands companies occasionally bid and acquire oil sands rights using names or numbers that hide their identity — making it impossible for competitors and the public to know which company is acquiring the rights.

## 2.2 Tenure Agreements

The tenure agreement awarded to the winning bid by the Department of Energy carries with it the expectation that the company will either evaluate the oils sands reserve or produce oil. Tenure agreements grant oil sands companies “the exclusive right to drill for, win, work, recover and remove oil sands.”<sup>40</sup> Agreements do not include surface access rights, although access is required to exercise the right to access the mineral. The Surface Rights Act and Public Lands Act require tenure holders to obtain landowner approval before accessing the land to exercise their rights.<sup>41</sup>

### Oil Sands Tenures in Alberta

As of September 30, 2006, the Alberta Department of Energy was administering 3,244 oil sands agreements. The province issued an average of 220 oil sands agreements annually, between 2001 and 2006.<sup>42</sup>

There are two types of oil sands agreements:

1. Permits that run for five years and can be converted to leases.
2. Leases that run for 15 years and can be continued indefinitely past their initial term.

Permits were used more often in the 1990s when there was little previous evaluation of oil sands resources, but leases are the primary tenure instrument today.<sup>43</sup> To continue a lease, a company must either produce oil, or sufficiently evaluate the oil sands deposits and report on the amount of oil sands reserves.<sup>44</sup> Since 2000, an escalating annual rent is charged for all continued oil sands leases that do not meet a minimum level of production. Escalating rent values differ for different oil sands zones (see Figure 2.2). The annual rent is \$3.50 per hectare or \$50 in total,

<sup>39</sup> Ibid.

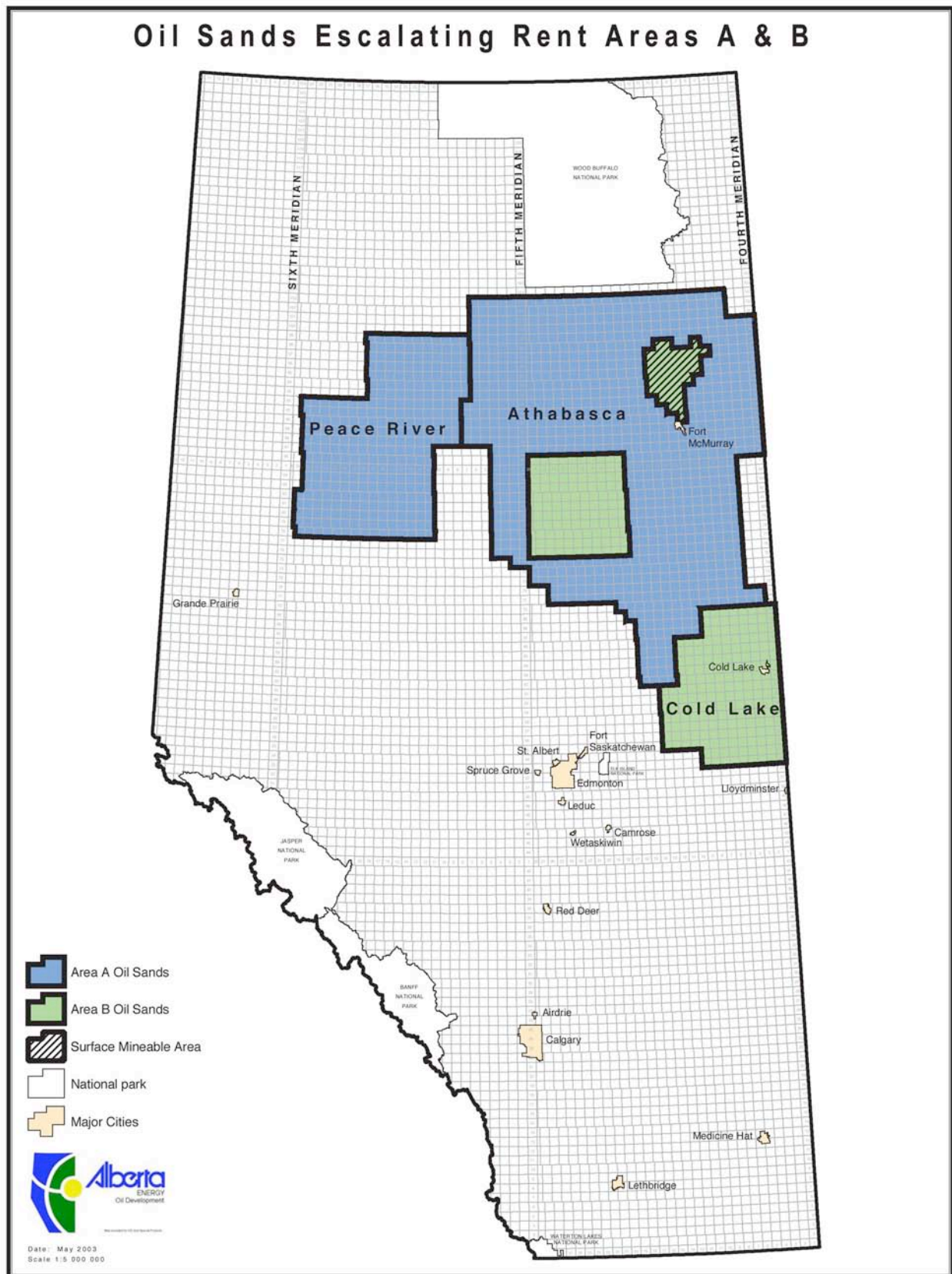
<sup>40</sup> Michael Wenig and Michael Quinn, “Integrating the Alberta Oil and Gas Tenure Regime with Landscape Objectives — One Step Towards Managing Cumulative Effects,” in *Access Management: Policy to Practice* (Calgary, Alberta: Alberta Society of Professional Biologists, 2003); Government of Alberta, “Oil Sands Tenure Regulation” (Calgary, Alberta: Government of Alberta, 2000).

<sup>41</sup> Public Lands Act, R.S.A. 2000, c. P-40

<sup>42</sup> Department of Energy, “Talk about Tenure: Facts on Oil Sands Tenure” (Calgary, Alberta: Government of Alberta, 2006). Available online at <http://www.energy.gov.ab.ca>

<sup>43</sup> Department of Energy, *Alberta Oil Sands Tenure Guidelines: Principles and Procedures* (Calgary, Alberta: Government of Alberta, 2006), 3-3.

<sup>44</sup> Ibid.



**Figure 2.2 Oil Sands Escalating Rent Areas**

Source: Courtesy of Alberta Department of Energy

whichever is higher. Escalating rent costs are charged to any non-producing leases, but they can be offset by research, development or exploration costs.<sup>45</sup>

The Department of Energy reviews continuation applications for leases and lease selections from permits to determine whether the required minimum level of evaluation (MLE) has been achieved. The MLE involves proof of exploration or production activities. The Oil Sands Tenure Regulation 50/2000 generally requires that companies: drill one evaluation well per section (per square mile) or drill one evaluation well in not less than 60% of the lease; obtain and submit data to Department of Energy from the oil sands zone(s) by coring at least 25% of the evaluation wells; and explore the remainder with 3.2 kilometres of seismic lines per section in order to continue to hold the lease.<sup>46</sup>

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<sup>45</sup> Ibid.

<sup>46</sup> Department of Energy, Oil Sands Tenure Regulation 50/2000 (Calgary: Government of Alberta, 2004), section 3.





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# 3. Problems with the Tenure Allocation Process

When oil sands tenure is granted to an oil sands company, it begins a chain of events that have environmental impacts and management implications, and that influence future regulatory decisions about oil sands development. The rate at which oil sands rights are issued drives the pace at which exploration and future development activities take place. Consequently, decisions about whether and under what conditions to grant oil sands tenure represent the first and most critical opportunity for the government to consider where, when and how quickly oil sands exploration and development activity will take place, and whether these activities are in the public interest.

This section describes the six key problems in the Department of Energy's current oil sands tenure process:

1. A narrow policy objective of maximizing oil sands development and revenue.
2. The absence of environmental objectives or a land use framework to guide tenure decisions.
3. A failure to consider environmental impacts when granting oil sands rights.
4. Inadequate opportunity for public input into decisions to grant oil sands rights.
5. Lack of consideration of the public interest in decisions to grant oil sands rights.
6. Incentives and requirements that increase development pressure in the absence of cumulative environmental assessment

## 1. A narrow policy objective of maximizing oil sands development and revenue

The Department of Energy appears focused on maximizing oil sands development, often in contradiction of Government of Alberta policy commitments to sustainable development principles. In 1999, the Government of Alberta released its Commitment for Sustainable Resource and Environmental Management (SREM) and published the 1999 landmark document, *Alberta's Commitment to Sustainable Resource and Environmental Management*. In that document, the government asserted that "environmental decisions will take into account economic impacts and economic decisions will reflect environmental impacts."<sup>47</sup>

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<sup>47</sup> Government of Alberta, *Alberta's Commitment to Sustainable Resource and Environmental Management* (Calgary, Alberta: Departments of Energy, Environment and Sustainable Resource Development, September 1999), 4.

**Cross-Ministry Principles of SREM (2005)<sup>48</sup>**

- **Using a strategic, systems approach** driven by clear, concrete, agreed-upon outcomes and based on a sound understanding of our resources and environment, an effective management system and collaboration among citizens, business, communities and governments, working together and taking joint responsibility.
- **Practicing resource and environmental stewardship** where citizens, industry and communities are expected to follow a stewardship ethic in carrying out their affairs.
- **Seeking and adopting a government-wide vision and goals** with shared implementation across ministries.
- **Sharing responsibility** whereby Albertans and their government work together as resource and environmental stewards.
- **Adopting place-based approaches** in which the environment, the economy and communities are treated as a whole in a way that establishes clear goals and addresses cumulative effects.
- **Developing flexible regulatory and non-regulatory tools** including a comprehensive set of legislation, policies and strategies.
- **Continuous improvement** whereby the Alberta government, departments and agencies, will monitor, review and make changes to improve on an on-going basis.

In September 2005, the three lead resource management departments — the Departments of Energy, Environment, and Sustainable Resource Development — reaffirmed their commitment to SREM, establishing the goal to become “the best resource and environmental managers in the world.”<sup>49</sup> Their shared commitment was intended to improve communication between departments and to integrate their decisions on resource and environmental management.<sup>50</sup>

Unfortunately, the oil sands tenure process has not been updated or modified to make it consistent with the objectives and principles of the SREM commitment. Although largely a determinant of landscape change from industrial activity, the oil sands tenure process is managed by the Alberta Department of Energy in isolation from both the Department of Environment and the Department of Sustainable Resource Development. Table 3.1 clarifies the authority of each department in throughout the oil sands development process.

<b>Oil Sands Development Activities and Regulatory Authorities</b> Energy and Utilities Board (EUB), Sustainable Resource Development (SRD), Department of Energy (DOE), Alberta Environment (AE)		
Predrilling and Exploration	Seismic Activity	AE & SRD
	Mineral Exploration	AE & SRD
	Surface Access	
Mineral Rights Disposition	Crown Rights	DOE
	Private Rights	Private Contract
Development & Production	Field Activity	EUB, AE & SRD
	Technical	EUB
	Rights Management	DOE
	Revenue Collection	DOE

<sup>48</sup> Government of Alberta, *Our Commitment to Sustainable Resource and Environmental Management* (Calgary, Alberta: Departments of Energy, Environment and Sustainable Resource Development, September, 2005).

<sup>49</sup> Government of Alberta, Sustainable Resource and Environmental Management homepage (2006), <http://www.srem.gov.ab.ca/> (accessed March 12, 2006)

<sup>50</sup> Ibid.

<b>Oil Sands Development Activities and Regulatory Authorities</b> Energy and Utilities Board (EUB), Sustainable Resource Development (SRD), Department of Energy (DOE), Alberta Environment (AE)		
	Environmental Regulation	AE, SRD & EUB
Processing & Transportation	Pipelines	EUB & AE
Well Abandonment	Physical	EUB & AE
	Reclamation	AE & SRD

**Table 3.1 Oil Sands Development Activities and Regulatory Authorities**

## **2. The absence of environmental objectives or a land use framework to guide tenure decisions**

In order to effectively assess the environmental impacts of oil sands development — ranging from exploration through to project development — the government needs to be clear about its objectives. Without ecological objectives and a management framework in place to guide government decisions about additional oil sands development, the ongoing approval of new oil sands mines and in situ projects risks exceeding the ecological limits before they are even identified.

In 1999, the province recognized that these environmental objectives had to be identified and that environmental management frameworks had to be implemented to ensure that government decisions about oil sands development were consistent with its SREM commitment. In the same year, it initiated the Regional Sustainable Development Strategy (RSDS) with the intent of developing frameworks for environmental management in the Athabasca oil sands region, which are to be implemented by the Government of Alberta.<sup>51</sup> To develop these frameworks, a multi-stakeholder consensus organization, the Cumulative Environmental Management Association (CEMA), was created in 2000.<sup>52</sup>

A CEMA subgroup, the Sustainable Ecosystems Working Group (SEWG), was formed with a mandate to identify the boreal forest's ecological limits (including its wildlife) and to develop an environmental management framework to manage the cumulative environmental impacts on the landscape. Initially targeted for completion in 2002, the deadline was deferred to 2004. To date, the group has not provided its recommendations.<sup>53</sup> It is expected now that recommendations will not be made before 2008.<sup>54</sup>

In addition to the absence of an environmental management framework, the Alberta government also lacks a land use plan for the oil sands region. Land use plans would help inform decisions at all stages of resource development, from the Department of Energy's oil sands tenure process to

<sup>51</sup> Government of Alberta, "Regional Sustainable Development Strategy for the Athabasca Oil Sands Area" (Calgary, Alberta: Departments of Environment and Sustainable Resource Development, July 1999), 1. <http://www3.gov.ab.ca/env/regions/neb/rsds/>

<sup>52</sup> Members of CEMA represent First Nations, government, industry and non-governmental organizations. For more information, see <http://www.cemaonline.ca/>

<sup>53</sup> Cumulative Environmental Management Association, "CEMA Schedule Compared to Oil Sand Development Profiles" and "CEMA Five-Year Strategic Plan – Summary of Working Group Activities" (Fort McMurray, Alberta: CEMA, 2002 and 2004).

<sup>54</sup> Cumulative Environmental Management Association Sustainable Ecosystems Working Group, briefing presentation to Alberta Department of Sustainable Resource Development, 2006.

specific oil sands project approvals by the EUB and the Department of Environment. There is a Subregional Integrated Resource Plan for the Fort McMurray Athabasca Oil Sands Areas, created in 1996 and amended in 2002, but it includes only broad and non-measurable goals to encourage oil sands development while minimizing environmental impacts. It also fails to address the oil sands tenure regime and is now significantly out of date. British Columbia's land use planning and pre-tenure planning processes could serve as useful models for how to identify and implement ecological limits to manage cumulative impacts.

### **Pre-Tenure Assessment and Planning Integrates Surface Considerations with the Mineral Rights Process**

The first legislated example of pre-tenure assessment took place in British Columbia where conflict over resource development led the province to initiate a unique community-based process for land management.<sup>55</sup> In 1995, the Land and Resource Management Planning process created multi-stakeholder forums with mandates to design regional land use plans, and set conservation and resource-use objectives. The first pre-tenure plans were developed in the Muskwa-Kechika Management Area, located in northeastern British Columbia, which includes areas with oil and gas potential within the Western Sedimentary Basin.

Legislated through the Muskwa-Kechika Management Area Act, the pre-tenure plans are intended to guide the environmentally and socially responsible development of oil and gas in the region. Five of seven pre-tenure plans have been completed within the Muskwa-Kechika Management Area.

The pre-tenure plans are driven by a results-oriented process in which key indicators are monitored to meet a management objective. The objectives are broad statements about the future condition of a value, measured by indicators. For example, if an objective was to restore disturbed areas to pre-development conditions, the indicators might be the proportion of area restored and the amount of non-native species present.

Thresholds, called management targets, are applied to the indicators. These targets are numeric limits or development requirements that may be reviewed given new information and monitoring. Thresholds for key indicator species can be measured by the number of hectares disturbed within a particular habitat class.<sup>56</sup> The developers within an area must work together to minimize their land disturbance and keep within the thresholds.

In 2005, the Alberta government released the draft Mineable Oil Sands Strategy (MOSS). The MOSS draft claims that “this policy shifts from managing all resources in the mineable oil sands area with equal weight to placing higher priority on extracting mineable oil sands.”<sup>57</sup> The draft effectively said that MOSS would give preference to oil sands development over other land uses, and was released prior to the identification of land disturbance thresholds to protect environmental values in the broader region. In response to public outcry, the government put MOSS on hold and initiated a public consultation process in the Fall of 2006. It is due to be completed by June 30, 2007.<sup>58</sup>

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<sup>55</sup> R. McManus Consulting Ltd. and Salmo Consulting Inc., *Muskwa-Kechika Case Study* (Calgary, Alberta: National Round Table on the Environment and the Economy, 2004).

<sup>56</sup> Government of British Columbia, “Pre-Tenure Plans for Oil and Gas Development in the Muskwa-Kechika Management Area” (B.C.: Ministry of Sustainable Resource Management, 2004).

<sup>57</sup> Government of Alberta, “Draft Mineable Oil Sands Strategy — MOSS” (2005), <http://www.energy.gov.ab.ca/3005.asp>

<sup>58</sup> For more information on the status of the Government of Alberta's oil sands public consultation, see <http://www.oilsandsconsultations.gov.ab.ca>

Recognition of emerging land use conflicts and concerns about changes to Alberta landscapes has driven the Alberta government to commit to develop and deliver a Land Use Framework for the province. The Land Use Framework is intended to be “a plan to manage land, resources, and the natural environment. It is intended to be a shared, over-arching, values-based vision for land use in Alberta.” Recognizing that land use impacts are the result of decision-making across many government ministries, the government proposed this initiative as one of its key cross-ministry initiatives for 2005–08.<sup>59</sup> The draft Land Use Framework is expected to be complete by the Fall of 2007.

It is unclear whether the government would be willing to use the Land Use Framework to reform the way tenure is granted. The Canadian Institute of Resources Law cautions that policy initiatives such as the Land Use Framework will only be effective if they include a review of the ways in which the Department of Energy manages the tenure regime.<sup>60</sup>

#### **Alberta Energy: What Role Is It Playing?**

Alberta Energy has played the spoiler on land-use and stewardship initiatives in the past. As the government's cash-cow, it has had the power in Cabinet to pursue a single-minded growth strategy for the oil and gas sector, with scant regard to cumulative environmental effects or, as it turns out, the cumulative effects of run-away development on the province's labour market and inflation rate.

— Steven Kennett, “A Checklist for Evaluating Alberta's New Land Use Initiative,” *Resources, Canadian Institute of Resources Law* No. 95 (Summer 2006).

### **3. A failure to consider environmental impacts when granting oil sands rights**

The Crown Mineral Disposition Review Committee (CMDRC) provides the one and only opportunity during the tenure process to consider the environmental and social impacts of granting oil sands rights. As mentioned earlier, it is the CMDRC's responsibility “to review surface access restrictions relating to the requested lands, and to provide the Department [of Energy] with full information on the nature of the restriction.”<sup>61</sup>

Unfortunately, in its efforts to carry out this responsibility, the CMDRC faces a number of significant challenges:

- The scope of the committee's environmental consideration is too narrow to meaningfully identify or address cumulative environmental impacts.
- The Alberta Department of Energy grants the committee insufficient time to conduct its review.
- The committee has an inadequate information base for evaluating proposals.
- The committee solicits no public input and does not conduct a formalized environmental assessment during its review.

<sup>59</sup> The participating ministries are Sustainable Resource Development, Energy, Municipal Affairs, Environment, Agriculture Food and Rural Development, Community Development, and Aboriginal Affairs and Northern Development.

<sup>60</sup> Kennett.

<sup>61</sup> Department of Sustainable Resource Development, “CMDRC — Crown Mineral Disposition Review Committee” (Calgary, Alberta: Government of Alberta, 2004), [http://www.srd.gov.ab.ca/land/u\\_oilgas\\_exp\\_cmdrc.html](http://www.srd.gov.ab.ca/land/u_oilgas_exp_cmdrc.html) (accessed March 5, 2007)



- The committee serves a purely advisory function and therefore lacks any real decision-making authority.<sup>62</sup>
- The committee's deliberations occur behind closed doors. There is no public record of the CMDRC's meetings other than the brief notations in the public postings that reflect their decisions.<sup>63</sup>

In stark contrast to the CMRDC, Alaska's oil and gas lease sales process gathers broad public input and produces written findings documenting how the decision will best serve the public interest.<sup>64</sup>

The CMDRC's mandate provides little latitude to genuinely consider the range of environmental impacts. The surface access restrictions it recommends do not consider cumulative impacts of multiple tenure sales, combined with existing and approved industrial activities. The CMDRC may identify "no surface access" as a restriction if the land is a protected area such as an ecological reserve or a wildland provincial park, but it is not equipped to determine whether surface access restrictions should be implemented to minimize the cumulative environmental impacts in a region.

As with public input into the process, Alberta lags behind other jurisdictions in this regard. For example, the United States Bureau of Land Management and Forestry Service conducts regional environmental assessments prior to issuing oil and gas rights (see text box below).

#### **Regional Environment Impact Assessments in the United States**

The U.S. National Environmental Policy Act and the Council on Environmental Quality require federal agencies to conduct an environmental impact statement for all government actions that could significantly affect the environment: to determine the potential environment impact, identify reasonable alternatives, look at the potential cumulative impacts of an action in the context of local and regional activities, and develop proposals to monitor and mitigate potentially significant environmental impacts.<sup>65</sup>

The Bureau of Land Management and the Forestry Service have conducted several statewide and regional environmental assessments, pursuant to requirements of the National Environmental Policy Act, prior to granting oil and gas rights. They also require environmental impact assessments for individual projects.<sup>66</sup>

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<sup>62</sup> Daniel Farr et al., *Al-Pac Case Study Report: Part 2, Regulatory Barriers and Options* (Ottawa, Ontario: National Round Table on the Environment and the Economy, July 2004), 15. Available at <http://www.nrtee-trnee.ca/>

<sup>63</sup> Michael Wenig, "Who really owns Alberta's natural resources?" *Law Now* (December 2003/January 2004); Michael Wenig and Michael Quinn, "Integrating the Alberta Oil and Gas Tenure Regime with Landscape Objectives — One Step Towards Managing Cumulative Effects," in *Access Management: Policy to Practice* (Calgary, Alberta: Alberta Society of Professional Biologists, 2003).

<sup>64</sup> Ibid.

<sup>65</sup> Council on Environmental Quality, "Regulations for Implementing NEPA" (Washington, D.C.: Council on Environmental Quality, 2005). [http://www.eh.doe.gov/nepa/tools/guidance/Volume1/toc\\_ceq.htm](http://www.eh.doe.gov/nepa/tools/guidance/Volume1/toc_ceq.htm)

<sup>66</sup> National Bureau of Land Management, National Environmental Policy Act: Law, Regulation and Policy (National Department of the Interior Bureau of Land Management, 2006), <http://www.blm.gov/wo/st/en/info/nepa.2.html> for an example of environmental impact statements, see U.S. Forest Service, "Final Environmental Impact Statement (FEIS) for Oil and Gas Leasing in Management Area 21, 45, 71 and 72 of the Bridger-Teton National Forest" (U.S. Forest Service, 2003); U.S. Bureau of Land Management and Montana Department of Environmental Quality, "Final Statewide Oil and Gas Environmental Impact Statement" (U.S. Bureau of Land Management, 2003).

### **Tradeable Rights Allocation System — An Idea Worth Considering?**

A pre-tenure planning process that sets limits on land disturbance in an area can be complemented by a tradeable land rights (TLRs) allocation system. Under this system, habitat-loss thresholds can be set for certain habitat types based on scientific data and public values. While below the threshold, land can be allocated as a tradeable right to companies.<sup>67</sup> When all land access rights have been allocated up to the threshold, companies that want to access land either have to reclaim previously disturbed sites or negotiate access rights from a company that has surface rights that it is not using.

This system could complement the current regulatory process by providing a strong incentive for developers to reduce their footprints using best practices, to accelerate the reclamation of previously used sites, and to coordinate with other developers in the area.<sup>68</sup> Since such a system does not control where development can occur, ecologically or socially significant sites would have to be set aside as protected areas with unique disturbance limits. TLRs can protect the majority of species and prevent the loss of biodiversity in general.

## **4. Inadequate opportunity for public input into decisions to grant oil sands rights**

The oil sands tenure process occurs largely out of the public eye. Surface landowners and other stakeholders who might be affected by tenure decisions are not directly notified of subsurface mineral postings or sales.<sup>69</sup> Public postings are not distributed to a wide audience and are accessible only by email subscription upon request through the Alberta Department of Energy website. No public input is sought or required prior to the Department of Energy's decisions to allocate tenure agreements.<sup>70</sup>

When the government grants oil sands rights, it kick-starts exploration and development activities. With oil sands rights in hand, companies invest millions of dollars in conducting exploration activities to delineate the resource and meet government exploration requirements, and in developing project development applications. The decision to grant tenure and initiate this chain of events is made in the absence of public scrutiny or consideration of the economic, social and environmental impacts of doing so.

## **5. Lack of consideration of the public interest in decisions to grant oil sands rights**

Not only are members of the public not alerted to postings, but even in the event that they become aware of a sale and have concerns, there is currently no mechanism to determine whether allocation of particular oil sands rights are in the public best interest—economically, socially and environmentally.

<sup>67</sup> M. Weber, M. and W. Adamowicz, "Tradable Land Use Rights for Cumulative Environmental Effects Management," *Canadian Public Policy* 28, no. 4 (2002): 581–95.

<sup>68</sup> Michael Wenig and Michael Quinn, "Integrating the Alberta Oil and Gas Tenure Regime with Landscape Objectives — One Step Towards Managing Cumulative Effects," in *Access Management: Policy to Practice* (Calgary, Alberta: Alberta Society of Professional Biologists, 2003).

<sup>69</sup> Steven A. Kennett and Michael M. Wenig, "Alberta's Oil and Gas Boom Fuels Land Use Conflicts — But Should the EUB Be Taking the Heat?" *Resources* 91 (Summer 2005): 8.

<sup>70</sup> Wenig, Michael and Michael Quinn. "Integrating the Alberta Oil and Gas Tenure Regime with Landscape Objectives- One Step Towards Managing Cumulative Effects," in *Access Management: Policy to Practice* (Calgary, Alberta: Alberta Society of Professional Biologists, 2003).

It is not until an oil sands company has conducted its exploration activities and expended millions of dollars that a formal public process takes place to determine whether development of that resource is in the public interest of Albertans. Once an oil sands company has filed its application for project development and the accompanying environmental impact assessment (EIA), the formal process of public consultation and engagement begins. The Alberta Energy and Utilities Board and other government departments then review individual project proposals and consider the concerns of affected or interested parties. On the basis of the information presented, the Board weighs the costs and benefits to Albertans and determines whether a proposed oil sands project is in the public interest.

In short, the tenure regime “puts the cart before the horse.”<sup>71</sup> When the Energy and Utility Board finally evaluates a proposed project in terms of the public interest, the development process has advanced to such a degree that the proponent’s possession of oil sands rights is taken into account.<sup>72</sup> The Board considers the company’s “need” for the project and typically finds that because the proponent already “owns” the oil sands rights, it has a need for the project in order to exercise the rights.<sup>73</sup> Because mineral rights are issued long before the Energy Utility Board makes its evaluation, the outcome of its public interest decisions are tilted in favour of the proponent. As the Canadian Institute of Resource Law has observed, this leaves the public “questioning how the Board reached its ‘public interest’ conclusion without first questioning — and taking public input on — whether the mineral right that tilted the balance was itself in the ‘public interest.’”<sup>74</sup> The allocation of tenure rights begins a snowball effect, with each stage of the regulatory process building greater momentum for the next. By the time the Energy Utility Board takes the public interest into account, it is very difficult to halt the process.

The fact that a project proponent has already paid for and acquired legal mineral rights creates legal and/or political pressures to allow them to exercise their rights. In British Columbia, mineral rights holders may be legally entitled to compensation if they cannot access their tenure rights.<sup>75</sup> In Alberta, the Mines and Minerals Act allows the Minister of Energy to expropriate any minerals if development is not deemed to be in the public interest.<sup>76</sup> Since tenure rights are subject to any limits imposed at later regulatory stages, one would expect that “subject to” clauses would preclude a claim from compensation if the regulatory requirements were to nullify the tenure right. However, the law in this area is unclear, and an oil sands company can exert significant political pressure for the approval to exercise its rights — particularly given that it has paid a significant amount of money in acquiring them.

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<sup>71</sup> Steven A. Kennett and Michael M. Wenig, “Alberta’s Oil and Gas Boom Fuels Land Use Conflicts — But Should the EUB Be Taking the Heat?” *Resources* 91 (Summer 2005): 8.

<sup>72</sup> *Ibid.* 8.

<sup>73</sup> *Ibid.* 8.

<sup>74</sup> *Ibid.* 8.

<sup>75</sup> For example, see *British Columbia v. Tener* (1985) CM-17 s. 8(1)(b)), *R. v. Tener*, [1985] 1 S.C.R. 533; (May 9, 1985), <http://scc.lexum.umontreal.ca/en/1985/1985rcs1-533/1985rcs1-533.pdf>

<sup>76</sup> Mines and Minerals Act s. 8 (1) b.

### **A More Balanced Approach to Tenure: Metis Settlement Act**

An interesting model for a more balanced approach to granting oil sands agreements is provided in the provisions of the Metis Settlements Act.<sup>77</sup> The Metis Settlements Act contains a Co-Management Agreement that involves the disposition of mineral rights within Metis Settlements. It requires the Minister of Energy to forward all posting requests for minerals to a committee on the settlement in question. The committee may recommend that a posting request be denied, or recommend that environmental or socio-economic conditions be attached. If an agreement cannot be reached between the Minister and the committee, the rights may still be leased, but with a provision allowing no surface access.<sup>78</sup>

On public lands, an improved tenure process could involve a multi-stakeholder committee that would review public comments and environmental screening information to determine whether to post oil sands rights and the terms and conditions of such agreements. This committee would replace the Crown Mineral Disposition Review Committee (CMDRC), which to date has not had the necessary mandate or composition to effectively review tenure decisions.

## **6. Incentives and requirements that increase development pressure in the absence of cumulative environmental assessment**

Five-year permits and the more common fifteen-year leases that are granted to oil sands companies have specific timelines and expectations. For example, to extend a lease, operators must either produce oil or sufficiently evaluate the oil sands deposits and report on what they find.<sup>79</sup> These timelines and expectations provide the Alberta Department of Energy with important insight into what level of oil sands activity could be occurring on the landscape in the future.

Minimum level of evaluation (MLE) regulations are intended to ensure that the oil sands resource is adequately delineated and developed in a timely manner. This is reasonable if conditions are in place to regulate the pace of development and the number of oil sands leases granted. In the absence of these conditions, the MLE and escalating rents may function to intensify the rush to develop. The environmental implications of lease evaluation requirements do not appear to have been considered in the development of these regulations, nor are they considered in cumulative effects assessments of “reasonably foreseeable” future development by industry proponents, hence underemphasizing the contribution of disturbance from lease evaluation to regional cumulative impacts.

At the end of the lease term, the Department of Energy reviews applications for lease renewals to determine if the required MLE has been achieved. The MLE involves proof of exploration or production activities. Although part six of the Oil Sands Tenure Regulation 50/2000 enables the Minister of Energy to prescribe a level of lease evaluation that may be less than required, the development of this regulation clearly did not envision the cumulative environmental impacts associated with drilling exploration wells every square mile over vast portions of Alberta’s boreal forest. Indeed, the level of terrestrial impacts associated with this mandatory disturbance may have negative effects on wildlife species long before an environmental assessment is ever conducted. It is not consistent with the principles of SREM to require massive surface impacts as part of a tenure allocation decision that has not considered cumulative environmental impacts.

<sup>77</sup> Metis Settlements Act. R.S.A. 2000, c. M-14

<sup>78</sup> Monique Ross, “Aboriginal Peoples and Resource Development in Northern Alberta,” Canadian Institute of Resources Law Occasional Paper no. 12, (Calgary, Alberta: Canadian Institute of Resources Law, 2003).

<sup>79</sup> Government of Alberta. *Alberta Oil Sands Tenure Guidelines: Principles and Procedures* (Calgary, Alberta: Department of Energy, 2006).

### **Mandatory Surface Disturbance Without Environmental Assessment?**

#### Example of Meeting a Minimum Level of Evaluation (MLE)

“Consider a lease selection request for 29 sections. Evaluation wells have been drilled on 17 sections (slightly less than 60%). Twelve sections are undrilled. Seismic testing has been conducted for 29 miles (46.4 km), on both the drilled and undrilled sections of the land.

To meet MLE requirements, the lessee must drill an additional well: this will bring the well count to 18 — slightly more than 60%. Each of the 11 undrilled sections must have 3.2 kilometres of seismic data lines. This means that 35.2 km (3.2 km x 11 sections) are required.”

— Taken from: Alberta Oil Sands Tenure Guidelines 2006

The mandatory exploration associated with lease evaluation has been recognized as a significant contributor to ecosystem disturbance and fragmentation.<sup>80</sup> Because the assessment of environmental impacts occurs after, and not before, the decision is made to grant oil sands rights, these disturbances are not considered before exploration begins. Even under best practices, oil sands evaluation wells may be approximately half a hectare (70 metres by 70 metres) in size, and accessed by a right of way that is 6–8 metres wide.<sup>81</sup>

The impact of linear features such seismic lines and exploration well access routes on wildlife are well documented. Linear features may be avoided by wildlife, act as barriers to them, and increase access for humans and predators.<sup>82</sup> In Alberta, the levels of disturbance associated with MLE activities exceed the recommended thresholds for maintaining species such as woodland caribou.<sup>83</sup>

The oil sands tenure regime is designed to encourage companies to aggressively explore and develop the oil sands resource. The MLE functions to encourage development, as do the escalating annual rent charges on all non-producing leases. Companies who hold oil sands leases are charged an escalating annual per hectare rent if development activities do not occur. Companies can avoid escalating rent payments if they conduct other activities that are considered valuable, such as upgrading bitumen in Alberta or conducting research activities. There is no evidence that environmental considerations are incorporated into escalating rent rules, or that provisions are in place to waive escalating rent rules where cumulative environmental limits have already been exceeded. While the current approach to encouraging development is not necessarily a problem in its own right, it further exacerbates the challenges already presented by the pace and intensity of oil sands development.

The environmental, social and infrastructure challenges that currently face the Regional Municipality of Wood Buffalo, which lies at the heart of the oil sands region, are inextricably

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<sup>80</sup>Lornel Consultants and AXYS Environmental Consultants, *Guidelines for the Implementation of Ecosystem Management Tools*, prepared for the Cumulative Environmental Management Association (Calgary, Alberta: 2002), 2.

<sup>81</sup>Ibid.

<sup>82</sup>M.G. Jalkotzy et al, *The Effects of Linear Developments on Wildlife: A Review of Selected Scientific Literature*, prepared for Canadian Association of Petroleum Producers, (Calgary, Alberta: Arc Wildlife Services Ltd.,1997).

<sup>83</sup>Dehcho Land Use Planning Committee, *Dehcho Land Use Plan*, final draft, (Fort Providence, Northwest Territories: Dehcho Land Use Planning Committee, 2006). The Dehcho Land Plan recommends a maximum linear density, including cutlines and winter roads, of 1.8 km/km<sup>2</sup> in order to maintain habitat for woodland caribou. For a summary of the scientific rationale for this threshold, see *Dehcho Cumulative Effects Study, Phase 1: Management Indicators and Thresholds* (Salmo Consulting Inc., 2004).

linked to the fast pace of oil sands development within the region. The departments of Energy, Environment and Sustainable Resource Development could proactively address the location and timing of the allocation of oil sands rights to address many of these challenges. Furthermore, an oil sands tenure process that was subject to public scrutiny and participation could help foresee environmental impacts and improve decisions about whether to post additional parcels of land.





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# 4. Conclusions

The single largest determinant of future landscape change in northeastern Alberta is whether subsurface oil sands rights are issued, yet this critical stage in the development process receives the least environmental assessment and planning and no public input. The oil sands tenure regime provides a system whereby private companies are granted legal rights to the oil sands for development on behalf of the citizens of Alberta. The decision to grant these oil sands rights to companies is made by the Government of Alberta prior to a public discussion on the acceptable amount and pace of development, and the social and ecological limits of the ecosystem.

Alberta's oil sands tenure regime is a relic of another age, almost entirely focused on disposing of oil sands rights as rapidly as possible, and then stimulating oil sands production through escalating rents and requirements for lease evaluation.

As explored in this report, there are six key problems with the current oil sands tenure process:

1. A narrow policy objective of maximizing development and revenue.
2. The absence of environmental objectives or a land use framework to guide tenure decisions.
3. A failure to consider environmental impacts when granting oil sands rights.
4. Inadequate opportunity for public input into decisions to grant oil sands rights.
5. Lack of consideration of the public interest in decisions to grant oil sands rights.
6. Incentives and requirements that increase development pressure in the absence of cumulative environmental assessment.

Until the tenure regime is reviewed and revised, and a policy framework, such as a land use plan, is implemented, a moratorium on new oil sands agreements is essential. We must re-evaluate the intensity of oil sands growth and the stress it places on the region's air, land and water, and the province's infrastructure, economy and social systems. A new tenure regime must integrate environmental, social and economic goals as part of the decision to allocate lands for oil sands development.

Since sub-surface oil sands rights have not been granted to 67% of the lands underlain by oil sands deposits in the province, an opportunity to improve management over a large portion of northern Alberta still exists. Integrating the environmental and social goals of the province with the oil sands tenure process is essential to sustainable development. It is also the single most effective way to improve the management of Alberta's oil sands.



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# 5. Recommendations

The current oil sands tenure regime is a major contributor to the environmental and social problems associated with oil sands development. The tenure regime needs to be informed by a policy and planning context that ensures sustainable development. The Pembina Institute makes the following recommendations for reforming the oil sands tenure regime in Alberta. Although the province needs other changes to its policy system to effectively manage the cumulative impacts of oil sands development, the three tenure-specific recommendations outlined here are essential if Alberta's oil sands management is to serve the public interest.

**1. The Minister of Energy should implement a moratorium on granting future oil sands rights until the tenure process is changed to reflect economic, environmental and social considerations.**

There is an urgent need to substantially update Alberta's oil sands tenure regime to ensure that environmental values are reflected in the process of determining whether to post and grant oil sands leases. The only way to ensure that we do not make the same mistakes with the 67% of oil sands rights that have not yet been allocated is to stop issuing any new oil sands agreements until this reform is completed.

**2. Prior to lifting the moratorium, the Ministers of Energy, Environment and Sustainable Resource Development should ensure that land use planning for the oil sands region is completed so that it can inform rights-issuance decisions.**

Before the moratorium can be lifted, the Alberta government must ensure that the Regional Sustainable Development Strategy (RSDS) is fully implemented — with established ecological thresholds and environmental management systems. These efforts must be complemented by the integrated and coordinated implementation of a land use plan for the oil sands region and also by the establishment of a network of protected areas in northeastern Alberta.

Land use planning can provide direction to the tenure allocation process by specifying where and when oil sands rights should be granted. Because land use planning needs to involve integration among government departments and stakeholders, the Cumulative Environmental Management Association (CEMA) is the best body to deliver recommendations for a land use plan for the oil sands region. Continued lease allocations and project approvals undermine the important work of this organization, however.

A key component of any effective land use plan is the establishment of protected areas. Ideally, they should be designated prior to mineral rights allocations. In Alberta, we have seen that when protected areas are established *after* sub-surface rights are granted, the options for protection are constrained because the existing mineral rights trump the protective land designation.<sup>84</sup> There is a limited window of opportunity for filling in the gaps in northeastern Alberta's protected areas network before the allocation of the remaining oil sands rights. The Sustainable Ecosystems Working Group (SEWG) of CEMA is currently examining the benefits of additional protected areas as part of a regional management

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<sup>84</sup> Government of Alberta, "Information Letter 2003–25: Honoring Existing Mineral Commitments in Legislated Provincial Protected Areas" (Calgary, Alberta: Government of Alberta, 2005).

framework;<sup>85</sup> there is, however, no protection or recognition of these candidate sites in the interim while SEWG prepares and proposes a plan.

In recent years, Alberta has expressed a renewed interest in integrating the government departments that affect land management. The Sustainable Resource and Environmental Management (SREM) office has been charged with this integration. A high-profile deliverable of SREM, anticipated later in 2007, is the proposed Land Use Framework. The Land Use Framework will be most effective if it addresses the most fundamental of land use issues — that is, whether the decision to grant sub-surface rights (including oil sands rights) are informed by landscape objectives.

**Components of an Effective Landscape Plan for the Oil Sands: Will CEMA Deliver?**

- a complete, scientifically-based, protected areas network that provides long-term certainty about lands that are not available for oil sands development;
- quantitative objectives for forest cover and wildlife habitat that inform decisions to allocate oil sands tenure;
- identified acceptable thresholds/limits for cumulative industrial developments;
- a monitoring program that tracks whether landscape and biodiversity objectives are met and that enables adaptive management.

**3. The Minister of Energy should adopt changes to the tenure regime to ensure that decisions include:**

**a. environmental assessment (including cumulative impacts) to determine if issuing these oil sands rights is consistent with specific environmental objectives for regional management**

Prior to the decision to grant tenure, a regional-level environmental impact assessment should be conducted to consider potential development scenarios and determine whether they are consistent with environmental objectives. As identified in this paper, there are a host of examples from other jurisdictions that can serve as models of tenure allocation decision-making that is based on environmental objectives.

Pre-tenure environmental assessments for the oil sands region must include a cumulative impacts assessment to identify the potential impacts of a future development based on the resources in a defined area. Guidelines could indicate how much surface disturbance is appropriate in an area, and surface disturbance limits could be set to maintain desired social or environmental objectives. Setting these limits is particularly important in the oil sands region where terrestrial impacts associated with a surface footprint are so extensive that they cannot be completely mitigated. The pre-tenure assessment and resulting plans can provide greater clarity for industry and government on the appropriate pace and extent of development. Companies with oil sands rights could be given more assurance that their projects will be approved without lengthy delays or an adversarial hearing process, providing that their projects adhere to the requirements in the pre-tenure plan.

One argument against conducting environmental assessments at the pre-tenure stage is that it is difficult to understand the nature and scope of a proposed project because it is too early to know the specifics about location, type and scale of surface facilities.

<sup>85</sup> Cumulative Environmental Management Association Sustainable Ecosystems Working Group, briefing to the Alberta Department of Sustainable Resource Development, 2006.

However, at the pre-tenure stage, it is possible to create plausible scenarios of potential development and conduct basic environmental assessments, using information about typical development elsewhere. In addition, the presence of land use plans that make clear the ecological limits and areas of no development (such as protected areas or sacred sites) would guide the allocation of tenure rights and the restrictions to development.

**b. public notice and opportunities for comment before tenure decisions are made**

Prospective lands that companies have requested for posting should be identified on maps on the Alberta Department of Energy website. The public should have an opportunity to raise concerns about whether lands should be posted for oil sands development, and have input into any restrictions attached to lands that are posted.

**c. a public interest decision on whether to grant tenure, based on the information derived from an environmental assessment and public input**

Based on the environmental assessment, public comments, and the anticipated impact of a proposed oil sands lease agreement on landscape management objectives, a public interest decision should be made over whether to proceed with the auction of oil sands rights. After conducting a review, a multi-departmental decision should be made about whether the issuance of tenure rights meets the public interest.

**d. a review of current tenure requirements, and inclusion of environmental terms and conditions whenever oil sands rights are granted**

The requirements for existing tenures should be reviewed and take into consideration their impact on the environment. Existing requirements for oil sands tenures should be examined for opportunities to limit cumulative environmental damage.

MLE requirements need to be recognized as a major surface impact associated with the oil sands tenure process. The review of MLE management should involve two steps. First, an assessment of the need for the current MLE regulations, considering current knowledge of the resource and exploration techniques, should be conducted to determine if MLE requirements are having unnecessary environmental impacts. Second, if, based on this assessment, it is revealed that the current MLE is required to meet resource delineation objectives, the major impacts associated with MLE should be reflected in environmental assessments before decisions are made to grant tenure.

Precedents exist for waiving escalating rents for activities deemed to be of benefit to Albertans. The province waives escalating rents when companies upgrade bitumen in Alberta or conduct research activities. Exceptions to escalating rent provisions could also be made when an environmental investigation reveals that no development or slower development is in the public interest.

In the same way tenure agreements currently set annual rent payments and state expectations for a company to determine the reserves within a lease, they could establish specific environmental conditions. Prior to granting subsurface rights and lease renewals, additional conditions could include maximum land disturbance limits as well as requirements to use best practices. As part of the lease renewal process, a company could be reviewed for its adherence to environmental conditions.

In Alberta, 49,973 square kilometres of land has been allocated for oil sands development without adequate consideration of the immediate or cumulative environmental and social consequences of that development. However, because the rights to 67% of the province's



oil sands deposits have not yet been allocated, a critical opportunity still remains to set total regional disturbance limits and establish new protected areas.

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