

MINING IN PARKS: AN ANALYSIS OF THE POLICY FRAMEWORK FOR  
B.C.'S PROVINCIAL PARKS

by

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## ABSTRACT

The provincial parks of British Columbia have endured varying degrees of resource exploitation since the creation of the first provincial park in B.C., Strathcona Park in 1911. B.C. Parks, the government agency which manages B.C.'s parks, administers the Park Act (R.S.B.C. 1979 C.309) and derives its dual goals for recreation and conservation from the Act. In addition to the Park Act, there are several levels of policy for B.C. Parks which guide decisions regarding resource use in parks, including "Striking the Balance - B.C. Parks Policy Statement," occasional policy statements in News Releases, and some conditions in resource use permits.

This thesis examines the levels of policy which guide decisions regarding mining in parks in British Columbia and the consistency of the commitment to the goals of B.C. Parks through the policy levels. The approach to policy analysis taken is that a policy is both an output of the level above, and an input to the level below. Three criteria are derived from the definitions of policy in the literature. They are that policy should be clear and a guide to decision-making, that it should be forward-looking, and that it should be enforceable. The fourth criterion says that the goals of B.C. Parks stated in the Park Act should be traceable through the policy levels.

Since 1973, there have been five policies regarding mining in B.C.'s parks which stand out as significantly altering the commitment of B.C. Parks to its goals. In two of these policies the recreation and conservation goals of B.C. Parks are

apparent, while the goals are not apparent in three of the policies.

Foreseeable decisions for mining in parks are examined, and the ability of the present policies to guide the decisions is tested. B.C. Parks retains little decision-making authority with respect to mining in parks. On a mineral claim in a recreation area, the Ministry of Energy, Mines and Petroleum Resources has jurisdiction. Off a mineral claim in a recreation area, B.C. Parks has limited authority over mining activities. The fundamental decisions which rests with B.C. Parks is whether or not the recreational values of the area are sufficiently impaired by mining to delete it from the park system.

Surprises can occur when the results are different from what was expected, either because the cause is different, the behaviours are not what was anticipated, or an action produces the opposite result from what was intended (Holling 1986: p.294). Several surprises with regard to mining in Parks are imagined and the challenge to the goals of B.C. Parks through the policy levels is examined. A strong commitment to the goals at the upper levels of parks policy, and reflected through the levels is proposed to ensure that B.C.'s parks survive challenges from mining and from other sources.

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## CHAPTER 1. THE CHALLENGE TO B.C. PARKS POSED BY MINING

This thesis has grown from a concern that B.C. Parks, the government agency which manages British Columbia's provincial parks, is faced with potentially extensive exploration and mining activity within parks. Although permitting this activity appears to be contrary to the recreational and conservation goals stated in the Park Act (R.S.B.C. 1979 C.309)<sup>1</sup>, mining activity is permitted in some parks. It appears that decisions regarding mining in parks are not made in accordance with the goals stated in the Park Act. Several questions arise from these observations. Is there a clear policy framework which guides decisions for mining in parks? At what level in the policy framework do the decisions deviate from the goals? What are some possible reasons for the deviant decisions? Given the present policy framework, what decisions might be made in the future with regard to foreseeable and imagined mining activities in parks? These questions will be explored in this thesis.

The occurrence of mining activity in Parks<sup>2</sup> has become an issue of public concern in the last several years. There are strong lobby groups both for opening the Parks to further mineral exploration and for closing Parks totally to industrial exploitation. Pro-mining<sup>3</sup> interests point out that "for every one thousand promising prospects only one has a chance of becoming a mine"

<sup>1</sup>Further references to the Park Act (R.S.B.C. 1979 C.309) will be as the Park Act and the year will only be included where required for clarity.

<sup>2</sup>The word "Park" when used in this thesis will mean land in British Columbia which has been designated under the Park Act. The word "park" will be used when referring to park land in general, but not necessarily designated under the Park Act.

<sup>3</sup>The word "mining" will be used in the broadest sense to include all of the activities from exploration and claim staking through development to production.

(Mineral Industry Task Force 1987: p.21). It is therefore important to the pro-mining group that "the maximum amount of land is available for mineral exploration, since a small percentage of that land area will be found to contain substantial mineral deposits" (Energy, Mines and Petroleum Resources 1984: p.13). Pro-Park interests cite damage to water courses and wildlife and visual damage to scenic views from mining activities as evidence that mining in Parks should not be permitted. They suggest that "Mining and parks are mutually exclusive land-uses" (CPAWS 1987: p.2.). Statements similar to this one are often seen in the conservation literature (Mitchell and Sewell 1981; Dooling 1985; Eidsvik 1986) and illustrate the challenge which B.C. Parks faces in managing Parks containing mining activity.

It is likely that conflicts between Parks and mining interest groups will become even more intense as the population increases and the demands for recreation also increase. Hardin (1988) states that "As population increases, some goods decrease" (p.11), and although he is referring specifically to wilderness as the decreasing good, the concept is equally applicable to parks. Ever-increasing demands for resource exploitation threaten existing and potential park lands. Awareness of the potential conflicts and a clear policy framework in which to make decisions on these difficult issues will assist B.C. Parks to better manage the areas over which the agency has jurisdiction.

Policies are generally intended to achieve certain goals and/or objectives. The Park Act presents a set of goals which ought to be used to formulate policies which guide the management of mining in Parks. It follows logically that these

goals ought also to be reflected in the lower levels of policy derived from the Park Act. The Park Act names the Parks Branch and states that it will be responsible for the management of lands designated under the Act. B.C. Parks is the popular name which has been adopted by the managing agency (Kerr 1989) and will be used in this thesis.

This thesis will not consider the philosophical issues relating to the sanctity of parks or questions about whether any exploitive activities should be permitted in parks. The current Social Credit government has clearly shown by several actions that it intends to allow mineral exploration in Parks through the designation of recreation areas. For example, the Mineral Tenure Act was passed in August 1988 incorporating several changes which facilitate mining in Parks. Another example is the change in the status of some Park land covering mineral claims. It was downgraded by orders-in-council in 1987 and 1988 from Class A (no resource extraction) to recreation area, a classification in which resource extraction is permitted. The legislation is taken as given and is the starting point for the policy framework discussions.

This study will consider only the policies relating to exploration and development of hard-rock mineral mines in Parks. Neither placer mining nor oil and gas exploration will be examined - although many of the broad principles are similar, the details are quite different from hard-rock mineral exploration and development.

Many government policies are not available to the public, nor to other observers. This study is therefore based on those policies and documents that are publicly

available. Moreover, the analysis is confined to the stated policies of B.C. Parks and the Ministry of Energy, Mines and Petroleum Resources and does not explore contextual political or structural issues such as the roles of Cabinet or the public in influencing decisions.

A review of the policy literature in Chapter 2 establishes the need for policy to guide decision-makers and develops a definition of policy to be used in this thesis. Three criteria, based on the policy definitions in the literature, are selected which are used as determinants of true policy. A fourth criterion is developed from the discussion of policy analysis and implementation and states that goals should be traceable through the policy levels when more detailed policies are developed from the level of policy above them. The assumption is that if a policy is "true policy" as defined in the literature, it should uphold the goals of the legislation from which it was derived.

In Chapter 3 a short chronology of policies for mining in Parks is presented. This chronology sets the historical context for the discussion of the current policy framework in the next chapter and identifies five critical turning points in policy which represent dramatic changes in the pursuit of the goals of the Park Act. These five critical policies are analysed in further detail in Chapter 5.

In Chapter 4 the current policy framework for decisions regarding mining in Parks is set forth. Although the policies of B.C. Parks are the primary focus of the discussion, policies of Energy, Mines and Petroleum Resources are described where they are relevant to mining in Parks. The policies of B.C.

Parks are measured against the first three criteria to illustrate that they are true policies. The fourth criterion is also applied to determine how traceable the goals are through the levels of policy in the framework.

In Chapter 5 the analysis returns to the five critical policies identified in Chapter 3. These policies, which represent dramatic changes in the pursuit of the goals of B.C. Parks, are measured against the four criteria developed in Chapter 2. Observations are presented on how well the policies represent the goals of B.C. Parks and on the possible reasons for the deviations from the goals for each of the five critical policies.

In Chapter 6, some of the foreseeable decisions regarding mining in Parks are considered and opportunities for B.C. Parks to make decisions within the current policy framework which uphold its goals are examined. "Surprises" for B.C. Parks are imagined, and comments made on the utility of present policies to guide decisions when surprises occur.

Chapter 7 presents the conclusions drawn from this study regarding the current policy framework for mining in Parks. Although there is a reasonably clear policy framework to guide B.C. Parks decisions regarding mining in Parks, the goals set out in the Park Act are not always easily traced through the policy levels at implementation.

## CHAPTER 2. POLICY CONCEPTS

This review of the policy literature is intended to establish several points. First, the need and rationale for policy will be considered. Then a definition of policy useful in the context of this study will be developed. Next, the concept of levels of policy will be examined and a connection made to policy analysis and implementation. Finally, the link between policy and preparedness will be discussed.

### *2.1. THE NEED FOR POLICY IN A DEMOCRATIC SOCIETY*

Policy is viewed by some authors as a part of the democratic process (Davidson 1981; Sewell and Dumbrell 1987; Doern and Phidd 1983). Accountability, efficiency, fairness, predictability and equity are facilitated by stated policies. Sewell and Dumbrell (1987: p.v) state that "Without policy or legislation, it is difficult to assign responsibility" and that inefficiency is likely to result from "a lack of clear and consistent policies." These authors believe that clearly stated policies lead to accountability for decisions and suggest that decisions are made more efficiently if there are policies to guide decision-making.

Policy making has been described by Simeon as "a matter of choice in which resources are limited and goals and objectives differ and cannot easily be weighed against each other" (Simeon 1976: p.550). Having made these difficult policy choices, governments which base decisions on explicit policies will generally be considered more fair than those which have no explicit policies.

Predictability is linked to fairness in that a rationale for a decision can be seen. There can be a reasonable expectation that a similar decision would be made in similar circumstances if a policy were in place to guide decision makers. Nagel (1984a) considers predictability as one of the more important procedural goals for evaluating policies (p.33). The Mineral Industry Task Force identified a "predictable policy environment" (1987:p.1, Executive Summary) as most desirable for the mining industry of British Columbia.

Doern and Phidd (1983) state that "equity is a democratic concept" that "enjoins policy makers to:

- treat people in equivalent situations equally, and to
- treat people who are not in equivalent situations unequally (that is, be fair and reasonable)" (p.55).

Thus, policy has an important role to play in a democratic society.

## **2.2. THE CONCEPT OF PUBLIC POLICY**

This study will focus specifically on public policy. Dubnick and Bardes (1983) state that "a problem becomes public when it calls for the use of government resources or involves groups so large in number or so politically significant that government policy-makers cannot ignore them" and conclude that "public policies are established as possible solutions to problems, *public problems*" (p.6). The issue of mining in Parks involves both government resources and several large and politically significant interest groups.



Bullock et al. (1983) suggest that "a useful definition of public policy will indicate that policy is a pattern of governmental activity on some topic or matter which has a purpose or goal" and stress that public policy is developed by government institutions (p.2).

### **2.3. DEFINITION OF POLICY**

Defining "policy" has "absorbed a great deal of scholarly energy" (Wellman 1987: p.6) and Dye (1984: p.2) states that the "search for a precise definition is likely to be futile and distracting." Nevertheless, nearly every book and article on the study of policy contains a definition judged by the author as useful. While these definitions vary widely, many have elements in common.

The first common element is the idea that policy is a guide to decisions likely to be repeated, rather than an actual decision. Mitchell (1979) states that "policy is viewed as a pattern of purposive or goal-oriented choice and action rather than as separate, discrete decisions" (p.295). Wellman (1987) quotes Eulau and Prewitt who define policy "as a "standing decision" characterized by behavioural consistency and repetitiveness ..." (p.6). These two definitions serve to illustrate that policy is considered to be a guide to decisions which will be made on more than one occasion, shown by the use of the phrases "standing decision," "repetitiveness," and "pattern of ... choice." It is also anticipated that the decisions will be made under differing circumstances, hence the necessity of the phrase "purposive or goal-oriented choice." If the purpose or goal of the policy is clear, then decisions will be made in the same way each time and

there will indeed be a "pattern" or "standing decision."

The second element which occurs in several works is that policy is forward-looking. Simmons et al. (1974) say that policy "is regarded as an indication of intention, a guide to action (rather than a decision which implies immediate consequence)" (p.460). Mitchell and Sewell (1981) state that policies must "address present and future needs" and that "future actions must be conceived, designed and implemented" (p.1). While policies may be designed in response to present conditions, the future must also be considered, and considerable thought given to how those policies will assist decision-makers with future decisions.

The last common element in policy definitions is that policy is based on legislation and is enforceable. Bullock et al. (1983) state that "public policy is based on law and is authoritative" and that there is an "implied threat of legitimate coercion" (p.4). Policies, based on legislation, may provide the decision-maker with a framework for a decision which has narrower focus than the legislation. Policy may also be formed to guide ministerial discretion which is permitted by many pieces of legislation. At a broader scale, policy may create a framework for the interaction of several pieces of legislation. All of these types of policy, however, will have the authority of the law as their basis.

The three most common elements drawn from the definitions in the literature indicate that policy is:

1. a clearly stated guide to decision making (rather than the decision itself)

- and sets up a pattern of decisions;
2. forward looking, that is that the policy is a guide for decisions to be made in the future as well as those to be made immediately; and
  3. backed by the force of law, that is that policy is authoritative and enforceable.

These three points are the basis for the working definition for this thesis. They are more than common elements - they are prerequisites to true policy. The three prerequisites will be used as criteria for true policy and will be applied to the B.C. Parks policy framework in an initial analysis in Chapter 4, and to selected critical policies in a detailed analysis in Chapter 5.

#### ***2.4. LEVELS OF POLICY***

Simeon (1976), referring specifically to Canada, states that public policy "includes the revised statutes of eleven governments, their public accounts, numberless ordinances and regulations, white papers and reports, not to mention the informal and unwritten actions of officials in the field" (p.557). This concept substantiates the third point of the definition developed above, that policy is authoritative. If the statutes and regulations are considered as one of the levels of policy, it follows that papers, reports and statements derived from them should share their authority. It follows, also, that the papers, reports and statements should share the goals of the statutes and legislation.

Wellman (1987) considers "public laws" that "are the most explicit and traceable" policies and traces policy development through the levels of the American political

system. He concludes that conflict between legislative and executive goals is a "slippage in policy implementation" (p.7). The levels of policy relating to mining in Parks will be discussed in Chapter 4, and the consistency of these policies with the goals of B.C. Parks set out in the Park Act will constitute part of the analysis in Chapter 5.

Sewell and Dumbrell (1987), in their discussion of wilderness decision making in British Columbia, examine the several levels of policy. They conclude that "there is no consistent policy on wilderness management" although there are several Acts and agencies "involved in wilderness management in B.C." (p.ii). The result, they found, is that "decision-making may become confused and protracted when contentious, non-routine issues arise" (p.ii). The prospect of exploration and mining in Parks is certainly a "contentious, non-routine issue," and, as discussed in Chapter 5, making decisions in connection with this activity has been confused and difficult.

## **2.5. POLICY ANALYSIS AND IMPLEMENTATION**

Policy analysis takes place primarily in a setting which involves "public decisions" (Weimer and Vining 1989: p.1). "The product of policy analysis is advice" and the analysts must have "clients for their advice who can participate in public decision making" (p.1). Although the analysis in this thesis is detached from the public decision making arena, the policies and questions considered are public policies and decisions.

Policy analysis has traditionally focussed on either the variables that shape policy or on the outputs of policy. Nagel (1984b) states that "some (authors) emphasize policy effects and the evaluation or optimization of those effects ... others prefer to stress the causal determinants and processes" (p.1). There is, he says, "a trend to taking goals as givens and attempting to determine what policies will maximize them" (p.13), a style of analysis closely related to the study of policy inputs.

Nagel (1988) says that "Goals are whatever effects one is seeking to achieve or avoid" (p.3). Nakamura and Pinderhughes (1981) state that "the degree of implementation achieved" is measured by "the degree to which those goals are actually achieved" (p.4). Dunn (1983) says that there is an ideal in a democracy that when an elected government passes a law, the law should be followed (p.192,193). This ideal is reflected in the assertion by Palumbo and Harder (1981) that "changes made in policy during implementation might therefore be considered illegitimate. This is perhaps the main reason that there is a tendency to define successful implementation as occurring only when policy goals are carried out" (p.xi). The fourth criterion against which the policies of B.C. Parks are measured is based on this ideal that goals, identifiable in the legislation, should be upheld during implementation.

Doern and Phidd (1983) suggest that there are two types of policy analysis which, although part of a cycle, are distinct. *Ex post* evaluation involves an assessment of the causal effects of a policy after implementation whereas *a priori* analysis involves modelling and other predictive analyses prior to policy

adoption (p.528).

Mood (1983) defines policy analysis as "the painstaking investigation of matters of public concern" (p.1) and "usually begins when someone perceives ... a potential improvement" and believes that "benefits would accrue ... if certain changes were made" (p.4). He also states that "the heart of policy analysis is the evaluation of alternatives" (p.11), and focusses on mathematical models of analysis and decision-making. Hogwood and Gunn (1984) consider that policy analysis is relevant throughout the policy process from issue identification through forecasting and option analysis to implementation and evaluation (p.7-10).

This study borrows from the theories of both policy analysis and implementation. Policy, in this study, is considered to be both an output of the levels above it and an input to the policy levels below. The top level considered in this study is the Park Act which is taken as a "given" and influences the levels below it, while policy derived from the Park Act is viewed as an implementation of the Act.

Mitchell (1979) cautions that geographers (and we may presume other social scientists) should "approach policy analysis as a means to an end, rather than as an end in itself" (p.293). This is the approach to policy analysis taken in this thesis. The end sought here is a better understanding of the policy framework within which B.C. Parks makes decisions regarding mining in Parks and how the goals set out in the Park Act are reflected in the policies at different levels in the framework.

## **2.6. POLICY, PREPAREDNESS AND SURPRISE**

The initial two elements of the definition of policy suggest a link between policy and preparedness. The first, that policy is a guide to decisions likely to be repeated, indicates that similar decisions may be made in the future. Clear and carefully formulated policies help agencies to be prepared for the future. The second, that policy is forward-looking, implies that policies will be formulated for decisions which are anticipated at a later time. The higher levels of policy in particular, if based on the goals of the agency, will assist with decisions which are anticipated at a later time. Mitchell and Sewell (1981) state that "policies must address present and future needs rather than those which already are passing us by." and that "the level of preparedness for emerging problems must be improved" (p.1). These authors imply that policies which address future needs will enable decision-makers to be better prepared to deal with emerging problems.

Holling and Goldberg (1971) described the effects of incremental changes in the management of ecosystems, noting that individual incremental changes are often absorbed and the system seems stable. "It is only when a series of incremental changes accumulate or a massive shock is imposed, that the resilience of the system is exceeded, generating dramatic and unexpected signals of change" (p.221). It is these dramatic and unexpected changes which Holling refers to as "surprise" in his later work. He says that surprises "occur when causes turn out to be sharply different than was conceived, when behaviours are profoundly unexpected, and when action produces a result opposite to that intended - in

short, when perceived reality departs *qualitatively* from expectation" (Holling 1986: p.294).

Di Castri, in Clark and Munn (1986), comments on an article by C.S. Holling. He extends the ecological context of Holling's discussion and states that "management institutions (and political establishments) should not desperately seek prediction and control, but rather should settle their organization and their policy on the acceptance of, and the adaptation to, surprise effects" (p.318). He advises that agencies should step beyond preparing for foreseeable decisions as suggested by Mitchell and Sewell and prepare for the unforeseeable decisions or "surprises." For policymakers, he says that "Flexibility should be the *sine qua non* condition for their decisions" (p. 318). Brooks (1986) moderates this advice by saying that "it would be a mistake to reject surprise-free thinking out of hand," preferring instead to integrate longer term thinking with surprise thinking (p.327). While it is clear that surprise and policy need to be linked, prescriptive models specifically doing so have not yet appeared in the literature.

Preparing for surprise poses a paradox for policy. Policies must be clear and consistent to guide decisions over time, yet they must be flexible enough to respond to surprises. Some of this paradox can be resolved by successive levels of policy which are based on goals but derived from the policy level above.



## CHAPTER 3. HISTORY OF MINING IN PARKS AND EVOLUTION OF CURRENT POLICY

The history of policies relating to mining in Parks in British Columbia is set out in this chapter with a minimum of discussion about the significance of each policy. Current policies are identified in their historical context and are evaluated in Chapter 4. In examining the chronology, five policies stand out as critical policy choices, that is policies which significantly altered the policy direction with regard to mining in Parks. These five critical policies will be examined in detail in Chapter 5.

### 3.1. *THE CHRONOLOGY*

The first park created in British Columbia was Strathcona Park in 1911 by the Strathcona Park Act (S.B.C. 1911 C.49). The park was "reserved and set apart as a public park and pleasure-ground for the benefit, advantage, and enjoyment of the people of British Columbia ... " (Section 3). The park was "withdrawn from sale, settlement, and occupancy ... with respect to mining or any other matter" (Section 2). Mount Robson and Garibaldi Parks were created under similarly protective legislation in 1913 and 1923 respectively. Initially, therefore, parks were to be free of resource commitments in general, and mining in particular.

In 1918, 1925, and 1927 amendments were passed to the Strathcona Park Act which gradually opened the Park to resource exploitation, allowing both forest and

mineral tenures. The Forest Act Amendment Act in 1939 transferred management authority for all parks except Strathcona, Mount Robson, and Garibaldi to the forest ministry. In 1957, the Department of Recreation and Conservation Act was passed which established a Parks Branch, and responsibility for the 104 parks existing at the time, was passed to the new agency. This was the first provincial government agency of its kind in Canada. Through the wedding of several resource branches into the Parks Branch, the agency had authority over fish, wildlife, recreation, and tourism in parks. These recreational resources were recognized in their own Act with a minister directly responsible (Dooling 1970).

In 1965, the Park Act was passed which contained the designations of Class A, B, and C park, nature conservancy, and recreation area. The natural resources in Class A and C parks were protected from exploitation except where necessary to preserve or maintain the recreational values. Class B parks and recreation areas were open for mineral exploration and mining at the discretion of the minister. This was an important clause because it meant that claims staked after this time were acquired under permission that could be withdrawn at any time. In practice, the permission was freely granted into the early 1970's. The Park Act of 1965 also closed small parks (less than 5000 acres) of all classes and nature conservancies to mining activity. The other important note about the Park Act of 1965 is that parks could be created, altered, or deleted by an order-in-council. This process involved no public debate on the proposed changes.

In 1972 the New Democratic Party was elected in British Columbia on a strong pro-environment and conservation platform (Marcy 1985: p.14). All Class B parks were closed to exploration and mining in early 1973, with the exception of that part of Strathcona Park which contained the Westmin Mine. This policy change was announced in the legislature by the minister responsible for parks on February 23. An amendment to the Park Act later in 1973 enacted the boundaries of eighty Class A parks. This amendment gave more protection to these areas by ensuring that their boundaries could not be changed or their designation altered except by an amendment to the Park Act.

Although the Social Credit Party was re-elected in 1975, there was little change in the access which the mining industry sought to protected lands. This was due, in part, to high metal prices and the availability of mineral deposits that were ready to develop outside parks. Known deposits were able to meet demand, and there was little sympathy for new exploration in parks.

The Park Act in force at present was passed in 1979, incorporating the amendments which had been made in 1973 to protect Class A parks. The Act states that Class A parks were "dedicated for the preservation of their natural environments for the inspiration, use and enjoyment of the public" (Section 5(3)). This section gives these Parks strong protection for preservation. In addition, the Act introduced the resource use permit without which resource extraction could not proceed in a recreation area. B.C. Parks was given a more active management role in recreation areas through issuance of these permits.

Although the mining industry in general did not protest strongly against the policy of closing Class B provincial Parks to mining activity in 1973, some affected individuals did. One of these was David Tener who repeatedly requested access to his claims in Wells Gray Park through the 1970's (Marcy 1985: p.151). His requests were continually denied, and finally he sought redress through the courts in 1979.

This was the first legal challenge to the denial of access for mineral exploration and development in any class of Park. Tener applied to the Supreme Court of British Columbia for compensation and the Court denied the application in 1980. Tener then appealed the decision to the British Columbia Court of Appeal which, in 1982, ruled in favour of compensation. The value of the claims calculated by Tener, including expenditures and lost opportunity, was \$5.2 million. The Province of British Columbia appealed to the Supreme Court of Canada, and in May 1985 the decision was that the province had in effect expropriated some of Tener's rights. The province was therefore required either to compensate Tener or to allow access to the claims. The province chose to allow access rather than pay compensation.

The area of the Tener claims in Wells Gray Park was reclassified from Class A to recreation area by an amendment to the Park Act in August 1985. A second amendment was drafted allowing a surface access corridor to be reclassified from Class A to recreation area but it was never enacted. The claim area is approximately 16 kilometers from the Park boundary by the proposed surface access corridor, but the route is environmentally sensitive.

Helicopter access only would be permitted until a more advanced development stage were reached on the claims which required the enactment of the amendment to allow surface access.

This was an important policy choice as it opened the way for other requests for access and compensation, one of which was from Cream Silver Mines Ltd. in 1986 and is discussed later in this chapter. The policy to allow access, however, failed to differentiate between claims which pre-dated the establishment of a park, as Tener's did, and other claims which were staked after 1965 under the Minister's permission in Class B Parks.

B.C. Parks prepared the Park Land Designation Policy in October 1985 to simplify the designations under the Park Act. The policy stated that only Class A parks and recreation areas would be created under the Park Act. Existing Class B parks and recreation areas would be reclassified to Class A, except areas which contained commitments for non-recreational purposes. Areas with non-recreational commitments would be classified as recreation area. Class C parks, which were intended to fill community recreational needs, were to be transferred to local jurisdictions such as municipalities or reclassified to Class A park or recreation area as appropriate. This policy was intended, in part, to resolve mineral resource tenures in existing parks by reclassifying the claim areas as recreation area and upgrading the rest of the park from Class B or recreation area to Class A. The policy was implemented almost completely over the next four years with respect to reclassifying Class B parks. The Park Registry Data of B.C. Parks dated June 26, 1989 lists only two Class B parks.

Through the mid-1980's, there was growing public concern about the continued intrusion of extractive resource users into wilderness areas. Potential development of mineral claims on the west side of Manning Park were perceived as a threat to the wilderness value of the Park, and mining roads and infrastructure development in the Alsek-Tatshenshini River valleys threatened the area's international reputation as a wilderness river rafting location. The Wilderness Advisory Committee (WAC) was appointed in October 1985 to advise the Minister of Environment on issues of land allocation, "particularly the problem of setting aside land for the preservation of wilderness in the province" (WAC 1986a: p.1). There were 16 study areas and 8 park boundary reviews named in the terms of reference. Nine of the 16 study areas (WAC 1986b: p.33-98) and 5 of the park boundary reviews (p.99-130) included conflicts between wilderness preservation and mineral resource exploitation. The recommendations of the Wilderness Advisory Committee were published in March 1986 in "The Wilderness Mosaic." The Committee accepted the view of EMPR that as much land possible should remain available for exploration, "except where the ecological character of the site is the reason for its protection ... and where mining would inevitably change that character" (WAC 1986b: p.30). The Committee recommended that two study areas with low mineral potential be designated as Class A parks. These were the Gitnadoix and Wokkpash areas both of which were instead designated as recreation areas in December 1986 and are open for mineral exploration.

In April 1986, Cream Silver Mines Ltd. sought to have the Supreme Court of Canada's decision regarding the Tener claims applied to their claims in

Strathcona Park. The British Columbia Supreme Court determined that, because the claims were acquired after the park was declared and under a different Mineral Act, Cream Silver did not have the same interest as Tener. Consequently, no compensation was due.

The provincial government interpreted the Tener decision to be broadly applicable, despite the Cream Silver court ruling to the contrary, and in January 1987 it reclassified the existing mineral claims in Strathcona, Tweedsmuir and Kokanee Glacier Parks to recreation area from Class A or B. In addition, areas of known high mineral potential in Kwadacha and Tweedsmuir Parks were "designated as recreation area to permit exploration" (Environment and Parks 1987).

B.C. Parks and the Ministry of Energy, Mines and Petroleum Resources signed an agreement in July 1987 to jointly manage mineral exploration and development in recreation areas. This agreement is known as The Parks-Mines Protocol. The terms of the agreement indicate that Mines was the stronger ministry and made few concessions to Parks jurisdiction and management responsibilities. For example, Clause 5 states that "all necessary access to mineral claims across recreation areas will be assured by means of a resource use permit" and Clause 6 says that "the terms and conditions of a RUP respecting mineral exploration, development and mining will be no more stringent than those required ... outside a recreation area." The main concessions granted by Mines were that Parks would be included in the referral process for a Notice of Work which affected a recreation area and have input to the Reclamation

Permit issued by Mines. Many of the clauses from this agreement have been incorporated in the Recreation Area Regulation (April 1989) under the Mineral Tenure Act and the agreement is otherwise defunct.

In January 1988 B.C. Parks published a document entitled "Striking the Balance - B.C. Parks Policy." The document reiterates the concepts expressed in the Land Designation Policy of 1985 which states that Park lands with non-recreational commitments would be classified as recreation areas. A second printing of the Parks policy document was released in April 1989 in which the policies on mineral exploration and development were changed. "The new policy is that **there will be no mineral exploration or development inside parks**" (B.C. Parks 1989: p.16). The intention is that mineral claims in recreation areas which are wholly within a Park will be closed to exploration and development, and that the land will be returned to Class A status, while those recreation areas which lie on the peripheries of Parks may be opened to mining.

With the area over its claims in Strathcona Park reclassified to recreation area, Cream Silver Mines Ltd. applied for and received a RUP in January 1988 authorizing a drill program. There was much public protest when the work began, including civil disobedience. The work was hastily concluded and the Strathcona Park Advisory Committee was appointed in March 1988 to "address both recent decisions and future plans for the management of the park and recreation area" as a result of the "growing public concern and interest, particularly in the potential development of the existing mineral tenures" (Environment and Parks 1988: p.1). The terms of reference for the Committee



required it "to investigate and make recommendations on ... the management implications of resource tenures" (p.2). Its report, "Restoring the Balance," was released in June 1988. Its title was selected to emphasize that the goals set out in B.C. Parks policy statement called "Striking the Balance" (January 1988) required a stronger commitment. The primary recommendation contained in the report was that there be no new mineral exploration or mining in Strathcona Park. The Westmin mine at Buttle Lake would be permitted to continue, but no new work should be authorized. A News Release from the Minister Responsible for Parks on September 1, 1988, confirmed the policy that no new tenures or exploration would be permitted in Strathcona Park. A News Release dated December 21, 1988, extended the policy to apply to other Parks, namely Wells Gray (including the Tener claims), Tweedsmuir, Manning, and Kokanee Glacier. The issues raised by the Tener legal case concerning what rights were expropriated and how compensation should be established remained. The December 21, 1988, news release also states that B.C. Parks "will deal equitably with holders of valid existing claims."

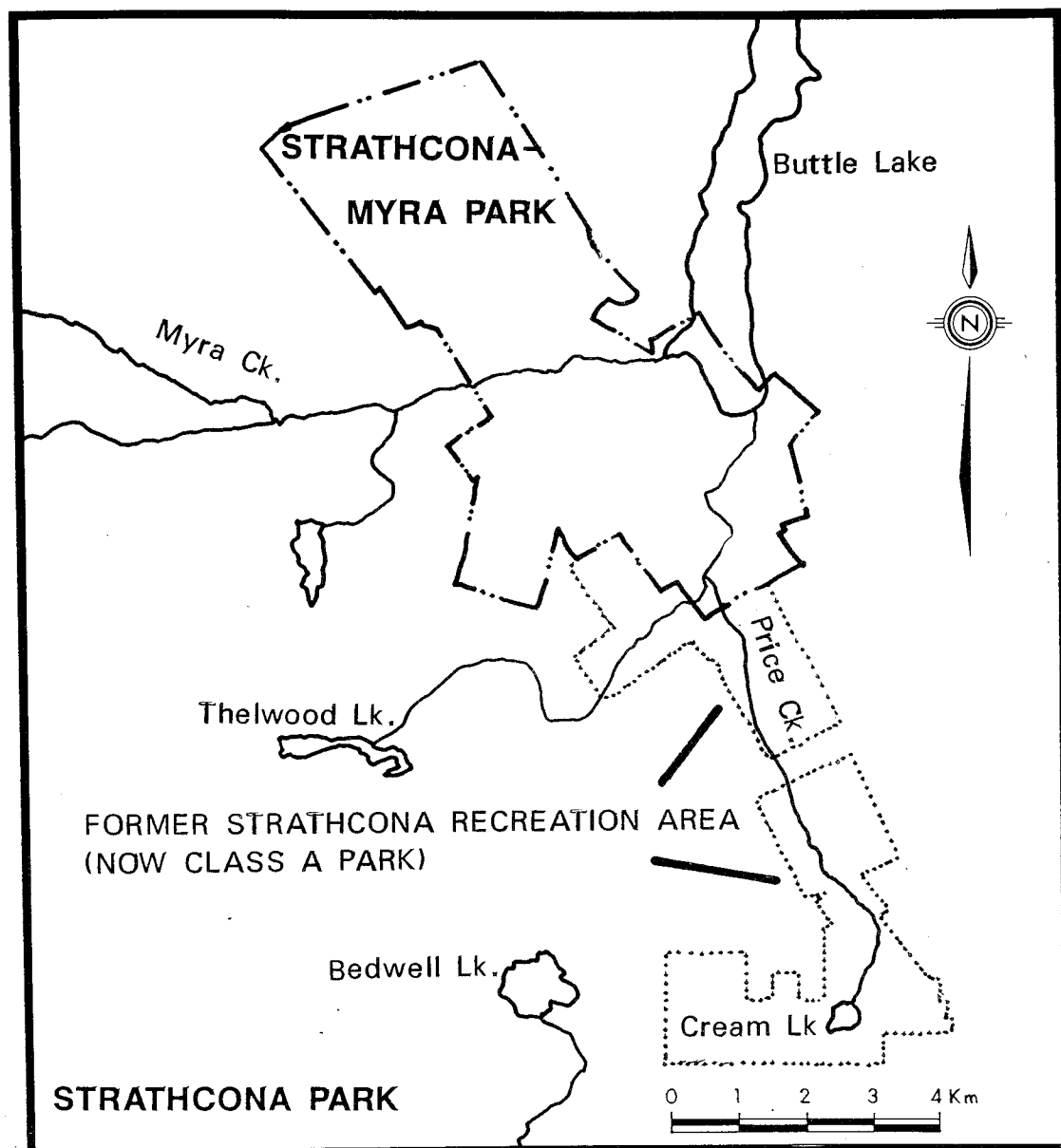
In August 1988, the Mineral Tenure Act was passed, introducing a new type of mineral tenure for recreation areas. The Act permitted time-limited tenure in recreation areas jointly designated by the ministers responsible for parks and mines. This time-limit is a minimum ten year window of opportunity for mineral exploration and development. The ten year period begins after publication of a mineral potential evaluation and notice that the area is to be reclassified from recreation area to Park. In April 1989 the Recreation Area Regulation was passed which details how those tenures will be managed by the

two agencies, namely B.C. Parks and EMPR.

In an apparent reversal of the October 1985 policy on park land designation which stated that only Class A and recreation area would be used to classify new designations and that existing areas would be reclassified, the area covered by the lease for the Westmin Mine was reclassified from recreation area to Class B on June 12, 1989, by Order-in-Council 839. It is now a separate park named Strathcona-Myra Park. The rest of the former Strathcona Recreation Area was added to Strathcona Park as Class A (See Figure 1). The reasoning behind this arrangement is that the Park Act requires the minister to consider the recreational values of the area before issuing permits for resource use in a Class B park, thereby giving B.C. Parks stronger management responsibility.

In April 1989 the Ministry of Energy, Mines and Petroleum Resources released a Call For Proposal for areas of known mineral potential in two recreation areas. The evaluation criteria ranged from technical merits of the proposal and the proposed expenditures to the financial and environmental reputation of the proponent. However, in the proposal call document, there is no indication that B.C. Parks has any responsibility for the approval.

Table 1 summarizes the chronology of mining in Parks.



(Park outline from B.C. Parks, other information compiled by author.)

Figure 1. Land Designations in Strathcona Park

**Table 1. Chronological Summary of Mining in Parks**

1911	<u>Strathcona Park Act</u> created first provincial park in B.C.
1913, 1923	Mount Robson and Garibaldi Parks created.
1918, 1925, 1927	Amendments to the <u>Strathcona Park Act</u> permitted forest and mineral tenures.
1957	<u>Department of Recreation and Conservation Act</u> established Parks Branch which had responsibility for all provincial parks.
1965	<u>Park Act</u> passed which stated that Class B parks and recreation areas were open for mineral exploration at the minister's discretion, while Classes A and C and small parks were closed to mineral exploration.
1973 (February)	All provincial parks closed to mining.
1973	Boundaries of 80 Class A parks enacted by amendment to <u>Park Act</u> .
1979	The current <u>Park Act</u> passed incorporating special recognition of the natural environments of Class A parks.
1979-1985	Tener case in courts; decision that B.C. Parks must allow access or compensate.
1985 (August)	<u>Park Act</u> amended to reclassify Tener claims from Class A to recreation Area.
1985 (October)	Park Land Designation Policy states that Class B designations will be reclassified as Class A or recreation area.
1985 (October)	Wilderness Advisory Committee established.
1986 (March)	"The Wilderness Mosaic," report of the Wilderness Advisory Committee, released.
1986 (April)	British Columbia Supreme Court determined that Cream Silver Mines Ltd. did not have the same interest in its claims in Strathcona Park that Tener had in Well Gray Park.
1987 (January)	Mineral claims, as well as areas of known mineral potential, within parks were reclassified to recreation area despite the Cream Silver court ruling.

1987 (July)	Parks-Mines Protocol signed which outlined how mining activity will be managed in a recreation area.
1988 (January)	Cream Silver Mines Ltd. conducted drill program on claims in Strathcona Park amid great public protest.
1988 (January)	"Striking the Balance - B.C. Parks Policy Statement" released.
1988 (March)	Strathcona Park Advisory Committee appointed.
1988 (June)	"Restoring the Balance," the report of the Strathcona Park Advisory Committee, released.
1988 (August)	<u>Mineral Tenure Act</u> passed which introduced time-limited mineral tenure in recreation areas.
1988 (December)	Policy announced that no new mineral tenures would be permitted in Strathcona, Tweedsmuir, Manning, Wells Gray, or Kokanee Glacier Parks.
1989 (June)	Recreation area containing the Westmin Mine in Strathcona Park reclassified to Class B park.

### **3.2. THE CRITICAL POLICY CHOICES**

There were five policies which significantly altered the policy direction and the commitment of B.C. Parks to its ideal conservation and recreational goals. Three of these policies uphold the goals, while two policies do not. The five policies which directed these policy shifts are referred to in this thesis as critical policies.

The first critical policy selected for discussion was established in 1973 and excluded mineral exploration and development from Class B parks and provided recognition that Parks were natural areas of special significance and deserved protection. The goals of B.C. Parks, particularly the conservation goals, are apparent in this policy.

The second critical policy, based on the Tener case in 1985, was to allow access to mineral claims inside Parks rather than negotiate compensation. The recreational and conservation goals of B.C. Parks are obscure in this policy.

The third critical policy choice was to establish an agreement or "protocol" with EMPR in 1987 regarding management of mineral exploration and development activities in recreation areas. As a result of that agreement, EMPR emerged as the stronger agency with regard to regulating mining in Parks. This policy also does not uphold B.C. Park's goals.

The fourth critical policy decision, announced in the second release of "Striking the Balance" in April 1989, was not to allow exploration in recreation areas which are inside Parks. Although this policy has raised other issues, one of which is again the amount of compensation due to the claim holder, the goals of B.C. Parks are again more apparent.

The latest critical policy decision was the reclassification, in June 1989, of that part of the Strathcona Recreation Area which covered the mineral production lease around the Westmin Mine to a Class B park. B.C. Parks is able to assume a stronger management role in a Class B park, and the recreational and conservation goals of B.C. Parks can be strongly upheld through this policy.

Further analysis of these critical policies with respect to mining in Parks will be presented in Chapter 5.

## CHAPTER 4. CURRENT POLICIES RELATING TO MINING IN PARKS

Simeon (1976), in his discussion of public policy in Canada, lists the levels of policy as the statutes of the federal and provincial governments, their policy statements, regulations, papers and reports, as well as the "informal and unwritten actions of officials in the field" (p.557). This chapter examines the levels of policy which are relevant to mining in Parks in British Columbia, beginning at the federal level and moving through the successive levels of policy of the provincial government. The three criteria for true policy derived from the definitions of policy in Chapter 2 are applied in an evaluation of the current policy framework. The fourth criterion relating to the traceability of the goals of B.C. Parks is also applied to the current policies to determine if a clear policy framework exists in which to make decisions that relate to mining in Parks.

### 4.1. THE FEDERAL LEVEL

The British North America Act 1867 passes jurisdiction over natural resources to the provinces. Section 109 states that all lands, mines, and minerals belong to the provinces in which they are located. The Constitution Act 1867 (Section 92) confers upon the province power to legislate with respect to natural resources. The Canada Act 1982 added Section 92A to the Constitution Act 1867 and is explicit about the powers which it confers. It states:

- 92A (1) In each province, the legislature may exclusively make laws in relation to
- (a) exploration for non-renewable natural resources in the province;
  - (b) development, conservation, and management of non-renewable natural resources ... in the province, including laws in relation to the rate of

primary production therefrom (Blue 1984).

The responsibilities of the federal government within the provinces have been limited by this section.

The Department of Energy, Mines and Resources (EMR) manages the Government of Canada's limited interest in non-renewable resources. Its responsibilities in the mining sector are primarily in international and interprovincial matters, as well as research and development with associated information gathering (EMR 1987: p.6). The limitations set in the British North America Act 1867 constrain the Department's jurisdiction in the provinces, and it has virtually no authority regarding mining in British Columbia's Parks.

#### **4.2. PROVINCIAL STATUTES AND REGULATIONS**

Section 92A of the Constitution Act 1867, as described above, quite clearly gives the government of the province of British Columbia the exclusive authority to manage both the exploration for and the development of minerals within the province. As all provincial parks are wholly within provincial boundaries, it follows that the government has the authority to manage exploration and development of minerals in Parks. Therefore, the remainder of this thesis will focus on policy at the provincial level.

The government of British Columbia has adopted legislation which governs all aspects of mineral resource development. The provincial legislation which is directly relevant to exploration in Parks is the Park Act; the Mineral Tenure



Act, and the Mines Act.

#### **4.2.1. The Park Act**

The Park Act (R.S.B.C. 1979 C.309) is the most important piece of legislation pertaining to parks in British Columbia. It creates a Parks Branch (Section 2) which "has jurisdiction over, shall manage and administer, all matters concerning parks and recreation areas and public and private use and conduct in and on them ..." (Section 3). Section 5(1)(a) allows the Lieutenant Governor in Council to "establish an area of Crown land as a park of Class A, Class B or Class C, or as a recreation area." Section 9(1) states that no natural resources, other than fish and wildlife in the appropriate situations, in a Class A or Class C park will be damaged or utilized on any way except when, "in the opinion of the minister," it is "necessary for the preservation or maintenance of the recreational values of the park involved." In a Class B park, resource use will be permitted only when, "in the opinion of the minister," it is not "detrimental to the recreational values of the park involved." In a recreation area, natural resources may not be "utilized under any Act except as may be approved by the minister." These discretionary powers granted to the minister are important to mining in Parks. Before allowing any resource use such as mining in a Class B park, the minister is bound by the Act to consider the effect on the recreational values; however, there is no such requirement in a recreation area. The effect of these discretionary powers will be explained under the discussion of the Mineral Tenure Act.

If the minister chooses to authorize, in a Class A, B, or C park, resource use which is necessary to preserve or maintain the recreational values (Section 9(1)) a *park* use permit would be issued. In a recreation area, a *resource* use permit (RUP) would authorize resource use and without a permit one may not "carry on any work or improvement or any industrial or commercial enterprise on any recreation area" (Section 12(4)).

The Park Act is a strong and important piece of legislation. It establishes a management authority called the Parks Branch and clearly sets out the powers and responsibilities of that authority. It prohibits the exploitation of natural resources in Class A, B, and C parks and recreation areas created by the Act except as authorized by the minister's issuance of a park or resource use permit. It is important that there is a requirement for the minister to consider the recreational values before issuing a park use permit, but no conditions on the issuance of a resource use permit. Table 2 summarizes the classes of Park designations and the permits authorizing resource use in each class.

All lands designated under the Park Act are considered by this author to be Parks, whether they are Class A, B, or C or recreation areas. This is consistent with B.C. Parks philosophy as illustrated by news releases and their policy statement "Striking the Balance" (discussed later in this chapter). A News Release dated March 17, 1987, is entitled "Park Growth Near Million Hectares" and announces the creation of four new recreation areas. The title of the map which accompanies "Striking the Balance" is "The British Columbia Provincial Park System" and makes no distinction between recreation areas and

**Table 2. Classes of Parks and Permits**

	<b>Description</b>	<b>Park Use Permit Available</b>	<b>Resource Use Permit</b>
<b>Class A</b>	most protected status	yes, if proposed use to preserve or maintain recreational values	N/A
<b>Class B</b>	non-recreational uses allowed	yes, if proposed use not detrimental to recreational values	N/A
<b>Class C</b>	regional recreation	yes, if proposed use to preserve or maintain recreational values	N/A
<b>Recreation Area</b>	managed for recreational use, but may have other tenures	N/A	yes, subject to minister's approval

other classes of Parks.

#### **4.2.2. The Mineral Tenure Act and Regulations**

The second piece of legislation relevant to mining in Parks is the Mineral Tenure Act (S.B.C. 1988 C.5). This Act sets out the administrative structure for managing mineral titles in the province and who may acquire those titles, as well as the different ways to acquire them. Section 17 states that "no person shall locate a mineral title, carry out exploration and development or produce minerals or placer minerals in a park created by or under an Act of the Province or of Canada unless authorized by the Lieutenant Government in Council

on the recommendation of the person, corporation, or government that is responsible for the park." The discretion allowed to the minister responsible for Parks by Section 9(1)(d) of the Park Act is the "recommendation" to which this section refers.

The Mineral Tenure Act, passed in 1988, introduced a new type of mineral tenure for recreation areas. The Act permits time-limited tenure in recreation areas jointly designated by the ministers responsible for parks and mines. This time-limit is a minimum 10 year window of opportunity for mineral exploration and development, during which time mineral claims may not be expropriated by the Province to be added to a Park or reclassified from recreation area to Park. The ten years, however, does not start until the later of one of two events: "(a) the first publication of the mineral or placer potential of the recreation area by the minister (of mines)" or "(b) the first publication addressed by the Minister of Environment and Parks ... stating that the recreation area is to become a park" (Section 19(4)). Both of these notices must be published before the ten year period begins, and the ten years is counted from the date of the later publication. There is, however, no requirement under any Act for either of these events to occur, nor is there any clause prohibiting exploration or development before the notices are published. Consequently, many recreation areas will be open for exploration for longer than ten years awaiting the second publication which signals the start of the ten year period.

Section 19 allows the government to issue a detailed set of regulations regarding exploration and mining activities in recreation areas which have been designated

jointly by the minister responsible for Parks and the minister responsible for mines. This detailed set is known as the Recreation Area Regulation and was issued in April 1989. Several clauses of the Recreation Area Regulation set more stringent terms for work within a recreation area than for work on land not in a recreation area. For example, a "one post" claim system was created for the aquisition of mineral titles to reduce the amount of claim boundary marking in a recreation area, and the claim must be recorded within 5 days, rather than 20 days outside a recreation area. Most importantly, the regulation allows for much higher security bonds including a bond for "environmental sensitivity" (Section 15(1)(d)).

While some requirements of the Regulations are more strict, Section 11 is more lax and seems to contravene the Park Act. It states that approval (i.e. permits) "under the Mines Act and the Park Act is not required for any mineral exploration or prospecting activity on or off a mineral claim in a recreation area which only involves the use of hand equipment." Only when there is "disturbance to the land surface" by mechanical means are permits required. This includes access to the claims so that a resource use permit is not required if there is no surface disturbance during access, along an existing road or trail, for example, or by helicopter.

The Mineral Tenure Act and Recreation Area Regulation the conditions under which a mineral title may be acquired in a recreation area and under which work may be performed. Most important is the condition that the minister responsible for Parks may exercise his discretionary power and recommend that

exploration be permitted in certain recreation areas.

#### **4.2.3. The Mines Act**

The Mines Act (S.B.C. 1980 C.28) is relevant to exploration and mining in Parks because it sets out the requirements for permits to work on a mineral claim. Section 6 states that notice of the intention to work on a mineral claim must be filed with the chief inspector at least 7 days prior to the date that work is to begin. A Work Permit is issued after referral to other agencies which may have an interest in the area. In addition, a program for "the protection of the surface of the land and watercourses" must be filed with the minister (Section 7). A Reclamation Permit may be issued under Section 8 and a reclamation bond posted. This bond is in addition to the bonding permitted by the Recreation Area Regulation of the Mineral Tenure Act.

This Act also gives the Chief Inspector of Mines or his representative the responsibility to inspect every mine and exploration site where there is mechanical disturbance of the surface of the land (Section 4). The chief inspector has the power to order that work be stopped for non-compliance with a permit (Section 11), and may cancel the permit under the same section. Under Section 38(6), the owner or operator may also be fined for not complying with either the work permit or the reclamation permit.

### **4.3. POLICY STATEMENTS**

Policy statements of the two main agencies concerned with mining in Parks, namely B.C. Parks and B.C. Ministry of Energy, Mines and Petroleum Resources are the next level in the policy framework to be introduced.

#### **4.3.1. B.C. Parks Policy Statement**

B.C. Parks published a document entitled "Striking the Balance - B.C. Parks Policy" in January 1988 and a revised edition in April 1989. Both editions are introduced by a statement from the minister of Parks giving the rationale for producing a "formal policy statement."

"Striking the Balance" contains a discussion of the historical development of the Parks system, and emphasises the dual mandate of providing recreational opportunities and conserving the natural resources of the Parks. The document refers to the Park Act and says that park management is guided by the principles contained in the Act. The goals derived from those principles are classified under the two headings of conservation and recreation. "Our provincial parks are set aside for recreational use ... but also for conservation. They have a role in attracting tourists ... and in preserving wilderness" (B.C. Parks 1988, 1989: p.7). Finding the balance between these two objectives led to the title, "Striking the Balance," for the policy statement.

The conservation goals listed in the policy statement (1988, 1989) are:

- "to protect examples of the most important representative natural landscapes of B.C., and
- to protect B.C.'s key recreational settings and most outstanding scenic features ..." (p.23).

The recreational goals listed are:

- "to provide parks that are major outdoor recreation destinations,
- to provide parks along major travel corridors, and
- to provide parks for regional recreation in areas where other agencies cannot" (p.23).

These goals are derived from Section 12 of the Park Act which sets out six categories of parks and briefly describes the "development and improvement" permitted in each category. The categories are different from the classes of Parks discussed previously. The categories range from preservation of a particular environment to providing opportunity for a specific recreational activity. The development and improvement is limited by the Act to that necessary to meet the objective for designating the Park.

With regard to mineral exploration and development, the 1988 edition of the policy statement says that there are "park reserves in the system temporarily classified as *Recreation Areas* because they either:

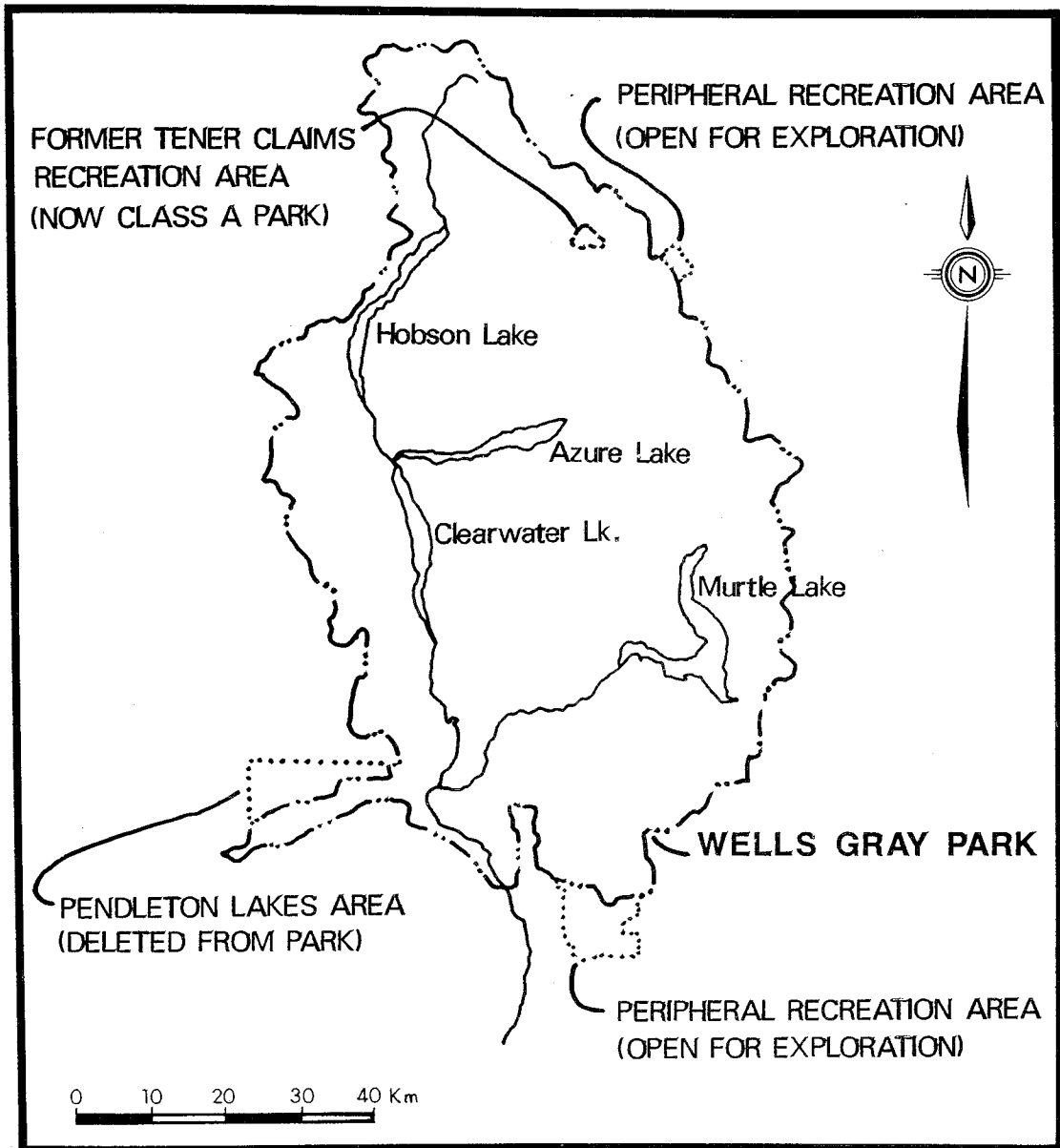
- have resource commitments within their boundaries from earlier history ...  
or
- are having a mineral resource evaluation done under a time-limited tenure ..." (p.9).



This policy had been followed for at least a year before "Striking the Balance" was published. A News Release from the Ministry of Environment and Parks on January 29, 1987, announced that the area surrounding existing mineral claims in Strathcona, Tweedsmuir, and Kokanee Glacier Parks would become recreation areas and that exploration would be permitted. In addition, areas of known mineral potential in Tweedsmuir and Kwadacha Parks would also become recreation areas although there were no existing mineral claims.

The second edition of "Striking the Balance," released in April 1989, contains revisions to the policies on exploration and development. "The new policy is that **there will be no mineral exploration or development inside parks.**" (p.16). The intention is that existing mineral claims in recreation areas which are wholly within a Park will be closed to exploration and development, and that the land will be returned to Class A status. Recreation areas which lie on the peripheries of Parks may be opened to mining. Examples of these peripheral recreation areas are the McAndrew Lake and Trophy Mountains areas adjacent to Wells Gray Park, shown in Figure 2. Recreation areas such as these which are adjacent to a Park are not considered part of the Park and are managed differently from the Park according to the Park Act (Sections 9(1)(d) and 12(4).)

"Striking the Balance" (1988, revised 1989) is important for several reasons. It is the first formal policy statement issued by B.C. Parks. Policies have been stated from time to time on specific issues, but there had never been a statement "about the purpose of provincial parks and why they are managed the way they are" (B.C. Parks 1988, 1989: p.1). There is recognition that



(Information compiled by author.)

Figure 2. Wells Gray Park and Recreation Areas

"attention will be shifting from assembling the lands that constitute the park system to ensuring their conservation for perpetuity" (p.1). The report goes on to state that increasing resource demands make it necessary to clarify and strengthen the management strategy. "In response to this competition for finite resources, a direction for B.C. Parks must be clearly identified and followed" (p.1).

In addition to "Striking the Balance," policy statements are issued from time to time by the minister for Parks, often in news releases. These policy statements are usually focused on a particular issue such the exploration policy announced in a News Release on December 21, 1988, (Parks and EMPR 1988). It quoted Parks Minister Terry Huberts as saying that "we will not permit mineral exploration in parks, nor will we permit new claims to be staked in parks." A distinction is made between parks and recreation areas in this statement.

#### **4.3.2. Mines Policy Statements**

The Ministry of Energy, Mines and Petroleum Resources (EMPR) released a statement in 1984 entitled "Land Use Policy." Although it does not specifically refer to Parks, it does state that "there are 4.5 million hectares of land from which mineral exploration activity is precluded" (p.13) and that the goal of the Mineral Resources Division of EMPR is "to ensure that the maximum amount of land is available for mineral exploration" (p.13).

One of the principles in the EMPR policy statement is that "Proposals to

alienate land from energy, mineral and petroleum exploration must be preceded by an assessment of the resource potential" (p.15). It does, however, concede that "proper assessments ... can include repeated cycles of exploration on the same land area spurred by changes in prices and demand for minerals and by more efficient exploration techniques" (p.13). There is no expected time limit given in the policy for a proper assessment, an omission which makes a travesty of the concept of time-limited assessment from the conservation perspective.

#### **4.4. RESOURCE USE PERMITS AS POLICY**

Under the Park Act (1989 Section 12(4)), resource use permits (RUP's) may be issued to authorize resource use in recreation areas. The conditions set in these permits represent another level of policy in B.C. Parks. The permit conditions often represent the formalization of informal policies followed by field staff. Employees of B.C. Parks informed the author in August 1989 that there were no policies specifically written to assist in the preparation of conditions for RUP's for mining in Parks.

The goals set in the Park Act guide the setting of conditions in resource use permits. The goals are necessarily broad, while conditions established by permit can be more specific. For example, the RUP's issued to Cream Silver Mines Ltd. for mineral exploration in Strathcona Recreation Area in 1987 and 1988 required that biodegradable flagging tape be utilized in the permit area. This policy is applied to all RUP's for mineral exploration issued by the South Coast

Regional Office of B.C. Parks (Maier 1989). It remains, however, an unwritten policy and is applied by reference to previously issued permits. This supports the contention of this thesis that the conditions of RUP's are policy because they create precedents for future decisions. The conditions of a RUP are set within the bounds established by the goals of the Park Act and "Striking the Balance," and conditions of earlier RUP's.

Not all of the conditions of RUP's are policies - some are site-specific conditions, such as the requirement to bridge a particular creek or to locate the fuel storage area in a particular place.

Although the "informal and unwritten actions of officials in the field" mentioned by Simeon as a level of policy (1976: p.557) are more difficult to trace and document than formal policies, one could imagine several ways in which field officials interpret conditions of RUP's. Some officials may have a policy of strict enforcement of the permit as written while others may have a policy of seeking creative alternatives that may be allowed by the latitude of the permit. Due to the difficulty of documenting this level of policy, however, it will not be discussed further in this thesis.

#### **4.5. SUMMARY OF POLICY LEVELS**

The powers reserved by the federal government for policy regarding mineral exploration and development relate primarily to interprovincial and international matters. The provincial government has the authority to manage mineral

exploration and development within its boundaries, including these activities within Parks.

Several provincial Acts are relevant to mineral exploration in Parks. The Park Act allows the establishment of parks of Class A, B, or C and recreation areas and sets out the degree of protection of the resources in each classification. It also sets out a permit system to authorize utilization of the mineral resources at the Minister's discretion in Class B parks and in recreation areas. The Mineral Tenure Act controls the granting of mineral rights in the province, including those within Parks. Regulations issued under the Mineral Tenure Act establish special conditions and procedures for mineral exploration and development within Parks. The Mines Act requires the issuance of permits prior to the development of mineral claims, and conditions may be attached to these permits. The conditions attached to a reclamation permit may be more stringent in a Park.

"Striking the Balance" (1988, 1989) is the policy statement published by B.C. Parks. It sets out the objectives for Park management based on the Park Act, and states the agency's policy on mineral exploration and development inside Parks. This policy statement is supplemented from time to time by other policy statements, often as news releases. Although the "Land Use Policy" of Energy, Mines and Petroleum Resources does not refer specifically to Parks, it does state that the goal of the agency is to maintain access to the greatest amount of land possible for mineral exploration.

Resource use permits establish policy by setting conditions for management at the

local or regional level. The informal actions of field staff during permit enforcement or other management tasks may also be considered an aspect of policy.

#### **4.6. INITIAL EVALUATION OF POLICY LEVELS**

The discussion in Chapter 2 on the definition of policy in the literature concluded that there were three common elements for true policy. They are that policy should be:

1. clear and serve as a guide to decision making (rather than the decision itself) and facilitate a pattern of decisions;
2. forward looking, that is that the policy is a guide for decisions to be made in the future as well as those to be made immediately; and
3. backed by the force of law, that is that policy is authoritative and enforceable.

These three criteria will be used to evaluate the current levels of policy for mining in Parks discussed above.

The fourth criterion, developed from the discussion about policy analysis and implementation in Chapter 2, states that

4. the goals of B.C. Parks set out in the Park Act (1979) should be traceable through the levels of policy developed from the Act.

This analysis looks only at current policy levels whereas specific policies are examined in Chapter 5. It is a static picture, and does not consider an

historical or geographical context. The initial assessment of policy levels, using the above criteria, sets the context for the more detailed analysis in Chapter 5 which will build on the concept of the levels of policy and analyse the traceability of the stated goals through the different levels of policy.

#### **4.6.1. Statutes and Regulations**

The Park Act, the Mineral Tenure Act, and the Mines Act were presented as the first level of policy regarding mining in Parks. Although, strictly speaking, the Mineral Tenure Act and the Mines Act may not be considered as policies of B.C. Parks, they are both included in this analysis because of the influence which they exert over subsequent Park's policy for mining in Parks.

The three Acts meet the first criterion, that is they are guides to decision making. Evidence of this is the opportunity provided in each Act to formulate regulations which guide the more specific decisions to be made within the framework set out by the Act. The second criterion is met in two ways: Ministerial discretion allows the ministers to make decisions based on information or circumstances which did not exist at the time of writing the Act, and the provision which allows for regulations to be written ensures that additional policies may be developed when necessary. The third criterion, that the policy is authoritative and enforceable, is also met. The Acts were passed by the duly elected provincial government which was passed the authority to manage resources within provincial boundaries by the federal government. The Park Act (1979) sets out the recreation and conservation goals which are examined at



subsequent policy levels, and therefore the fourth criterion is not applied here.

#### 4.6.2. Policy Statements

"Striking The Balance - B.C. Parks Policy" (1988, 1989) makes several statements which are clearly meant as a guide to decision making. However, these statements are sometimes conflicting and it is not clear which one takes precedence. For example, the statement "Protecting and enhancing the natural resources of a park is foremost" (p.13) means that decisions may be made to exclude other uses in favour a protecting a natural resource. A few pages later, though, the statement "Conserving the recreation resource is foremost" (p.17) suggests that decisions will be made which favour the recreation resource over other resource uses. These policies could be in conflict and would be more useful as guides to decision making if the policy statement were clearer. The policy is, however, quite clear on the topic on mining, to the extent that it uses bold type to declare that **"... there will be no mineral exploration or development inside parks"** (1989: p.16).

By articulating the goals and deriving them from the Park Act, the policy statement has met the second, third and fourth criteria. The goals are forward looking and in some cases are specifically oriented toward the future, such as providing for "new recreational pursuits, unimagined today" (p.27). Definition of the goals based on the Park Act ensures that the policy will be enforceable.

The "Land Use Policy" released in 1984 by Ministry of Energy, Mines and

Petroleum Resources makes no specific reference to Parks. It does state that the maximum amount of land must be available for mineral exploration and that the resource potential must be assessed before any further land is alienated from exploration. It also states that changes in technology or demand for metals may result in several cycles of exploration activity on the same land. An awareness of the challenges to Parks from policies of other agencies points out the importance that B.C. Parks policies be defensible, that they meet the criteria defined in Chapter 2.

#### **4.6.3. Resource Use Permits**

Although only some of the conditions in RUP's can be considered as policy, they are nevertheless important. They represent policies formed by field level management of Parks, often as a result of experience and in the absence of top-down policy statements.

While some conditions in RUP's are site specific, others are seen as guides to future decisions and therefore may be classed as policy. The policy, for example, to require the use of biodegradable flagging tape in recreation areas serves as a guide to future decisions on permits. Similarly, other conditions could be set in the permit which would guide decisions on future work in the permit area. Because the Park Act sets out the requirements for a RUP and the applicant signs the permit in acceptance of the conditions, the policies reflected in the permit are enforceable. The recreation and conservation goals of B.C. Parks are not always easily traced in the RUP's. For example, in the

permit issued to Azure River Gold Inc. on August 10, 1987, condition 27 required that testpits and trenches be backfilled immediately on completion of sampling in them. Before the permit was signed, however, the requirement was removed. Neither the recreation nor conservation goals are reflected in the removal of this condition.

#### 4.6.4. Summary

An examination of the levels of policy related to Park management has shown that statutes, policy statements, and conditions in RUP's generally meet the three criteria for true policy derived from the policy definitions. The goals of B.C. Parks, however, are not easily traced through some of the conditions in the RUP's.

In terms of the B.C. Park Act, mineral exploration and development is not compatible with the goals and objectives for management of Park lands. Many of the legal commitments to mineral claims which exist in Parks were made years ago under different management objectives. The development of these commitments was outlined in Chapter 3, and five critical policies were selected. The recreational and conservation goals discussed in Sections 4.2.1 and 4.2.3, along with the three criteria for true policy, will be used in the next chapter to evaluate the five policies and their relation to policies at other levels.

## CHAPTER 5. ANALYSIS OF CRITICAL POLICIES FOR MINING IN PARKS

This chapter constitutes an analysis of the critical policy choices identified in Chapter 3 regarding mining in Parks. The concept that goals should be shared by successive policy levels was introduced in Section 2.4, and will be applied to selected policies of B.C. Parks in the analysis. The analytical framework set out in Section 2.5 indicated that policy is both an output of the policy levels above it and an input to the levels below. The traceability of the goals of B.C. Parks outlined in the Park Act (1979) at successive policy levels is examined.

### *5.1. PARKS CLOSED TO MINING IN 1973*

The first critical policy discussed in Chapter 3 was to close all Parks to exploration and mining in 1973. This policy was enforceable because the Park Act of 1965 included a section protecting the natural resources, and resource use was only permitted at the discretion of the minister (Section 9). It was incorporated into the Mineral Act when it was rewritten in 1977 as Section 9 which stated that there would be no exploration in Parks without the consent of the minister responsible for Parks. This policy and the resultant legislation strongly support the recreational and conservation goals of B.C. Parks discussed in Sections 4.2.1 and 4.3.1. The policy was both an output of the higher level, the Park Act, and an input to the policy of another agency, the Mineral Act, and meets the three criteria for true policy and the fourth criterion that goals should be traceable.

## 5.2. ALLOWING ACCESS TO MINERAL CLAIMS IN PARKS

The legal case brought by Tener against the government of British Columbia was a significant turning point in the policies of B.C. Parks regarding mining in Parks. The policy abruptly shifted in 1985 from all Parks being closed to mineral exploration and development to nearly all areas in Parks of interest to the mining industry being open to exploration and development.<sup>4</sup> This policy shift was based on the ministerial discretion allowed in the Park Act, and although it is an output of the policy level above, it is not consistent with the stated goals.

The resource use permit issued in August 1987 to Azure River Gold Inc. for a drilling program on the Tener claims is an output of the policy to allow access to mineral claims. However, only some of the conditions in the permit show a commitment to the recreational and conservation goals of B.C. Parks. The first condition in the permit is that the proponent would have a legal survey done of the boundary of the claim block which was coincident with the recreation area boundary. This was to ensure that trespass did not occur onto adjacent Park lands, thereby disturbing more land than necessary. Other clauses required the most direct flight path to avoid harassment of wildlife and the minimum disturbance possible at work sites. However, a condition which required immediate backfilling of trenches and testpits was deleted from the permit. The deletion of this condition contradicts both the recreation and conservation goals of B.C. Parks. In contrast, the reclamation permit issued for the drill program on

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<sup>4</sup>The exceptions were a few single claims in Class A parks or claim blocks which were in areas which were deleted altogether from the Park such as the claim block in the Pendleton Lake area deleted from Wells Gray Park (refer to Figure 2).

the Tener claims by EMPR under the Mines Act contained no entries in the section for "Special Conditions" (Reclamation Permit MX-11-48). This reflects the strength of EMPR, a trait which also shows in the protocol agreement between B.C. Parks and EMPR which was being negotiated at the time of issue of the permits.

B.C. Parks still had the opportunity to maintain a strong commitment to its conservation and recreational goals when the Tener decision was handed down. The Court had given the option of providing compensation or allowing access. The Park Act offered strong protection for Class A parks which included Wells Gray Park. The Mineral Act which was in force at the time stated that there was to be no exploration in Parks without the consent of the minister of parks. Instead of making a significant concession to the mining interest, sensitive and informed negotiation on the value of compensation might have permitted closer adherence to B.C. Parks goals. If negotiations had become so protracted that reaching agreement was doubtful, B.C. Parks could have resorted to the option of allowing access.

The policy to allow access to nearly all mineral claims in Parks does not seem to reflect the recreational or conservation goals of B.C. Parks. In the instance of the Tener claims, the recreation area boundary was coincident with the claim boundary allowing access to only the land which also had a mineral tenure commitment. In Strathcona Park, however, the recreation area covering the Cream Silver claims contained about 30% unencumbered land (Strathcona Park Advisory Committee 1988: p.17). In a News Release dated January 29, 1987,

entitled "Park Changes Announced," "areas of known high mineral potential (were) designated as Recreation Area to permit exploration" at Kwadacha and Tweedsmuir Parks. This reclassification did not involve existing mineral claims, but the decision was made under the policy of allowing access.

The policy of allowing access was inconsistently interpreted and applied with respect to the area which was reclassified to recreation area. The first criterion for true policy, that it be a clear guide to decisions, was not met. Uncertainty in the policy led to such diverse reclassifications as only the mineral claims such as at Wells Gray to areas with no mineral claims such as Kwadacha and Tweedsmuir. The second criterion, that the policy be forward-looking, is difficult to judge. The uncertainty contained in the policy makes it unlikely that the policy could be forward-looking. The policy was enforceable, however, due to the discretion allowed the minister in the Park Act permitting him to authorize resource use in a recreation area. The fourth criterion, that the goals set out in the Park Act (1979) ought to be reflected in the policies derived from the Act, is not met either. If all of the reclassifications resulting from this policy had been similar to that at Wells Gray where only the status of area of the mineral claims was changed, the goals would be more evident. One could agree that B.C. Parks was complying with the Supreme Court ruling, but conceding the minimum in terms of pursuing its goals. The status changes at Kwadacha and Tweedsmuir Parks, however, illustrate disregard for the recreation and conservation goals.

The significant omission from this policy, and other levels of policy at this time,

was the recognition that claims staked under different Acts acquired different rights. Claims staked in Class B parks after 1965, for example, were staked only with the minister's permission which could be withdrawn whereas claims such as Tener's were Crown granted under the Land Registry Act in 1937 and pre-dated the Park. In terms of the "rules" at the time, staking claims in a Class B park was a gamble, and gamblers sometimes lose. It would have been generous to offer compensation in these circumstances. The decision by the court regarding Cream Silver's request for compensation supports this view of the situation.

### **5.3. THE PARKS-MINES PROTOCOL**

The Parks-Mines Protocol (1987) was an output of the discretion granted to the minister in the Park Act and was again an input to the upper level of policy of EMPR, namely the Recreation Area Regulation (1989) of the Mineral Tenure Act (1988). It was also an input to the RUP issued to Cream Silver Mines Ltd. in 1988.

The Parks-Mines Protocol meets the first criterion in that it is clearly written and guides decisions on mining activity in recreation areas. It is also forward-looking in that possible outcomes of exploration at the end of the ten-year period are listed, and alternative designations are suggested, thereby meeting the second criterion. The policy is enforceable due to the discretionary power allowed to the minister in the Park Act (1979). However, clause 4 seems to contravene Section 12(4) of the Park Act (1979). The clause states



that "prospecting for the purposes of locating a mineral claim that use non-mechanical methods ... and results in no significant disturbance to the Recreation Area may occur without authorization by Resource Use Permit." The Park Act, however, states that "any commercial or industrial enterprise" must be authorized by RUP. Prospecting, it could be easily argued, is both a commercial and industrial enterprise. This apparent contravention was not challenged in court and remains enigmatic.

The Parks-Mines Protocol of 1987 is completely contrary to the recreational and conservation goals of B.C. Parks. EMPR usurped management responsibility from B.C. Parks with little obvious objection from them. The Protocol dictates that "the conditions of the Resource Use Permit respecting mineral exploration, development and mining will be no more stringent than those required ... outside Recreation Areas" (Clause 6). The Park Act states that RUP's may be issued at the minister's discretion, but Clause 5 of the Protocol states that access to mineral claims across recreation areas "will be assured by means of a Resource Use Permit." This clause removes the opportunity for the minister of Parks to utilize his discretion as granted by his governing Act or to pursue the recreational or conservation goals through policy in a recreation area.

Many of the items contained in the Protocol are now part of the Recreation Area Regulation under the Mineral Tenure Act (1988). B.C. Parks management responsibility for recreation areas was further eroded by two sections of the Regulation. Section 10(3), referring to access across a recreation area which will cause surface disturbance, states that the "Regional Director of Parks ... shall

only refuse a resource use permit for this purpose if the Chief Inspector of Mines agrees with the refusal." Section 11 states that a RUP is not required for work "on or off a mineral claim in a recreation area which only involves the use of hand equipment for prospecting, claim staking, geological mapping or geochemical surveys, or the use of hand tools for drilling." This section appears to contravene the Park Act which says that no person "shall, except as may be authorized by a resource use permit, carry on any work or improvement or any industrial or commercial enterprise on any recreation area" (Section 12(4)).

#### **5.4. CLOSING RECREATION AREAS INSIDE PARKS**

Following the recommendations of the Strathcona Park Advisory Committee, the recreation areas inside Strathcona Park were closed to new exploration and claim staking in September 1988. A few months later, all recreation areas inside Parks were also closed. This policy is a result of ministerial discretion allowed in the Park Act, and represents a stronger commitment to the recreational and conservation goals than had been shown by the previous policy of allowing access to nearly all claims.

The policy is clearly stated and should therefore ensure that decisions are made consistently under it. The policy does not have a forward-looking component that is easily identified. It is again enforceable through the use of ministerial discretion. The fourth criterion is met indirectly in that destructive activity often resulting from mineral development is excluded from Parks, allowing the recreation and conservation goals to be pursued.

### **5.5. CONVERSION OF A RECREATION AREA TO A CLASS B PARK**

The designation of Strathcona-Myra Park in June 1989 as a Class B covering the lease held by the Westmin Mine could be seen as a return to a stronger commitment to its recreational and conservation goals by B.C. Parks. Class B status gives B.C. Parks complete management authority over the resource uses and the Park Act requires that the recreational values be considered in any decisions to allow resource use. The Mineral Tenure Act and the Recreation Area Regulation are applicable only in recreation areas. The opportunity exists for B.C. Parks to regain some of the responsibility which was lost to EMPR in the mid-1980's. It remains to be seen, however, whether this is a new policy or an isolated decision.

### **5.6. SUMMARY OF CRITICAL POLICIES FOR MINING IN PARKS**

The 1973 policy to close all Park lands in British Columbia to mining was clear and represented a strong commitment to the recreational and conservation goals of B.C. Parks. This policy was based on the Park Act, the topmost level of policy regarding mining in B.C.'s Parks. However, as a result of the legal challenge by Tener, the commitment crumbled.

The policy which took the place of the 1973 one in 1986 of allowing access to mineral claims for the purpose of exploration showed a weak commitment to the goals of B.C. Parks. This change was also based on the Park Act, specifically on the ministerial discretion permitted with respect to resource use in recreation

areas. Not only existing mineral claims, but also areas of known mineral potential, were reclassified to recreation area to allow for mineral exploration in 1986. The policy outputs (i.e. the reclassifications) indicate that the policy was not a clear guide to decisions.

EMPR sensed the weakness of the commitment of B.C. Parks and assumed management of mineral exploration and development in recreation areas, first through the Parks-Mines Protocol in 1987 and later through the Mineral Tenure Act and Regulations. Although not strictly a policy of B.C. Parks, the Mineral Tenure Act could be viewed as an output of the Protocol and the policy of allowing access to mineral claims in Parks.

In 1988, the policy of allowing access to mineral claims was modified to exclude mineral claims which were in recreation areas within Parks. This policy is based on the ministerial discretion in the Park Act and is consistent with the goals in the Park Act.

In June 1989, the recreation area containing the Westmin Mine in Strathcona Park was reclassified to Class B Park. This decision represents a stronger commitment to the goals set out in the Park Act. It may not, however, be a policy but a decision which will not be repeated and therefore would contravene the second policy criterion.

In Chapter 5, selected policies regarding mining in Parks have been examined, relative to both the commitment which they represent to the goals of B.C. Parks

and their relationship to the other levels of policy.

In Chapter 6 foreseeable decisions will be discussed, and, taking present policies as given, examine the possible outcomes. Then, an attempt will be made to look at preparedness for imagined decisions.

## CHAPTER 6. FORESEEABLE DECISIONS AND SURPRISES FOR MINING IN PARKS

In this chapter, foreseeable decision points with regard to future mining activities in Parks are examined. A short description of possible mining activities is given to set the context for the potential decisions. The guidance offered for making decisions on future mining activities by the levels of B.C. Parks policy is considered for these activities. Next, consideration is given to "surprises," and the levels of policy which might guide decision making are examined.

### 6.1. FORESEEABLE DECISIONS REGARDING MINERAL EXPLORATION

Until 1989, the majority of the mineral activity in Parks has been exploration resulting in relatively minor surface disturbance.<sup>5</sup> Disruption from exploration activities to the land surface and local drainage patterns are caused by "activities such as construction of access roads, exploration trenches, adits, pits, and drill pads" (Marshall 1982: p.16). "With careful planning ... and the increased use of specialized equipment and helicopters, much of the damage can be minimized" (p.16), and through prompt and appropriate reclamation treatments, most of the damaged areas can be restored. Recontouring the surface with stockpiled topsoil and planting with native species will camouflage the results of these activities.

Where exploration activities are proposed in a recreation area which has been designated under the Mineral Tenure Act as open for mining, B.C. Parks only

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<sup>5</sup>The exception is the Westmin Mine operating in the centre of Strathcona Park.

has management responsibility for activities off the mineral claim which will cause a disturbance to the surface. Work on a mineral claim which does not cause a disturbance to the surface is not under any permit requirements. Disturbances on claims such as trenches, roads, adits, pits, and drill pads require permits under the Mines Act, and Parks and Mines jointly issue the terms and conditions of the permit.

As described earlier, B.C. Parks authority to manage mineral exploration on a mineral claim has been limited by the Mineral Tenure Act and Recreation Area Regulation. Off a mineral claim in a recreation area, surface disturbances require a RUP. Although a RUP for access cannot be denied by B.C. Parks without the approval of the Chief Inspector of Mines (Recreation Area Regulation Section 10(3)), the terms of the permit could limit the scale of activity. Road improvements, for example, could be restricted, thus limiting the size of equipment that can be used. The size and location of camp could also be limited in a RUP.

On a mineral claim in a recreation area, B.C. Parks has input in an advisory capacity regarding mineral exploration activities. Applications for work and reclamation permits under the Mines Act are referred to the Regional Director of Parks who may "make recommendations to the Chief Inspector of Mines with respect to the terms and conditions of any approval of activities on or off a mineral claim" (Recreation Area Regulation- Section 14(2)). The terms and conditions of the reclamation permit are "jointly agreed to by the Chief Inspector of Mines and the Regional Director of Parks" (Section 14(3)). Activities off a

mineral claim require the approval of a RUP with "terms and conditions jointly agreed to by the Regional Director of Parks and the Chief Inspector of Mines" (Section 14(4)).

The Park Act, the top level of B.C. Parks policy considered in this thesis, allows the minister discretion to permit mineral exploration in a recreation area. Once permission has been given, the Mineral Tenure Act supersedes the Park Act on mineral claims in recreation areas. The minister of Parks may choose not to permit exploration in a recreation area and to reclassify the area to Park status. Examples of this are Mount Judge Howay and International Ridge which were reclassified from recreation area to Class A parks in March 1989.

The requirement for RUP's for work off a mineral claim in a recreation area offers an opportunity for policy making. At the extreme, B.C. Parks could allow no work except that related directly to access (which they cannot deny). Other policies could include requiring the permittee to provide appropriate recreational facilities, fund fish-stocking projects, or use bio-degradable flagging and natural markers such as rock cairns.

## **6.2. FORESEEABLE DECISIONS REGARDING DEVELOPMENT AND PRODUCTION**

If the exploration activities indicate that the mineral claims are worthy of additional work, the development phase will begin. It can involve activities which result in considerably greater disturbance such as underground exploration



or bulk sampling. Underground exploration may require a tunnel or adit, or stripping the surface may be necessary to facilitate bulk sampling of the potential ore.

Construction of the facilities and buildings necessary for production are also part of the development phase. These include the crushing operations to pulverize the rock and the mill complex for the chemical extraction of the desired metals from the pulverized rock. Administration buildings would complete the usual complement of facilities at a mine site.

The pre-production stages of exploration and development cause disturbance to the greatest area of land. However, the impacts and disturbances caused by production from mines are much more significant, partly because they are concentrated in a smaller area and partly due to the types of activities.

Several types of solid waste are generated at a mine, and its "disposal ... remains a major problem" (Marshall 1982: p.18). The solid wastes include the surface soils and gravels which may be removed, waste rock which must be moved to expose the ore, and the remains from the chemical extraction process to remove the metals from the rock. There is potential for contamination of the land and water courses from the disposal of solid wastes, either by the extraction chemicals or by metals leached from the waste rocks.

The mine itself may be open pit or underground. If the orebody is close to the surface, open pit is usually the less expensive and preferred mining technique.

If the orebody is deep, underground mining methods are generally preferred. A combination of open pit and underground mining may be used when the ore body is close to the surface, but extends to great depth.

Open pits are usually not backfilled on abandonment (Marshall 1982: p.26) and a very large deep pit is left. The size of the open pit at the Brenda Mine in Peachland, for example, is about 1000 meters across and 150 meters deep (p.29). Pits may fill with water over time, but such "lakes" are deep with steep shores, and may contain high metal concentrations leached from the exposed rock in the walls of the pit. They are not, consequently, considered recreational assets.

The tunnels and shafts of an underground mine are not usually backfilled, and the waste rock which is removed from the mine is permanently stored on the surface. However, because underground mining can be more selective about the material which is removed, there is considerably less waste brought to the surface than from open pit mining.

The development and production activities described above normally occur when the exploration stage has shown that the claims hold a mineral deposit of sufficient value. Because the development and production activities occur on the mineral claims, B.C. Parks has limited authority. Authority for regulating mine development proposals in British Columbia rests with Energy, Mines and Petroleum Resources.

All proposals in British Columbia to develop a mine are subject to the Mine Development Review Process. This is a non-legislated process administered by the Environment and Land Use Committee of the provincial government Cabinet with Energy, Mines and Petroleum Resources as the lead agency (EMPR 1988). B.C. Parks is not a presently member of the Mine Development Review Process.

Given the types of development and mining activities with their attendant impacts, combined with the limited authority of B.C. Parks on mineral claims, the fundamental decision may be whether or not to retain the recreation area in the Park system. The Park Act defines a recreation area as "Crown land reserved or set aside for public recreational use" (Section 1), but if the recreational value of the land would be sufficiently impaired by mineral production, a decision could be made to cancel all or part of the recreation area. Given the limited authority of B.C. Parks in managing mineral activity in a recreation area, retaining the recreational values with an operating mine in an area would be an extremely difficult task.

### ***6.3. FORESEEABLE DECISIONS REGARDING DESIGNATION OF NEW PARKS***

The present policies regarding mining in Parks may limit designation of additional provincial parks. Lands proposed for large parks, such as the Chilko-Chilcotin Park Proposal, will first be designated as recreation areas with time-limited mineral exploration permitted because the minister for Parks has accepted the "principle that the mineral potential of any proposed park should be thoroughly

evaluated before making long-term park designation decisions" (Parks 1988). The time limit allowed for exploration could be very long, though, as there is no requirement under either the Park Act or the Mineral Tenure Act for the notices to be given that the ten year period has begun. For example, the mineral resource evaluation for the Wokkpash Recreation Area was completed in 1985, and EMPR has stated that the "clock can start ticking" (Thorleifson 1989). Because the Mineral Tenure Act states that the ten years starts from the latter of the two events, B.C. Parks must give notice that the area is to become a Park before the clock starts. In "Striking the Balance," released in April 1989, Wokkpash is used as the example of a recreation area which is "having a mineral resource evaluation done under a time-limited tenure" (p.9). Although there is no particular reason that B.C. Parks has not published the notice of intent to designate the Wokkpash Recreation Area as a Park, it has not been done (Price 1989).

The commitment of the Parks minister to a full resource evaluation before an area will be designated as Park virtually precludes the designation of any large new Parks for at least ten years. Parks of less than 2023 hectares could be designated because the Park Act specifically excludes resource exploitation from them (Section 9(1)(c)).

#### **6.4. SURPRISES AND MINING IN PARKS**

Holling says that surprise occurs when the results are different from what was expected, either because the cause is different, the behaviours are not what was

anticipated, or an action produces the opposite result from what was intended (Holling 1986: p.294).

With regard to mining in Parks, surprises could occur at a local scale such as a landslide into a river because of poor siting of a new road. Local surprises would test the policies in RUP's. Because the policies of RUP's look to the higher policy levels for advice, the next surprises imagined will be at a broader scale to test the upper levels of policy.

With regard to the designation of new Parks, discussed in the previous section, a surprise could be that a large new Class A park is created. For example, B.C. Parks could respond to the increasing calls for designation of the Tatshenini River area in the northeast corner of British Columbia. The river flows from Kluane National Park in the Yukon, where its headwaters are protected, through B.C., where it is threatened by the development of a mine, into Alaska where its mouth is also protected in a national park. Class A for this area would be conceivable in the context of massive public pressure for conservation, as occurred in the South Moresby case. Nevertheless, such a decision would qualify as a "surprise."

Another type of surprise might be that a mineral deposit which is discovered in a recreation area is the "tip of the iceberg" and the larger part of the orebody is in an adjoining Park. The policy emphasized in "Striking the Balance" (1989) says that **"there will be no mineral exploration or development inside parks"** (p.16). The policy is clear and emphatic, and based on the Park Act.

The commitment of B.C. Parks to its goals would be tested by this situation. If, however, B.C. Parks were to display strong commitment and refuse to consider further boundary changes, might the government overrule B.C. Parks and delete the Park completely? The Klappan coal deposit, for example, on the southwestern boundary of Spatsizi Park, may extend northeast into the Park. Spatsizi Park is internationally important because of the variety and abundance of wildlife, and the opportunity to study predator-prey interactions. If B.C. Parks were to strongly resist the expansion of the coal mining into the Park, the Park might be deleted. A possible result, such as this, opposite to that intended, is one of the surprises which Holling identifies.

Another surprise might be the self-perpetuating nature of the bureaucracy which evolves to manage mining in Parks. A "pre-bureaucracy" is emerging already in the Vancouver office of the Mineral Titles Branch of Energy, Mines and Petroleum Resources where the recreation area claims are filed separately from the other claims and a particular staff member has been assigned to process the related forms. Holling noted this phenomenon in several of his studies (Holling 1986: p.311). As recreation areas are found to contain no viable mineral deposits and are reclassified to Class A park, the bureaucracy (developed specially to administer mining in recreation areas) might see its *raison d'être* disappearing, and demand that other areas in Parks be reclassified to recreation area to allow exploration. B.C. Parks commitment to its goals would again be tested, and the challenge would be at the top level, the Park Act. While some areas in Parks could be opened to mining through ministerial discretion or order-in-council, others with legislated boundaries would be protected from all but

an amendment to the Park Act.

The Park Act (R.S.B.C. 1979 C.309) says that the "the total area of parks and recreation areas (will) not be less than 2,550,000 ha" (Section 5(2)). Presently, the total area is about 5.4 million hectares, twice that called for in the Act (Parks 1989). Would the park system be stable at the minimum size stated in the Act? Would demand for recreational use exceed the capacity of the system to supply the opportunities? There has been concern about the ability of individual Parks to withstand incremental, but continuous deletions. Wood (1988) referred to the "imminent park destruction" resulting from the "land swaps" of land inside Strathcona Park with resource values for land elsewhere in the province for potential parks. Might another surprise be that the entire park system in British Columbia would reach a presently unknown lower threshold and collapse? The collapse of the system could be a profoundly unexpected behaviour, discussed by Holling as a surprise. At the system level, a new policy for a biogeoclimatic "system plan" is likely to be released by B.C. Parks in the near future. The impacts of this policy are unforeseeable, and may lead to further surprises.

#### **6.5. SUMMARY**

Decisions regarding management of exploration impacts off a mineral claim in a recreation area are guided by several levels of policy. At the broadest scale, the Park Act states that the purpose of a recreation area is public recreational use and at the site specific level, RUP's can establish policies to guide more site

specific decisions.

When development and production activities begin, B.C. Park's authority is quite limited. The Park Act, through the goals set out and the definition of a recreation area, offers the only guides to decisions at the production stage. The decision might be whether or not the recreational values were compromised sufficiently that the area no longer merited inclusion in the park system.

Policies which guide decisions on system-wide surprises would be at the top level of policy. The Park Act sets out goals for the conservation of natural areas and provision for recreational activities associated with those natural areas. The Act is clear and offers B.C. Parks the authority to pursue its goals. However, the commitment of B.C. Parks to its goals has not been consistent. Only if B.C. Parks pursues its goals more consistently will the surprises be resolved in favour of Parks.

In Chapter 7, the conclusions drawn from this study regarding B.C. Parks policy framework relating to mining in Parks will be presented.



## CHAPTER 7. CONCLUSIONS

This thesis examines the challenge to Parks in British Columbia posed by mining and the levels of policy which guide B.C. Parks decisions in response to that challenge. The goals of B.C. Parks set out in the Park Act (R.S.B.C. 1979 C.309) are accepted as given, and the traceability of those goals through the policy framework is examined. In addition to the Park Act, "Striking the Balance - B.C. Parks Policy" describes the goals of B.C. Parks including the recreational and conservation goals. Although the policy statement is not clear about the balance sought between the recreational and conservation goals, it is clear that there will be no new exploration or mining within Parks. The consistency of commitment to the goals set out in these two documents is examined at the levels of policy based on the Park Act.

The concept of levels of policy is relevant to the approach to policy analysis used in this thesis where the policy levels are viewed as both an output of the level above and an input to the levels below. The Park Act (R.S.B.C. 1979 C.309) and the goals set in it are taken as given, and the commitment to the goals at subsequent policy levels is examined. The initial analysis of the current policies found that the four criteria are not consistently met. While the criteria for true policy are generally met, the fourth criterion - that the goals from the Park Act be traceable - is less often met at the lower levels of policy.

The discussion of the critical policies in Chapter 5 found that the commitment of B.C. Parks to its goals has wavered over the years and that the goals are not

easily traced through the policies. In 1973, Parks of all classes, including recreation areas, were closed to mining. The recreational and conservation goals of B.C. Parks are clearly represented in this policy. However, the Court's decision in 1985 in favour of access to the Tener claims resulted in a major policy shift which allowed access to all almost mineral claims in Parks. This weakened commitment to the recreation and conservation goals can be traced through the Protocol negotiated between B.C. Parks and B.C. Energy, Mines and Petroleum Resources in 1987 to the conditions set in resource use permits such as that issued to Cream Silver Mines Ltd. in 1988. Then, in March 1989, the commitment to the goals was strengthened by a new policy which closed recreation areas inside Parks to mineral exploration and development. Most recently, in June 1989, part of the former Strathcona Recreation Area which contained the Westmin Mine was reclassified to Class B from recreation area and the rest of the former recreation area was reclassified to Class A and added to Strathcona Park. This reclassification represents a stronger commitment to the goals of B.C. Parks for Strathcona Park. Whether or not this commitment extends to other Parks remains to be seen.

The inconsistency of commitment to the goals of B.C. Parks, reflected in its policies regarding mining in Parks, is appreciated by neither the mining industry nor park conservationists. The mining industry has called for a stable policy environment in British Columbia (Mineral Industry Task Force 1987), and the Strathcona Park Advisory Committee (1988: p.16) noted that the "confusing history" of classification at Strathcona resulted "from shifts in government policy with respect to industrial resource users."

Some foreseeable decisions regarding mining in Parks were examined. Both the mineral exploration phase and the development and production phases were considered. The opportunities for making decisions based on the present policies are limited for B.C. Parks. Mining activities on a mineral claim in a recreation area are managed by EMPR under the Mineral Tenure Act and the Mines Act. B.C. Parks has opportunity for advisory input through the referral process when a Notice of Work is circulated by the Chief Inspector of Mines. For mining activities in a recreation area off a mineral claim, B.C. Parks may set conditions in a resource use permit which they may not refuse under the Mineral Tenure Act. At the development and production stage, B.C. Parks has even less opportunity to make decisions under the present policies. The most important decision at this point would be whether or not the recreational values of the recreation area were sufficiently impaired by the mining activities to warrant its deletion from the Park system.

There are policies in place in British Columbia which will make addition of new Class A parks to the Park system difficult. In particular, the commitment to full mineral potential evaluation before alienation from the mining industry ensures that new Parks will not be created. Desirable park areas will probably be created as recreation areas and a minimum of ten years permitted for mineral evaluation. During this ten years, however, the area could become alienated from recreational use due to impairment of the park values by the mining activities.

Under the present policies, B.C. Parks has limited opportunities to pursue its

goals with respect to mining in Parks. Within the present bounds, the strongest statement that B.C. Parks can make is to publish its intent to reclassify to Class A park all recreation areas which are now open to mining.

This study has found that, while there is a clear policy framework to guide decisions for mining in Parks, policy decisions frequently deviate from the goals set out at the upper levels of the framework. The deviations are most often a result of the undirected ministerial discretion allowed in the Park Act, and are then reflected in the lower levels of policy.

The goals set out in the Park Act offer guides to decisions regarding surprises from mining in Parks. However, the uncertain commitment to those goals which has been described in this thesis needs to be strengthened in order to meet the challenges to Parks from mining. The goals set out in the Park Act (1979) and reiterated in "Striking the Balance" ought to be apparent in all levels of B.C. Parks' policy.

There are several ways to ensure that the goals set out in the Park Act are more visible in the levels of policy. One way is to include a preamble with the Act which states that one intent of the Act is to protect the lands designated under it in accordance with the goals. Another minor change to the Act would require that the minister consider the goals of the Park Act during exercise of the discretion permitted to him by the Act.

Although beyond the scope of this thesis, an issue which underlies much of the

conflict between Parks and mines is the relative value to society of protected areas versus industrial use. The question of valuation is important not only for allocation decisions to be made soon, but as an agent of change in societal attitudes in the longer term.

A further issue underlying the findings of this research is a perceived discrepancy in the power between the Ministry of Parks and the Ministry of Energy, Mines and Petroleum Resources. The stronger power attributed to Mines may stem from its close associations with industry-based mining organizations. B.C. Parks might gain relative power by establishing closer links with the growing parks and wilderness lobby in this province.

This thesis has considered the challenge posed by mining to B.C.'s Parks. Similar challenges may come from other sources such as logging or even from demands for recreational or wilderness experiences. A consistent commitment to the goals of B.C. Parks through the levels of policy which guide decisions for Parks will help to ensure that Parks survive the challenges.

## BIBLIOGRAPHY

- B.C. Parks. 1988. Striking the Balance - B.C. Parks Policy. Province of British Columbia.
- B.C. Parks. 1989. Striking the Balance - B.C. Parks Policy. 2nd Edition. Province of British Columbia.
- Blue, Gregory. 1984. In Bartlett, Richard (ed). Mining Law in Canada. Law Society of Saskatchewan, Saskatoon.
- Brooks, H. 1986. "The typology of surprises in technology, institutions, and development." in Clark, W.C. and R.E. Munn, editors. 1986. Sustainable Development of the Biosphere. IIASA, Cambridge University Press, Cambridge. Pages 325-348.
- Bullock, Charles S., James E. Anderson and David W. Brady. 1983. Public Policy in the Eighties. Brooks/Cole Publishing Company, California.
- Canadian Parks and Wilderness Society. 1987. Editorial, British Columbia Chapter Newsletter. July 1987.
- CPAWS. See Canadian Parks and Wilderness Society.
- Davidson, Margaret Anne. 1981. Policy and Decision-Making in the North: The Case of Lancaster Sound. M.A. Thesis, University of British Columbia.
- Di Castri, F. 1986. "Commentary" in Clark, W.C. and R.E. Munn, editors. 1986. Sustainable Development of the Biosphere. IIASA, Cambridge University Press, Cambridge. Pages 317-320.
- Doern, G. Bruce and Richard W. Phidd. 1983. Canadian Public Policy: Ideas, Structure, Process. Methuen Publications, Toronto.

- Dooling, Peter J. 1970. History: Provincial Parks of British Columbia. Forestry 491 Course Notes, unpublished.
- Dooling, Peter J. Editor. 1985. Parks in British Columbia. D.W. Friesen and Sons, Canada.
- Dubnick, Melvin J. and Barbara A. Bardes. 1983. Thinking about Public Policy: A Problem-Solving Approach. John Wiley & Sons, New York.
- Dunn, William N. 1983. Editor. Values, Ethics, and the Practice of Policy Analysis. Lexington Books, D.C. Heath and Company, Toronto.
- Dye, Thomas R. 1984. Understanding Public Policy. Prentice-Hall, New Jersey.
- Eidsvik, Harold K. 1986. Protected Areas, Conservation and Development. The H.R. MacMillan Lectureship in Forestry, University of British Columbia.
- EMPR. See Energy, Mines and Petroleum Resources.
- EMR. See Energy, Mines and Resources.
- Energy, Mines and Petroleum Resources, Ministry of. 1984. Land Use Policy, Information Paper. Province of British Columbia.
- Energy, Mines and Petroleum Resources, Ministry of. 1988. Mine Development Review Process: Seminar Presentation. February 24, 1988, Vancouver.
- Energy, Mines and Resources, Department of. 1987. The Mineral and Metal Policy of the Government of Canada. Government of Canada.
- Environment and Parks, Ministry of. 1987. News Release January 29, 1987. Park Changes Announced.

- Environment and Parks, Ministry of. 1988. News Release March 10, 1988.  
Public Review for Strathcona Park.
- Hardin, Garrett. 1988. "Wilderness, A Probe into "Cultural Carrying Capacity"."  
Population and Environment 10:1:5-13.
- Holling, C.S. and M.A. Goldberg. 1971. "Ecology and Planning". Journal of the Americal Institute of Planners. 37:4:221-230.
- Holling, C.S. 1986. "The resilience of terrestrial ecosystems: local surprise and global change" in Clark, W.C. and R.E. Munn, editors. 1986. Sustainable Development of the Biosphere. IIASA, Cambridge University Press, Cambridge. Pages 292-317.
- Hogwood, Brian W. and Lewis A. Gunn. 1984. Policy Analysis for the Real World. Oxford University Press, New York.
- Kerr, Ron. 1989. Operations Officer, Visitor Services, Headquarters, B.C. Parks. Telephone interview, April 4.
- Maier, R. 1989. Permits Officer, South Coast Region, B.C. Parks. Telephone interview, August 28.
- Marcy, K.N. 1985. British Columbia Parks and Mines in Conflict: An Evaluation of the Resolution Processes. MSc. Thesis. University of British Columbia.
- Marshall, I.B. 1982. Mining, Land Use and the Environment. Part I. A Canadian Overview. Lands Directorate, Environment Canada, Ottawa.
- Mineral Industry Task Force. 1987. Report to the Government of British Columbia.



- Mitchell, Bruce. 1979. Geography and Resource Analysis. Longman, Inc. New York.
- Mitchell, Bruce and W.R. Derrick Sewell. 1981. Canadian Resource Policies: Problems and Prospects. Methuen Publications, Toronto.
- Mood, Alexander M. 1983. Introduction to Policy Analysis. Elsevier Science Publishing Co., Inc., New York.
- Nagel, Stuart S. 1988. Policy Studies: Integration and Evaluation. Greenwood Press, New York.
- Nagel, Stuart S. 1984a. Public Policy: Goals, Means, and Methods. St. Martin's Press, New York.
- Nagel, Stuart S. 1984b. Contemporary Public Policy Analysis. The University of Alabama Press.
- Nakamura, Robert T. and Dianne M. Pinderhughes. 1981. Changing Anacostia: Definition and Implementation. In Palumbo, Dennis J. and Marvin A. Harder. 1981. Editors. Implementing Public Policy. Lexington Books, Lexington, Mass.
- Palumbo, Dennis J. and Marvin A. Harder. 1981: Editors. Implementing Public Policy. Lexington Books, Lexington, Mass.
- Parks, Ministry of and Ministry of Energy, Mines and Petroleum Resources. 1988. Backgrounder to News Release December 21, 1988. Government Upgrades Parkland and Sets Exploration Policy.
- Parks, Ministry of and Ministry of Energy, Mines and Petroleum Resources. 1989. News Release March 22, 1989. New Parks Established, New Rec Area Guidelines Set.

- Price, Bryan. 1989. Senior Resource Technician, Headquarters, B.C. Parks. Telephone interview, September 7.
- Sewell, W.R. Derrick and John W. Dumbrell. 1987. Wilderness Decision-Making: A Comparative Study of Experiences in British Columbia, Australia, and New Zealand. Cornett Occasional Papers No. 5. University of Victoria.
- Simeon, Richard. 1976. "Studying Public Policy." Canadian Journal of Political Science 9:548-580.
- Simmons, Robert H., Bruce W. Davis, Ralph J.K. Chapman, and Daniel D. Sager. 1974. "Policy Flow Analysis: A Conceptual Model for Comparative Public Policy Research." The Western Political Quarterly 27:3:457-468.
- Strathcona Park Advisory Committee. 1988. Restoring the Balance. Victoria, British Columbia.
- Thorleifson, S. 1989. Secretary, Mineral Resources Division, Energy, Mines and Petroleum Resources. Telephone interview, August 24, 1989.
- WAC. See Wilderness Advisory Committee.
- Weimer, David L. and Aidan R. Vining. 1989. Policy Analysis: Concepts and Practice. Prentice Hall, N.J.
- Wellman, Douglas J. 1987. Wildland Recreation Policy: An Introduction. John Wiley and Sons, New York.
- Wilderness Advisory Committee. 1986a. Wilderness Advisory Committee News. January 1986.
- Wilderness Advisory Committee. 1986b. The Wilderness Mosaic. Vancouver, B.C.

Wood, Bruce. 1988. Submission of the Friends of Strathcona Park to the / 82  
Strathcona Park Advisory Committee. May 19, 1988.