WHITEHORSE MINING INITIATIVE

LAND ACCESS ISSUE GROUP

FINAL REPORT

October 1994

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Foreword

In September 1992, at the *49th Annual Mines Ministers Conference* in Whitehorse, Yukon, the Mining Association of Canada (MAC), on behalf of its member companies, as well as provincial and territorial mining associations/chambers, presented a brief reviewing the serious challenges facing the minerals and metals industry in Canada.

Recognizing the need for the mining industry "to earn the trust of Canadians and to prove that it can operate in an environmentally sensitive and sustainable fashion", the MAC proposed the launch of a multi-stakeholder process to develop a common vision and strategic plan that would take the metals and minerals sector into the next century.

The proposal was endorsed by the Mines Ministers, and on March 30, 1993, the Whitehorse Mining Initiative (WMI) was launched at the annual Prospectors and Developers Association of Canada Convention. Other stakeholders who had been identified and who had agreed to participate include: federal, provincial and territorial governments; business, including the banking community; Aboriginal groups; environmentalists; and labour. The immediate objective was to design a consultative process to address key issues affecting both the industry and the other stakeholders.

The objective of the WMI is to move toward a socially, economically and environmentally sustainable and prosperous mining industry, underpinned by political and community consensus.

The WMI is spearheaded by a Leadership Council composed of government ministers and senior executives and officials from each of the sectors. The Leadership Council is coordinated and supported by a Working Group, also composed of representatives from each of the participating sectors, although at the senior working level. Third, four Issue Groups were formed to address the four main issue areas identified as being important to the mining industry. Finally, a Secretariat was created to play an overall coordinating and support role for all of these bodies. In part, the Secretariat is responsible for supporting and coordinating the issue groups and assisting them in the preparation of their final reports.

The four Issue Groups were created to address the following topics:

- land access
- environmental management and regulations
- finance and taxation
- workplace/workforce/community.

The Land Access Issue Group (LAIG) held its first meeting in August 1993. At that meeting, the Issue Group included representatives from the mining industry, the governments of Canada, Ontario, British Columbia, Nova Scotia, and Newfoundland, aboriginal groups, and the

environmental sector. At its second meeting, the Issue Group added representatives from the government of Quebec and the labour sector. A complete list of all participants may be found in Appendix 1.

The LAIG began its work by identifying those issues that were considered to be of particular relevance to its assigned topic: land access. The objective was to discuss each of these issues and to identify common ground.

Through a series of six meetings and several teleconferences during 1993-94, the Issue Group succeeded in identifying and grouping these key issues, and in reaching agreement on the means to resolve some of the problems and conflicts that prevented the stakeholders from achieving their goals with respect to Canada's land use mosaic.

In reaching a consensus, the LAIG did so on the basis of the entire document. It is a package of interrelated principles, objectives and recommendations. Each section must therefore be considered in light of the overall balance of the entire report.

While tremendous progress was made in achieving the consensus described, it can only represent part of the work that needs to be accomplished before all concerns are addressed to the satisfaction of the many land access stakeholders in Canada. Land access issues, and land- use planning and decision-making generally, are complex and will continue to evolve. In addition to the recommendations for action found in this Report, the LAIG therefore believes that the process of consultation and discussion must continue.

The WMI is a national exercise. The Issue Group, however, is aware of and has drawn upon a number of regional, provincial and territorial exercises related to land-use planning, integrated resource management and Aboriginal land-claims settlements.

The LAIG is only one of four Issue Groups working within the direction provided by the WMI Working Group and Leadership Council. The LAIG recognizes that its discussions, and the kinds of land uses which might be permitted under various land use designations, are closely related to discussions on environmental regulation, the workforce and workplace, and finance and taxation considerations. Consistent with the theme of interdependence contained in this report, the LAIG hopes that all of the WMI recommendations can be integrated so that the work of each issue group is enhanced.

PREFACE

In their discussions, the LAIG participants were not speaking on behalf of their respective organizations, or expressing official policy, nor were they committing their respective organizations, institutions or sectors to the contents of this report or any particular course of action. Rather, the discussions represented the efforts by these individuals to develop their ideas and bridge the gaps that exist between and among the various stakeholders.

This document is the product of those discussions. It represents the consensus views of the **members** of the LAIG (see membership list in Appendix 1), including the principles, objectives and recommendations that the Issue Group put before the WMI Leadership Council for its consideration in its efforts to translate this consensus into action. The appendices are meant only to provide background information; as such, they are not formally part of the contents of the Report.

The consensus reached by the Issue Group members is limited to the contents of this Report. It should not be interpreted as signifying agreement on any or all of the other three Issue Group reports, nor should it be interpreted as acceptance of the contents of the WMI Leadership Council Accord, or any documents related to that Accord.

Finally, it is recognized and understood by all LAIG participants that nothing in this Report shall in any way prejudice Aboriginal or treaty rights, the land claims process or self-government negotiations, nor should it be interpreted by anyone as doing so.

CHAPTER 1

INTRODUCTION

Most land and resource users in Canada are required to meet their needs in a climate of escalating demands on a finite land base, finding themselves faced by land-use decision-making processes which are increasingly complex, time-consuming and uncertain in their outcomes. At the same time, these land and resource users see clear, timely and well-reasoned decisions on land use designations to be more and more important for a variety of reasons.

The range of interests that contribute to, and are affected by, land-use decisions represent many divergent points of view, and often includes potential for conflict. In addition to mining, these interests can include: agriculture; wildlife management; recreation and tourism; urbanization; the forest industry; transportation; telecommunications; hydro-electric and other energy resource development; national and provincial parks and other protected area designations; and Aboriginal interests, rights and concerns, to name but a few of the more obvious examples.

At the writing of this report, the total percentage of lands in Canada that are closed, temporarily or permanently, to mineral exploration and development, is 6.5 per cent. Of these lands, protected areas account for 4.9 per cent (See Appendix 2).

Clearly, these percentages are going to grow, given that each of Canada's 13 senior governments is publicly committed to completing its own network of protected areas. Completion, which will entail representing each of Canada's natural regions and protecting its critical wildlife habitat, will likely result in protected status for **at least** 12 per cent of Canada. Some jurisdictions have specifically included the 12-per-cent target in their protected area goals.¹ In addition to the

¹ The guideline of setting aside a certain percentage (originally estimated to be 10 per cent) of a nation's land mass in protected areas was first suggested in 1982 at the Third World Congress on National Parks. The percentage (this time estimated to be 12 per cent) target was picked up in the 1987 Brundtland Report in this statement: "A consensus of professional opinion suggests that the total expanse of protected areas (four million km² or four per cent of the Earth's surface) needs to be at least tripled if it is to constitute a representative sample of the Earth's ecosystems." (pp. 165-66.)

The 12-per-cent guideline was echoed in the World Wildlife Fund's Endangered Spaces Campaign in 1989, in the federal government's Green Plan in 1990, and in the unanimous resolution of the House of Commons in 1991. (cont'd next page) (cont'd from previous page)

It should be noted, however, that in most instances, the percentage is not, in itself, the goal, but rather, the result of achieving the goal. The goal is the completion of the networks of protected areas that are representative of Canada's natural regions and that protect Canada's critical wildlife habitat.

protected areas commitments, there are likely to be pressures to close or restrict access as a result of other environmental initiatives, such as biodiversity commitments, heritage programs, and buffer zones and corridors.

In addition to the 4.9 per cent, a further 1.5-2.0 per cent of land is either permanently or temporarily closed to mineral exploration and development activities across the country. This land is closed for a variety of reasons. Land types and sizes of these areas will vary from one jurisdiction to another. Some of the larger types of closure in some jurisdictions include Aboriginal land claims, hydro-electric power development and transmission corridors, National Defence lands, urban development, roads and railways. These land uses will also continue to grow, exerting increasing pressure among competing land users and affecting land availability.

Approximately 66 per cent of the 1.5-2.0 per cent is in Aboriginal land claims, entitlements or settlements. While these lands are not necessarily closed permanently or in a formal sense, the slow progress being made in settling land claims and the uncertainty surrounding their eventual settlement discourage the industry from committing its exploration capital without knowing whether development will be allowed.

This will be offset, in part, through the resolution of outstanding Aboriginal land claims and the possibility that these Aboriginal communities will open their territories to mineral exploration and development.

Not all stakeholders will have an interest in every land-use decision, but it is rare today for a decision maker not to be faced with competing interests, which requires an evaluation of costs and benefits.. Too often, stakeholders are faced with an adversarial process, and each stakeholder may find itself trying to question and undermine the legitimacy of its competitors. Sometimes a stakeholder is prevented from having full access to a decision-making process, leading to complaints of lack of transparency and political interference. The lack of satisfaction with the quality of the processes hinders wide-spread acceptance of the decisions by the full range of stakeholders, and competition for influence with the decision makers is pursued through a variety of alternative channels.

In this context, the Whitehorse Mining Initiative (WMI) Land Access Issue Group (LAIG) is an attempt by the mining industry and other stakeholders to develop a basis for a more cooperative and constructive approach to land-use planning and decision making. Aside from the industry, governments, and the labour movement within the mining industry, two other sectors with a direct stake in resolving land use issues were invited to participate. These two sectors are Aboriginal peoples and environmental organizations.

Although they are not the only sectors with a stake in land-use issues, Aboriginal peoples and the environment community are perceived by the mining industry as potentially having a greater impact on the industry's access to land. This view is shaped by the fact that there are two national initiatives under way in Canada that will have a considerable and permanent impact on

land-use designation -- the settlement of Aboriginal land claims and the completion of Canada's protected area networks.

Both of these initiatives are driven by government policy. In fact, all 13 senior governments have endorsed the completion of Canada land-based protected areas networks by the year 2000, and are in various stages of identifying candidate sites for protection and creating new protected areas. This will be discussed more extensively in Chapter 4.

These two initiatives, and the sector interests associated with them, have consequently been considered in some detail by the LAIG with a reference to their relationship with mining interests. Through lengthy discussions, the Group has reached consensus on a set of principles, objectives and recommendations with respect to support for: access to land for mining; the settlement of Aboriginal land claims and considerations for the joint management of resource development on such lands; and the completion of the protected area networks. These principles, objectives and recommendations are contained in Chapters 2-4 of this report.

The stakeholders participating in the WMI process recognize that their land and resource needs cannot be considered in isolation from other interests. The principle of sustainable development requires the integration of interests so as to reflect the interdependence of the environment and the economy. In light of this context, the LAIG members have expressed a common interest in developing the principles of a land-use planning and decision-making framework that satisfy each other's requirements *and* a common interest in resolving land-use conflicts in a more productive manner.

The weaknesses found in some of the current land-use planning and decision-making processes in Canada, and the resulting uncertainty, are central concerns for all of the WMI LAIG participants. The LAIG has described the fundamental characteristics of an integrated land- use planning and decision-making process in Chapter 5. Issues which concern the mining industry in particular are also identified and addressed.

CHAPTER 2

LAND ACCESS AND MINING

1. Background

Access to land for exploration and development, and certainty of tenure for deposits which are found, are key components of the continued well being of Canada's mining industry² as it exists today. Historically, it is through wide-spread access to Canada's land mass that the mining industry has been able to find ore bodies and to develop those ore bodies into mines.

Unlike, for example, forest resources, which are easily detected and inventoried, most mineral resources are hidden and difficult to find. As a result, the process of discovery is financially risky, expensive, and is usually the result of extensive exploration efforts that are carried out over long periods of time, often involving years or even decades of effort. A discovery is the product of an iterative process, often including many cycles of exploration to find a prospect, to turn a prospect into a discovery, and a discovery into a mine. An explorer will typically examine many promising areas and stake many mineral claims before discovering an ore body which is economically viable. Even then, it may be many years before it is developed into a mine, if ever. Exploration activities contribute significantly to the provincial and territorial economies. While exploration may encompass large tracts of land initially, ultimately a mine operation will only occupy a very small area of land, typically not measuring more than 5-20 km².

Controversy over land access has, however, arisen due, in part, to concerns about cumulative impacts of mineral exploration and development activities. For example, potential for negative impacts on adjacent land users and wildlife from roads and unreclaimed sites are an ongoing source of conflict and opposition to land access for mining and exploration in environmentally sensitive areas. The potential downstream impacts and infrastructure that supports a mine site may extend beyond the 5-20 km² to which reference was made above.

Concerns over allowing access to land for exploration which might eventually result in mining are, in part, the legacy of past practices, mistakes or incomplete technical understanding of potential impacts. In many cases, the mining industry has taken significant steps forward to ensure that it explores and mines in an environmentally responsible fashion. This process continues in all facets of the industry, from exploration through to reclamation. It is being accomplished through better technology, new technical practices and better management. The concerns and input of workers, the community and governments are increasingly being taken into

² In the context of this report, the mining industry includes metallic and non-metallic hard-rock mining, placer mining, industrial minerals (including sand, gravel and aggregates), as well as the mining of coal and tar sands.

account.

While the mining industry, its associations and governments are continually communicating with Canadians about the industry, better communications programs alone may not be sufficient. The mining industry, in cooperation with governments and other stakeholders, could consider the establishment of a model mine program to demonstrate in a tangible way that the mining industry is taking steps to be responsive and environmentally responsible. Elements of such a program might entail documenting or determining best practices at all stages of the industry, enhancing community and stakeholder involvement, or establishing sound business relationships with Aboriginal peoples. Another facet might be to use specific operations to demonstrate how mining industry activities and environmental goals can co-exist within a specific geographic area with environmental sensitivities.

The accompanying chart (see Appendix 3) displays the typical stages of a mineral exploration and development project. At each stage, the explorer and its financial backers must decide whether to invest further funds in an exploration project. The completion of each successive exploration stage reveals more information about the mineral potential of the area in question. Sometimes the information is positive, inducing the explorer to continue to the next stage of exploration; usually, the information is negative, leading to abandonment of the area or the particular target under examination. The decision to continue or abandon the exploration project is based on an assessment of the costs of the next stage and the probability of eventual success; that is, discovering and developing a "mineable" deposit.

The costs of the advanced exploration stages on a given target are typically much greater than the costs of primary exploration activities. The closer the explorer comes to a production decision, the more expensive the next step. At each stage, there is a risk that the expenditure may only prove that the deposit is uneconomic. Uncertainty is reduced at each stage, but not always in the desired direction.

The explorer is induced to incur the costs and risks of exploration by the hope of eventually discovering an economically viable deposit and the expectation of being able to develop a mine. To provide incentive to incur these costs, mining legislation in Canada provides that the successful explorer can acquire the mineral tenure so as to have the exclusive right to exploit the deposit, subject to regulatory approvals. To achieve regulatory approval and to respond to growing concerns about the potential impact of mining operations on the environment, many operators fund and conduct extensive scientific and technical research regarding the physical and chemical characteristics of the deposit and the site conditions.

Mineral tenure is critical to the mining industry, and there is consensus that governments should have clearly communicated policies on issuing and cancelling mineral tenure. There are, however, differing views on the exact nature of mineral tenure. One view is that a clear title or

property right arises upon the staking of mineral claims. Another view is that mineral rights are not property rights. Regardless of either view, minerals are a public resource and entitlement to use them is an evolving matter of public policy.

In the view of the mining industry, mineral tenure is an essential element in the legal and regulatory system governing mineral exploration and development. Historically, all jurisdictions in Canada have been regarded as having systems of secure mineral tenure which have given explorers clear "title" to deposits found, and a **concomitant** right to proceed to the mining stage if all regulatory requirements are met.

This has been a positive factor in the assessment of Canada's investment climate by the international community. From these rights has flowed a perception of legal certainty in the investment community, resulting in the commitment of financial resources. If that certainty is missing, the perception of "sovereign or political risk" increases dramatically and will affect the choice of jurisdiction in which mineral exploration will occur.

In recent years, the nature of "mineral rights" and "mineral tenure" has been questioned. Some lawyers consider "mineral tenure" to be a "property right", while others consider "mineral tenure" to be in the nature of a contract or a licence. This latter view holds that rights to public resources are contractual in nature and are received subject to limitations that are inconsistent with traditional views of property rights.

The LAIG did not have the time or legal resources to consider this issue in depth. Nevertheless, it did come to the conclusion that it is necessary for jurisdictions to have clear policies on issuing and cancelling mineral tenure. Such policies also need to be clearly communicated.

In the case that a mineral tenure is cancelled, the issue of compensation may arise. There is debate over whether compensation should be paid and, if so, how the amount should be determined. The mining industry thinks that compensation must be paid in a timely fashion based on technical and economic estimates of foregone market value. Others think that compensation should be paid on the basis of costs incurred. Still others think that no compensation may be due. The LAIG was in no position to consider this issue in detail. However, notwithstanding this difference of views on mechanism, the LAIG agrees that jurisdictions must have a clearly established and communicated compensation policy for cancelled mineral tenure.

Access to the land base and the processes of land-use designation are important to the economics of exploration and mining industry in two ways.

First, mineral deposits are found in a wide range of geological settings. The ability to predict the whereabouts of individual mineral deposits is quite limited. In general, therefore, reducing the amount of land available for exploration results in lost opportunity for the industry.

Second, the nature of decision-making processes for land-use designation can have a major impact on mineral tenure. Consequently, these processes can affect the willingness of people to continue mineral exploration in a particular jurisdiction.

The foregoing leads to three basic observations.

First, the early establishment of the boundaries of land areas and the associated management regimes which are to exclude or restrict mineral exploration and mining will reduce uncertainty and the risk which accompanies uncertainty.

Second, to the extent possible, selecting areas to be withdrawn in such a way as to fully consider the value of potentially mineral-rich lands will minimize the foregone opportunities and the economic costs associated with withdrawal.

Third, security of mineral tenure and related compensation issues are important factors in assessing economic and environmental costs and benefits of any development project. Clear policies and laws are critical to avoiding unnecessary loss of public resources and private investment. The key is to provide certainty and clarity surrounding the rules and regulations regarding mineral tenure.

2. Principles

- 1. Canada's mining industry is an important contributor to this country's social and economic well being. To continue to play this role, it must have fair and reasonable access to land to explore for, and develop, the mineral reserves necessary to meet what a sustainable society requires.
- 2. All stakeholders have a legitimate and important role to play in the debate and decisions being taken across the country in matters affecting land use and land access.
- 3. Given that certainty of mineral tenure is critical to mineral investment, and recognizing the need for governments to retain some latitude for public policy purposes, all jurisdictions must have clear policies and practices on issuing and cancelling mineral tenure.
- 4. The resolution of land use-conflicts must integrate social, economic and environmental goals, objectives, and commitments. The environmentally sensitive development of Canada's mineral endowment is a key element of ecologically and socially responsible economic development.

3. Objectives

- 1. As a legitimate land user, the mining industry must have access to policy and decision-making processes which recognize the industry's economic benefits and which consider the industry's requirements for, and impacts on, land.
- 2. To develop consultative mechanisms through which the mining industry and other stakeholders can address and resolve contentious issues on an ongoing basis, both in the context of specific operations or proposals and for broader, policy-oriented matters.
- 3. To promote certainty with respect to mineral tenure by providing clear mineral tenure policies and practices.
- 4. To demonstrate to Canadians that the mining industry can operate in an environmentally responsible fashion.

4. Recommendations

- 1. The mining industry should actively participate in land-use planning and decision making.
- 2. The mining industry should continue to improve its efforts to explore and mine in an environmentally responsible fashion: by continuing to improve its record on environmental compliance; through environmental codes of practice relating to exploration, development, operations, reclamation and closure, management and communications practices, and procurement.
- 3. The mining industry, together with governments and other stakeholders, should investigate the feasibility of a "model mine program" in the context of integrated resource management to demonstrate to Canadians that the mining industry is taking steps to be progressive, responsive and responsible.
- 4. Stakeholders should create permanent mechanisms at the national and regional levels to develop and maintain a dialogue on issues of ongoing mutual concern.

5. All governments should have and communicate clear policies on the issuance and cancellation of mineral tenure, including compensation.

CHAPTER 3

ABORIGINAL LAND CLAIMS AND INTERIM MEASURES

1. Background

Settlement of Aboriginal land claims is important, not only because of governments' fiduciary duty to Aboriginal peoples or because of the positive impact that it will have on Canada's Aboriginal people, but also because it is expected to eliminate or reduce a significant source of uncertainty at a time when many concurrent land-use planning activities are contributing to increased uncertainty. In addition, some Aboriginal communities³ have an interest in mineral developments in their areas because of the economic benefits they bring, particularly as a source of revenue, training, jobs, and business opportunities, which will be essential for viable Aboriginal communities, both before and after settlement of land claims.

Settlement of land claims is providing Aboriginal communities with authority over lands and resources. With that authority comes the right of the community to decide whether to develop or not to develop its mineral resources. That has not always been the case, historically. In most cases, in the past, mineral development has proceeded without the consent or involvement of the Aboriginal community. There are still other instances where, although the community did consent to development, it derived none of the benefits.

Pending the settlement of land claims, mechanisms such as Memoranda of Understanding (MOUs; known as Interim Agreements in Ontario) and Interim Agreements (IAs; known as Resource Development Agreements (RDAs) in Ontario) are beginning to be used to guide development on Aboriginal land. (See Appendix 4 for examples.)

Memoranda of Understanding between Aboriginal and non-Aboriginal governments are being developed as a basis for defining how mineral and other economic development will take place on Aboriginal land before, during, and after land-claims settlements.

Sometimes, Interim Agreements (RDAs in Ontario) between Aboriginal governments and mining companies are also being developed pending land claim settlement. The IAs cover such areas as employment and training, contracting opportunities, environmental protection and monitoring. They may also deal with issues such as flexible work schedules to accommodate traditional activities and subsistence hunting/fishing, as well as any other items which are deemed relevant between the company and the community. Similar arrangements can also be used in situations where claims are not being negotiated.

³ The term "community" is used to refer to Bands, Band Councils, designated Aboriginal organizations, as well as local or regional Aboriginal communities and their corporations.

Both the MOUs and IAs are legally binding documents which are being developed "without prejudice" to Aboriginal rights and treaty negotiations. To the extent that their terms do not contradict the land claim settlement, those terms have been incorporated into the land claim settlement agreement and, in the areas they cover, could provide the initial operating framework for mineral development activities following land claim settlement. Because of these characteristics, these agreements contribute substantially to increased certainty with regard to mineral exploration and development on lands subject to land claims negotiations. In some cases, these agreements have led to commercial activities.

Although many parties may have an interest in the outcome of land claims negotiations, the nature of the process -- government-to-government negotiations -- means that only three parties can sit at the negotiating table: the federal government; the provincial/territorial government or governments; and the Aboriginal community that filed the claim. All other parties are deemed to be represented by one or more of these three parties.

Trying a new approach, British Columbia has created a Treaty Negotiations Advisory Committee (TNAC) in addition to the existing forum for negotiating land claims. It includes non-government parties with an interest in the outcome. This Committee can advise the federal and provincial governments on the interests involved.

The LAIG recognizes that certain comprehensive land claims have been settled and that any recommendations developed in the WMI process should not prejudice these existing agreements. These include, for example, the Inuvialuit Final Agreement, the Nunavut Agreement, and other agreements. The mining industry should develop a clear understanding of the obligations and land access procedures found in these agreements. Provisions in land claims settlements and ancillary legislation will establish new boards and agencies with a role in determining the terms and conditions for land access or to arbitrate disputes. Close attention needs to be given to their design and function to minimize the possibility of overlap, duplication and complexity which could affect land access or increase uncertainty.

The LAIG recognizes that by respecting the Aboriginal community mineral access policies created by these agreements, communications and relations will improve among industry, governments and the communities. Where there is interest in pursuing mineral-related opportunities, there may be benefits in a mutual education process. The mining industry needs to understand Aboriginal requirements for opportunities and safeguarding traditional economic activities. At the same time, Aboriginal communities need to understand the mining industry's needs for rules and processes which are conducive to attracting investment.

Indian reserves may also have potential for mineral development. Currently resource development on reserves is governed by the federal *Indian Act*. It appears that the framework for resource development on reserves found in the *Indian Act* is in need of substantial reform.

2. Principles

- 1. Governments have a duty and a responsibility to fairly and expeditiously settle land claims.
- 2. The development and maintenance of communications between the mining industry and Aboriginal people is an important feature of land claim settlement processes and post-settlement activities.
- 3. Where mineral development is wanted by an Aboriginal community, rules and processes for resource development must be timely, consistent, dependable, and must minimize complexity.
- 4. Third-party rights relating to lands and resources subject to land claim negotiations are an important factor to be recognized and referenced in land claim agreements.

3. Objectives

- 1. To settle land claims as fairly and expeditiously as possible.
- 2. To establish simple and effective regulatory regimes governing land use and environmental management where required.
- 3. To develop interim business agreements between mining companies and affected Aboriginal communities where both parties are interested in pursuing mineral development.

4. **Recommendations**

- 1. Federal, provincial and territorial governments should facilitate the expeditious and efficient settlement of land claims by ensuring that the structure for negotiations is well defined, clearly understood, and provides an opportunity for third-party advice.
- 2. Governments should improve and make accessible in a usable format all non-confidential information on Aboriginal land claims, including which communities are involved, which areas are claimed and the status of the claim process. This information should be made available, in a mapped format, to all stakeholders,

either as part of the NATLUS⁴ database or as a stand-alone database. The information should make clear the nature of the claim; it should draw a distinction between surface and sub-surface rights with respect to the claim in question; and it should provide contacts within the Aboriginal community for parties who require more information.

- 3. Governments should assist those Aboriginal communities not currently involved in comprehensive land claim negotiations, and who would like to pursue resource development opportunities, to enable them to pursue interim business agreements with mining companies. This support would include helping to assess factors such as economic and human resource development needs.
- 4. Land access provisions contained in settled Aboriginal land claims agreements should be clearly communicated by all parties to the agreement to industry, and industry should develop a clear understanding of those provisions. Moreover, the mining industry and Aboriginal communities should work together to make each other aware of respective requirements, especially in the design and operation of regulatory regimes affecting land access and mineral development. Ways to facilitate such a discussion should be explored as early in the process as possible.
- 5. Boards and agencies which are established to regulate or arbitrate land access pursuant to land claims settlements should operate in a manner which is timely, consistent and simple.

⁴ The National Industry Land Use System (NATLUS) was initiated in 1989 as a joint project between the Mining Industry Land Use Committee (MILUC) and the federal Department of Natural Resources. This digital database for land area information was made available to both governments and the industry. It is designed to operate on the Integrated Resource Management Information system (IRMIS), a desktop computer mapping system, as well as other GIS that may be used by government departments.

CHAPTER 4

COMPLETION OF CANADA'S PROTECTED AREAS NETWORKS

1. Background

Protected areas serve many functions globally and domestically. In concert with responsible development activity throughout the country, protected areas networks are recognized as contributing substantially to environmental health, biological diversity and ecological processes. As a fundamental part of a sustainable balance of economy and environment, protected areas hold scientific, educational, recreational, economic and inspirational values for current and future generations.

As with mineral development, the issue of certainty is central to achieving the goals of protected areas initiatives. Long-term protection that is legislated or formalized in other ways by governments, is critical for the maintenance of representative areas within each ecosystem and critical wildlife habitat.

The mining industry, environmental groups, and other stakeholders endorse the completion of the protected areas networks, as agreed to in the *Tri-Council Statement of Commitment* (see the discussion below and Appendix 5).

There is, however, a shared concern about the continuing uncertainty surrounding the completion of these networks.

The mining industry is concerned, in part, because it is not clear what areas will be withdrawn or restricted, nor is it clear how large those areas will be or how adjacent areas will be managed. Second, the longer it takes for protected area candidate sites to be identified and publicized, and for the final selection to be completed, the longer the uncertainty will inhibit the industry's ability to plan its exploration and development activities. Third, the industry is concerned that decisions on protected areas are sometimes being made without complete information being available regarding the mineral resource potential of the area in question. Many of the areas considered for protected areas have been subject to little or no government geological mapping or industry mineral exploration. This factor, in combination with the limitations of geological deposit models, makes it extremely difficult, if not impossible, to identify areas of high mineral potential. Better information could help decision makers to select protected areas that achieve the goals of the protected areas networks, while minimizing the impact on the mining industry to find and develop economic mineral deposits.

All Aboriginal groups are concerned that there be full consultation in the process used to complete Canada's protected areas networks.

Environmental groups are concerned about similar process-related issues, such as the slow progress of governments in getting candidate areas on the table and in establishing the protected areas. Environmental groups are also concerned about: the loss of potential candidate areas to development; compromises on protected area boundaries to accommodate other interests; provincial governments changing their protected area policies to allow resource development in some protected areas; and the impact on protected areas of incompatible resource development on adjacent lands.

The urgent need for the protection of representative natural regions is reflected in the *Tri-Council Statement of Commitment to Complete Canada's Networks of Protected Areas*, endorsed by the federal, provincial and territorial Ministers of Environment, Ministers of Parks, and Ministers of Wildlife, in Aylmer, Quebec, in November 1992. The *Tri-Council Statement of Commitment* was also endorsed by Canada's Forest Ministers and representatives of the four national Aboriginal organizations. The five commitments are:

- ! Complete Canada's networks of protected areas representative of Canada's land-based natural regions by the year 2000 and accelerate the protection of areas representative of Canada's marine natural regions.
- ! Accelerate the identification and protection of Canada's critical wildlife habitat.
- ! Adopt frameworks, strategies, and timeframes for the completion of the protected areas networks.
- ! Continue to cooperate in the protection of ecosystems, landscapes and wildlife habitat.
- ! Ensure that protected areas are integral components of all sustainable development strategies.

One impetus for the *Tri-Council Statement of Commitment* was the **Canadian Wilderness Charter** (see Appendix 6) which led to the launch by the World Wildlife Fund of the Endangered Spaces campaign. The goal of the Endangered Spaces campaign is to achieve the representation of each of Canada's natural regions within a defined protected areas network. As of the end of 1993, 32 of these 422 natural regions were fully represented, 52 were moderately represented, 112 were partially represented, and 226 had little or no representation at all (see Appendix 8). In total, the percentage of Canada that is set aside as protected areas, where mining is prohibited, is 4.9 per cent.⁵

There is a range of protected areas, from those that are most stringently protected to those that are less so. However, the heart of a protected areas network lies in lands free from industrial development and managed to maintain the natural ecological integrity in perpetuity. In addition, lands adjacent to protected areas also play an important role as buffer zones or management areas, where exploration and mining, among other land uses, may be regulated more intensively.

In establishing the protected areas networks, the rationale, scientific criteria and traditional ecological knowledge are critical in defining explicit and defensible selection criteria. Criteria and methods for achieving representation that are based on scientific research have been developed. One such method is discussed in Appendix 7.

The early identification of candidate protected areas should provide the mining industry with a greater degree of certainty with respect to access to mineral bodies. To help reduce potential land-use conflicts, governments are therefore encouraged to identify **and make public** their candidate sites as soon as possible. These sites should be carefully tailored to meet the need for representativeness without withdrawing land from other land uses where it is not necessary. Working with relevant stakeholders, those governments that have not already done so should release the criteria that will be used to select and review preliminary lists of candidate areas, from which a final list of candidate areas will be drawn.

To guide their actions to complete a network of protected areas, most jurisdictions have developed a map of natural regions. The goal is to protect an area that represents the range of elements found in that natural region. However, because of a lack of inter-jurisdictional cooperation in drawing the natural regions, there is little coordination across political boundaries. Hence, it is possible that the same natural features will be represented twice within the protected area networks on both sides of a political boundary. The LAIG therefore urges all governments to coordinate their efforts across political boundaries to avoid unnecessary duplication of efforts and the removal of more land than is required for conservation purposes.

Another issue related to the establishment of protected areas is the provision of interim protection/management measures for candidate sites in use in some jurisdictions in Canada.

From the perspective of the environmental sector, interim protection/management measures are an important means of ensuring the preservation of the value of candidate sites as protected areas during the evaluation and selection process. These measures will normally require closure of candidate sites, or the restriction of access to them, for industrial purposes, during the period of

⁵ The statistics in this paragraph are taken from the ENDANGERED SPACES PROGRESS REPORT, 1993, No. 4, published by the World Wildlife Fund, except for the figure of 4.9 per cent, which is explained in Appendix 2.

evaluation and selection. As part of these measures, recognition should also be given to the concern of potential or existing industrial or commercial users that such closures or restrictions not be in effect for any longer than is necessary. Overall, the process of nomination and selection of protected areas ought to be speedy. In addition, special measures could be devised, such as shorter time-lines (fast tracking) for candidate sites where industry indicates that it has a special interest in a candidate site.

The mining industry is also concerned about the use of interim protection/management measures for candidate protected areas sites. These concerns include: the nature of the protection; the length of time involved; the size and extent of the areas involved; the criteria used to select such sites; treatment of the existing third-party rights and interests; and the signals sent to investors, especially if the areas involved are extensive.

Finally, better understanding would also be promoted by having and effectively communicating common standards and terminology across jurisdictions. One such set of standards and terminology that may assist in promoting understanding is the standard classification system adopted by the International Union for the Conservation of Nature (IUCN) (see Appendix 9). While Canada's different jurisdictions may follow the content of those standards, the use of different terminology can confuse prospective land users.

2. Principles

- 1. The WMI LAIG endorses the five commitments in the November 1992 *Tri-Council Statement of Commitment to Complete Canada's Networks of Protected Areas,* which calls on governments to:
 - ! Complete Canada's networks of protected areas representative of Canada's land-based natural regions by the year 2000 and accelerate the protection of areas representative of Canada's marine natural regions.
 - ! Accelerate the identification and protection of Canada's critical wildlife habitat.
 - ! Adopt frameworks, strategies, and timeframes for the completion of the protected areas networks.
 - ! Continue to cooperate in the protection of ecosystems, landscapes and wildlife habitat.
 - ! Ensure that protected areas are integral components of all sustainable development strategies.

- 2. It is important for governments to complete an early identification of all candidate protected areas and then, in part, to avoid potential land-use conflicts, to initiate full consultation with all stakeholders during the final selection phase of the selection process.
- 3. Governments should create and set aside from industrial development by the year 2000 those protected areas required to achieve representation of Canada's land-based natural regions.⁶ Elsewhere, protected areas may be open for development as long as this development is compatible with the objectives of the protected area and consistent with relevant management policies and legislation in that particular jurisdiction.
- 4. Aboriginal communities must be involved in the selection and management of protected areas. These communities should have access to protected areas for traditional, ceremonial, cultural, subsistence and social practices. Aboriginal communities should benefit from economic opportunities related to the development and operation of protected areas consistent with management plans for those areas.

3. Objectives

- 1. That for all jurisdictions, the rationale and criteria for the identification and selection of the networks of protected areas, as set out in the *Tri-Council Statement of Commitment*, are defined and candidate sites made public as soon as possible.
- 2. That the selection of sites be coordinated among jurisdictions so as to achieve representation while avoiding duplication wherever and to the extent possible.

4. Recommendations

1. Governments should enhance efforts to ensure that all parties with an interest in land use, including Aboriginal communities, environmental groups, labour and the mining industry, have equal access to, and can participate meaningfully in, all stages of the

⁶ Industrial development includes: mining, logging, oil and gas, and hydro-electric development.

completion of Canada's protected area networks (e.g. determining protected area criteria and management regimes; candidate site selection; evaluation of candidates, etc.).

- 2. Governments should coordinate and integrate, to the extent possible, their processes for the selection of sites for protected areas so that natural regions are adequately represented without being duplicated across jurisdictions.
- 3. For all jurisdictions, the criteria and process for the identification and selection of protected areas should be defined and the candidate sites made public as soon as possible.
- 4. Mineral information inventories should be conducted and evaluated prior to the final selection of a protected area.
- 5. All stakeholders should work to understand and disseminate information regarding the criteria and process for the identification and selection of protected areas.
- 6. Governments should consider what interim protection management measures for protected area candidate sites, if any, would be appropriate, to ensure that these sites are not compromised by development.
- 7. Where governments are using or considering using interim protection/management measures such as full closure or restricted access for candidate protected areas sites, they should first carefully determine the need for and likely impact of such measures on all affected stakeholders, as well as the local, regional or national economy. Consideration must also be given to when these measures should be applied and their duration. Any interim protection/management measure should only be applied following full consultation with all affected stakeholders.

CHAPTER 5

LAND USE PLANNING⁷ AND DECISION-MAKING PROCESSES

1. Background

Decisions over the distribution of land or resources are often made in an atmosphere of competing interests vigorously presenting conflicting points of view. The issues which invariably must be addressed include: the valuation of the land and various natural resources; the way in which they are used; who should use them; who pays for and benefits from their development; and, what management strategies are important.

Land-use decision making has often been adversarial and the decision-making structure hierarchical, with the affected parties frequently seeking a more "accountable" approach. This approach to resolving land-use conflicts has resulted in the perception, if not the reality, that there are winners and losers, and that favourable land-use decisions are reached through lobbying decision-makers or winning over public opinion. This reality is further complicated by complex administrative channels, land-use policies and legislation that are based on inadequate information and data.

The increasingly complex relationships among our environmental, economic and social needs require an integrated land-use and decision making process that effectively and efficiently addresses a much wider range of interests and rights. As a result, multi-party negotiations, based on identifying and achieving each party's objectives, are becoming a widely used process for making land-use decisions.

Decision-making structures may range from legislated powers of a Minister or Cabinet, through various forms of delegated powers, advisory bodies, shared or *ad hoc* decision-making processes. Regardless of the approach taken, the principles which affect how a decision is reached should remain consistent. A distinction should be made between the application of decision-making processes at different levels. While a generic land-use decision-making structure should serve to guide the process of policy development, there should be enough flexibility to accommodate the attributes of specific undertakings at the site level.

⁷ Land-use planning is broadly defined as the process of making considered decisions about how people should use (or leave unused) some part of the earth's surface, having regard to known and expected circumstances and to given aims and/or criteria. This definition has been adapted from Nigel Richardson, LAND USE PLANNING AND SUSTAINABLE DEVELOPMENT IN CANADA, Canadian Environmental Advisory Council, 1989.

The availability and quality of information is also becoming more important as the demand for access to land rises among the many competing interests. This need for information ranges from technical and scientific information about the impact of various land uses to the cumulative impact of land-use decisions on the various users and on the environment. There is also a strong need for a mechanism simply to generate and maintain comprehensive inventories of the various types of land-use designations.

Exploration and mining are a significant part of Canada's land-use mosaic and are thus affected by the various decision-making systems that determine land use. While mineral interests are in some respects affected in the same way as other resource interests, it is possible to identify specific problems for the mining industry which are directly related to the decision-making process:

1. INFORMATION

Most land-use planning in Canada is concerned primarily with the visible land base: the length and breadth of the surface. Often it does not account for the hidden "third dimension" of the land base, that is, the underlying geology, hydrology, energy, mineral and ground water resource potential. In general practice, land-use decisions are made without the benefit of suitable geological resource information. In some cases, this has led to increased risks to public safety and the environment, land-use conflict, investment loss, and costs to infrastructure and natural capital. In addition, decisions have led to the preclusion of future mineral resource development, either by the designation of permanent surface land use and zoning or by restricted access and *de facto* closures to land with resource development potential. Hence, this third dimension needs to be considered and analyzed by land-use decision makers, and factored into all land-use planning and decision making processes in Canada. This includes the issue of accessing land with undeveloped mineral resources and the impact of land-use decisions on areas adjacent to existing mines.

Similarly, the full inclusion of environmental information, including rare and endangered species habitats, parks and candidate protected areas, will also be necessary to improve the effectiveness of integrated resource planning and decision making, and to reduce conflicts between preservation and development interests.

2. THE CUMULATIVE IMPACT OF LAND-USE DECISIONS

The complexity of Canada's land-use mosaic with its numerous and varied designations affecting the availability of land makes it difficult for stakeholders to track and assess the cumulative impact(s) of land-use plans and decisions. To the extent that such vehicles exist (e.g. NATLUS), they would assist stakeholders with an improved understanding of land access and resource allocation issues and help governments in making more informed land and resource policy decisions.

3. MINERAL RESOURCE INFORMATION AND ASSESSMENTS

Prudent land-use decision making requires a thorough knowledge and consideration of the mineral resource potential of the land. It is extremely difficult, however, to predict mineral potential due to such factors as the uncertainties of what mineral commodities will be of value in the future and where they might be found. As a result, there are strongly differing viewpoints on our ability to provide meaningful information on future mineral potential to land-use planning processes.

The methodologies for estimating mineral potential have been evolving for more than three decades in response to a variety of needs for information on future mineral development capabilities. Today's methodologies begin with a strong geo-scientific foundation of existing knowledge from mineral information inventories (MII) to define areas of known high mineral value. The elements of this foundation are then interpreted using mineral deposit models, and knowledge of what constitutes economic mineral deposits, to provide an indication of both discovered and undiscovered resource potential. Such assessments are essentially a "snapshot in time". As new data become available, as new concepts are developed, as new uses and extractive technologies are devised, and as the local and world economies change, so too will the resource potential. A mineral resource assessment is, therefore, simply a "snapshot in time". The difficulties of making accurate mineral resource assessments, coupled with a lack of appreciation of the uncertainties by stakeholders, including decision makers, gives rise to differing viewpoints on the value of conducting mineral resource assessments. The differences are strongly held because, where land areas have been closed to exploration and mining, there is usually no opportunity to revisit land-use decisions in the light of new information that could change the mineral potential rating.

The reality, however, is that Canada's land-use mosaic is in a significant period of change, with strong pressures to restrict or preclude mineral exploration and mining in certain areas for a number of reasons. In these land-use decisions, mineral values must be accounted for, with the best information and techniques available, in order to minimize foregone benefits of mineral development. What constitutes the "best information" to provide to planning processes and decision makers is a hotly debated issue.

Many geologists in the mining industry point out that neither government nor industry can effectively predict where mineral deposits will be found or their ultimate value. These geologists are concerned that there is no evidence that using extrapolated MRA information leads to better land-use decisions, largely because of the inherent weaknesses in the approach and in decision makers' lack of appreciation of those weaknesses. MRA data, in the viewpoint of these geologists, masks some of the real difficulties in making informed decisions because the final MRA product is not based on uniform mineral information. Understanding this principle is paramount and they believe that decision makers are not all aware of it. Therefore, many industry representatives will not endorse the current technology and methodology of MRAs until decision makers demonstrate to the broadest segment of industry that there is a fundamental understanding of the technical hurdles involved in MRAs. Without this understanding, the representatives will not accept that "good" land-use decisions are being made.

Industry representatives believe that MII data on known mineral occurrences and deposits, without significant extrapolations of mineral potential, should be used for land-use planning purposes. The nature of such inventories is such that they can only be used to avoid land-use conflicts where alternative sites are available to accommodate competing land uses.

An opposing view is held by government geologists and planners who are responding to the requirements of multi-stakeholder planning processes. They are of the strong opinion that MII data, while having a high degree of accuracy, is far too limited in extent to provide meaningful information across the large tracts of land subject to planning. Experience has shown that mineral values will not be considered at all if left only to MII data. Geological surveys around the world, including many in Canada, are undertaking MRAs to provide input to strategic land-use planning and policy-making. New research efforts, which incorporate expert industry input, are being pursued to enhance the certainty and scientific basis underlying MRA. Supporters of MRA argue that land-use planning processes are informed of the limitations of the methodology and develop recommendations with this understanding. When these land-use recommendations are forwarded to government decision makers, the limitations are again identified. In the end, decisions affecting land use are going to be made and this group believes that better decisions are being made with MRA data and can point to examples of these decisions.

Clearly, this debate is far from resolved. The LAIG recognizes the shortcomings of the current MRA processes, but it also acknowledges the need for high quality mineral data to be part of land-use decision making. The LAIG supports the concept that the limitations inherent in any resource information should be clearly articulated and should be fully recognized by decision makers alongside the resource data itself. The LAIG also suggests that further investigation into improving MRAs is warranted and should be considered a priority. Governments, industry and the academic and research communities should cooperate and provide the opportunity for research that will improve strategies and, therefore, levels of confidence in assessing mineral resource potential. Land-use decision making systems also should be refined to take into account the nature of geo-scientific knowledge, the accumulated experience of geologists involved in MRAs, and evolving mining technologies.

4. DUE PROCESS

Mining projects typically take many years from exploration to commencement of production, and the mines themselves may continue to produce for many decades. When coupled with the low probability of any particular exploration effort being successful, it is clear that the mining industry requires certainty of mineral tenure over discoveries. This underlines the need for a consistent land-use decision making process which is fair, open, reasoned and effective, and which is allowed to run its course.

There are also problems which exist generally, going beyond the specific concerns of the mining industry:

1. PARTICIPATION

All stakeholders are faced with constraints in participating in land-use planning and decision-making processes. There are two aspects to the issue: the ability to participate, defined as having the resources, skills and time to play an effective role in processes, and the opportunity to participate, defined as having access to the process and the decision makers for the purposes of providing meaningful input into the decision-making process.

Regarding the first aspect, with respect to some processes, there is a concern regarding "consultation overload" as governments shift towards more participatory decision-making processes. Stakeholders should be able to participate without stretching their financial resources beyond their means. In some cases, funding may need to be available to allow for meaningful participation.

As to the second aspect, some regulatory and decision-making processes do not always provide adequate opportunity for stakeholders to participate and provide meaningful input.

In the first case, it appears that regulators, in their desire to open up their processes, sometimes confuse the "quantity" of input with the "quality" of input. In the second case, lack of access prevents stakeholders from expressing legitimate needs and concerns. What is really needed is a balance. Stakeholders need the necessary access to ensure that meaningful input can be provided, without being overburdened to the point where resources can no longer meet the demand for input. This scenario requires careful and sensitive design of the mechanisms for stakeholder participation to preserve that balance.

2. CREATIVE SOLUTIONS

As land-use pressures increase because of competing interests and rising demands on the available land base, the need for creative solutions will also increase. Interest-based negotiations which seek to maximize the resolution of competing interests may be very useful. Any solution must find a balance between providing predictability of outcome and retaining flexibility. Retaining flexibility refers to the possibility of amending previously decided matters should land ownership, economic and/or environmental conditions change. Any review of a decision to determine whether an amendment is necessary should only take place if all stakeholders agree that it is warranted.

3. EVOLVING APPROACHES (ECOSYSTEM-BASED PLANNING)⁸

Some jurisdictions are moving to ecosystem-based planning. This approach to land-use planning attempts to sustain the health, vitality and integrity of the ecosystem, while planning for the community's long-term interests, its economy and the environment that supports them. The ecosystem concept provides many alternatives to traditional ways of doing things and, most importantly, recognizes that "everything is connected to everything else". An ecosystem approach to land-use planning should: provide means for evaluating the natural, physical, social, cultural, and economic components of ecosystems, and the relationships among them; focus on understanding the interactions among air, land, water, and living organisms, including humans; assess the cumulative effects of human activities on ecosystems; recognize the importance of living species other than humans, and of future generations; and to work to restore and maintain the integrity, quality and health of the ecosystem.

An important distinction to traditional land-use planning is that decisions in ecosystembased planning are not based on political or administrative boundaries, but rather on environmental units, such as watersheds or other natural regions that will cross administrative lines.

⁸ Although ecosystem-based planning is a concept that has been around for approximately 30 years, the definition is still evolving. What is offered above has been drawn in part from a discussion paper entitled *Toward an Ecosystem Approach to Land-Use Planning* by S. Barrett and K. Davies, in PLANNING FOR SUSTAINABILITY: TOWARDS INTEGRATING ENVIRONMENTAL PLANNING INTO LAND-USE PLANNING, prepared for the Royal Commission on the Future of the Toronto Waterfront, 1991.

4. CERTAINTY AND LASTING DECISIONS

All stakeholders are looking for certainty in land-use designations. Therefore, we require well thought-out and long-lasting decisions. Certainty is needed to ensure that ecological integrity is being protected in the long run, and to provide the confidence to the mining industry, among other development interests, that investments in mineral exploration and mining are safe investments from a land-use viewpoint. Land-use planning should establish which lands are to remain available for responsible resource development and which lands are not. Proposals for mining-related activities can then proceed in the confidence that questions pertaining to the acceptability of mining as a land-use have been addressed. All stakeholders in the planning processes will also have the confidence that such proposals are still subject to an environmental review or assessment according to the regulations of that jurisdiction.

2. Principles

The LAIG recognizes that land-use planning and decision making is largely a provincial matter, and that most, if not all, of Canada's jurisdictions already have in place land-use decision making processes. This is also true for some Aboriginal territory where land claims have been settled. For the most part, these processes adequately address the issues which must be resolved. In setting out the following principles and recommendations, it is not the objective of the LAIG to create yet another variant of some of the more successful models that exist. Rather, the LAIG is putting forward key principles that comprise the "best" possible process, and making some general suggestions for ways in which these many existing processes may be able to improve their effectiveness and efficiency, while minimizing conflict over the way in which decisions are made.

- 1. A central purpose of land-use planning is to ensure ecological and socio-economic integrity in each of Canada's natural regions.
- 2. An important product of land-use planning is to provide certainty to all stakeholders as to which lands are available for responsible resource development and which lands are not.
- 3. Land-use planning in Canada is an effective tool for achieving sustainable development by its application to promoting the efficient use of land and resources; protecting lands, resources and features of special value; resolving competing demands for land and resources according to predetermined criteria; and encouraging and facilitating environmentally sound economic development.
- 4. Effective and Efficient decisions about land use are reached through the application of a fair, open, reasoned, effective, timely

and consistent decision-making process which is accessible to all those who are legitimately affected by it (see Appendix 10 for the listed attributes for these basic characteristics).

5. Land-use decisions should be based on information that is timely, consistent, of the best possible quality, and as complete as possible. This information should be understandable across jurisdictions.

3. Objectives

- 1. To ensure that all land-use stakeholders have equal access to an effective and fair land-use decision-making process which takes into account all relevant values and interests in the determination of land-use.
- 2. To ensure that decision makers have access to understandable, timely, high quality, relevant and unbiased information on which to base decisions.
- 3. To ensure that land-use decisions provide as much certainty as possible for all stakeholders.

4. Recommendations

- 1. Decision makers should create mechanisms which enable all stakeholders to participate fully, efficiently, effectively, and equitably in land-use decision-making processes.
- 2. All levels of governments should move toward the integration of land-use, environmental and resource planning and decision making, and ensure that they address ecological and socio-economic issues.
- 3. Federal, provincial/territorial and Aboriginal governments and the minerals industry should work together to ensure that better mineral resource information is more readily available and understandable to land-use decision makers. To this end, mineral resource data should be developed and incorporated into land/resource GIS databases.
- 4. Decision makers should be made aware of the quality of information available to them, and, ideally, be sensitized to the

nuances of the technical aspects of information on which decisions will be made. All limitations in the information or methodology should be pointed out to the decision maker.

- 5. A complete Mineral Information Inventory should be done prior to any land-use decision. Where Mineral Resource Assessments are conducted for government use in land-use planning, they should pay particular attention to Recommendation No. 4 above. Any mineral data should be compiled by experts and the results communicated in an understandable manner to land-use decision makers. The results should be used in considering alternative siting, varying degrees of protection, and interim management measures to optimize the objectives of all interests.
- 6. All parties, and especially decision-makers, who have had meaningful input in a land-use decision-making process should commit to the implementation and enforcement of the decisions and regulatory controls identified through that process.
- 7. Governments, industry and the academic and research communities should work together to provide the opportunity for research to improve strategies and levels of confidence in assessing mineral resource potential, and in land-use decision-making systems that provide the latitude necessary for the dynamic nature of geoscientific knowledge, related technologies and the accumulation of experience.
- 8. Where candidate protected areas are proposed or other land-use designations that affect mineral activities, the nature and timing of any constraints imposed on mineral-based activity should be made clear as early on in the decision-making process as possible.

APPENDIX 1

LIST OF PARTICIPANTS

Members of the LAIG:

Jerry Asp	Tahltan Nation Development Corporation
Michael Bourassa	Aird and Berlis
Paul Dean	Government of Newfoundland
Darliea Dorey	Congress of Aboriginal Peoples
Howard Epstein	Ecology Action Centre
Peter Hale	Government of Canada
David Hopper	Government of Nova Scotia
Bob Keyes	Mining Association of Canada
Bruce McKnight	Westmin Resources Inc.
Kevin McNamee	Canadian Nature Federation
Graeme McLaren	Government of British Columbia
Benoit Nadeau	Government of Quebec
Mike Paulette	Metis Nation (NWT)
Bert Pereboom	United Steelworkers of America
Dennis Prince	Falconbridge, Inc.
Paul Quassa	Nunavut Beneficiary
Heather Robertson	Government of Ontario
Colleen Snipper	Government of Canada
Roger Wallis	Geological consultant
Norma Wilson	Canadian Parks and Wilderness Society
Bill Wolfe	Cominco Limited
Alan Young	Yukon Conservation Society

Other Participants:

Tony Andrews Phil Fraser Edmond Gus Tom Hoefer Jim Johnston David Luff Hans Matthews George Miller Prospectors and Developers Association of Canada Native Council of Canada Assembly of First Nations NWT Chamber of Mines Government of Canada Government of Alberta Canadian Aboriginal Minerals Association Mining Association of Canada

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⁹ Norm MacLeod was the principal facilitator for the Land Access Issue Group, chairing all meetings up to and including the sixth face-to-face meeting in Vancouver, held on May 30-31, 1994. Dan Johnston chaired three teleconferences held in June 1994, in the absence of Mr MacLeod.

LAND AREA INFORMATION FOR CANADA

Ed. Note: It has been proposed by a majority of those responding that this appendix should stay in the document with a strong cautionary note attached which explains its genesis, drawbacks, and how it illustrates the need for better quality information. Accordingly, wording has been added to the preface to reflect these suggestions. The land area statistics contained in this Appendix have been supplied by the provincial and territorial jurisdictions at the request of the WMI Land Access Issue Group. The request was sent to all jurisdictions through members of the Intergovernmental Working Group on the Mineral Industry (IGWG).

Jurisdictions were asked to supply their respective land area information based on the following generic groupings:

A1 Protected Areas:	Lands off limits to exploration and mining for protected areas purposes.
A2 Other Closed Areas:	Lands off limits to exploration and mining for other purposes.
B Restricted Access:	Lands where mining industry access is restricted or conditional. These restrictions can range from severe to minor.

It should be noted that while these groupings are closed or restricted to mining, they may also apply to other forms of development. This is especially so for the Restricted Access grouping.

The aforementioned generic breakdown was used because all jurisdictions have different, complex and discrete land area descriptions that may have similar or different applications to mineral exploration and mining. For example, one jurisdiction may collect statistics for land areas under **town/city land**, which is identified as closed to mining. Another jurisdiction, however, may collect land area statistics for **municipal land** that includes cities, towns and rural areas, all of which may be restricted but **not** closed to mining. Hydro-electric development lands in one jurisdiction may be closed to mining, while in another jurisdiction there may be minimal, if any, restrictions on land access for mineral exploration or mining.

The primary purpose of this statistical information is to illustrate the complexity of how land is used and closed or restricted in the context of mining across the country.

Some jurisdictions have also identified new land categories that have been developed but are not yet identified or evaluated. These categories were included as examples of new initiatives that may further restrict the land base available for exploration and mining. This illustrates that land access is and, indeed, will continue to be a complex issue, not just for mineral exploration and mining, but for a number of sectors who have differing needs and objectives on a finite land base.

The reader should take special note that land area statistics in the provincial and territorial jurisdictions are collected for multi-purposes and generally not by a single agency. Consequently, there may be individual land area categories that overlap with others within single jurisdiction. This is particularly the case under Column B: Restricted Access. On the other hand, the individual land area categories under Columns A1 and A2 are separate entities

and do not overlap with the others within the "A" grouping.

The reader should also note that the total of the three columns will not represent the total land area of each jurisdiction. Within each jurisdiction, there are lands on which mineral exploration and mining may take place without restrictions over and above normal operating requirements.

It is for this reason of overlap that individual land area categories have not been totalled under Column B. The reader is cautioned against totalling Column B in order to develop percentages or draw relative comparisons within the column, with other column groupings or between jurisdictions. Any such relative comparisons will be inaccurate and overestimated. The reader is advised to consult with the individual jurisdictions for explanations of each land area category.

Caution: Upon cursory review, the Issue Group has identified several apparent inconsistencies with other sources of information, and within the table from one jurisdiction to another. For example, the land areas shown for national parks do not always agree with the figures and statistics of Parks Canada. Also, migratory bird sanctuaries, which are shown as restricted in Prince Edward Island and Quebec, are shown as closed to mineral activities in both Alberta and Saskatchewan, despite the fact that the federal legislation governing these features does not prohibit mineral activities.

> Due to time constraints, the Issue Group was unable to verify all of the entries in the table. Nevertheless, the Group has chosen to include the table because it represents the only compilation of its kind for Canada and served as a basis for our statistics in this Report. Its shortcomings serve to illustrate the lack of consistent, fully reliable information on the topic, and suggests the need for cooperative efforts to provide such information.

MINERAL DEVELOPMENT DECISION SEQUENCE AND GLOSSARY

EXAMPLES OF MEMORANDA OF UNDERSTANDING AND INTERIM AGREEMENTS

T RI-COUNCIL STATEMENT OF COMMITMENT TO COMPLETE CANADA'S NETWORKS OF PROTECTED AREAS

Preamble

This Statement is intended as a public statement of consolidated political will to complete Canada's networks of protected areas by the year 2000. Realization of this commitment will build upon more than a century of conservation efforts in Canada. The Statement's endorsement by three separate federal-provincial councils is a recognition of the need for both interjurisdictional and inter-disciplinary cooperation. This Statement is the beneficiary of many international commissions, resolutions and declarations - the World Conservation Strategy, the world Charter for Nature, the world Commission on Environment and Development, Caring for the Earth: A Strategy for sustainable Living; and most recently, in February 1992, the Caracas Declaration from the Fourth World congress on Parks and Protected Areas - all of which have signalled the urgency to complete the world's networks of protected areas. The world Commission on environment and Development has recommended that at least 12% of the planet be set aside in protected areas.

It is understood that nothing in this Statement shall in any way prejudice Aboriginal or treaty rights, the land claims process or self-government negotiations.

Premises

On the occasion of Canada's 125th anniversary, the Canadian Council of Ministers of the Environment, the Canadian Parks Ministers' Council, and the Wildlife Ministers' Council of Canada have come together to recognize that:

- ! Canada's natural heritage its wildlands, waters and wildlife unites and defines us all as Canadians
- ! Canada has a special global responsibility to protect its natural heritage given that:
 - Canada is steward of almost 20% of the planet's wilderness (excluding Antarctica), 20% of its fresh water, and 24% of its remaining wetlands
 - Canada is one of the few nations that still has an opportunity to represent its

natural regions and features, and to conserve its critical wildlife habitat

- Protected areas have scientific, educational, inspirational and recreational values for humankind and contribute to sustainable development
- Protected areas are essential to Canada's environmental health, biological diversity, and ecological processes
- ! The ecological health of protected areas is affected by the quality of the surrounding environment
- ! The opportunities to protect Canada's natural regions and wildlife habitat are quickly being foreclosed
- ! Canada's natural heritage should be safeguarded through a variety of protected areas, including national and provincial parks, ecological reserves, wildlife management areas and migratory bird sanctuaries
- Protected areas must be complemented by sound public and private stewardship of all of Canada's lands
- ! Aboriginal peoples have a significant and unique role in the protection of Canada's natural heritage
- ! The protection of Canada's natural heritage cannot be achieved by any one government or agency
- ! Canadians want to be involved in decisions affecting protected areas

Commitments

And therefore, in the interest of present and future generations of Canadians, council members will make every effort to:

! Complete Canada's networks of protected areas representative of Canada's landbased natural regions by the year 2000 and accelerate the protection of areas representative of Canada's marine natural regions

- ! Accelerate the identification and protection of Canada's critical wildlife habitat
- ! Adopt frameworks, strategies, and time-frames for the completion of the protected areas networks
- ! Continue to cooperate in the protection of ecosystems, landscapes and wildlife habitat
- **!** Ensure that protected areas are integral components of all sustainable development strategies

The Honourable Pauline Browes Minister of State (Environment) Government of Canada Canadian Council of Ministers of the Environment The Honourable Harry J. Enns Minister of Natural Resources Government of Manitoba Canadian Parks Ministers' Council The Honourable Titus Allooloo Minister of Renewable Resources and Municipal and Community Affairs Government of the Northwest Territories Wildlife Ministers' Council of Canada

Signed in Aylmer, Quebec, November 25, 1992

CANADIAN WILDERNESS CHARTER

1. WHEREAS humankind is but one of millions of species sharing the planet Earth and whereas the future of the Earth is severely threatened by the activities of this single species, 2. WHEREAS our planet has already lost much of its former wilderness character, thereby endangering many species and ecosystems, 3. WHEREAS Canadians still have the opportunity to complete a network of protected areas representing the biological diversity of our country, **4.** WHEREAS Canada's remaining wild places, be they land or water, merit protection for their inherent value, 5. WHEREAS the protection of wilderness also meets an intrinsic human need for spiritual rekindling and artistic inspiration, 6. WHEREAS Canada's once vast wilderness has deeply shaped the national identity and continues to profoundly influence how we view ourselves as Canadians, 7. WHEREAS Canada's aboriginal peoples hold deep and direct ties to wilderness areas throughout Canada and seek to maintain options for traditional wilderness use, 8. WHEREAS protected areas can serve a variety of purposes including: a) preserving a genetic reservoir of wild plants and animals for future use and appreciation by citizens of Canada and the world, **b**) producing economic benefits from environmentally sensitive tourism, c) offering opportunities for research and environmental education, **9.** WHEREAS the opportunity to complete a national network of protected areas

9. WHEREAS the opportunity to complete a national network of protected areas must be grasped and acted upon during the next ten years, or be lost,

WE AGREE AND URGE:

1. THAT governments, industries, environmental groups and individual Canadians commit themselves to a national effort to establish at least one representative protected area in each of the natural regions of Canada by the year 2000, **2.** THAT the total area thereby protected comprise at least 12% of the lands and waters of Canada as recommended in the world Commission on Environment and Development's report, Our Common Future, **3.** THAT public and private agencies at international, national, provincial, territorial and local levels rigorously monitor progress toward meeting these goals in Canada and ensure that they are fully achieved, and **4.** THAT federal, provincial and territorial government conservation agencies on behalf of all Canadians develop action plans by 1990 for achieving these goals by the year 2000.

As of December 1993, the *Canadian Wilderness Charter* had been signed by more than 250 nongovernmental organizations representing the environmental movement, organized religion, business and commerce, recreation and tourism, and naturalists.

Appendix 7

A Methodology for Achieving Representation of Canada's Natural Regions

Protection of a representative sample of each of Canada's natural regions will contribute to the conservation of Canada's biological diversity. The concept of preserving representative samples within a protected areas network is central to the **Tri-Council Statement of Commitment** and the **Canadian Wilderness Charter**.

The notion of representation is grounded in the science of conservation biology which looks at ecological requirements for ongoing health of ecosystems and their constituent parts. Identifying and protecting representative features is a science-based exercise which focuses on the "enduring features of the landscape, relatively stable land and sea[-]forms and accompanying plant and animal communities". The idea is "not so much to preserve characteristic types of communities [as museum pieces], so much as to maintain the full spectrum of community variation along environmental gradients".

If a network of protected areas fails to represent all habitats, species, or other natural features, it is not fully representative. To assess whether or not a natural region is adequately represented, a methodology known as gap analysis is used. This technique assumes that representation of habitats is defined by soils, parent materials, topography, and other physical factors will serve to represent associated biotic features.

Research and recommendations on gap analysis and representation have been undertaken by the Canadian Council on Ecological Areas (CCEA).¹⁰ Organizations such as the World Wildlife Fund are working to establish standards for science-based gap analysis. Currently, jurisdictions across Canada have differing methods for assessing the degree of representation.

The gap analysis process involves the mapping of land-forms, plant and animal communities, landscape features (and in some cases, cultural and recreational features) to assess the current degree of representation. The process looks at options for including sufficient (representative) examples of a region's essential natural populations and processes in a configuration that ensures the long-term integrity of those features and phenomena. The CCEA defines integrity as the "capability of a protected area to support and maintain assemblages of organisms (communities) that have a composition, form and functional organization comparable to that of similar ecosystem types of the regions."

¹⁰ See Framework for Developing a Nation-Wide System of Ecological Areas: Part 1 (CCEA, 1992).

Both representation criteria and gap analysis methodology are being refined on an ongoing basis through the cooperation of the different agencies and organizations participating in the nation-wide protected areas initiatives.

CANADA'S NATURAL REGIONS ¹¹

¹¹ The following map has been generously supplied by the World Wildlife Fund. It illustrates the eco-region units currently adopted by each provincial/territorial government for purposes of protected areas network planning.

WORLD CONSERVATION UNION (IUCN) PROTECTED AREA CATEGORIES OF PROTECTED AREAS¹²

Through its Commission on National Parks and Protected Areas (CNPPA), the IUCN has given international guidance on the categorization of protected areas for nearly a quarter of a century.

The IUCN definition of a protected area:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

I. Strict Nature Reserves/Wilderness Areas

A Strict Nature Reserve is an area of land and/or sea possessing some outstanding or representative ecosystems, geological, or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

A Wilderness Area is a large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its condition.

II. National Parks

A National Park is a natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally compatible.

¹² Excerpted from the *Guidelines for Protected Areas Management Categories*, endorsed by the 19th General Assembly of the IUCN -- World Conservation Union, Buenos Aires, Argentina, January 1994.

III. Natural Monuments

A Natural Monument is an area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

IV. Habitat/Species Management Areas

A Habitat/Species Management Area is an area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

V. Protected Landscapes/Seascapes

A Protected Landscape/Seascape is an area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

VI. Managed Resource Protected Area

A Managed Resource Protected Area is an area containing predominantly (at least two-thirds) unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

In the case of categories I, II, III, and IV, one of the main management objectives is "to eliminate and thereafter, prevent exploitation or occupation inimical to the purpose of designation". Management of category V calls for the elimination and thereafter, the prevention of "land-uses and activities which are inappropriate in scale and/or character". While category VI areas are to be managed for the protection and maintenance of biological diversity in the long term, they are also to be managed for the promotion of sound management practices for sustainable production purposes and contribution to regional and national development.

GENERIC LAND-USE PLANNING AND DECISION-MAKING MODEL

Part A: An Eleven-Step Decision-Making Model

1. Define the required decision and the area to which it applies

- Define precisely the geographic area under consideration and the required decision.
- Describe the effect of the decision on the land's surface and subsurface.

2. Gather information to make the best possible decision

- Decide on the range of information needed, including where and how it can retrieved.
- Identify any critical information gaps.

3. Identify all the interests, rights, parties and stakeholders

- Establish criteria for what is a "legitimate" interest.
- Decide who and what are affected and ensure that they have access to and can participate in the process.
- Ensure that each participant's interests are clearly articulated and understood by the other participants.

4. Identify the issues

- Break the problem down into component issues based on the rights/interests of participants and the information gathered.

5. Select an appropriate decision-making process

- The range of processes include interest-based negotiations that focus on consensus-building, to consultation, to a simple bureaucratic or political decision.
- Identify which parts of the process are advisory and where the ultimate decisionmaking authority lies.

- Identify the roles of the respective parties, including responsibilities and expectations.
- Ensure that all interested parties have a full understanding of the process.
- Establish the appropriate time-lines for reaching a decision.
- Identify the dispute resolution mechanisms

6. Gather additional data and conduct data analysis

- Where possible gather the strategic and critical data needed to fill the gaps for the selected process.
- Analyze all information.

7. Consider the options for issue resolution

- Identify the range of possible solutions and outcomes.
- Evaluate the possible outcomes in terms of environmental, social and economic impacts.

8. Make recommendations to resolve issues that enter into the decision

- Choose recommendations based on the options analysis, explicitly considering the principles in terms of environmental, social and economic impacts.
- Clarify to the decision-makers if the recommendations are to be considered as a package or if they can be implemented selectively.

9. Seek broader input on options/recommendations from the general public and the constituency groups represented in the process

10. Make a decision

- Communicate the decision, including the reasoning behind it, to all interested parties.

11. Implement the decision, monitor progress, and review the result following implementation

Part B: Necessary Characteristics

At the heart of interest-based decision making is the goal of reaching consensus on a package of land-use recommendations that is generally acceptable to all interests affected by the decision. Any process designed to achieve this must be open, fair, reasoned and effective. The following attributes are considered necessary for such a process:

1. Open

- All interests affected by the outcome must have an opportunity to participate on a voluntary basis;
- internally, process participants must be open to listening to diverse points of view and must be respectful of others interests;
- negotiations/discussions must proceed on a direct, face-to-face basis;
- the relation to those ultimately responsible for making and implementing the decision must be clear;
- decision-making alternatives, should a consensus process fail, must be identified; and
- all participants must have full and equal access to all information.

2. Fair

- To the extent that it is practical, the process should be designed by the participants to meet the needs of the issue being addressed;
- a comprehensive range of economic, environmental and social interests and values must be addressed;
- the process should be administered neutrally, including neutral assistance (e.g. independent facilitation) where necessary;
- to promote fairness, consideration should be given to providing training in negotiating skills/consensus-building and to ensuring that all participants have the necessary resources to be directly involved in a meaningful way; and
- process sponsors must be prepared to entertain compensation or mitigation measures when they are necessary to achieve fair treatment of affected interests, and to reach agreement.

3. Reasoned

- Adequate information must be provided to all interests, so that informed decisions can be made; and
- there must be reasonable assessment of information and a reasoned method of comparing different values.

4. Effective

- The process must be purpose-driven. That is, it must be the appropriate method to resolve the land-use question, or to arrive at a sound decision;
- accountability must be clear, first, of the ultimate decision-maker to the participants, and, second, of the participants to each other and to their respective constituencies that they represent;
- the process must be flexible and responsive to changes in information or in participants' needs;
- realistic time limits should be set;
- final recommendations should provide decision-makers with a means of implementing a land-use decision and of monitoring the effectiveness of that decision;
- where there is not agreement on everything, areas of disagreement should be fully described and alternate dispute resolution mechanisms should be proposed;
- final recommendations must be enforceable and should maintain social, environmental and economic stability; and
- the process, its outcome and how it will be implemented, including time-lines, should be communicated to the general public to foster broader support and understanding.

In addition to the above, a successful decision-making process will make efficient use of allotted time and resources.

Interest-based negotiations focus on the real needs and interests of participants. Consensus, where successfully implemented, will lead to lasting land-use decisions. Consensus-building processes can be time-consuming and expensive in the short-term, but can lead to enormous long-term savings. Achieving consensus normally requires a degree of compromise by the participants; where the issues at stake involve fundamental values or philosophies that cannot be compromised, an alternative decision-making process must be sought.