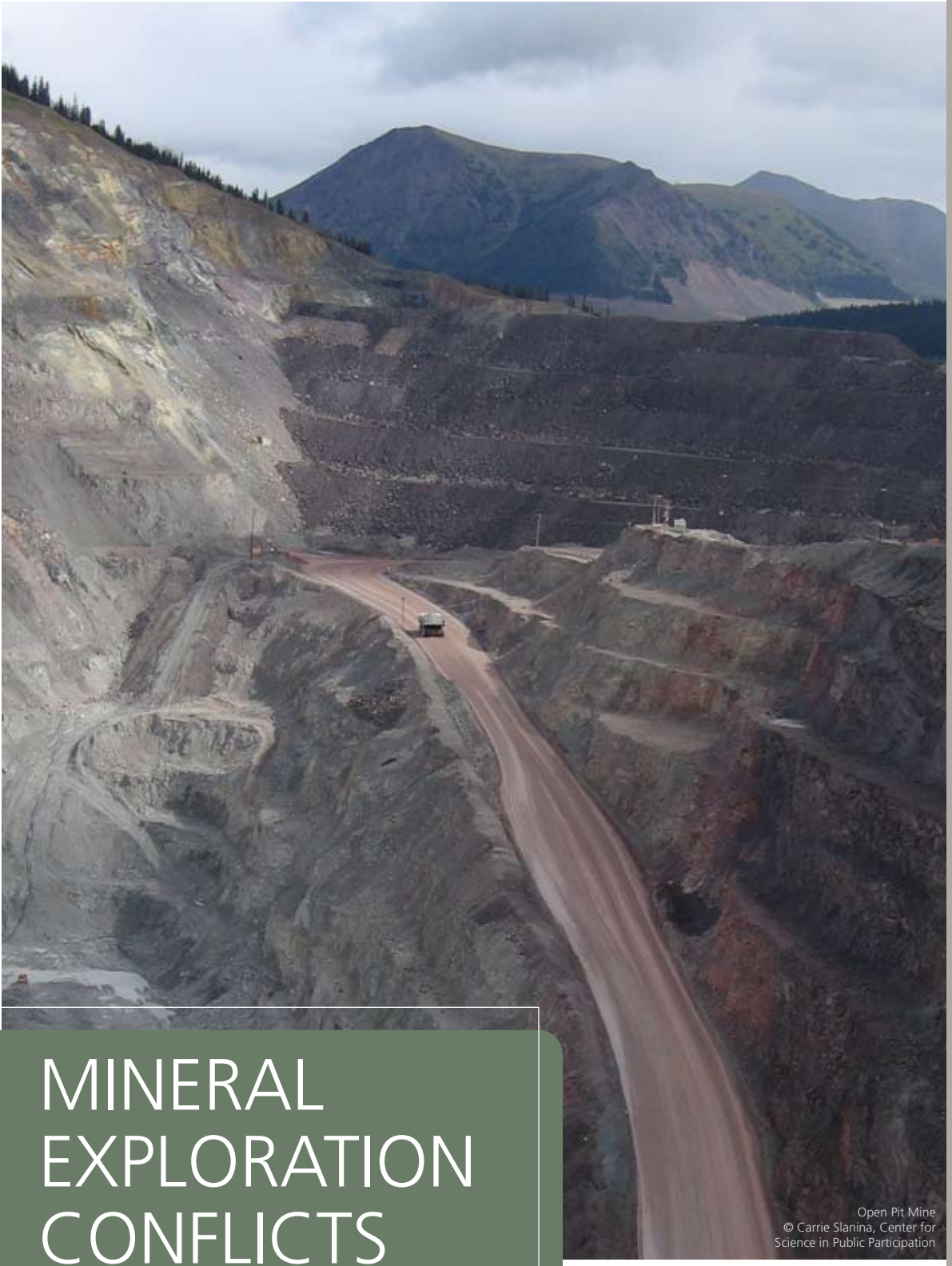


Open Pit Mine
© Carrie Slanina, Center for Science in Public Participation

MINERAL EXPLORATION CONFLICTS

IN CANADA'S BOREAL FOREST

Moose calf © Bryan Evans

© Global Forest Watch Canada

Cree children © Natasha Moine

Canada's booming mining industry operates extensively throughout the Boreal Forest. Conflicts are arising between mining companies, Aboriginal communities, private landowners and other stakeholders as a consequence of the free entry tenure system which grants mineral rights to prospectors without prior consultation with affected communities or regard for ecological and cultural values. Fundamental legislative and industry reform is necessary to resolve current conflicts and prevent future ones.

MAY 2008

INTERNATIONAL BOREAL CONSERVATION CAMPAIGN

CANADIAN BOREAL INITIATIVE
INITIATIVE BORÉALE CANADIENNE

THE VALUE OF CANADA'S BOREAL FOREST

Caribou © Irene Owsley

INTRODUCTION

Canada's Boreal Forest is the largest unspoiled forest and wetland ecosystem remaining on Earth. Representing 25% of the world's remaining intact forests, the Canadian Boreal Forest is one of the last places left on Earth that maintains a fully functioning ecosystem capable of sustaining such abundance. It provides critical habitat for wildlife – including billions of migrating songbirds and waterfowl, and large predators such as wolves, lynx and bears. Some of the wildlife it supports are among the largest remaining populations on the planet, while some species, such as woodland caribou, are facing serious declines. The Boreal Forest is home to over 600 Aboriginal communities which depend on the Boreal as a source of cultural identity, spiritual renewal and economic livelihood.

The Boreal's immense forests and millions of lakes and wetlands purify our water and produce oxygen. The Boreal Forest is one of the world's greatest storehouses of carbon essential to moderating our climate and providing a vital shield against global warming. These essential environmental services have been estimated to be worth at least 2.5 times more than resource extraction from mining, forestry and energy production.[1]

Mining provides vital materials, generates business and employment opportunities in much of the Boreal Forest, and contributes significant wealth to the country as a whole. While there have been improvements in how mining projects are assessed and implemented, and many positive examples of successful projects undertaken with the support of affected First Nations, mineral exploration remains a significant source of conflict.

There is a real choice to be made between ongoing and escalating conflicts around exploration, and the opportunity for governments, industry, Aboriginal peoples and stakeholders to transition to a new regime that addresses the rights and interests of Aboriginal people and private landowners, as well as the expectations of the public.

This report documents these conflicts and outlines proposals for fundamental reform to achieve a mining sector that is compatible with the balanced approach to conservation and development that Canadians expect within the Boreal Forest. Making changes that will bring mining laws into the 21st century is in the best interest of all Canadians.

The Booming Mining Sector in the Boreal

There are 105 active mines in Canada's Boreal Forest, representing 44% of the mining activity in Canada; mineral claims cover 583,000 square kilometres of the Boreal, half of the land area that has been staked across the country.[2] Mining contributed 3.7% of Canada's GDP in 2006.[3]

With surging world prices for most mineral commodities, Canada's mining sector is currently booming with record spending and record profits. Spending in mineral exploration reached over $2.5 billion in 2007, breaking the previous expenditure record set in 1987 and continuing a five-year trend of expenditures greater than $1 billion.[4] These investments are occurring in almost every jurisdiction across Canada (led by Ontario), with most of the money going into exploration focused on precious metals, followed by base metals, uranium and diamonds.[5] National mineral production in 2007 reached $40.4 billion.[6]

MINING EXPLORATION

Where It Begins – Claims Staking and the "Free Entry" System

The mineral industry in Canada enjoys virtually unrestricted access to land for exploration activities. Across most of the Boreal Forest, mineral exploration takes place under a "free entry" tenure system that was established in Canada 150 years ago.[7] Under this system, prospectors acquire mineral rights by literally – or, increasingly, virtually – "staking" land and then registering staked lands as mineral claims with government.[8] Once staked and filed, the prospector is granted enduring rights to the lands for purposes of mineral exploration and development.

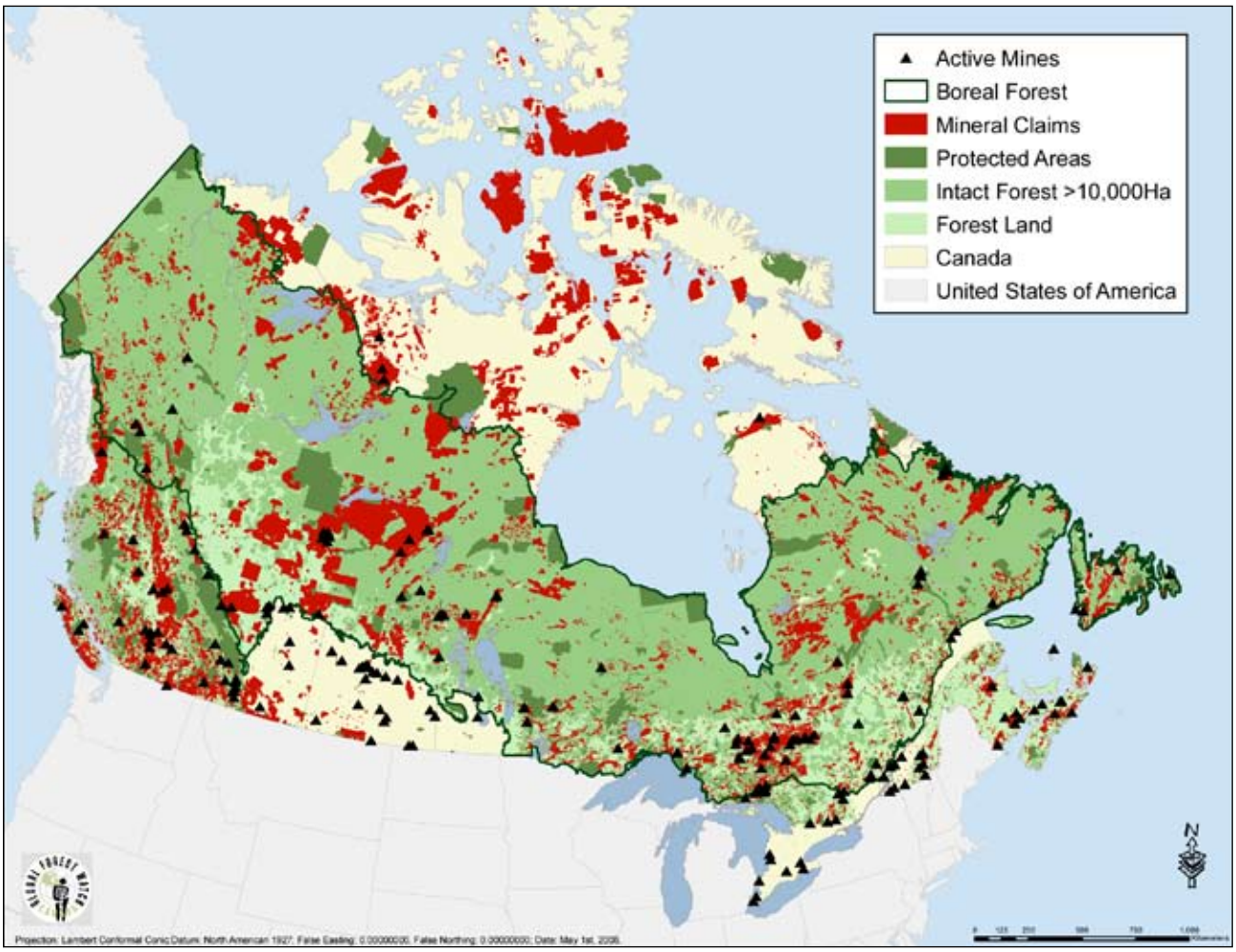
The free entry system is unique among all resource extraction sectors in that it grants rights to prospectors at the time claims are staked, instead of through an application and review process. There are no requirements for prior planning and the detailed public review process that forestry, agriculture, transportation and other projects undergo. This review process occurs only once a mining project has reached a very advanced stage. Furthermore, the ability to stake land without consultation undermines important regional land use planning efforts that seek to guide a more rational, fair and integrated use of various land and resource values.

To complicate matters, legal interests in land are split between the "surface" and "subsurface" interests. The surface interest may be leased or owned outright by one person for a particular purpose, such as forestry, tourism or agriculture, while the subsurface interest may be legally acquired for exploration by another. The surface owner is required to provide access for exploration and mineral development, even when exploration or mining activities are incompatible with the surface use.

"We've got a problem with the mining act. I don't think it's in keeping with our values and expectations at the beginning of the 21st century."

– Ontario Premier Dalton McGuinty
April 24, 2008[9]

MINERAL CLAIMS AND ACTIVE MINES IN CANADA'S BOREAL FOREST



As of September 2007, 583,000 square kilometres of mineral claims were staked across Canada's Boreal Forest (approximately 10% of the ecosystem) under a free entry tenure system established 150 years ago. This antiquated system gives priority to mining claims and makes it difficult to plan for other values such as protected areas conservation, cultural values and Aboriginal rights, resulting in escalating conflicts.

Aspens © Peter Sandiford, CPAWS

With evolving land use pressures and changing social values, this antiquated tenure system has increasingly become a source of conflict. The most significant conflicts arise as a consequence of free entry mineral tenures being granted without prior consultations with affected Aboriginal peoples. The system also results in conflicts with private landowners and other stakeholders. Since land is deemed to be "open to staking" unless expressly excluded, there exists little scope for government to regulate access to land for exploration in a more systematic way. With exploration companies acquiring rights automatically under free entry, governments cannot exercise discretion or refuse to register a properly filed claim. As a consequence, when exploration conflicts with Aboriginal rights, conservation or other public interests, governments are left with few options but to either allow the activities to proceed or close areas to staking and compensate exploration companies for existing claims.

Other industry players are increasingly recognizing the need for a better approach to land use to avoid the gridlock of competing demands. The need for planning as a precursor to industrial development was recognized by the national forest sector at the most recent National Forest Congress. The joint position statement from the Forest Products Association of Canada and the Canadian Boreal Initiative states that "planning for conservation of ecological and cultural values should occur prior to new forest tenures in the unallocated parts of Canada's boreal, in a manner that respects the constitutional rights of Aboriginal peoples." To improve land use for everyone, governments need to ensure that this kind of planning is undertaken with all interests at the table before allocating development rights that prejudice balanced outcomes.

ABORIGINAL RIGHTS

Until recently, mineral exploration occurred with little regard for the rights of Aboriginal people. This situation began to shift in the mid-1980s following the recognition of Aboriginal and treaty rights in Canada's Constitution. Disputes between Aboriginal organizations and governments over the meaning of those rights have in some cases blocked exploration. In other cases, Aboriginal communities have secured significant concessions and benefits through negotiations with mining companies. Despite positive movement from industry in this regard, many exploration companies continue to stake claims and carry out exploration activities without prior agreement with affected communities.

Governments in particular have been slow to act. Under the free entry system, mineral rights on lands "open to staking" are acquired automatically without consideration of surface interests or other land-use priorities. Most importantly, the free entry system does not provide for the exercise of free, prior and informed consent by affected Aboriginal people at the critical point when mineral rights are acquired.

However, Aboriginal law is evolving in Canada, and several important legal precedents over the past 5 years – notably the *Haida Nation, Taku* and *Mikisew Cree* decisions in the Supreme Court of Canada – have reinforced the obligation of governments to consult with and to accommodate affected Aboriginal people before granting development rights in their territories.[10] Put simply, this requires governments to deal with Aboriginal people before fundamental decisions are made. The free entry system, because it provides no scope for government to make discretionary decisions, does not permit this to occur. Significantly, the *Tsilhqotin* case in the B.C. Supreme Court has cautioned that provincial legislation and policies, including resource tenures that fail to meet consultation requirements, risk being struck down as unconstitutional.[11]

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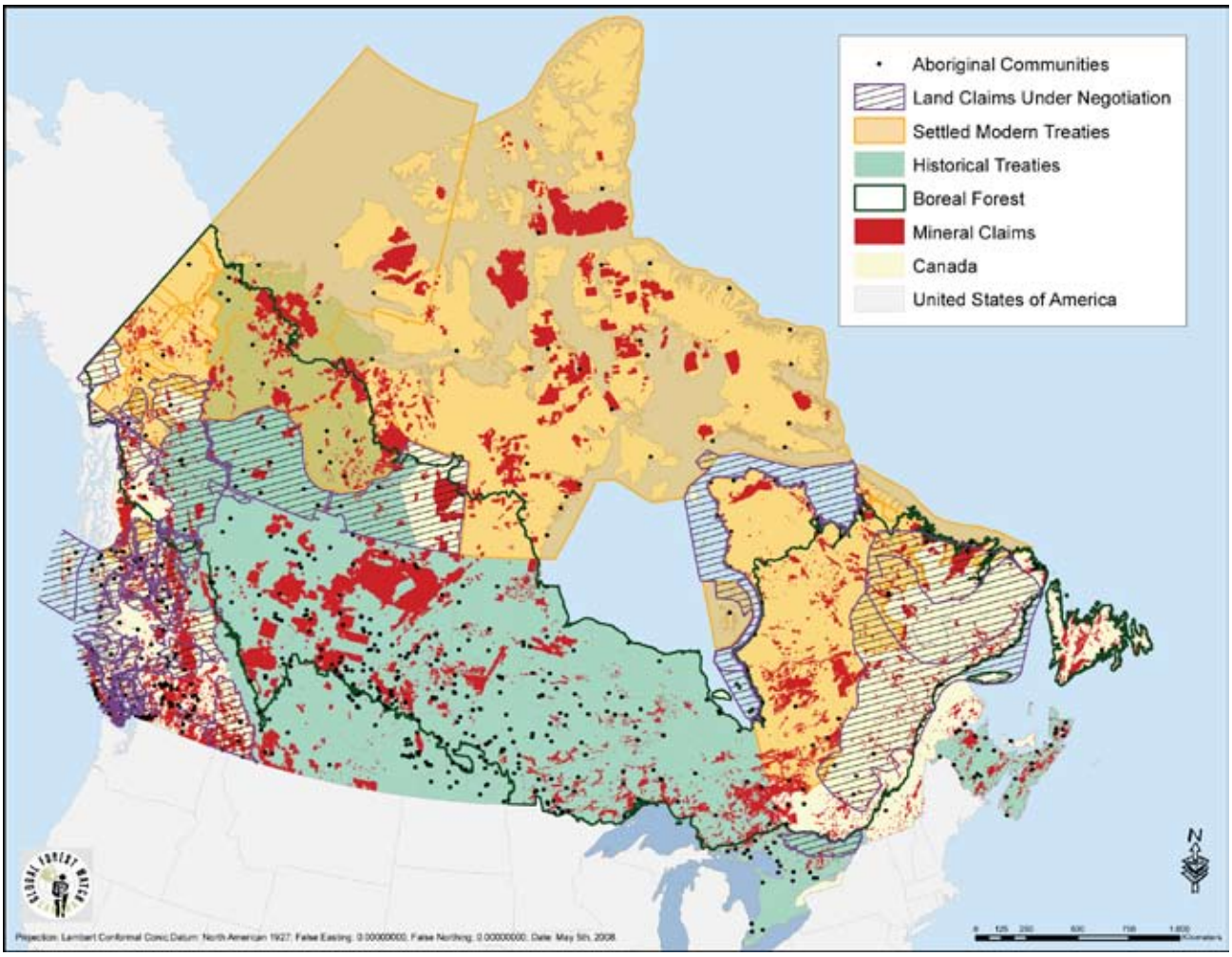
MINERAL CLAIMS AND ABORIGINAL AND TREATY RIGHTS IN CANADA'S BOREAL FOREST



Mineral claims granted under free entry tenure systems may result in conflicts with Aboriginal communities. Governments are required to consult with Aboriginal peoples before granting rights which may conflict with constitutionally protected Aboriginal and treaty rights. Mineral claims are currently granted without prior consultation in most of Canada.

Planning for conservation of ecological and cultural values should occur prior to new forest tenures in the unallocated parts of Canada's boreal, in a manner that respects the constitutional rights of Aboriginal peoples.

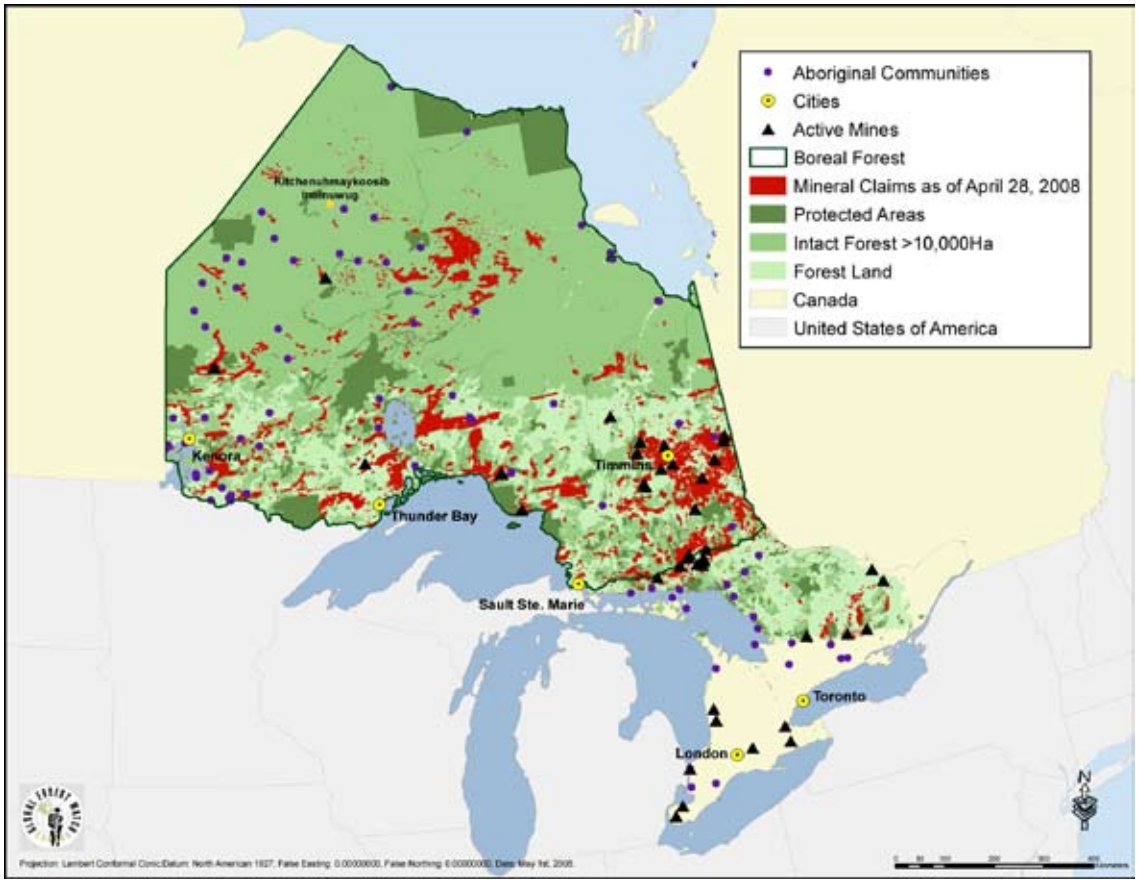
– Joint position statement,
Forest Products Association of Canada
and Canadian Boreal Initiative

Dene Traditional Drum Dance
© Garth Lenz

MINERAL CLAIMS AND ACTIVE MINES IN ONTARIO'S BOREAL FOREST

"Ontario better get its act together in regard to aboriginal and permitting issues or it will seriously fall from grace."

– Fraser Institute[12]



More mining is taking place in Ontario than in any other province in Canada. The conflicts in Ontario have become so severe that First Nations leaders have been jailed for peacefully protesting mining exploration on their lands. Values such as Aboriginal rights and conservation need to be put on par with mining.

PROVINCIAL FOCUS: ONTARIO

Ontario is the largest jurisdiction for mineral production in Canada.[13] In 2006, the total value of mineral production rose to $9.4 billion, with exploration expenditures projected to rise above $300 million. In the same year, active mining claim units reached 229,000, continuing a trend of record levels.[14]

Ongoing land conflicts related to mineral claims, Aboriginal rights and environmental concerns are recognized by the conservative Fraser Institute as a serious impediment to investment in the mineral sector.

Ontario and the KI Six

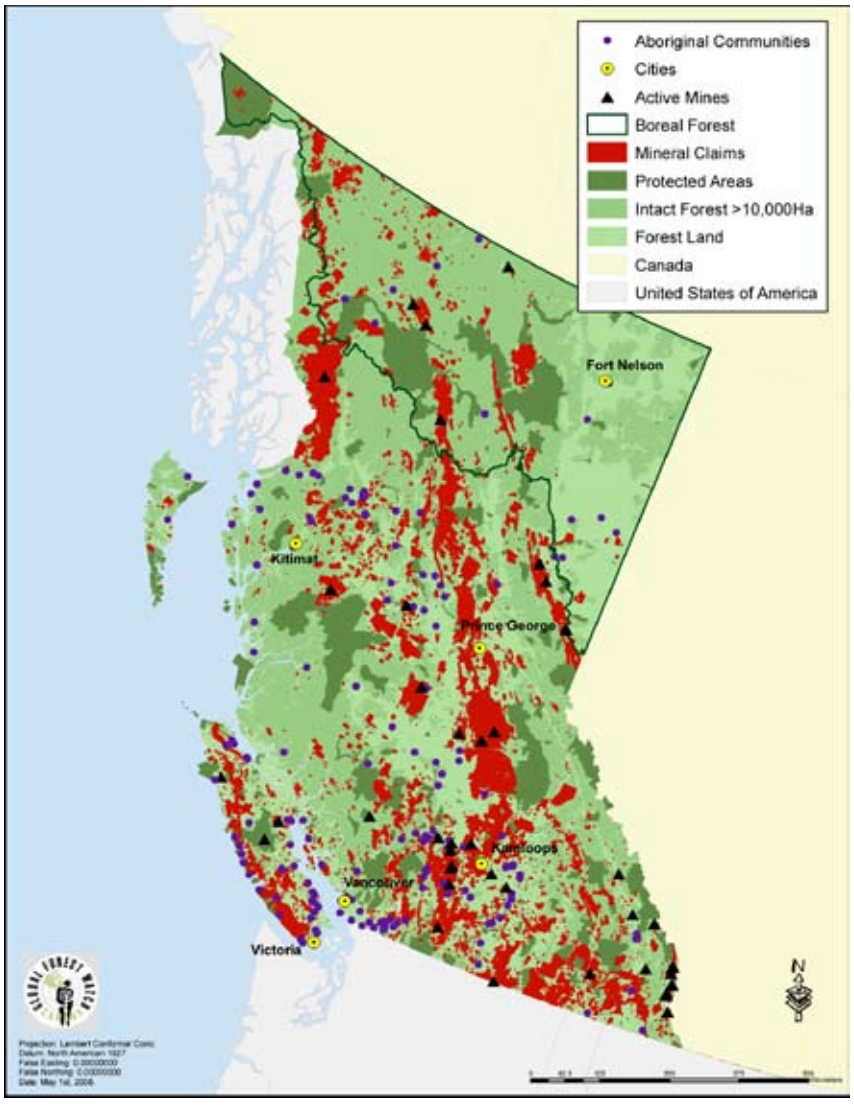
Kitchenuhmaykoosib Inninuwug (KI) is a remote First Nation in Northwestern Ontario. Frustrated by government inaction in resolving a long-standing treaty land entitlement claim, KI declared a moratorium on mineral activities within its traditional territory in 2001. Platinex Inc., a junior exploration company holding mineral claims in the area, was advised of the moratorium but arrived in the community with a drilling crew intending to conduct exploration activities. When the community peacefully blocked access to the site, the company filed a $10 billion lawsuit against the community. The resulting legal proceedings failed to resolve the dispute and bankrupted the community. In early 2008, the community gave notice they would not permit exploration to resume in the face of a court order, and its Chief and five council members were imprisoned for six months in contempt of court. A similar situation has also resulted in the imprisonment of Bob Lovelace, a chief of the Ardoch Algonquin, for protesting uranium mining within Algonquin traditional territory in the southeast of the province.

The Ontario government has been widely criticised by First Nations, environmental groups, social justice advocates and by the mining industry for allowing these conflicts to escalate.

British Columbia contains a large part of the Canadian Cordillera, a region rich in mineral and coal deposits, and contributes 17% of Canada's mineral production.[15] In 2007, half of the proposed major mine projects nationwide were located in B.C.[16] A 2003 report by the Ministry of Energy and Mines Mining Division identifies 1,887 closed or abandoned mines in B.C.; 1,171 of those mines are of environmental concern and present public health and safety issues.[17]

In January 2005, B.C. introduced an online map-staking system, Mineral Titles Online (MTO). Using this system, prospectors require only a valid free miner certificate, an internet connection, and a credit card to stake a mineral claim in B.C. In its first week of operation, MTO received 2.56 million hits to the website and 3,110 claims were acquired.[18] Less than nine months after the launch of MTO, 13,800 claims had been acquired online, an increase of 160% over the previous year.[19]

MINERAL CLAIMS AND ACTIVE MINES IN BRITISH COLUMBIA'S BOREAL FOREST



Private Landowners

In British Columbia and Ontario, conflicts between private landowners, such as cottage owners and farmers, and prospectors are intensifying. Under the B.C. Mineral Tenure Act, "free miners" may stake private land and then enter, use and occupy a mineral claim without notice to the surface landowner. Ontario legislation contains similar provisions. Notice must be given to property owners before exploration work commences, although only a single day's notice is required in Ontario.[20] Disputes between prospectors and property owners are resolved by a commissioner, who can award compensation for damages caused to surface owners by exploration or mining development activities; however, the legislation is clear that mineral development is the priority use.[21]

Mining exploration in British Columbia also illustrates the rising conflicts associated with booming mineral claims and the outdated free entry mining system. The vast majority of resource development in the province occurs within Aboriginal traditional territories where Aboriginal rights issues have not been settled. Recent court decisions have cautioned that resource tenures that fail to meet consultation requirements risk being struck down as unconstitutional, while some projects have been rejected due to risks of significant adverse environmental, social and cultural effects. Reform that requires conservation-first land use planning and free, prior and informed consent for First Nations would eliminate conflicts between mining and other land use priorities.

Quebec is described by the Fraser Institute[22] as one of the jurisdictions most favourable to mining in the world. Over 85% of Quebec's territory (both public and private lands) is available for mineral exploration. Through the use of Quebec's online staking system, mineral claims doubled from 2004 to 2008. As of March 2008, there were 255,000 active mining claims over 12,000,000 hectares of land (7% of Quebec). As with other Canadian jurisdictions, free entry exploration leads to land use conflicts, most of which are ultimately settled in favour of the mining sector.

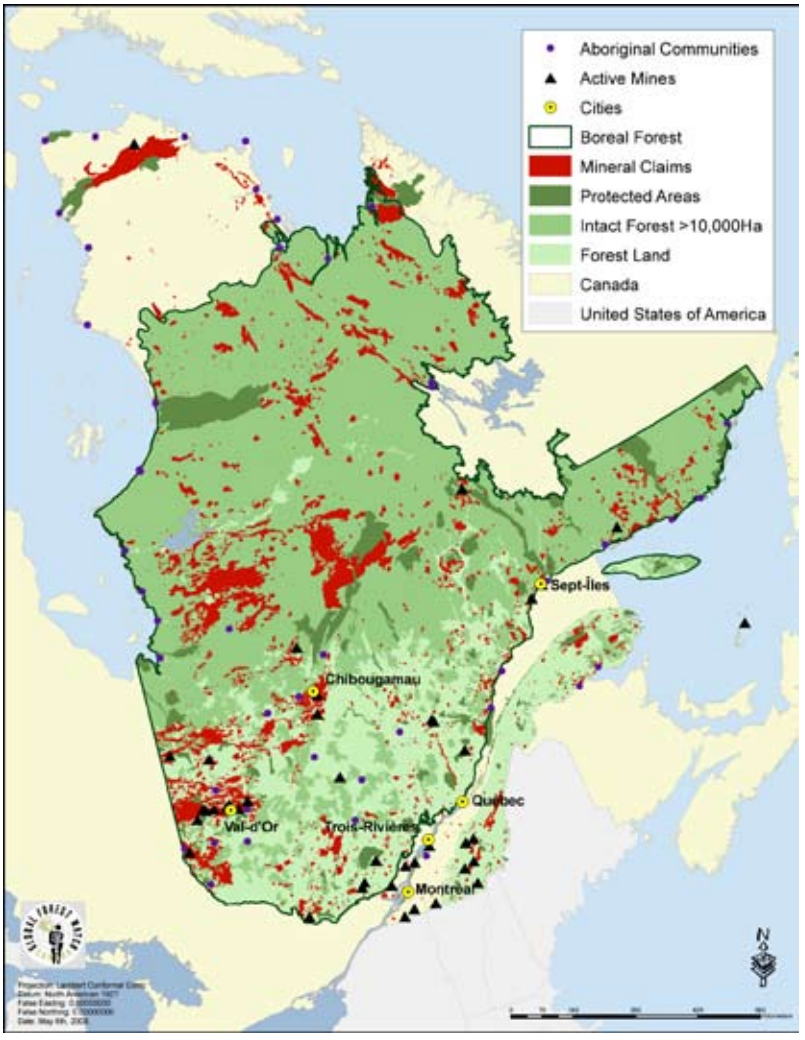
With less than 5% of its territory in protected areas, Quebec is struggling to reach stated conservation targets (8% by 2008, and 12% by 2010). Mineral exploration is the main obstacle to achieving these goals. Mineral claims operate as a virtual veto over conservation designations, but several proposals are also being stalled because of alleged "mineral potential," a vague concept that is being applied the vast majority of Quebec's Boreal region. Conflicted conservation proposals include the Wemindji Cree Nation protected area project, the Mont Groulx biodiversity reserve and the Albanel-Temiscamie-Otish provincial park.

MINERAL CLAIMS AND ACTIVE MINES IN QUEBEC'S BOREAL FOREST

New Zealand: A Permit System for Mining

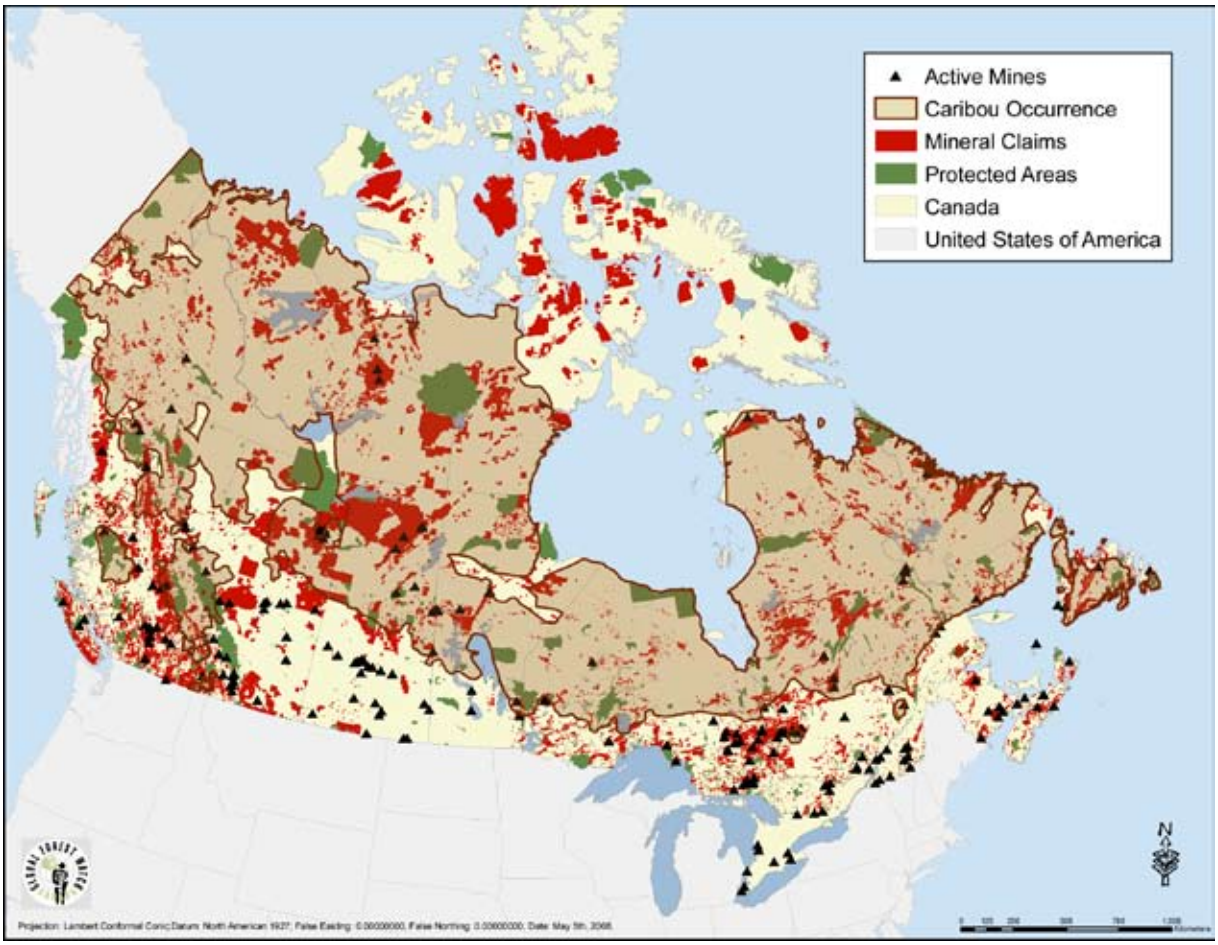
The *New Zealand Crown Minerals Act 1991* requires permits to be issued for the prospecting, exploration, and development stages of mining. Under this system, in which mineral permits are awarded on the basis of "first acceptable work programme submitted," New Zealand has been able to enjoy a healthy growth in prospecting and exploration expenditures and activities in recent years.

In an address to the 2007 New Zealand Minerals Conference, the Minister of Energy Hon. Harry Duynhoven reported that "Expenditure for prospecting and exploration activity over the past year has remained at a steady level at over $24 million (this excludes exploration activity within mining permits) and remains a 10 fold increase on the level of activity only 5 years ago." The Minister also noted that increased "community recognition and acceptance of the considerable regional economic benefits that can accrue from environmentally responsible and socially acceptable mining projects."[23]



The province of Quebec is an extremely permissive jurisdiction for mining due to accessible land, cheap electricity, large and well documented mineral deposits, and favourable tax credits for the mining sector. Mining claims have doubled since 2004, leading to exploration activities covering more than 12,000,000 hectares of Quebec's territory. Mining claims are major impediments to conservation projects and land use planning by First Nations and local communities.

MINERAL EXPLORATION AND ACTIVE MINES IN CARIBOU RANGE IN CANADA'S BOREAL FOREST



Some of the world's largest remaining populations of woodland and barren ground caribou occur in Canada's Boreal Forest. Susceptible to development impacts, caribou are used as a focal species in conservation planning. Broad impacts from widespread mining development across the Boreal may result in a further decline in caribou populations. Of particular concern are the many dwindling woodland caribou populations that are especially susceptible to disturbance. Woodland caribou are listed as a threatened species throughout the Boreal Forest.

EXPLORATION IMPACTS TO CARIBOU

The operation of drilling equipment, establishment of camps, use of aircraft, construction of roads, operation of vehicles, handling of fuel, and the disposal of waste all present risks to vulnerable wildlife.

One of the primary objectives of conservation planning is to maintain viable populations of all native species in natural patterns of abundance and distribution. Conservation planning cannot consider every species, but instead evaluates the needs of a set of focal species selected due to characteristics, such as large area requirements[24] and sensitivity to human alteration of natural landscapes,[25] that make them especially susceptible to development. The woodland caribou possesses these characteristics and is often used as a focal species for Boreal ecosystems.

Woodland caribou are susceptible to predation from species such as wolves, and even slightly elevated levels of predation can threaten the viability of a woodland caribou population. Anthropogenic disturbances to the landscape tend to increase densities of alternate prey such as moose and deer, which subsequently increases predator densities and predation pressure on woodland caribou. As a result, woodland caribou range has shifted northward in response to the expansion of land use into the Boreal region.[26] Woodland caribou have been listed as a threatened species throughout the Boreal Forest under the federal Species at Risk Act since 2002.[27]

In addition to the indirect impact of increased predation pressure, mining can directly impact woodland caribou through reduced habitat and increased harassment and

mortality. Woodland caribou in Newfoundland displayed avoidance or decreased use of habitat within four kilometers of a mine site,[28] and caribou in Alberta avoided roads and other industrial features by 250 meters.[29] Loud noises produced during exploration activities can harass caribou, causing a flight response that increases energy expenditure. Noise associated with petroleum exploration activities in northern Alberta, for example, were found to be sufficient to cause substantial weight loss.[30] Severe or repeated harassment, especially during calving and rutting periods, could ultimately result in mortality and decreased reproductive rates due to loss of body fat.[31] Caribou, due to their low reproductive rates and seasonal migrations, are also susceptible to mortality from hunting and vehicular collisions associated with human access to mines.[32] Mining can create wildlife management issues for other species as well, such as the barren-ground grizzly bear whose population viability is susceptible to even small increases in mortality potentially caused by increased human-wildlife conflicts or hunting.[33]

ROADMAP TO MINING REFORM

The mining sector and society as a whole would benefit from the following reforms.

Replace Free Entry with a Permitting System for Prospecting and Exploration

Instead of allowing rights to be acquired by staking, legislation should establish a permit regime that promotes government discretion before rights are granted through the whole mining cycle, from prospecting to development. Under a permit-based tenure system, permit holders acquire permission to carry out activities, but do not automatically acquire rights to minerals as they do under a free entry system. Mineral rights would be issued only where projects satisfy economic, environmental and social objectives, and do not conflict with the rights of Aboriginal people or private landowners.

Require Exploration and Mining Activities to Conform to Land Use Plans

Mineral exploration should be situated within a broader policy framework for land use that balances conservation with development and ensures that environmental protection and other public policy objectives are achieved. Land use planning is a flexible tool to accommodate exploration within terms and conditions set out in the plan, while ensuring that conservation, cultural protection and other goals are achieved. Requiring comprehensive land use planning before mineral tenures are granted would prevent conflicts and assist governments in meeting consultation obligations to Aboriginal peoples.

Require Prior and Informed Consent from Affected First Nations

Before permits are granted for exploration, mining laws should require applicants to provide detailed work plans and impact analyses to affected First Nation communities in order to enable decisions about whether the activity is acceptable, and to decline projects which are not. When achieved, exploration agreements with First Nations create a supportive environment for mining, and a more secure climate for investment, as well as enabling Aboriginal training, employment and business opportunities prior to development.

Improve Environmental Standards for Exploration

Many jurisdictions require exploration companies to submit detailed work plans before authorization is issued for ground-disturbing work such as drilling or blasting. These work plans enable regulators to ensure that activities meet approved standards, assess the likely impacts of activities, and facilitate consultations with potentially affected Aboriginal communities, landowners and other stakeholders.

Require Financial Assurances at the Exploration Stage

At present, financial assurances or performance bonds are rarely required for the exploration phase; consequently, many abandoned exploration projects become public liabilities. Financial assurances sufficient for remediation should be required of exploration companies as part of the initial approval process.

Implement Regional Environmental Monitoring Bodies for Intensive Exploration

Establishing an environmental monitoring agency has been a condition of a project's approval for several significant mining developments in recent years, including the Ekati and Diavik diamond projects and the Voisey's Bay nickel project. These bodies provide opportunities for Aboriginal communities and other stakeholders to engage with companies and regulators to ensure that environmental performance objectives are achieved through effective monitoring and reporting. This approach should be broadly adapted to areas subject to intensive exploration activities to enable cumulative effects to be identified and addressed.

Such reforms will promote a viable climate for investment, ensure protection of critical habitat for species, and improve opportunities for Aboriginal and Northern communities to benefit from responsible mineral exploration and development.

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[7] Except in Alberta, where exploration is regulated under a permit, rather than a staking, system.
[8] "Map staking" is being developed and is gaining usage in provinces or regions of provinces where the territory is surveyed. Claims can then be recorded on a map directly at the mining recorders' office without the prospector ever having visited the location on the ground. Elsewhere, claims must actually be marked out on the ground, using marked wooden corner posts and boundaries cut through the forest.
Natural Resources Canada. Mining Regulations: Overview 2007. Available online at www.nrcan.gc.ca/miningtax/inv_6.htm (accessed April 24, 2008).
[9] Globe and Mail, "Time to update Ontario's Mining Act", 24 April 2008
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[21] See Bepple v. Western Industrial Clay Products Ltd., 2004 BCCA 497 (CanLII). Where a property owner loses full use and enjoyment because of mineral activity, they can only claim market value, and not replacement cost, for the property.
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Flat River, Northwest Territories
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Mineral claims are as of September 2007 (with the exception of those shown on the Ontario map, which are current as of April, 2008). Mineral claims include claims, permits and leases on public lands to give the most complete representation of mineral exploration activity. Leases on patent or freehold lands are not included.

Horseranch Lake
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INTERNATIONAL BOREAL CONSERVATION CAMPAIGN

www.interboreal.org

The International Boreal Conservation Campaign (IBCC) is dedicated to public education and advocacy on behalf of protection of the world's boreal forests, with a special focus on the Canadian Boreal Forest. We work closely with Canadian and international environmental organizations, corporations and aboriginal First Nations to find common ground around the Canadian Boreal Forest Conservation Framework, a visionary plan to protect and sustain this globally important ecosystem over time.

CANADIAN BOREAL INITIATIVE / INITIATIVE BORÉALE CANADIENNE

www.borealcanada.ca

The Canadian Boreal Initiative (CBI) works with First Nations, governments, conservation organizations, industry leaders and others to link science, policy and conservation solutions across Canada's Boreal Forest. We work to advance the Boreal Forest Conservation Framework as a balanced vision for conservation and sustainable development.

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