

MANAGEMENT PLAN

February, 1999



for Marble Range and Edge Hills
Provincial Parks



BRITISH
COLUMBIA

Ministry of Environment,
Lands and Parks
BC Parks Division

Marble Range and Edge Hills
Provincial Parks

MANAGEMENT
PLAN

Prepared by
BC Parks
Cariboo District
Williams Lake BC V2G 1Y7



**Marble Range and Provincial Park
Edge Hills Provincial Park**

MANAGEMENT

PLAN
October 1998

Approved by:

Steve Mazur Date: Nov. 24, 1998
Steve L. Mazur
District Manager

Denis O’Gorman Date: 99.03.18
Denis O’Gorman
Assistant Deputy Minister

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PLAN HIGHLIGHTS

Cariboo Chicotin Land Use Plan

- The management plan for Marble Range and Edge Hills Provincial Parks was developed with the direct involvement of Clinton and area residents, and through public review of a draft plan.
- These parks are two of seventeen protected areas created by the Cariboo Chilcotin Land Use Plan and park objectives are drawn, in part, from direction provided by the regional plan.
- The parks are surrounded by a Special Resource Development Zone which is intended, among other functions, to help protect integrity of the parks.
- Marble Range and Edge Hills Parks will be managed as wilderness parks to protect the ecosystem and outdoor recreation attributes, and particularly to conserve wildlife habitat and resident populations of California bighorn sheep and mule deer.

Management of Natural and Cultural Values

- Management focus is on the maintenance of natural plant communities and their contributions to summer and winter wildlife habitat.
- A vegetation management plan will be prepared that includes a wildfire management plan, a weed control plan, an overall livestock grazing strategy and a disease and insect management strategy.
- BC Parks will work with the Ministry of Forests to manage livestock grazing within the parks through range use plans and park use permits. The regional plan identifies grazing as a permitted activity.
- A long-term plan for wildlife will be prepared in collaboration with BC Environment that addresses requirements for information, habitat management and species populations. The regional plan specifies that hunting is a permitted activity.
- Cultural values in the parks, including an area of historic settlement and use by the Shuswap people, will be protected. Settlement sites will be identified so that their integrity can be maintained.

Management of Outdoor Recreation

- Visitors will continue to be able to pursue traditional outdoor recreation activities consistent with the wilderness character of the parks, including hiking, backpacking, horseback riding, hunting, fishing, photography and nature appreciation.
- Recreation activities will be monitored for their potential impacts on natural values, particularly on wildlife ranges and populations, and on cultural values.
- Levels of recreational guiding will be monitored and assessed to minimize impacts from commercial operations. Commercial recreation operations will be managed through park use permits to ensure that levels of activity and user awareness are consistent with management objectives for the parks.
- An informal network of trails will continue to be the only access within the parks. The unroaded character of the parks will be maintained.

Values on Adjacent Lands

- Several areas on the periphery of the parks are important for their recreational or ecological values, requiring special attention within sub-regional plans, or as possible candidates for future park completion.
- The Cariboo Chilcotin Land Use Plan states: *With regard to Marble Range Protected Area, the mineral tenure holder on the west side, Continental Lime, has indicated that it would be prepared in the future to relinquish any tenures not required for its operations. The area involved could then be added back to the protected area.*



Plate 1: Limestone ridges typical of the Marble Range

1.0 INTRODUCTION

Marble Range and Edge Hills Provincial Parks were established in July 1995 as a result of the protected area recommendations contained in the Cariboo - Chilcotin Land Use Plan (CCLUP), and were among 17 protected area designations in the Cariboo-Chilcotin. Although these parks were established to protect their dominant ecological values, a commitment was made that activities such as recreation, cattle grazing, hunting, trapping and backcountry tourism should continue.

Marble Range and Edge Hills Provincial Parks are located approximately 170 kilometers south of Williams Lake in south central B.C., just west of the community of Clinton. Map 1 shows park locations. These small parks (Marble Range at 17,920 hectares and Edge Hills at 11,882 hectares) lie adjacent to each other and are separated by the Jesmond Road corridor.

Marble Range and Edge Hills protect important habitat for mule deer (*Odocoileus hemionus*) and California bighorn sheep (*Ovis canadensis*), and include a wide elevation range from sagebrush grasslands to alpine tundra conditions.

Central to the management of these parks is the protection of wildlife populations and their habitats. Consequently, these areas are managed as wilderness areas that are not regularly serviced or patrolled, with activities restricted primarily to wilderness-based day use and no-trace camping.

The *Park Act*, *Park Amendment Act, 1997* and the Park and Recreation Area Regulations provide the legal framework for the management of these parks. Amendments to the *Park Act* in 1995 and the *Park Amendment Act* in 1997 allow the range of activities that were approved in the CCLUP, but that were not previously permitted under the *Park Act*. Both Marble Range and Edge Hills Parks are included in Schedule D of the *Park Act, Chapter 344, 1996*.

The legal descriptions of the boundaries of Marble Range and Edge Hills Parks can be found in *Appendix A*.

1.1 The Management Planning Process

This *management plan* has been prepared by BC Parks to guide park management over a 10-20 year term. Under the direction provided by the *Park Act*, the *Park Amendment Act, 1997* and the Park and Recreation Area Regulations, a management plan sets out objectives and actions for conservation, development, interpretation and recreational use. A management plan relies on information relating to such things as natural resources, cultural activities, current recreation uses and activities occurring on surrounding lands. The process for preparing a plan involves analysis of the overall goals of the park, patterns

of use, management objectives, and possible sources of conflict among park policies. Through the process, various options for managing the park are assessed for their ability to reach a balance between protecting the natural values from damage and managing human uses of the area. In the larger parks, the park area is broken down into management units to apply a variety of objectives and actions on the land base.

A management plan not only establishes long-term management direction for a park, but also deals with immediate issues. This means that a plan must contain numerous statements describing management actions to be undertaken. Since BC Parks cannot carry out every task at the same time, the plan must also rank the priority of the management actions.

BC Parks prepares management plans with a high degree of public involvement. The general public and special interest groups have opportunities to provide comments to BC Parks through a variety of means, including public meetings, workshops and reviews of written materials. In the case of Marble Range and Edge Hills, a group of local residents, the Clinton and District CORE Group, provided land use recommendations to the CCLUP, including proposals for protection of the Marble Range and Edge Hills areas. BC Parks has worked closely with the Clinton and District CORE Group to prepare a vision statement and management objectives for the parks, forming the foundation for the management plan. The flowchart in Figure 1 shows the general stages of management plan preparation.

This management plan consists of nine main sections:

- 1) an introductory section that provides background and context for the creation and management of these parks;
- 2) a description of the contribution of the parks to the provincial protected areas strategy and the vision for these park areas;
- 3) an explanation of park management zones that describes how different areas of the parks will be managed;
- 4) a description of the natural and cultural values of the parks and their respective management objectives and strategies;
- 5) statements of objectives and strategies for managing outdoor recreation opportunities and access to the parks;
- 6) a description of peripheral areas of importance because of their contributions to values and activities within the parks;
- 7) a communications strategy for these parks for the near future;
- 8) a listing of priority management activities and plan implementation considerations that should be undertaken in the short-term (over the next 5 years); and
- 9) a series of appendices that contain information relevant to the plan.

A public meeting was held
in Clinton to organize a public workshop.
October 29, 1996

A public workshop involving
Clinton and area residents sought advice on park vision,
objectives and management strategies.
December 1996

BC Parks prepared workshop results in a
management planning format .

A second public workshop reviewed a proposed
vision statement and management objectives and strategies, and
made necessary changes; results provided interim park
management direction and were used as key components of
a draft management plan.
February 1, 1997

The 1997 summer field season was used to
augment the information base for the parks.

BC Parks prepared a draft management plan for
broad public review.
October 1997

A public workshop reviewed the draft management
plan prior to its general circulation.
November 30, 1997

Broad public and agency review of the draft management plan.
January & February 1998

Review and approval by Inter Agency Management Committee
and Regional Resource Board.

Using the advice received, BC Parks completes the
management plan for Marble Range and Edge Hills Parks.
March 1999

1.2 Relationship With Other Land Use Planning

1.2.1 Regional Context and Direction from the CCLUP

Working directly with the people of the Cariboo-Chilcotin, the provincial government developed a land use plan for the region in October 1994. The Cariboo-Chilcotin Land Use Plan (CCLUP) addresses long-standing concerns about the stability of resource supplies and subsequent effects on the region's economy and job security. It also sets out management strategies for sustaining the integrity of the region's natural environment, including the creation of protected areas such as Marble Range and Edge Hills Parks.

The CCLUP provides five land use zone designations for resource lands that describe the management intent based on intensity of use: Enhanced Resource Development, Special Resource Development, Integrated Resource Management, Settlement Lands and Protected Areas.

Protected Areas

Marble Range and Edge Hills Parks are zoned as protected areas under the CCLUP and were subsequently designated as Class A provincial parks. The CCLUP provides a number of directives for management of values and activities within these protected areas, in addition to those provided by protected area legislation and regulations, including:

- o a protected area is land on which the dominant ecological values should be protected and that uses, such as recreation, livestock grazing, hunting, trapping and backcountry tourism, will be allowed
- o mineral and placer tenures are not compatible within protected areas; mining tenures fully within park boundaries will be extinguished and fair compensation paid to tenure holders
- o hunting and trapping will continue
- o commercial tourism and recreation can be permitted, where appropriate, recognizing the need for protection of special natural values and the provision for public, non-commercial recreation
- o existing approved levels of cattle grazing will be maintained by zone; specific management requirements and opportunities for enhancement can be addressed in subsequent management plans
- o the maximum level of animal unit months of grazing in protected areas is set at the level authorized as of October 24, 1994
- o no private land will be included in protected areas.

Marble Range SRDZ

Marble Range and Edge Hills Parks are surrounded entirely by Crown lands zoned as Special Resource Development Zones (SRDZ) by the CCLUP. The Special Resource Development Zone is an area where “significant fish, wildlife, ecosystem, backcountry recreation and tourism values exist”. These low intensity areas recognize the sensitive nature of certain lands outside protected areas that contribute a range of values including: natural resource conservation and maintenance; resource development and extraction; commercial and non-commercial recreation and tourism; and fishing, trapping and hunting.

Broad management objectives have been defined for each SRDZ. Resource development activities in these zones will be carried out in a manner that respects sensitive natural values. In the Marble Range SRDZ, which encompasses both Marble Range and Edge Hills Parks, mining, agriculture, timber harvesting, tourism, wildcraft/agro-forestry, fishing, hunting and recreation activities will have access to the zone. Activities to enhance forest productivity, grazing, fish and wildlife resources, and tourism opportunities will occur on a site-specific basis.

The CCLUP describes the Marble SRDZ as providing a buffer around Marble Range and Edge Hills Parks. It calls for the following management regime in the Marble Range SRDZ:

Grazing

- ◆ maintain the currently authorized level of animal unit months by range unit

Botanical Forest Products

- ◆ maintain road access to 50 percent of the zone, with access to the remainder being walk-in off permanent roads

Tourism

- ◆ promote tourism development and focus tourism use on the backcountry areas identified in the recreation targets (see below)
- ◆ maintain the quality of the viewshed surrounding existing tourism operations
- ◆ develop a network of trails linking tourism developments with the backcountry areas in the Marble Range

Mining

- ◆ maintain access to 100 percent of the area outside of those portions reserved from this activity (for example, protected areas)
- ◆ maintain the mine development objectives of Continental Lime
- ◆ adjust protected area boundaries to exclude mineral and placer tenures on the periphery of the parks
- ◆ consider adding mineral tenure areas on the west side of Marble Range Park to the park, if these are relinquished in the future by Continental Lime

Recreation

maintain 40 percent of the zone in backcountry condition; this figure includes high elevation portions of the Marble Range and areas adjacent to the Fraser River

- ◆ maintain the visual quality in the low elevation portions of the Marble Range and the Fraser River Valley (including Edge Hills Park)

Fish and Wildlife

- ◆ manage the Fraser River mainstream banks for salmon stocks through riparian area protection and controls on the rate of timber harvesting
- ◆ manage for biodiversity targets according to the regional biodiversity strategy and the Forest Practices Code
- ◆ maintain riparian habitats through the establishment of riparian management zones on all streams, lakes and wetlands as specified under the Forest Practices Code and Riparian Guidelines
- ◆ manage for California bighorn sheep, moose (*Alces alces*), fur-bearer, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management areas, and throughout this zone under the biodiversity conservation strategy
- ◆ establish landscape units which include both the SRDZ and adjacent park areas, and manage in conjunction with the park areas to maintain representational values
- ◆ maintain mule deer winter range values through modified timber harvest regimes over approximately 18 percent of the forest in this zone
- ◆ maintain community watershed values over the Clinton Creek Community Watershed
- ◆ inventory and manage for rare limestone plant associations

Timber

- ◆ harvest about 42 percent of the productive forest land in this zone in a conventional manner and about 48 percent in a modified way; 10 percent should not be subject to harvesting

1.2.2 Sub-regional Land Use Planning

A primary means of implementing the CCLUP, including its targets for the Marble Range SRDZ, is through sub-regional land use planning and local planning at more refined levels of detail. Sub-regional plans (including park management plans) should be consistent with the intent of the CCLUP, while providing refinements and options not identifiable at the regional scale.

BC Parks participates directly on the inter-agency sub-regional planning team for the area surrounding Marble Range and Edge Hills (part of the 100 Mile Forest District). As a result, BC Parks staff have an opportunity to directly influence land and resource management on the periphery of the parks. A number of concerns exist with respect to management of activities adjacent to the parks that draws attention to the importance of the sub-regional planning process, including critical park concerns of (1) key wildlife species using habitat adjacent to the parks, (2) quality of visual landscapes across park boundaries that are important for visitor experience, (3) managing outdoor recreation opportunities and developments, (4)

managing access in the vicinity of park boundaries and (5) providing direction to resource development activities near the parks.

1.3 Relationships with Other Agencies

BC Parks works directly with other land and resource management agencies to address specific management issues in the parks. For example, coordination with BC Environment is required for regulating hunting and for studies of wildlife populations and habitats. To manage livestock grazing, BC Parks and the Ministry of Forests have a formal protocol arrangement by which the Ministry of Forests manages range tenures in the parks under the authority of the *Range Act*.

BC Parks staff also work directly with staff of the Ministry of Forests in managing wildfire, forest pests and diseases, and vegetation within and near the parks. Fire management and vegetation management plans for Marble Range and Edge Hills will be prepared in collaboration with the Forest Service.

Either directly, or with the help of other government agencies, BC Parks will work with industrial resource managers to ensure that resource development plans and operations reflect considerations for park management. To assist in this regard, BC Parks participates in government agency reviews of applications for tenures (permits, licenses, leases) in areas near the parks where proposed activities could affect park values or management strategies.

1.4 Relationship with First Nations

Aboriginal people have traditionally occupied and used the area in and around Marble Range and Edge Hills Parks. By virtue of this traditional use and continued presence in the region, three Shuswap First Nations assert their aboriginal rights over the area: the Whispering Pines First Nation, the Canoe Creek First Nation and the High Bar First Nation.

The people of the High Bar First Nation are located in the Clinton and Big Bar areas. The Canoe Creek First Nation is located at Dog Creek, south of Alkali Lake. The Whispering Pines First Nation reserve is on the North Thompson River about 30 kilometers north of the city of Kamloops, B.C. This Band was moved there (in the 1970's by the BC Hydro Corporation) from their traditional home at Kelly Lake, on the southeastern boundary of Edge Hills Park.

A primary concern raised by First Nations during the establishment of the CCLUP was the potential of the CCLUP to prejudice future treaty negotiations. The provincial government provided a commitment to work with First Nations on a government-to-government basis, which will be without prejudice to aboriginal rights and treaty negotiations. It is explicit in the CCLUP that future cooperative management activities would lead to a sharing by First Nations in the economic and social benefits that follow from CCLUP implementation.

Affected First Nations will be contacted directly by BC Parks and invited to participate in the preparation of this management plan. It is important that effective working relationships continue to develop between agency staff and First Nations people to ensure that the exercise of aboriginal rights is not impaired by park management activities, and that park management objectives for vegetation and wildlife are as compatible as possible with First Nation objectives.

2.0 PARK VISION AND ROLES

2.1 Significance in the Protected Area System

Marble Range and Edge Hills provincial parks protect 6.8% of the Pavillion Ranges Ecosection, which is located in the Southern Interior Ecoprovince of British Columbia. These are the largest parks in the Pavillion Ranges, with a number of smaller parks located to the south, including Cornwall, Arrowsmith and Blue Earth Lake parks in the Thompson River District. These smaller parks contribute another 2%, resulting in a total of 8.74% of the ecosection within protected areas. Map 2 shows the ecosections and biogeoclimatic zones within Marble Range and Edge Hills Parks.

In addition to protecting large , representative ecosystems and backcountry opportunities, these parks encompass a number of special features. Cultural features include examples of ranching, trapping and Chinese mining history, as well as historic aboriginal settlement sites and fishing stations on the Fraser River.

The Marble Range is characterized by bold castellated peaks and ridges of pale gray Upper Permian limestone. This limestone, the upper member of the Cache Creek group, extends northward from the Cornwall Hills on Upper Hat Creek to beyond Big Bar Creek.

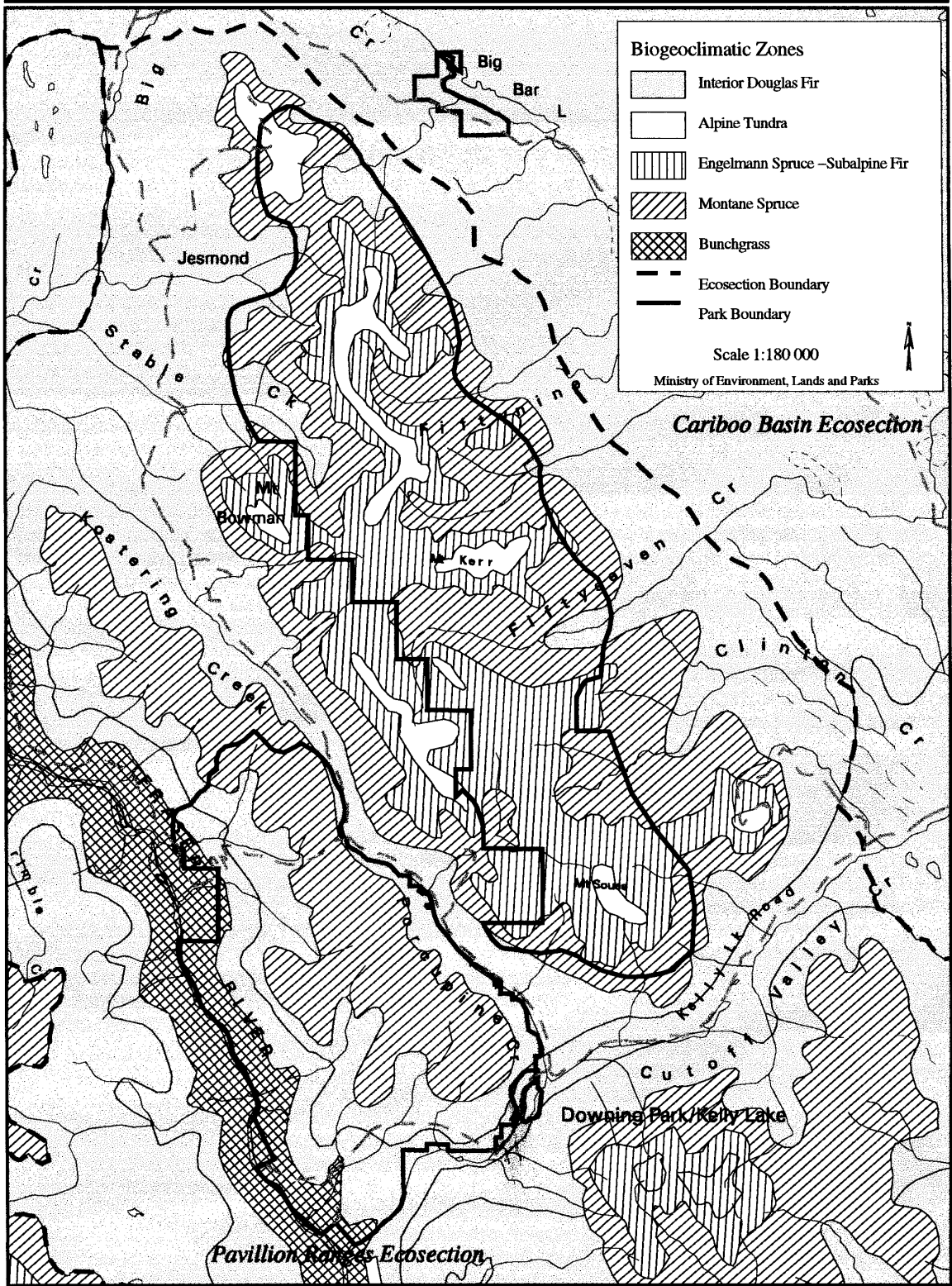
Marble Range Park is particularly noted for its karst topography, with features such as sinkholes, caves, disappearing streams and vertical shafts and vents that are unique to the interior of the province. Karst formations are not well represented in the parks system — examples of other provincially significant karst formations are found in Artlish Caves and White Ridge parks on Vancouver Island. The karst topography supports rare plant communities associated with the calcareous soils that overlay the limestone bedrock geology. The parks also provide important habitat for a number of species that require large, diverse ecosystems, including mule deer and the blue listed California bighorn sheep.

These parks provide outstanding backcountry opportunities for day or overnight recreationists seeking low impact experiences in close proximity to road access. Horseback riding, hiking, photography, hunting and wildlife viewing are all popular activities.

There are no developed day use or overnight facilities in Marble Range or Edge Hills Parks. Other nearby parks offer overnight facilities including Big Bar Lake park with 33 campsites, Downing park with 25 campsites and Green Lake park with 121 campsites.

Although Marble Range and Edge Hills Parks are located close to the community of Clinton and to Highway 97, most park visitors are from the surrounding area and utilize the area for hunting, hiking, horseback riding and wildlife viewing.

Map 2. Ecosections and Biogeoclimatic Zones



The area surrounding the parks is easily accessed by roads developed for mining, logging and settlement purposes. Increasing urbanization and population growth in the southern interior of British Columbia, have resulted in fragmentation of natural landscapes and placed a number of species on the red and blue species lists. Increases in tourist travel from Alberta and the Lower Mainland in the summer months have also created increased demand for accessible wilderness and natural environment experiences. As these trends continue, the role of these parks in protecting ecosystems and providing backcountry recreation opportunities will become increasingly important.

2.2 Roles of Marble Range and Edge Hills Provincial Parks

The respective roles for Marble Range and Edge Hills Parks are described in this section and provide the general purpose of each park. Together with the vision statement, these roles help guide the management strategies and user activities within the parks. These roles are consistent with the broader provincial Protected Area Strategy Goals and with BC Parks System Goals, as described in *Appendix B*.

2.2.1 Roles of Marble Range Provincial Park

Conservation Role

- Marble Range Park is representative of the subalpine and low alpine environments in the calcareous portions of the Pavilion Ranges Ecoregion. It contains four biogeoclimatic zones including relatively large areas of the Engelmann Spruce-Subalpine Fir zone and smaller areas of the Alpine Tundra, Montane Spruce and Interior Douglas-fir zones.
- The park has a high degree of naturalness including: closed canopy old forests of spruce, lodgepole pine, whitebark pine and Douglas-fir; a variety of younger forests; extensive forest/alpine parklands; and dry meadows. Unusual dry grasslands occur on the southern slopes of the park on Mt. Soues.
- The forest/alpine parkland, which is a major feature of the park, is especially rich in bird species, alpine flowering plants and other wildlife. This parkland environment has high wildlife habitat and wildlife viewing values.
- The park is unusual for its limestone bedrock and calcareous soils. Unusual plant species are present due to this calcareous bedrock, and some plant species occur at elevations higher than their normal distribution on other types of bedrock.
- The park protects important habitat for California bighorn sheep, including ram and lambing areas, and important summer range for mule deer.
- The park includes distinctive karst topography in which the action of water on limestone bedrock over thousands of years has resulted in unusual surface and subsurface features including sinkholes, vertical shafts, caves, disappearing streams and springs, and complex underground drainage systems.

Recreation Role

Under the provincial system goals for recreation, BC Parks has four recreation goals a) tourism travel routes; b) holiday destination; c) backcountry; and d) local and regional recreation opportunities. The focus for Marble Range Park is predominantly backcountry recreation although the park also meets the goal of providing local recreation opportunities.

- o The Marble Range is a dominant recreation feature in the south Cariboo and offers exceptional opportunities for enjoying mountain scenery and experiencing the outdoors.
- o Marble Range Park provides an informal network of overnight and day use trails and routes that support hiking, horseback riding and backcountry camping in a wilderness setting.
- o The park provides opportunities for wildlife viewing and hunting.

2.2.2 Roles of Edge Hills Provincial Park

Conservation Role

- o Edge Hills Park is representative of the non-calcareous portion of the Pavilion Ranges Ecoregion and contains ecosystems of the Bunchgrass, Interior Douglas-fir and Montane Spruce biogeoclimatic zones.
- o The west slopes of the park include a unique sequence of ecosystems from dry grassland and sagebrush communities at low elevations, to old Douglas-fir forests at middle elevations, and moist spruce and lodgepole pine forests at upper elevations.
- o The park is especially notable for its grassland and dry forest/grassland transition ecosystems which provide habitat for a rich diversity of wildlife species, possibly including several rare, endangered or threatened species.
- o The park protects important mule deer winter range and important habitat for California bighorn sheep, including portions of a migration corridor to lambing areas.
- o The park includes habitat for cougar, bats, grouse and many other species characteristic of dry Interior forests and forest/grassland transitions.

Recreation Role

The focus for Edge Hills Park in meeting provincial system goals for recreation is to provide low intensity backcountry recreation and local recreation opportunities.

- o Edge Hills provides opportunity for low intensity wildlife viewing, photography, hunting, limited horseback riding and hiking in a backcountry setting.

2.2.3 Cultural Heritage Role for the Parks

- Marble Range and Edge Hills Parks are within the traditional territory of the aboriginal people of the Shuswap area and have a history of aboriginal occupation. Three First Nations continue to use these parks for sustenance, spiritual and cultural purposes.
- Within Edge Hills Park, and potentially within Marble Range Park, are a number of pit houses that date from a time of early settlement by the Shuswap people. These areas are of significant cultural and spiritual importance to aboriginal people, and may hold important archaeological interest.
- Mining, ranching, trapping and guiding activities have occurred in and around these parks for many years and add important historical interest and context for park visitors and local residents.
- Grange Mine, located just outside Edge Hills Park at the mouth of Kelly Creek, operated until the late 1940s. Evidence also exists of extensive placer and hardrock mining in the form of numerous shafts and adits. Miners cabins existed below Pear Lake. There is a history of Chinese people working placer and hardrock claims extensively in this area.



Plate 2: Lower grassland slopes of Edge Hills Park

2.3 Vision Statement

The vision statement for Marble Range and Edge Hills Parks describes the character and use of these areas as we would expect to experience them 25 years from now (in 2023). Being clear about the long-term vision (state) guides what management objectives and strategies are adopted in the short-term (to achieve the vision). The vision assists park managers when faced with the need to respond to changing environmental conditions, growing recreational pressures or shifts in approaches to conservation management.

The vision statement is also based, in part, on the conservation and recreation contributions of these park areas to the provincial Protected Areas Strategy.

Vision Statement

Marble Range and Edge Hills Provincial Parks are, and will continue to be known as wilderness parks. The main focus of management is the protection and maintenance of the wild, natural ecosystems, particularly those elements related to the protection of wildlife habitat and conservation of wildlife populations.

These parks continue to fulfill their traditional roles as areas of local and regional, low-impact recreational use in a wilderness setting. Park users continue to cherish the wilderness experience.

Marble Range and Edge Hills are small, rugged parks that provide the visitor with a sense of connectedness to the natural landscape and a feeling of discovery of a special place of beauty and tranquillity. These parks contribute to the natural history of the area.

Marble Range and Edge Hills Provincial Parks are managed as complementary units that together contribute important elements of summer and winter ungulate habitat. Other important features include outstanding limestone geology and cave and vent formations that are protected from recreation impacts.

Park management is integrated with the management of lands and resources on adjacent Crown lands through government planning and coordinated operational activities.

Achieving the Vision

- Natural ecosystems and ecological integrity are maintained.
- Riparian areas are protected from damage.
- Management across park boundaries is coordinated with other regulatory agencies to enhance park values and maintain aesthetic qualities.
- Wildlife habitat and viable wildlife populations are sustained within the parks and in the vicinity of the parks, particularly with respect to California bighorn sheep and mule deer.
- Park management reflects the historic recreational pursuits of local people and the general public, particularly hiking, horseback riding, wildlife viewing, hunting, backpacking, and nature appreciation.
- Visitor numbers are managed at a level that protects the natural ecological integrity and maintains the backcountry experience.
- Recreation uses are non-motorized and low impact, and do not detract from the natural values, particularly the quality of wildlife habitat and use of critical ranges.
- Commercial facilities and permanent structures are located in appropriate areas outside of park boundaries.
- Commercial backcountry operations are compatible with levels of public recreation use.
- Aboriginal people use the park areas for subsistence, spiritual and cultural purposes.
- Local residents and aboriginal people participate in park management planning and operational activities.

3.0 PARK ZONING

BC Parks uses zoning to assist in the planning and management of provincial parks. In general terms, zoning divides a park into logical units to apply uniform and consistent management objectives for conservation and recreational values. The zones reflect the intended land use, existing patterns of use, the degree of human use desired, and the level of management and development required. At one end of the spectrum, the Intensive Recreation Zone indicates a portion of a park that is appropriate for high levels of recreation and facility development. At the opposite end, the Wilderness Conservation Zones indicate an area of a park that receives the highest level of resource protection and minimal human presence. Between these two extremes, there are three additional zones providing a range of conservation and recreation priorities — Natural Environment Zone, Special Feature Zone and Wilderness Recreation Zone. *Appendix C* contains a detailed description of park management zones and their respective management intents.

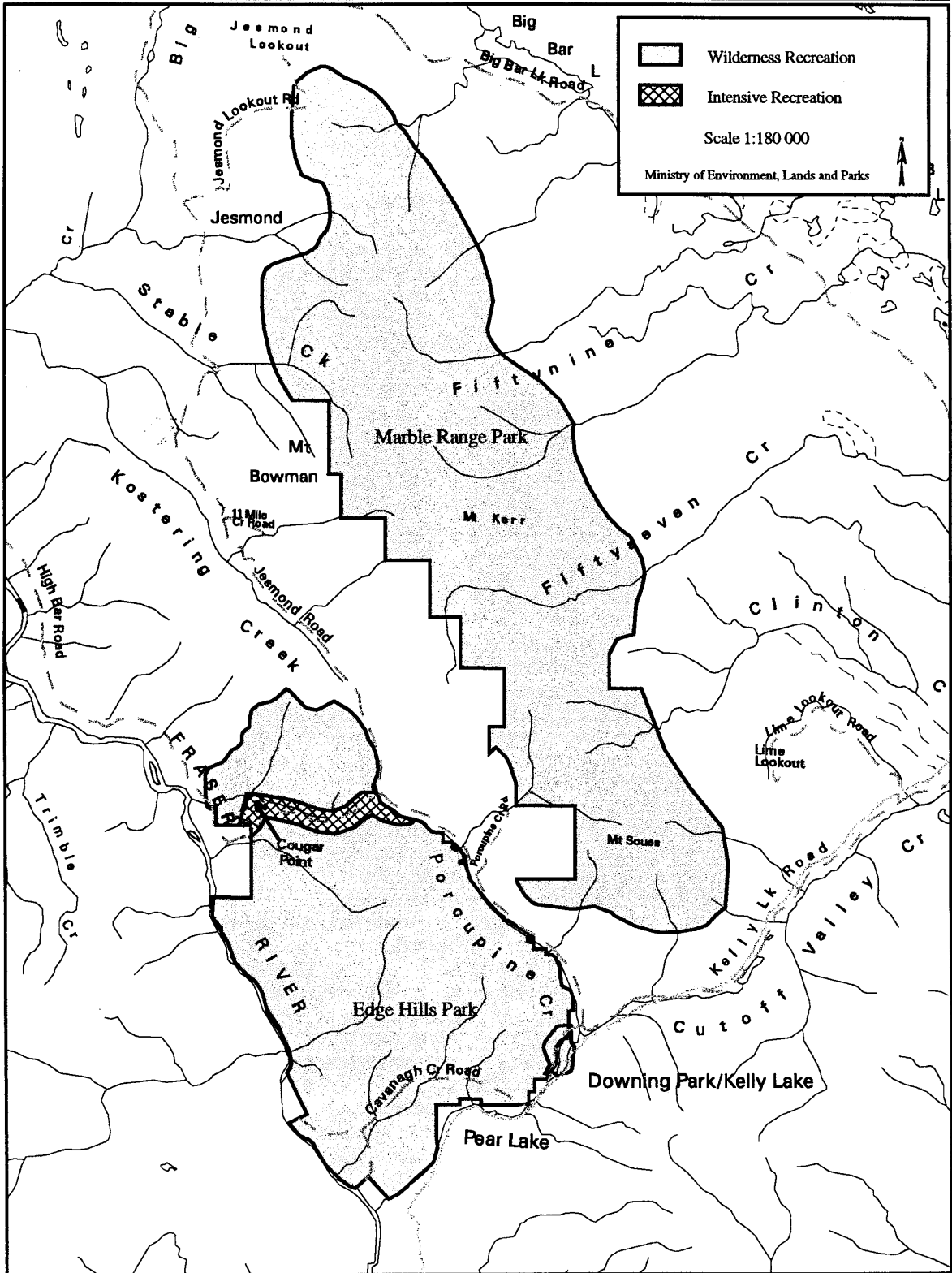
Map 3 shows the zoning for Marble Range and Edge Hills Provincial Parks. Marble Range is zoned entirely as a Wilderness Recreation Zone. Edge Hills is also a Wilderness Recreation Zone, but has a small area of Intensive Recreation Zone that contains the dayuse opportunities at Cougar Point and the access road traversing the park.

3.1 Wilderness Recreation Zone

The intent of this zone is to place a high priority on conserving the natural environment, particularly wildlife values, while providing some level of backcountry use that is compatible with the natural environment and its wilderness atmosphere. Facility development is minimal, at a level sufficient to satisfy user needs and to protect the overall environment of the park. In summary, areas designated Wilderness Recreation are large natural areas where natural ecological processes occur largely uninfluenced by human activity, and where low levels of recreation use are permitted but evidence of human presence is confined to specific primitive facilities and sites (for example, designated trails for commercial backcountry operators).

The Wilderness Recreation Zone covers the entire 17,920 hectares of Marble Range Park and 11,772 hectares of Edge Hills Park.

Map 3. Park Zoning for Marble Range and Edge Hills



3.2 Intensive Recreation Zone

The objective of this zone is to provide for a variety of readily accessible facility-oriented outdoor recreation opportunities. This includes facilities such as campgrounds, picnic areas, parking areas, and boat launches. The management intent of this designation is to accommodate vehicle-based users in as natural a setting as possible.

In Edge Hills Park, this 100 hectare zone encompasses the east to west access corridor and the Cougar Point viewpoint. This area provides an exceptional opportunity for road-accessible day use recreation and scenic viewpoint development, offering spectacular views of Edge Hills Park and the Fraser River valley. No overnight use is permitted.

A second intensive recreation zone could be created in Edge Hills Park if the Pear Lake area is successfully acquired by BC Parks at a future date. This is an area of private land on the southern border of Edge Hills.

Also adjacent to the southeastern corner of Edge Hills Park, just east of the Pear Lake property, is the existing Downing Provincial Park. The potential may exist in the future for amalgamation of Downing and Edge Hills Parks under one park entity. The joint management and possible amalgamation of these areas should be investigated for consideration at a future date. If both the Pear Lake property and Downing Park were to become additions to Edge Hills Park, this would require the creation of an intensive recreation zone over these areas to recognize the rustic camping and day use activities that take place there.

4.0 NATURAL AND CULTURAL VALUES

4.1 Introduction

The area in and around Marble Range and Edge Hills Parks has long been recognized by local residents and visitors as an outstanding natural area. These parks contain unique natural physiographic features including: unusual limestone bedrock and calcareous soil conditions; plant species adapted to the calcareous conditions; limestone cave and vent structures; a significant elevation range accompanying vegetation ecosystems; significant wildlife habitats and populations; undisturbed landscapes.

This section provides a brief description of the primary natural and cultural attributes of the parks, and sets out resource management objectives and strategies to protect natural features and processes.

4.2 Vegetation Management and Use

Vegetation in Marble Range and Edge Hills Parks has been shaped significantly by two major elements: (1) the rain shadow effect on the leeward side of the Coast Mountains and (2) the Fraser River cutting through the Pavilion Ranges and contributing to extreme elevation differences in vegetation types from lowland bunchgrass to alpine. Combined, these two parks represent an elevation transition of 1500 meters (5000 feet) and contain portions of five different biogeoclimatic zones (Bunchgrass, Interior Douglas-fir, Montane Spruce, Engelmann Spruce/Sub-alpine Fir and Alpine Tundra). As a result, the parks contribute to regional and ecosystem biodiversity, particularly with their protection of grasslands and alpine parkland.

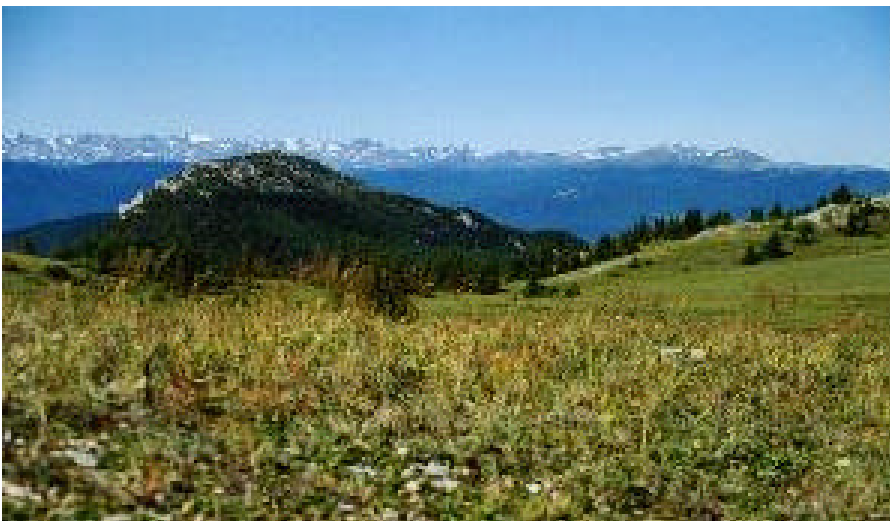


Plate 3: Alpine area near Mt. Bowman

Wildlife species, such as California bighorn sheep and mule deer, depend on the vegetation of the parks and seasonally migrate between the parks, from low elevation winter habitats to high elevation summer habitats. Park vegetation also contributes to the recreational and aesthetic experience of park users. Grazing tenures exist in both parks and management of animal units is aimed at ensuring forage is available for both planned wildlife and authorized livestock. Wildlife will have priority above these needs. The grazing strategy will be to achieve the Desired Plant Community (DPC)¹ within approved Range Use Plans. Travel corridors and ecological linkages will be maintained by ensuring that livestock do not cause significant unnatural cover breaks or isolate wildlife species from their habitats or potential habitats.

Dry grassland plant communities are among the rarest ecosystems found in the province, covering only 1.8% of the landbase. Although rare, grasslands play an important role in the province of British Columbia by supporting a unique variety of wildlife and plants, and by providing the best-quality grazing land for livestock. Edge Hills Parks plays a critical role in protecting grassland ecosystems and protects red and blue listed species such as spotted bats, longbilled curlews and California bighorn sheep. Found in the arid basin vegetation zone², these grasslands are a result of low elevation, intense rain shadow effect and hot, dry air masses from the south. The combined effect creates one of the hottest and driest climates in the province.

Low elevation grassland communities are characterized by the presence of prickly pear cactus (*Opuntia sp.*), big sagebrush (*Artemisia tridentata*) and many dryland grasses, such as bluebunch wheatgrass (*Agropyron spicatum*).

In natural ecosystems, fire, disease and insect infestations are fundamental disturbances that maintain ecosystem health and, as such, are generally allowed to continue within parks. Past interventions in natural disturbance patterns, particularly through wildfire suppression, has created some 'unnatural' conditions that make vegetation management more difficult. The resulting older seral stages and accompanying fuel loading has contributed to an increased risk of catastrophic wildfire and forest pest outbreaks. Fir and pine bark beetle infestations in recent years may be indicators that unnatural conditions may exist. Vegetation management planning that incorporates fire and forest health objectives may, as a result, be critical to maintaining healthy park ecosystems.

The management philosophy of BC Parks is to allow natural processes to occur to the greatest extent possible. This requires a good understanding of vegetation conditions and trends. Active management may be required to protect specific ecosystems that are important to wildlife species such as sheep and mule deer, and to maintain landscape biodiversity objectives.

Vegetation management within the parks must also be integrated with forest and grassland management on surrounding lands to ensure continued viability of vegetation ecosystems

¹ Desired Plant Community is a term defined under the Forest Practices Code to direct vegetation management objectives in Range Use Plans.

² *Plants of Southern Interior British Columbia*; J. Antos et al; Ministry of Forests and Lone Pine Publishing; Vancouver, British Columbia, 1996.

and wildlife populations. There has not been any significant vegetation inventory work undertaken for the park areas.

Objectives

- o To maintain natural plant communities for their inherent value and their contribution to summer and winter wildlife habitat.
- o To maintain natural vegetation for its contribution to landscape biodiversity and to visual aesthetics.
- o To protect rare, endangered and sensitive native plant communities and species, as they are identified, and to prevent the establishment of non-native species.
- o To manage for low impact, non-destructive scientific studies to improve the knowledge of park values and management activities.
- o To encourage public appreciation of the forest and vegetation values, particularly as they contribute to wildlife habitat.
- o To manage wildfire and pest infestations in a manner that maintains the integrity of natural conditions within the park, while considering the implications for adjacent native vegetation, wildlife, recreational and aesthetic values to the parks.
- o To manage for continued livestock grazing within the guidelines of the CCLUP, the *Range Act* and Forest Practices Code Range Management Guidebook in a manner that is sensitive to park values.



Plate 4: Monkshood in bloom

Strategies

- ◆ Prepare a vegetation management plan that considers objectives and strategies for: conserving natural vegetation patterns; identifying and protecting rare plants and plant associations; protecting sensitive or unique vegetation communities from adverse impacts of recreational uses; monitoring requirements to gauge the affects of park use on vegetation resources. This work should be supported by a biophysical inventory, ecosystem mapping, and rare vegetation inventory for the park areas, and will include:
 - a fire management plan for each park that indicates specific circumstances and locations for which wildfires may be allowed to burn or where controlled burning may be conducted. This plan will serve to meet landscape biodiversity objectives, protect adjacent commercial forests and adjacent buildings outside the park, resemble natural processes which maintain plant and animal diversity, and reduce the probabilities of a large wildfire. Included will be public evacuation measures, priority control areas and fire control methods (mechanized vs. non-mechanized).
 - a disease and insect management strategy to balance the ecological role of endemic levels with the threat of infestations that affect landscape biodiversity objectives or spread to adjacent lands.
- ◆ Undertake initial attack on all wildfire (by either the Ministry of Forests or BC Parks) to control wildfires until the situation is assessed. The fire may be allowed to run its natural course as long as it meets biodiversity objectives, and where visitors, adjacent commercial forests and other park values are not in danger. The intent is to allow natural fires to follow their natural course to the greatest extent possible. Avoid the construction of road access for fire suppression purposes to the greatest extent possible.
- ◆ Continue spot control of infestations by using low impact, site-specific methods, such as single-tree disposal. No new access will be created to address pest infestations. Where possible, allow infestations to run their natural course.
- ◆ Assess, monitor and control noxious weeds through mechanical means or proven biological means, particularly in areas where weed establishment could have harmful effects on wildlife and livestock forage.
- ◆ Develop interpretive information on the vegetation feature and values, as part of the communications strategy for the parks.
- ◆ Work cooperatively with the Ministry of Forests to manage cattle grazing in the parks in a manner that minimizes impacts from grazing on vegetation resources.

4.3 Fish and Wildlife

Marble Range and Edge Hills Parks contain important habitat for a variety of wildlife species. Large mammals include California bighorn sheep³, mule deer, moose, black bear (*Ursus americanus*) and cougar (*Felix concolor*).

The expansive alpine areas and rocky slopes of the Marble Range offer prime habitat for California bighorn sheep from late spring to early fall. Black bear, moose, mule deer and cougar can be found at lower elevations where there is continuous tree cover, forage vegetation and water. Several species of grouse can be found here such as the sharp-tailed grouse (*Tympanuchus phasianellus*), as can a variety of raptors and songbirds.

Elk (*Cervus elaphus*) have also been sighted in the area by BC Environment staff. While there is potential habitat for elk, there is no plan to re-introduce this species.

Edge Hills Park is of critical importance for both summer and winter range for both California bighorn sheep and mule deer, and as a lambing ground for California bighorn sheep. This area also attracts songbird species that are not found in Marble Range. The flammulated owl, a blue listed species on the provincial list and considered vulnerable by the Committee on the Status of Endangered Wildlife in Canada, is thought to utilize the old growth Douglas-fir forest along the ridges above the Fraser River. Several other rare species may also be present, including bats, toads and snakes.

Wildlife species often use various karst features for habitat. In Marble Range, the limestone cave formations are used intermittently by large carnivores for shelter or resting. Birds and small mammals nest in caves and other rock cavities. Mule deer and California bighorn sheep often bed down in the vicinity of cave openings during summer when the air from caves is cooler, and during winter when the air from caves is generally warmer than surrounding temperatures. Caves and their stable environments can be critically important for bat species that depend on them for roosting and hibernation.

A key feature of these parks is the continuous travel corridor for wildlife moving between seasonal ranges that these areas provide. Because of this annual migrating pattern, habitat management strategies for the park will need to be closely coordinated with those of the surrounding area.

These parks and surrounding areas experience significant use by hunters. Primary game species include California bighorn sheep, mule deer, moose and grouse. With few access roads into the parks, hunting access is predominately by trail.

³ California bighorn sheep are a blue listed species that is considered vulnerable in British Columbia.

In an effort to reduce the focus on key habitats, and thereby lessen the potential for visitor-wildlife conflicts, wildlife habitat and use maps have not been published as part of this management plan.

Fisheries values in these parks are low, with streams at lower elevations supporting small native trout populations. Water courses are small with steep gradients, and flows are flashy. The area is relatively dry and water is generally at a premium in the summer months. There have been no formal surveys of fishery values. Some of the small lakes in the vicinity of the parks, including Kelly Lake, have been stocked with rainbow trout (*Oncorhynchus mykiss*).

Pear Lake, just outside Edge Hills Park is a popular family fishing spot. If Pear Lake were to become part of Edge Hills Park at a future date, this would provide the opportunity for a park-managed, family (children's) recreational fishery along Kelly Creek and at Pear Lake.

Objectives

- To identify and conserve the natural diversity of wildlife species and populations over the landscape.
- To protect rare, endangered, sensitive or vulnerable species, especially California bighorn sheep and flammulated owl.
- To protect critical habitats and enhance declining habitats in conjunction with other park management and recreation use objectives, particularly California bighorn sheep summer and winter range and travel corridors in Edge Hills Park.
- To increase knowledge and understanding of wildlife resources and habitat in the park, and to encourage scientific research that has direct management benefits in the parks.
- To minimize the impact of traditional, recreation and commercial uses on fish and wildlife.
- To protect and maintain the natural qualities of water resources and their contribution to fish habitat within the parks.
- To maintain natural fish habitat and conserve all natural fish populations.
- To maintain a low intensity recreational fishery at Pear Lake (if added to Edge Hills Park).

Strategies

- ◆ Use terrestrial ecosystem mapping and other resources to identify wildlife habitat suitability and to support the management of wildlife within, and adjacent to, both parks.
- ◆ Develop a long-term management plan for wildlife with BC Environment. Key elements in this strategy include: ongoing wildlife inventories; inventory of habitat requirements of species with particular reference to critical habitats; protection of rare and endangered species; role of fire, insect and disease in terms of creating a range of

habitats including snags for various bird and animal species; role of adjacent lands; opportunities for research programs; and develop strategies if wildlife populations are endangered.

- ◆ Consider the enhancement of habitats or populations only to support biodiversity conservation objectives and the maintenance of species at natural levels.
- ◆ Take any necessary actions to minimize the damage to riparian areas and natural wetland environments from recreational use, wildlife use and cattle grazing. Monitor cattle grazing in wetland habitats using guidelines defined in the Range Management Guidebook and *Range Act*.
- ◆ Identify funding sources and/or programs by which information on wildlife habitat and population characteristics can be collected and evaluated.
- ◆ Assess conditions and monitor levels of recreation use to limit the impact on fish and wildlife. Undertake actions to address and avoid conflicts between people and wildlife, such as education, rerouting of trails and closures. Restrict recreation use in California bighorn sheep lambing areas during lambing season.
- ◆ Work with Fisheries Branch to maintain the recreational fishery at Pear Lake, (if added to Edge Hills Park) including a stocking program.
- ◆ Undertake radio collaring of California bighorn sheep to determine patterns of use and movement corridors.
- ◆ Aboriginal hunting, fishing and trapping rights are not affected by this management plan. BC Parks will work with BC Environment and First Nations with aboriginal rights in these parks to ensure that sustenance hunting needs are met, and that wildlife populations are viable.
- ◆ Authorize, by park use permit, the continuation of pre-existing trapline operations. Allow the use of firearms and snowmobile access for trapline management by the registered trapline holder and authorize this in park use permits.
- ◆ Allow non-motorized hunting activities to continue.
- ◆ Monitor and regulate hunting, fishing and trapping in conjunction with BC Environment to ensure healthy fish and wildlife populations are maintained. Meet annually, or periodically as required, with local hunting groups to gain timely local input to habitat management and hunting regulations that affect the animal populations that use these parks. Once management issues have been identified, corrective actions should be taken in as short a time period as possible.

4.4 Water

Water is a scarce resource in both Marble Range and Edge Hills Parks, with a number of streams flowing seasonally or disappearing underground for parts of the year. The management of certain activities within these parks may depend, in part, on the availability

of water supplies (for example, livestock grazing, commercial horse use or limitations based on fire hazards).

The Village of Clinton draws its water from the Clinton Creek drainage on the southeastern edge of Marble Range Park. This area has a community watershed designation. Known locally as “the big swamp”, the drainage contains areas where the peat layer is perhaps as thick as 20 feet. In the generally dry and rocky Marble Range, this large wetland is a distinctive feature. Only the headwaters of Clinton Creek are within the boundary of Marble Range Park.

Pure drinking water is one of this area’s main values for local residents. The combination of limestone and swamp provide large quantities of pure, high quality water. For this reason, the residents have been sensitive to human activities occurring in the watershed. A number of years ago, when plans were presented to log in the area, residents formed a watershed committee and, through discussion and compromise, developed a watershed logging and management plan acceptable to all parties. Logging in the watershed has been very restricted and vehicle access has been strictly controlled through gated and locked access.

The water flowing from several drainages along Lime Ridge, on the west side of Marble Range Park, forms Porcupine Creek. This creek is the main source of water on the west side of the Marble Range. Its taste and purity have resulted in people collecting their drinking water at the point where Porcupine Creek meets the Jesmond road. Homes along the Jesmond Road depend on this water.

A number of water licenses exist within Marble Range Park and these will continue under park use permit.

While the protection of water sources is an important component of the conservation and recreation roles of these parks, the small, steep gradient streams support few fish, except at lower elevations. If Pear Lake were to become part of Edge Hills Park, this would provide a good local recreational fishery along Kelly Creek and at Pear Lake.

Objectives

- To protect and maintain the natural qualities of water resources and their contribution to ecological processes within the parks.
- To maintain the quality and quantity of water from the parks for use as domestic water supplies, particularly the supply for the community of Clinton.
- To recognize pre-existing water rights and uses.

Strategies

- ◆ Except as approved in range use plans, prohibit further water impoundments, diversions or domestic use projects within the parks.

- ◆ Ensure that trail maintenance minimizes erosion of surface materials into watercourses.
- ◆ As part of the communications strategy for these parks, provide information to users on the acceptable procedures for proper disposal of human wastes — monitor use for impacts of waste disposal.
- ◆ Issue park use permits for pre-existing water licenses and structures.
- ◆ Modifications to pre-existing water use facilities related to cattle grazing may be permitted, subject to range use plan referral, park management policies and impact assessments.

4.5 Land and Resource Tenures

A number of activities have taken place in the area of these parks in the past that require the issuance of tenure by the Crown, including trapping, mining exploration and development, livestock grazing, timber harvesting, water use and recreational guiding.

With the formal designation of the parks under the *Park Act, 1995*, timber harvesting options and mineral exploration and development activities have been halted. These uses are incompatible with provincial park policies and legislation, and will no longer be permitted. Grazing, trapping, recreational guiding and hunting are compatible with the objectives of these parks, and their continuation is provided for in the CCLUP.

Some previously logged areas on the eastern periphery of Marble Range Park are just inside the park boundary. BC Parks will work with the Ministry of Forests to determine the most suitable silvicultural prescriptions for returning these blocks to a condition which is consistent with the vegetation management strategy and access management requirements for the park.

Mineral claims have been excluded within park boundaries. Continental Lime holds substantial claims on the periphery of the parks that cover an area of high interest for exploration and potential quarry development. The CCLUP provides for some of these claims to revert to the Crown for park purposes if, and when, Continental Lime relinquishes their interest in them. These claim areas are shown on Map 4.

Access to claims adjacent to Edge Hills Park along the Fraser River is by way of a road down Cavanagh Creek through Edge Hills Park. The issue of long term access through the park to these mineral claims will have to be resolved.

Cattle grazing has occurred in these parks and on surrounding range lands for decades, with the Ministry of Forests having the primary responsibility for ensuring good range management practices. Livestock grazing will continue in Marble Range and Edge Hills Parks, and will continue to be managed by the Ministry of Forests, subject to the *Range Act* and regulations, Forest Practices Code and inter-agency protocol.

Consistent with the CCLUP and subject to managed range conditions, pre-existing grazing tenures will be authorized under the *Range Act*, with no loss of Animal Unit Months (AUMs). However, AUMs will not be increased. Map 5 shows existing range tenures.

Low elevation grassland communities along the Fraser River are used by both California bighorn sheep and cattle, and with arid conditions, are particularly sensitive to over-grazing. Grazing strategies within approved Range Use Plans will maintain and enhance forage values for California bighorn sheep, other wildlife and livestock. Livestock grazing is to be managed to achieve the Desired Plant Community outlined in the Range Use Plan. The Forest Practices Code requires that Range Use Plans describe actions for achieving objectives for identified wildlife.

BC Parks will work with BC Environment staff and range staff from Ministry of Forests to assess, monitor and address impacts of grazing by both wildlife and cattle on sensitive grasslands. Action will be taken to correct localized damage along specific water courses.

Uncontrolled grazing by horses may be affecting the quality of low elevation grasslands in localized areas. BC Parks will identify the owners of these horses and will take any steps necessary to protect range quality from degradation by free-ranging horses.

Trapping has long been a traditional activity in the parks and its continuation is provided for in the CCLUP. Both parks are covered by five trapline tenures. This pre-existing trapping activity will be authorized by park use permit so that it may continue. The permit procedure will specify and authorize any required use of firearms or motorized access for trapline management by the registered trapline holder. If fur-bearer populations are under stress, BC Parks will work with BC Environment and the trapline holder to manage activities so that animal populations are not threatened. Trapline tenures may be sold.

Recreational guiding is also an established activity in these areas and includes trail riding, hiking, backpacking, photography expeditions, hunting and nature appreciation. Pre-existing operations will be authorized within the parks by way of park use permits, with specifications for operating procedures and use levels that are consistent with other park management objectives. Commercial recreation operations should not displace public access to park resources (refer to Section 5.2.8 for greater detail). Map 6 shows guiding areas, traplines and points of water diversion.

Guided hunting will continue. BC Parks will work with BC Environment and guides to assess hunting pressure and regulate quotas as necessary to protect the resource.

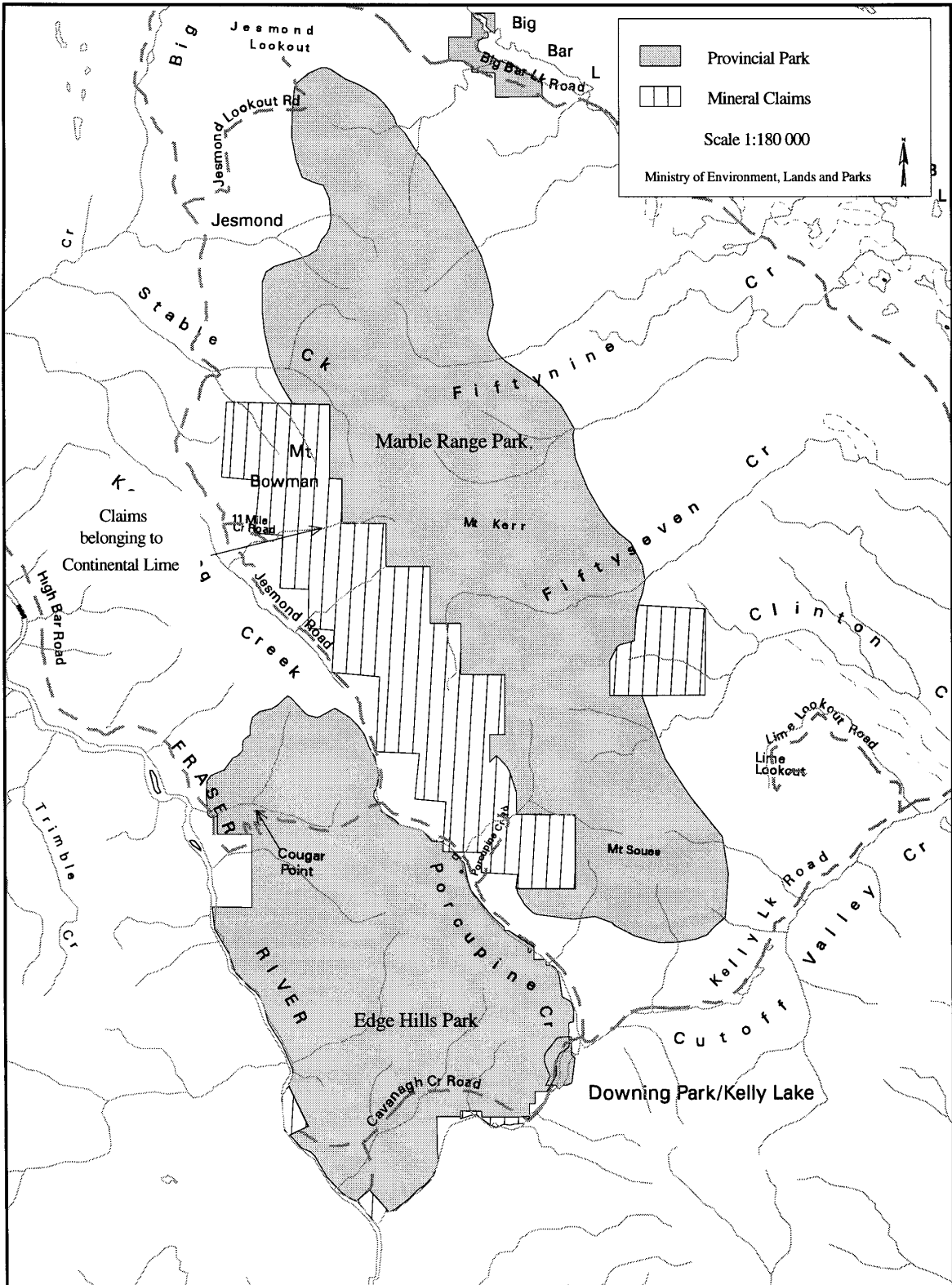
Objectives

- o To manage tenures to meet the conservation roles of the parks and the obligations to established uses.
- o To minimize environmental and visual impacts of tenured activities.

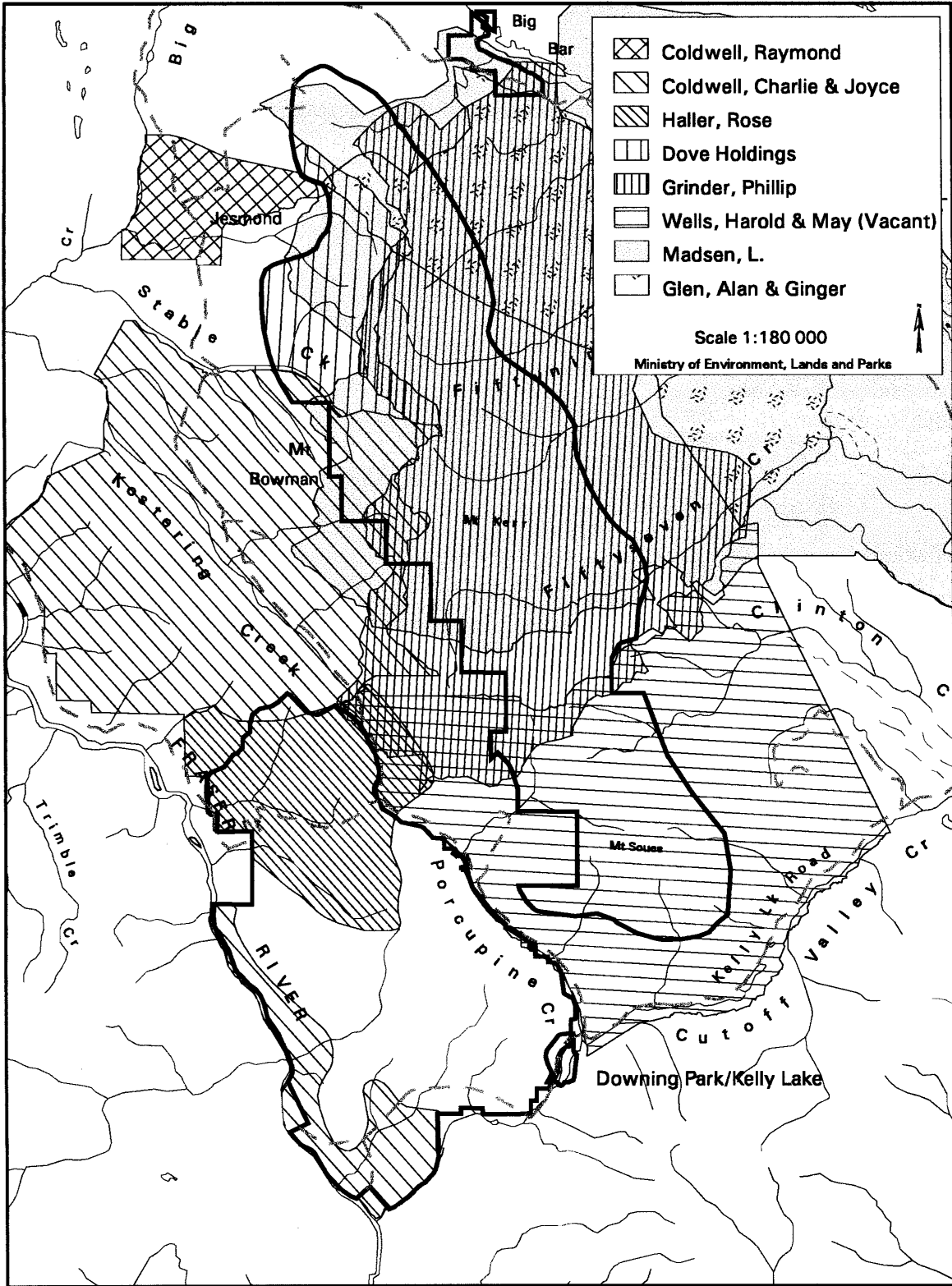
Strategies

- ◆ Work within sub-regional land use planning processes for surrounding lands, and with other agencies to protect values in the parks and adjacent to park boundaries. This includes minimizing impacts on scenic values, water and air quality and noise through activities such as logging, mine infrastructure and gravel pits. Focus on areas with important scenic and recreation values.
- ◆ Honor existing backcountry recreation-related tenures and permits as park use permits.
- ◆ Cooperate with the Ministry of Forests under its Range Management program in honoring and managing existing grazing tenures. Ensure that range management plans are prepared, and that livestock grazing is assessed, monitored and managed so that grazing and grassland communities are sustainable and damage is minimized (such as damage to riparian areas from cattle use). Grazing activity will not be expanded from the October 1994 allotted Animal Unit Months.
- ◆ Authorize current trapping and guide outfitting operations by issuing park use permits for activities and associated structures and camps.
- ◆ Require permit holders to remove unnatural objects and structures which have no historical significance, are severely dilapidated or are no longer required. The Permittee must rehabilitate the site to a natural state when the permit has been terminated.

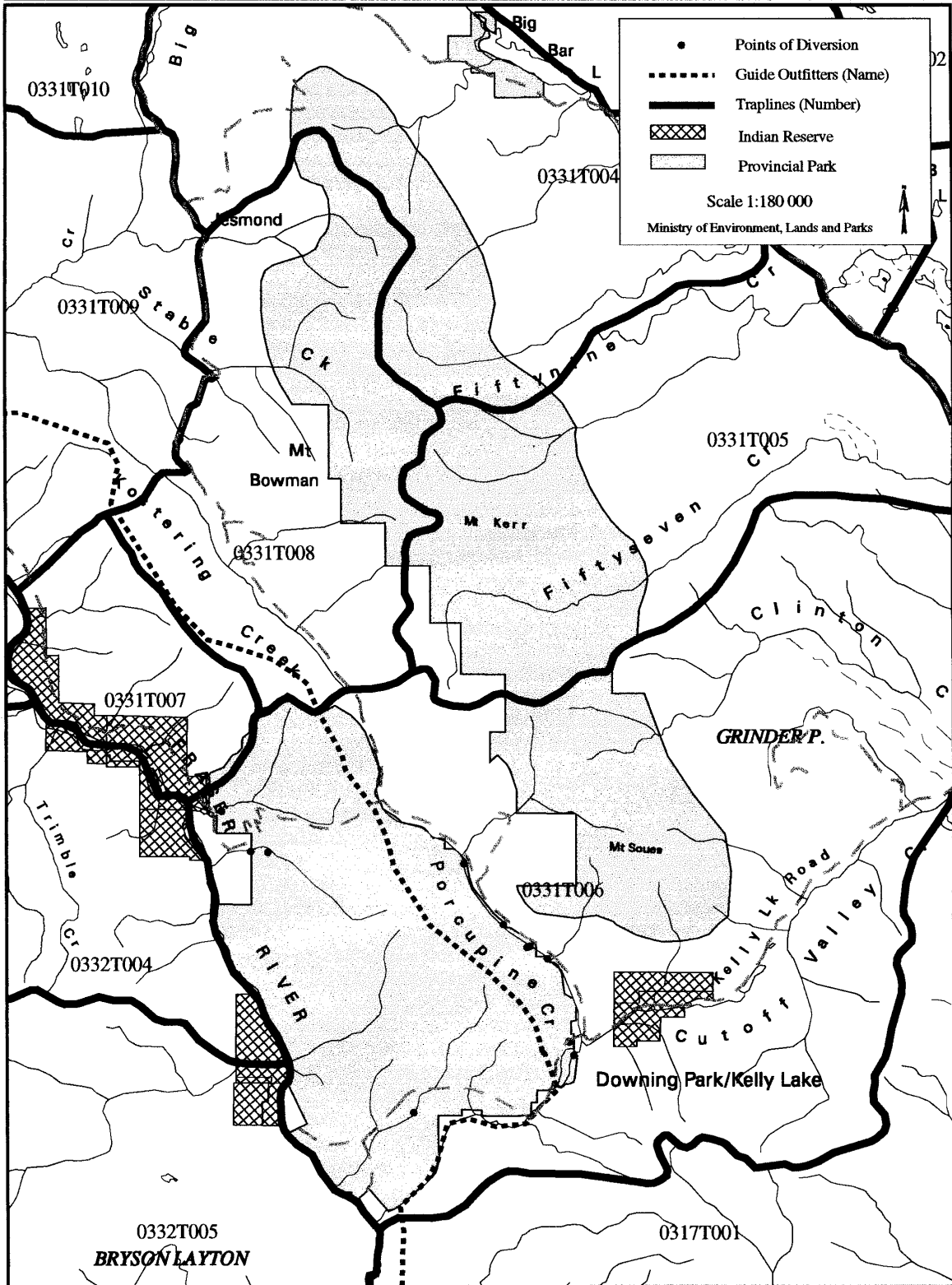
Map 4. Mineral Claims Bordering Marble and Edge Hills Parks



Map 5. Range Tenures Holders



Map 6. Guiding, Traplines and Points of Diversion



4.6 Cultural Values

Marble Range and Edge Hills Parks are part of the traditional territory of the Shuswap aboriginal people. The area provided home sites and was used for hunting, fishing, trapping and gathering. Of importance to gatherers were huckleberries, blueberries, soopallalie and saskatoon berries, as well as a number of medicinal plants. Strawberry Lake held special importance as a summer home site because of its proximity to berry picking sites.

The limestone caves found in the karst formations of the Marble Range served as important training grounds for aboriginal doctors and seers. These caves are reported to also have been used as a training location for lahal players (a game of dexterity and gambling played with sticks). Caves, as a result, hold special cultural and spiritual significance.

A large number of pit houses exist in the vicinity of Clinton Creek, 57 and 59 Mile Creeks, Kelly Lake, Pear Lake, Kelly Creek, Cavanagh Creek and along the valley toward the Fraser River. These pit houses point to the possibility that this area may have once been one of the most populous areas for the Shuswap aboriginal people. The largest such grouping of pit houses may have as many as 200 sites. First Nations information says that many pit houses were abandoned after the smallpox epidemic of 1862 killed most of the residents. It is thought that people who had succumbed to the deadly disease were left in the pit houses, and that the roofs were allowed to collapse and bury the bodies. The protection of the integrity of these pit houses is a serious concern for First Nations and for BC Parks. For this reason, site specific information about these sites is not available as part of this management plan.

Four Shuswap First Nations continue to use the area in and around Marble Range and Edge Hills Parks: the Whispering Pines First Nation, the Canoe Creek First Nation, the High Bar First Nation and Pavilion First Nation. The High Bar and Whispering Pines First Nations have traditional interests over the general area of both Marble Range and Edge Hills Parks. The traditional territory of the Canoe Creek First Nation takes in only the northern portion of Marble Range Park, while traditional territory of the Pavilion Band has been the southern portions of the two parks. Traditional sharing of the land among these First Nations continues today.

While Canoe Creek, High Bar and Pavilion First Nations are located in the general vicinity of the parks, the Whispering Pines First Nation reserve land is now located on the North Thompson River about 30 kilometers north of the city of Kamloops. This Band was moved there in 1972 by the BC Hydro Corporation from their traditional home at Kelly Lake. This move was precipitated by concerns about the proximity of hydro-electric transmission lines. Their traditional territory, however, remains intact and includes Kelly Lake and the area of the two parks. The Band continues to use the traditional fishing station on the Fraser River at Cavanagh Creek and upgrades the road for access every few years.

The area in and around Marble Range and Edge Hills Parks also has historical significance for its mining exploration and development activities. The most significant mine in the area, the Grange Mine, was active into the 1940s. Located at Kelly Creek just outside of Edge Hills Park, it employed white, aboriginal and Chinese workers.

With the development of the Grange Mine, the fishing stations traditionally used by aboriginal people became inaccessible. The area was developed with cabins and other structures to house mine workers and their families. Some evidence of these structures remain near Kelly Creek and below Pear Lake.

Chinese miners constructed a flume around the mountain from the mouth of Kelly Creek to deliver water to their own mine sites. Evidence of this flume can still be found.

Objectives

- To work with local residents and aboriginal people of the area to increase historical and cultural knowledge.
- To protect important historical, cultural and archaeological features and sites.

Strategies

- ◆ With guidance from local First Nations, undertake an archaeological assessment of the parks to determine the nature and extent of features and values.
- ◆ Work with local First Nations and Heritage Conservation Branch to protect important sites.
- ◆ Avoid publication of exact locations of historic or cultural values of significance, to reduce the likelihood of damage or degradation from human activities.
- ◆ With guidance from local First Nations, develop management strategies for identified heritage and archaeological sites, particularly pit houses and caves.
- ◆ With guidance from local First Nations, undertake archaeological impact assessment prior to any development, particularly near pit houses.
- ◆ Investigate opportunities for First Nations to provide information on their culture to park visitors.
- ◆ With guidance from local First Nations concerning their wishes with respect to visitation, site damage and the preservation of artifacts, provide education and information to park visitors on the sensitivities and significance of cultural landscapes, pit houses and caves.

5.0 OUTDOOR RECREATION OPPORTUNITIES AND MANAGEMENT

5.1 Introduction

This section describes the range of recreational activities that currently take place in Marble Range and Edge Hills Parks, as well as the objectives and strategies for managing these activities in the future. *Appendix D* contains a Summary of Park Activities.

5.2 Outdoor Recreation Opportunities

Marble Range and Edge Hills Provincial Parks provide attractive settings for a variety of opportunities for low-impact, dispersed, non-motorized outdoor recreation and nature appreciation. A number of natural attributes add to the attractiveness of these parks for visitors, including:

- natural beauty and tranquillity;
- spectacular views;
- unusual geological formations;
- variety in terrain, flora and fauna;
- wildlife viewing opportunities.

Recreational activities must be managed in these relatively small parks so that they are consistent with the vision and roles for these parks; are compatible with wilderness recreation zoning; are not detrimental to the natural and cultural values; and are consistent with visitor expectations.

Recreational activities inventoried to date include horseback riding, hiking, backpacking, mountain biking, hunting, fishing, sightseeing, nature appreciation and technical rock climbing. Commercial activities include recreational and hunting guiding. A variety of campground facilities exist in the vicinity of these parks that are managed by BC Parks, Ministry of Forests and private commercial operators (in association with guest ranch facilities).

Because of the proximity to the Cariboo Wagon Road, the general area was likely used for staging and hunting early in the province's history. Early ranching settlement followed, and local recreational use developed over time. There is a strong local affiliation with the wilderness nature of these parks, and with the opportunities the parks provide for hunting, horseback riding, hiking, wildlife viewing and nature appreciation. Historically, horses have played a large role in park access and enjoyment, and a significant amount of horse use can be expected to continue.



Plate 5: Many trails follow alpine ridges

Since both public and commercial recreation activities are established uses within these parks, it is important to balance these uses to ensure fairness of access, and to protect natural values which contribute to the recreation experience. Commercial uses will not take precedence over or displace public enjoyment of these parks.

A number of unmarked and unmapped trails and routes used by local residents and guides crisscross the parks. Very few trails are maintained in any way. People hiking or riding in the parks use this informal network of routes.

The bunchgrass-sage-cactus vegetation types in Edge Hills are generally more sensitive than vegetation types in the Marble Range, making this area more susceptible to use damage. This sensitivity and the higher fire hazard on the dryer sites in Edge Hills, provide a lower carrying capacity for recreation use than in the Marble Range.

Marble Range Park has a number of known caves. There is evidence to suggest that caves are used by wildlife (mineral licks, water, cover, dens), and the integrity of caves for such wildlife use should be maintained.

Concerns exist with respect to the ability of the informal trail network to sustain increased levels of use that could develop as a result of park designation. This concern is based on the general sensitivity of the ecosystems of the area to recover from disturbances. There is also concern about the potential conflicts between trail users, including hikers, horseback riders and mountain bikers.

Outdoor Recreation Objectives

The following broad outdoor recreation objectives are intended to provide direction to the range of public and commercial recreation activities that will take place in Marble Range and Edge Hills Parks. Activity-specific objectives and management strategies follow in this section.

- To maintain the remote, roadless, non-motorized wilderness qualities of the parks while allowing for a range of compatible, low-impact, public and commercial recreation uses.
- To ensure public access to these parks is not pre-empted by commercial recreation activities.
- To provide recreation opportunities that include wildlife viewing, nature appreciation, photography, hiking, hunting, backpacking, horseback riding and appreciation of cultural heritage values.
- To ensure that recreation activities are managed and monitored for their potential impacts on natural and cultural values within the parks, particularly on wildlife ranges and populations.
- To honor existing uses (uses present at the time of park designation), as specified in the CCLUP.
- To enhance visitor awareness and appreciation of the natural and cultural values of the parks, wildlife etiquette and user safety.
- To manage park use activities to minimize conflicts between various uses.
- To ensure that recreation information, development and use are compatible with conservation values and outdoor recreation features.

5.2.1 Primitive Camping

Objectives

- To offer a primitive backcountry camping opportunity in a wilderness setting, while protecting the natural environment from possible deterioration as a result of camping use.

Strategies

- ◆ Provide continued opportunities for wilderness-type hiking/camping experiences that these parks offer.
- ◆ Identify environmentally sensitive sites where overnight use will not take place.
- ◆ Enforce a pack-in/pack-out policy.

- ◆ Monitor use levels and impacts over time and take remedial actions as required to protect park values (for example, closing camping areas or establishing minimum facilities).

5.2.2 Recreational Horseback Riding

Objectives

- To manage recreational horse use to minimize impacts on the natural environment, and minimize conflicts with wildlife habitat and between users.

Strategies

- ◆ Provide for horseback riding opportunities, particularly for hunting and pleasure.
- ◆ Where feed for horses is required, require that weed-free, pellet feed be packed in. This is necessary because forage for horses is low and in direct competition with cattle and wildlife use in these small parks.
- ◆ Monitor use by recreational horseback riding groups; the potential exists for small group excursions, but such use should be monitored with a view to limiting the number of horses per group and/or the number of groups per season of use.

5.2.3 Mountain Biking

Objectives

- To provide opportunities for mountain biking on roads and low elevation trails so that there is minimal impact from erosion and also so conflicts with other users are kept to a minimum.

Strategies

- ◆ Restrict mountain bike use to existing roads and designated areas (for example, Kelly Creek), and monitor for impacts. Adjust use levels or areas of use based on impacts over time.

5.2.4 Hiking and Backpacking

Objectives

- To ensure the continued use of these parks for non-motorized public recreation.
- To offer a primitive, informal backcountry trail network for high-quality hiking and backpacking experiences in a wilderness setting, while protecting the natural environment from possible deterioration as a result of these activities.

Strategies

- ◆ Permit public recreation opportunities that are non-motorized, including hiking, backpacking and cross-country skiing.
- ◆ Work directly with Ministry of Forests staff to manage trail routes into the parks.
- ◆ Enforce a pack-in/pack-out policy.
- ◆ Trail maintenance requirements will be based on the ability of the trail to withstand use and recover from disturbance. Wherever possible, natural routes will be used and trail development will be avoided.
- ◆ Formal trail maintenance procedures will only be undertaken for environmental reasons.
- ◆ Ensure that all park information specifies the undeveloped nature of these parks so that conflicting expectations are avoided.

5.2.5 Caving

Objectives

- To protect the integrity of the limestone cave formations in the parks in a manner that ensures their future sustainability.
- To maintain the cultural values and uses of caves for aboriginal people, recognizing the relative uniqueness of historic cave use within the park system.

Strategies

- ◆ Maintain the integrity of cave features used by wildlife.
- ◆ Discourage the public awareness and use of cave features by not publishing or promoting cave locations or interest value.
- ◆ Prohibit the use of caves for commercial recreation.

5.2.6 Camping and Day Use

Objectives

- To maintain the park in its current natural state.
- To utilize existing recreation facility infrastructure in surrounding areas.

Strategies

- ◆ Prohibit the development of vehicle access camping and day use facilities within park boundaries, except as provided for in the management plan with respect to (1) viewpoints and (2) intensive recreation zones that may be required at a future date to accommodate previously developed areas, such as Pear Lake and Downing Park .

- ◆ Direct visitors to utilize the variety of campground and day use facilities that exist in the vicinity of these parks, managed by BC Parks, Ministry of Forests and private operators.
- ◆ Monitor day use to determine future requirements for day use or parking facilities at trailheads and key access points outside the park boundaries.
- ◆ Work with the Ministry of Forests to coordinate recreation facility planning on adjacent Crown lands.

5.2.7 Non-Commercial Summer or Winter Motorized Use

Objectives

- To maintain the low-impact, roadless, remote character of these parks.

Strategies

- ◆ Prohibit motorized use in the parks, except for park management and public safety purposes, and on public access roads as specified by the management plan.

5.2.8 Recreational Guiding

Objectives

- To place under park use permit all recreational guides operating in these parks at the time of designation of the CCLUP.
- To determine levels of use and management practices for guiding activities that are consistent with park objectives and protect natural values.

Strategies

- ◆ Authorize, by park use permit, pre-existing guide outfitting and backcountry recreation operations at their historic levels of use. Work with individual permit holders to set guidelines for use.
- ◆ Require all commercial backcountry permit holders to develop a business plan that is compatible with this management plan, and that can be updated and approved on a periodic basis consistent with the park use permit process.
- ◆ Monitor levels of backcountry use. Determine the potential for future commercial recreation operations by examining recreational impacts and the potential for adding one or more commercial operations over time. Work with individual permit holders to set quotas and guidelines for use.
- ◆ Monitor the effects of commercial backcountry use on the environment and visitor experiences, and adjust park use permits where the need is demonstrated to control environmental impacts from concentrated visitor use.

- ◆ Prohibit commercial backcountry camp areas with permanent structures or facilities and promote wilderness-type camps.
- ◆ Enforce a pack-in/pack-out policy and require that wilderness-type toilet facilities will be employed.
- ◆ Restrict the commercial use of all terrain vehicles (ATVs) in these parks, including the use of snowmobiles, to specified uses by approved tenure holders and for park operation purposes.

5.2.9 Trail Use and Maintenance

Objectives

- To maintain the informal nature of the trail network within the park, thereby minimizing the impacts of use on any particular trail route.
- To balance commercial and public trail use.

Strategies

- ◆ Prepare a trail inventory and trail management plan that can be used as a decision-making tool for managing public trail use, and for authorizing park use permits for commercial use of trails.
- ◆ Specify management activities and use levels for commercial horse use within park use permits that include:
 - authorized pre-existing levels of commercial horse use for each permit holder;
 - requirements for packing in weed-free, pellet feed for horses;
 - specifications for locating any permanent support facilities, such as corrals or loading/unloading facilities, outside of park boundaries;
 - a requirement to limit commercial horse use to designated trails and day trips, to the greatest extent possible;
 - mechanisms for monitoring the impacts of commercial horse use the trail infrastructure.
- ◆ Require all commercial trail development to be specified in park use permits, with commercial users being responsible under permit for the maintenance of the trails they use. Commercial trail maintenance should be aimed at maintaining minimum necessary standards and locations.
- ◆ Ensure that all trails used or maintained by commercial operators are also open to the public.

5.3 Aesthetic Values

Aesthetic values relate to the scenery inside and around the parks, water and air quality, and opportunities for solitude and quietness.

Scenery in and around Marble Range and Edge Hills is fundamental to the visitor's experience. Mountain vistas, limestone formations, treed slopes and grasslands all contribute to the scenery. Park visitors can also view areas outside of the park boundaries from some locations. Development in the area adjacent to the parks can affect the viewscape and the visitor experience.

The CCLUP recognizes that resource development activities will occur on adjacent lands. Some park boundaries were drawn to explicitly exclude mineral claims. The SRDZ that surrounds the parks is intended to recognize, in part, the sensitive nature of the parks and the potential impacts of resource development approvals on aesthetic values.

Objectives

- To retain aesthetic features within the parks so that the visual, water, and air qualities and wilderness atmosphere of the park, are protected.

Strategies

- ◆ Work within sub-regional land use planning processes for surrounding lands, and with other agencies to protect values in the parks and adjacent to park boundaries. This includes minimizing impacts on scenic values, water and air quality and of noise through activities such as logging, mine infrastructure and gravel pits. Focus on areas with important scenic and recreation values.
- ◆ Work with the mining industry and the Ministry of Employment and Investment to mitigate the impacts of mineral exploration and development in areas adjacent to the parks.
- ◆ Locate and design all park structures in harmony with the visual setting and the characters of the surrounding natural landscapes.
- ◆ Work with local communities in the planning of park facilities so that they are in keeping with the character of the area and blend with the natural setting.
- ◆ Work with other agencies to develop a visual landscape plan for lands outside the parks.

5.4 Access Management

Marble Range and Edge Hills Parks are located west of the Village of Clinton on Highway 97, approximately 170 kilometers south of Williams Lake.

Numbered highways, all weather roads and forest development roads provide very good access to the vicinity of Marble Range Park and enclose the park in a triangle formed by the Kelly Lake/Arden Park Road, the Jesmond Road and the Big Bar Lake Road.

Rough four wheel drive roads provide access to the Limestone and Jesmond Forest Service lookouts, which are located just outside the park boundary. These lookouts provide spectacular views of the Marble Range and surrounding countryside.

An extensive system of timber harvesting roads were developed along the eastern side of Marble Range Park, prior to park designation. An access management plan should be prepared for the park that directs future road development near the park boundary, including requirements for deactivating and rehabilitating pre-existing timber harvesting roads that are now within the park boundary. In general, roads to the park boundary should be deactivated to protect wilderness and wildlife values.

An informal system of trails and routes used by local recreationists and commercial operators follows creek drainages into Marble Range Park. The management focus for trails is to have an informal, unmarked, primitive trail system with a minimum of signage and maintenance. Trail upgrading is not anticipated and trails will remain in rough condition, except where management is required to address environmental concerns. One or two key trail routes into the park may be indicated on in-park brochures (see also Section 7.0 Communications), and this will be determined after completing a trail inventory. Existing routes that have potential as key routes into the park include 11 Mile Creek, Porcupine Creek, 57 Mile Creek, 59 Mile Creek and a trail on Mount Soues.

Two roads enter Edge Hills Park, the High Bar Road and the Cavanagh Creek Road. The High Bar Road is a gazetted provincial road that leaves the Jesmond Road, passes through the park, and leads to private land and Indian Reserves along the Fraser River, eventually connecting with the Big Bar ferry road. The middle portions of this road are very steep and recommended for four wheel drive vehicles only. Park visitor use of this road will only be encouraged as far as the lookout at Cougar Point.

The Cavanagh Creek road enters Edge Hills Park from Pear Lake. The road is passable to the height of land by four wheel drive vehicles, but beyond this point is very rough and only suited to short wheel base four wheel drive vehicles. Occasional road maintenance by the Whispering Pines First Nation allows access to the Band's fishing stations on the Fraser River, and to placer claims along the Fraser River. Public recommendations are for an access control point at the height of land to prevent motorized access to the sensitive grassland benches within the park. Consultation with First Nations and the placer claim holder will be necessary to identify long term access needs and controls. The Cavanagh Creek Road is the only road access to the existing mineral claims.

As with Marble Range, existing trails in Edge Hills will not be advertised or promoted so that disturbance to sensitive grassland ecosystems and wildlife populations can be avoided.

Plate 6: Informal routes lead through open forest to alpine



Access within the parks is provided by a network of informal trails or routes, many which may be difficult for first time visitors to follow. The intent is to maintain the informal nature of the trail network for the foreseeable future, and to keep trail location advertising and promotion to a minimum to protect sensitive sites and wildlife habitat.

Because access to Marble Range and Edge Hills Parks originates from surrounding Crown forest lands, the management of access will depend on coordinated efforts between BC Parks and the Ministry of Forests.

Objectives

- To ensure the roadless nature of the parks by actively managing or deactivating pre-existing access.
- To restrict aircraft landings in the parks, consistent with wildlife management objectives.
- To provide an appropriate level of visitor access to wilderness recreation opportunities within the parks.
- To resolve the issue of long term access through Edge Hills Park to mineral claims on Cavanagh Creek.

Strategies

- ◆ Prepare an inventory of existing roads and trails within and adjacent to the parks. Investigate 11 Mile, 59 Mile and other routes as a possible primary route into Marble Range Park.
- ◆ Prohibit new road construction in these parks for any purpose other than those specified in this management plan.
- ◆ Deactivate roads within the park boundaries and rehabilitate the rights-of-way to natural conditions (examples include the 3100 road into 59 Mile Creek and the Knox Creek Road).
- ◆ Ensure that access management plans and forest development plans in the vicinity of the parks include considerations for the protection of park values. To maintain wildlife and wilderness values, most forest development roads that approach the park boundaries should be deactivated and made impassable to motorized vehicles.
- ◆ Prohibit the landing of aircraft in the parks other than for park management and public safety purposes.
- ◆ Work with mineral exploration companies to mitigate the impacts of mineral exploration adjacent to park boundaries, for example at Cavanagh Creek.
- ◆ Investigate improving the Cougar Point access road as far as the lookout to a minimum safe standard for two-wheel drive public day use. The road should not be upgraded beyond the lookout, but should remain in rough condition as an access to Indian Reserve lands and private lands.

Obtain direction from the Land Use Coordination Office and Park Management Committee and meet with the placer tenure holder to determine long term access requirements and conditions to the placer claims along Cavanagh Creek.

6.0 PARK COMPLETION ISSUES

There are two key policies that guide land additions to protected areas in the Cariboo Region; the CCLUP and park management plans. The guiding policy specific to the Marble Range is provided in the CCLUP. It indicates that mineral tenures held by Continental Lime may be added to the park once the company has determined that the claims are no longer required for their operations. To accommodate this objective, portions of these claims were “save and excepted” from the park in the legal description (claims in Clinton Creek and along the western boundary of Marble Range Park). The intent is to add these claim areas to the parks, once they are relinquished by the company.

The Pear Lake area, an area of private property along the southern boundary of Edge Hills Park is of specific interest to BC Parks and is the subject of current acquisition negotiations.

Park completion issues are shown on Map 7.

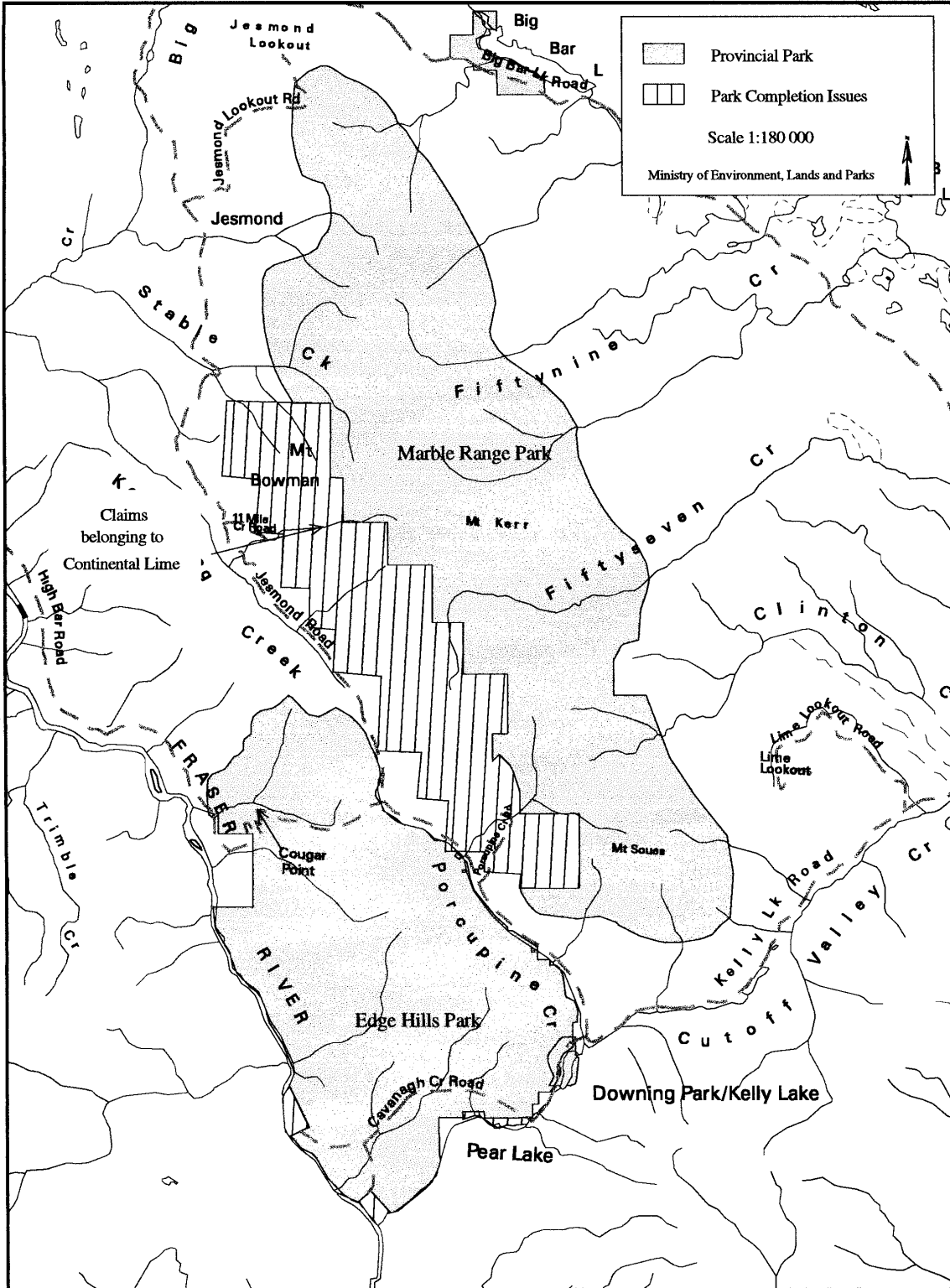
During preparation of this management plan, Clinton and area residents also provided their recommendations for adjacent lands with important values that might be considered for future park additions. *Appendix E* describes these “Public Recommendations for Adjacent Lands”.

6.1 Lime Ridge to Mt. Bowman

The area of interest for park completion is that area excluded from the park at the time of CCLUP approval, where claim areas were identified to revert to park status when relinquished by Continental Lime. These claim areas extend along Lime Ridge northward to the Mt. Bowman area.

This area is highly visible from road access to the parks. First seen from the Jesmond Road heading north, this section to Mt. Bowman is what residents and travelers often regard as the Marble Range (the Limestones). It is the most scenic visible feature of the Marble ranges, as seen from the Jesmond Road, and is the primary scenic feature for recreation lodge operations in the Jesmond area. The Mt. Bowman area is used by lodges as a recreation destination area and by local recreationists and visitors who frequent the area to horseback ride and hike.

Map 7. Park Completion Issues



e Lime Ridge area contains many steep cliffs and rugged limestone terrain. From the top of the ridge, a rider or hiker gets grand views of the Marble Range and the mountains to the west and southwest beyond Lillooet.

There are several interesting geological features in this area. The lower slopes of Lime Ridge is the geological dividing line between Marble Range and Edge Hills. During the Permian period (about 225-270 million years ago), the Marble Range was a shallow shelf under the seas that covered western B.C. The rock which is now the Edge Hills was deep ocean beyond the shelf. Subsequent withdrawal of the sea as the land lifted, folded and faulted during the Triassic and Jurassic periods, resulted in the Edge Hills formation being pushed onto the side of the Marble Range at Lime Ridge.

The Lime Ridge area contains numerous caves and interesting rock formations. Vent holes are numerous, appearing as small piles of dust or dirt directly over the vent. It is not locally known whether these vents result from air flowing to the surface through caves and cracks in the porous limestone, or from thermal convection from magma intrusions into the limestone. Some residents have noted locations of bare ground surrounded by snow in deep winter in this area, as well as warm air currents from holes in the limestone.

One location of special interest is Buckskin Basin. It is the only location in the Marble Range with good grass and water. This has made an ideal campsite for horseback riders and a few backpackers. The area has never been over-grazed. A difficult area to reach, Buckskin Basin is presently used by only a few hunters in the fall. Part of the area is in Marble Range Park and part is in the area of mineral claims.

Wildlife makes good use of the area. Bats can be found in the vicinity of the mining exploration roads. Black bear, mule deer and California bighorn sheep have summer ranges here. It is reported that lambing grounds are also located in this area. Peregrine falcons have been seen in adjacent areas and Lime Ridge offers cliff nesting locations that would be ideally suited for that species. Merlins, a smaller falcon, have been seen on Lime Ridge.

California bighorn sheep migration routes have been dwindling over the past three decades, for unknown reasons. The last remaining sheep migration routes, from winter range on the Fraser River to summer range in the Marble Range, are located here. BC Environment is planning to conduct bio-telemetry collaring studies on these sheep to determine migration routes, numbers of animals and primary migration habitat types.

The water flowing from several drainages along Lime Ridge forms Porcupine Creek. This creek is the main source of water on the west side of the Marble Range. Its taste and purity have resulted in people collecting their drinking water where Porcupine Creek meets the Jesmond Road. Homes along the Jesmond Road depend on this water. A poorly built diversion dam in Cutoff Valley allows water to be diverted to Cutoff Valley Creek for irrigating ranchlands there. The water is also necessary to maintain the level of Kelly Lake for trout feeding and spawning.

6.2 Mineral Claims in Upper Clinton Creek

This area of the upper Clinton Creek watershed is of interest as additional park land and is covered with existing mineral claims. It is understood that, as these claims expire, land will be added to the park as part of the “save and except” area defined by the CCLUP.

The other portions of the Clinton Creek watershed are discussed in Section 6.2.2 below, and in Section 4.3.

6.3 Pear Lake Private Property

The Pear Lake property is privately owned land that adjoins the southern boundary of Edge Hills Park and continues southward to the BC Rail right-of-way. It includes the only road through the area. Acquisition would allow controls to be placed on access to the Edge Hills at the Fraser River, and would permit public access to Pear Lake, which is now private property. The area would serve as a buffer zone on the southern boundary of Edge Hills Park.

This area is important for historical reasons. According to archaeologist R. Blacklaws (Vancouver Community College, Langara Campus), the Kelly Creek area may contain more than 200 pit houses or Kwigli holes, one of the largest concentrations of this kind in the province. This indicates that the area was probably the largest Shuswap aboriginal settlement in the province.

Ditches built by gold miners and a hand-built trail for mules are still visible from Pear Lake toward Kelly Creek. When the trail to the Grange Mine became too steep for mules, Chinese miners packed equipment and supplies into the area by way of a large donkey wheel and cable. The wheel still exists as evidence of this activity.

Pear Lake is a prime camping site. Although the lake is small, it is very picturesque and can support a limited recreational fishery. The property also affords a view of the Moran Canyon California bighorn sheep herd on the south side of the valley.

The Pear Lake property should be a priority addition to Edge Hills Park. Because it is private property, it is not governed by protected area recommendations of the CCLUP.

7.0 COMMUNICATIONS

Managing current information about the parks is an important component of managing visitor use and enjoyment. Information and its management can:

- serve to set visitor expectations and assist in planning recreational uses;
- promote outdoor etiquette and careful use of park resources; and
- create an awareness and appreciation about cultural features, natural setting and conservation.

Marble Range and Edge Hills Parks are primarily wilderness parks, providing opportunities for protection of wildlife and their habitats and for backcountry recreation. The role of the communications strategy is to support the achievement of these goals.

7.1 Marketing and Promotion

Marketing or promotion of a park can affect the level of use and the type of visitor it attracts. Consequently, information and promotion strategies must be consistent with the objectives of the parks.

The conservation and wilderness values of the parks must be incorporated in information and marketing strategies. There are concerns that promoting the values or backcountry recreation opportunities could lead to significant increases in the number of visitors and have correspondingly negative effects on wildlife and other park values. Consequently, care must be taken in the type of information program that is undertaken. Active advertising or promotion of values or activities is not appropriate for these parks.

For the term of this plan, BC Parks will provide basic information about these parks that describes some access routes and public safety information for park users, and lets users know how to protect park values during their visit.

Every effort should be made to ensure that there is consistency between commercial recreation users and BC Parks with respect to the accuracy of information provided and the level of promotion of park use.

Objectives

- o To ensure that published public information about Marble Range and Edge Hills Parks is consistent with park vision and roles.
- o To portray the role of these parks in conserving important wildlife habitat and populations.
- o To provide accurate and appropriate information for low use and low impact backcountry recreation.

Strategies

- ◆ Work with government agencies, commercial operators and tourism associations or groups to portray the park in a manner that encourages the awareness of the sensitivities of these areas to increased visitation.
- ◆ Do not actively promote or market these parks.
- ◆ Create an in-park handout that will focus on maintaining low levels of use, public safety and protection of park values, including such elements as outdoor safety, wilderness and conservation ethics, firewood conservation, cultural values, human waste disposal, bear safety, and trail etiquette. In-park handout preparation should recognize the special sensitivities of Edge Hills Park.
- ◆ Signing should be small and warn visitors of the backcountry nature of the area and of the absence of facilities and services.

7.2 Nature Appreciation

The natural and cultural values of these parks have appreciation, interpretation and educational potential. Interpretive programs can build an appreciation for the historical and natural features that the parks have to offer, and promote stewardship and support for parks and their values.

Wildlife viewing and nature appreciation are popular in these parks. When viewing wildlife, animals should not be disturbed, particularly in times of physiological stress during winter and spring.

Objectives

- To promote stewardship for these parks and their values
- To encourage visitor appreciation and understanding of the natural and cultural values of these parks.

Strategies

- ◆ Provide educational materials on wildlife viewing that includes information on ethics and intrusion on wildlife when animals are under stress.
- ◆ Work with commercial recreation operators, local environmental groups and schools to encourage private sector development of environmental education materials and opportunities.
- ◆ Develop and implement interpretive strategies for these parks that focus on their contributions to the protected area system, their natural and cultural values and desired wilderness ethics.

Consider the possibility of developing an off-site interpretive opportunity at an appropriate location (for example, in Clinton or along Highway 97).

8.0 PLAN IMPLEMENTATION

Marble Range and Edge Hills Provincial Parks are administered by BC Parks Cariboo District in Williams Lake. Staff ensure that management responsibilities are carried out in accordance with (a) the *Park Act* and Regulations, (b) the established policies and procedures of the agency, and (c) the direction provided by the approved management plan. These responsibilities extend, but are not limited, to: collecting resource information; managing resources and cultural values; regulating public use and maintaining public safety; maintaining facilities, trails, cabins and other parks infrastructure; managing permits covering all commercial uses within the parks; assessing and monitoring impacts of recreational uses and minimizing their impacts.

This section provides a summary of the main management activities listed throughout this management plan, in two categories:

- priority items to be undertaken in the short term (1-5 years);
- items that will be undertaken over time, but that do not necessarily have a priority in the first 5 years of the plan.

Implementation of actions described in this management plan is dependent upon the availability of BC Parks' financial and staff resources, and will be affected by the management needs of other parks in the Cariboo District and in the rest of the park system. Approval of this plan does not constitute automatic approval of funding for implementation.

8.1 Short Term Priorities

The following short term priorities will be undertaken over the next 1-5 years (1998-2003). Order is not important.

- o Resolve any boundary issues for Marble Range Park stemming from the legal description of the park boundary in relation to the "save and except" lands identified in the CCLUP.
- o Develop an in-park handout for the parks.
- o Develop a road and trail access management plan.
- o Develop a formal viewpoint at Cougar Point.
- o Monitor levels of use of these parks. Collect visitor use statistics to verify visitor management strategies.
- o Issue park use permits for commercial recreation operations and other pre-existing uses, as specified in the CCLUP, by March 31, 1998. Take a conservative approach to offering new commercial opportunities.

- Identify travel corridors and critical habitat requirements for California bighorn sheep and mule deer.
- Develop a long-term management plan for wildlife with BC Environment, particularly for flammulated owl and California bighorn sheep.
- Investigate amalgamating Downing Park with Edge Hills Park.
- Review management plan implementation annually with local residents.
- Coordinate park management activities with the preparation of the sub-regional plan for the surrounding area.
- Review facility development needs.
- Conduct an inventory of cave features, particularly for archaeological values.

8.2 Longer Term Actions

The following actions are important, but do not have a priority in the first 5 years of the plan. These actions will be undertaken as time and resources permit. Order is not important.

- Work with commercial operators to align promotional materials with park vision and communications strategies.
- Conduct an impact assessment of backcountry uses.
- Complete vegetation inventories and prepare a vegetation management plan that includes an overview of the ecological maintenance requirements for the parks and the identification of red and blue listed species.
- Conduct a formal management plan review that includes:
 - public involvement;
 - review of facility development needs and commercial backcountry opportunities;
 - the acquisition of archaeological inventory information;
 review of park completion options.

APPENDIX A

Legal Park Descriptions

Legal Park Descriptions

Edge Hills Provincial Park

All those parcels or tracts of Crown land, together with all that foreshore or land covered by water, situated in Lillooet District and lying within the following described boundaries:

Commencing at a point of the junction of the natural boundary of Fraser River, on the left bank thereof, and the natural boundary of Kelly Creek, on the right bank thereof; thence in a general northwesterly direction along the said natural boundary of Fraser River to a point thereon, said point being the southwest corner of District Lot 28; thence easterly along the southerly boundaries of District Lots 28 and 380 to the southeast corner of District Lot 380; thence northerly along the easterly boundaries of District Lots 380 and 381 to the northeast corner of District Lot 381; thence westerly along the northerly boundaries of District Lots 381 and 27 to the easterly boundary of District Lot 26; thence northerly and westerly along the easterly and northerly boundaries of said District Lot to a point being due South of the southeast corner of “High Bar” Indian Reserve No. 1 and being a point on the natural boundary of Barney Creek, on the left bank thereof; thence due North to said southeast corner; thence northerly along the easterly boundary of said Indian Reserve to the most easterly northeast corner thereof; thence due East, a distance of 600 metres, more or less, to the westerly boundary of the watershed of Barney Creek; thence northeasterly and southeasterly along the westerly and northerly watershed boundaries of Barney Creek to a point thereon, said point being due West of the headwaters of Porcupine Creek; thence due East to the headwaters of said creek, being the natural boundary, on the left bank thereof; thence in a general southeasterly direction along the natural boundary of said Creek, on the left bank thereof, to the westerly boundary of District Lot 4678; thence southerly and easterly along the westerly and southerly boundaries of said District Lot to the westerly boundary of District Lot 4677; thence southerly along said westerly boundary to the southwest corner of Block C of District Lot 4677; thence easterly along the southerly boundary of said Block C to the natural boundary of Porcupine Creek, on the left bank thereof; thence southeasterly along said natural boundary to the westerly boundary of District Lot 8308; thence southerly and easterly along the westerly and southerly boundaries of said District Lot to the natural boundary of Porcupine Creek, on the left bank thereof; thence southeasterly along said natural boundary to the northerly boundary of District Lot 3640; thence westerly and southerly along the northerly and westerly boundaries of said District Lot to the northeast corner of District Lot 4676; thence westerly along the northerly boundary of said District Lot to the most northerly corner of District Lot 1560; thence southwesterly along the westerly boundary of said District Lot to the northwest corner of District Lot 4675; thence southerly and easterly along the westerly and southerly boundaries of said District Lot to the northwest corner of District Lot 1561; thence southerly and southwesterly along the westerly boundary of said District Lot to the northerly boundary of District Lot

3639; thence westerly, southerly, westerly and southerly along the northerly and westerly boundaries of said Lot to the northeast corner of District Lot 2630; thence westerly along the northerly boundary of said District Lot to the easterly boundary of District Lot 2631; thence northerly, westerly and southerly along the easterly, northerly and westerly boundaries of said District Lot to the northeast corner of District Lot 3638; thence westerly, southerly and easterly along the northerly, westerly and southerly boundaries of said District Lot to the natural boundary of Kelly Creek, on the right bank thereof; thence southwesterly along said natural boundary to the junction with the natural boundary of Fraser River, on the left bank thereof, being the point of commencement; save and except thereout “Kelly Creek” Indian Reserve No. 3, District Lots 2092, 2293, 1613, 2004 and Placer Mining Leases No.’s 266474-476 (inclusive), Placer Lease No. 266375 and “Stag 2” Mineral Claim (Record No. 208889).

The whole containing approximately 11,882.5 hectares.

Marble Range Provincial Park

All those parcels or tracts of Crown land, together with all that foreshore or land covered by water, situated in Lillooet District and lying within the following described boundaries:

Commencing at a point, due North 2.0 kilometers and due East 200 metres, from the northeast corner of District Lot 4677; thence due North, a distance of 2.5 kilometers; thence due West, a distance of 2.0 kilometers; thence due North, a distance of 700 metres; thence northwesterly on a bearing of 343°, a distance of 750 metres; thence northwesterly on a bearing of 329°, a distance of 200 metres; thence northwesterly on a bearing of 316°, a distance of 500 metres; thence southwesterly on a bearing of 226°, a distance of 300 metres; thence due North, a distance of 900 metres; thence due East, a distance of 500 metres; thence due North, a distance of 2.0 kilometers; thence due West, a distance of 1.5 kilometers; thence due North, a distance of 1.7 kilometers; thence due West, a distance of 1.0 kilometers; thence due North, a distance of 1.9 kilometers; thence due West, a distance of 1.5 kilometers; thence due North, a distance of 1.45 kilometers; thence due West, a distance of 1.5 kilometers; thence due North, a distance of 1.5 kilometers; thence due West, a distance of 400 metres; thence due North, a distance of 2.5 kilometers; thence due West, a distance of 1.25 kilometers; thence northwesterly on a bearing of 330° to the natural boundary of Stable Creek, on the left bank thereof; thence northwesterly on a bearing of 344°, a distance of 1.0 kilometers; thence northwesterly on a bearing of 353°, a distance of 1.5 kilometers; thence due North, a distance of 500 metres; thence northeasterly on a bearing of 24°, a distance of 400 metres; thence northeasterly on a bearing of 69°, a distance of 1.5 kilometers; thence northeasterly on a bearing of 40°, a distance of 1.0 kilometers; thence northeasterly on a bearing of 8°, a distance of 900 metres; thence northwesterly on a bearing of 330°, a distance of 700 metres; thence northwesterly on a bearing of 291°, a distance of 800 metres; thence northwesterly on a bearing of 340°, a distance of 1.0 kilometers; thence due North a distance of 2.1 kilometers; thence northeasterly on a bearing of 58°, a distance of 1.3 kilometers; thence

southeasterly on a bearing of 120°, a distance of 2.0 kilometers; thence southeasterly on a bearing of 146°, a distance of 5.5 kilometers; thence southeasterly on a bearing of 159°, a distance of 1.5 kilometers; thence southeasterly on a bearing of 172°, a distance of 1.5 kilometers; thence southwesterly on a bearing of 197°, a distance of 700 metres; thence southeasterly on a bearing of 155°, a distance of 700 metres; thence southeasterly on a bearing of 129°, a distance of 2.0 kilometers; thence southeasterly on a bearing of 144°, a distance of 1.8 kilometers, more or less, to the natural boundary of Fiftynine Creek, on the left bank thereof; thence due South, a distance of 700 metres; thence southeasterly on a bearing of 162°, a distance of 1.0 kilometers; thence southeasterly on a bearing of 153°, a distance of 1.2 kilometers; thence southeasterly on a bearing of 135°, a distance of 1.5 kilometers; thence southeasterly on a bearing of 161°, a distance of 1.3 kilometers, more or less, to the natural boundary of Fiftyseven Creek, on the left bank thereof; thence southwesterly on a bearing of 191° to the northerly boundary of the watershed of Clinton Creek; thence southwesterly along said watershed boundary to a point thereon, said point being due East 4.7 kilometers and due North 600 metres, more or less, from the northeast corner of District Lot 1285; thence due South, a distance of 1.2 kilometers; thence due East, a distance of 1.1 kilometers; thence southeasterly on a bearing of 161°, a distance of 2.5 kilometers; thence southeasterly on a bearing of 143°, a distance of 3.0 kilometers; thence southeasterly on a bearing of 169°, a distance of 1.2 kilometers; thence southwesterly on a bearing of 184°, a distance of 1.6 kilometers; thence southwesterly on a bearing of 226°, a distance of 900 metres; thence southwesterly on a bearing of 260°, a distance of 1.2 kilometers; thence due West, a distance of 600 metres; thence northwesterly on a bearing of 293°, a distance of 2.0 kilometers; thence due West, a distance of 2.1 kilometers; thence northwesterly on a bearing of 330°, a distance of 1.1 kilometers; thence easterly in a straight line to a point, said point being due North 2 kilometers and due East 200 kilometers, more or less, from the northeast corner of District Lot 4677, being the point of commencement; save and except thereout "Irene #1" (Record No. 330507), "Tess 8-10" (Record Nos. 330518-20 inclusive), "Mar 102" (record No. 321062), "Stag 2" (Record No. 208889), "Mar 67" (Record No. 310969), "Mar 69" (Record No. 301971), "Stag 1" (Record No. 208888), "Mar 104-105" (Record No. 320198, 321063), "Mar 107-111" (Record Nos. 321065-067, 320199-200).

The whole containing approximately 17,920.1 hectares.

APPENDIX B

BC's Protected Area Strategy Goals

BC Parks System Goals

BC's Protected Area Strategy Goals

Goal 1: Representativeness

To protect viable, representative examples of the natural diversity of the province, representative of the major terrestrial, marine and freshwater ecosystems, the characteristic habitats, hydrology and landforms, and the characteristic backcountry recreational and cultural heritage values of each ecosection.

Wherever possible, protected areas should combine natural, cultural heritage and recreational values. Where it is not possible to combine these in a common area, they may be represented separately. Where it is not possible to represent all values, the natural values will be given priority.

Goal 2: Special Features

To protect the special natural, cultural heritage and recreational features of the province, including rare and endangered species and critical habitats, outstanding or unique botanical, zoological, geological and paleontological features, outstanding or fragile cultural heritage features, and outstanding outdoor recreational features such as trails.

Many protected areas will be set aside primarily to protect rare or vulnerable features. Others will combine protection with giving people the opportunity to appreciate and enjoy the intrinsic values of the areas. Others will be protected to attract people to experience and appreciate their natural or cultural heritage.

BC Parks System Goals

Under the *Park Act*, BC Parks must:

- o conserve significant and representative natural and cultural resources
- o provide a wide variety of outdoor recreation opportunities.

Conservation

Within the conservation mandate, BC Parks has two goals:

Goal 1 Protection of Representative Landscapes - to conserve British Columbia's natural diversity by protecting viable, representative examples of our different landscapes.

Goal 2 Protection of Special Features - to protect British Columbia's key natural and cultural features, including outstanding examples of our wildlife, old-growth forests, waterfalls and cultural artifacts.

Recreation

Within the recreation mandate, BC Parks has four goals:

Goal 1 Tourism Travel Routes - to provide park attractions and services enhance tourism travel routes.

Goal 2 Outdoor Recreation Holiday Destinations - to provide parks attractions which serve as or improve key destinations for outdoor recreation holidays.

Goal 3 Backcountry - to provide outstanding backcountry recreation opportunities throughout the province. Some sites may feature adventure tourism, while in other areas the wilderness would remain untouched.

Goal 4 Local Recreation - to ensure access to local outdoor recreation opportunities for all residents of this province.

APPENDIX C

BC Parks Management Planning

Zone Descriptions 1997/98

	Intensive Recreation	Natural Environment
OBJECTIVE	To provide for a variety of readily accessible, facility-oriented outdoor recreation opportunities.	To protect scenic values and to provide for backcountry recreation opportunities in a largely undisturbed natural environment.
USE LEVEL	Relatively high density and long duration types of use.	Relatively low use but higher levels in association with nodes of activity or access.
MEANS OF ACCESS	All-weather public roads or other types of access where use levels are high (see "Impacts" below).	Mechanized (power-boats, snowmobiles, all terrain vehicles), non-mechanized (foot, horse, canoe, bicycle). Aircraft and motorboat access to drop-off and pickup points will be permitted.
LOCATION	Contiguous with all-weather roads and covering immediate areas, modified landscapes or other high-use areas.	Removed from all-weather roads but easily accessible on a day-use basis. Accessible by mechanized means such as boat or plane.
SIZE OF ZONE	Small; usually less than 2,000 ha.	Can range from small to large.
BOUNDARY DEFINITION	Includes areas of high facility development in concentrated areas.	Boundaries should consider limits of activity/facility areas relative to ecosystem characteristics and features.
RECREATION OPPORTUNITIES	Vehicle camping, picnicking, beach activities, power-boating, canoeing, kayaking, strolling, historic and nature appreciation, fishing, snowplay, downhill and cross-country skiing, snowshoeing, specialized activities.	Walk-in/boat-in camping, power-boating, hunting, canoeing, kayaking, backpacking, historic and nature appreciation, fishing, cross-country skiing, snowmobiling, river rafting, horseback riding, heli-skiing, heli-hiking, and specialized activities.

Special Feature	Wilderness Recreation	Wilderness Conservation
To protect and present significant natural or cultural resources, features or processes because of their special character, fragility and heritage values.	To protect a remote, undisturbed natural landscape and to provide backcountry recreation opportunities dependent on a pristine environment where air access may be permitted to designated sites.	To protect a remote, undisturbed natural landscape and to provide unassisted backcountry recreation opportunities dependent on a pristine environment where no motorized activities will be allowed.
Generally low.	Very low use, to provide solitary experiences and a wilderness atmosphere. Use may be controlled to protect the environment.	Very low use, to provide solitary experiences and a wilderness atmosphere. Use may be controlled to protect the environment.
Various; may require special access permit.	Non-mechanized; except may permit low frequency air access to designated sites; foot, canoe (horses may be permitted).	Non-mechanized (no air access); foot, canoe (horses may be permitted).
Determined by location of special resources; may be surrounded by or next to any of the other zones.	Remote; not easily visited on a day-use basis.	Remote; not easily visited on a day-use basis.
Small; usually less than 2000 hectares.	Large; greater than 5,000 hectares.	Large; greater than 5,000 hectares.
Area defined by biophysical characteristics or the nature and extent of cultural resources (adequate to afford protection).	Defined by ecosystem limits and geographic features. Boundaries will encompass areas of visitor interest for specific activities supported by air access. Will be designated under the <i>Park Act</i> .	Defined by ecosystem limits and geographic features. Will be designated under the <i>Park Act</i> .
Sight-seeing, historic and nature appreciation. May be subject to temporary closures or permanently restricted access.	Backpacking, canoeing, kayaking, river rafting, nature and historic appreciation, hunting, fishing, cross-country skiing, snowshoeing, horseback riding, specialized activities (e.g. caving, climbing).	Backpacking, canoeing, kayaking, river rafting, nature and historic appreciation, fishing, cross-country skiing, snowshoeing, horseback riding, specialized activities (e.g. caving, climbing).

	Intensive Recreation	Natural Environment
FACILITIES	May be intensely developed for user convenience. Campgrounds, landscaped picnic/play areas, trail accommodation or interpretative buildings; boat launches, administrative buildings, service compounds, gravel pits, disposal sites, wood lots; parking lots, etc.	Moderately developed for user convenience. Trails, walk-in/boat-in campsites, shelters, accommodation buildings may be permitted; facilities for motorized access e.g. docks, landing strips, fuel storage, etc.
IMPACTS ON NATURAL ENVIRONMENT	Includes natural resource features and phenomena in a primarily natural state but where human presence may be readily visible both through the existence of recreation facilities and of people using the zone. Includes areas of high facility development with significant impact on concentrated areas.	Area where human presence on the land is not normally visible, facility development limited to relatively small areas. Facilities are visually compatible with natural setting.
MANAGEMENT GUIDELINES	Oriented toward maintaining a high quality recreation experience. Intensive management of resource and/or control of visitor activities. Operational facilities designed for efficient operation while remaining unobtrusive to the park visitor.	Oriented to maintaining a natural environment and a high quality recreation experience. Visitor access may be restricted to preserve the recreation experience or to limit impacts. Separation of less compatible recreational activities and transportation modes. Designation of transportation may be necessary to avoid potential conflicts (e.g. horse trails, cycle paths, hiking trails).
EXAMPLES OF ZONING	Campground in Rathtrevor Beach Park; Gibson Pass ski area in E.C. Manning Park.	Core area in Cathedral Park; North beach in Naikoon Park.

Special Feature	Wilderness Recreation	Wilderness Conservation
Interpretative facilities only, resources are to be protected.	Minimal facility development for user convenience and safety, and protection of the environment e.g. trails, primitive campsites, etc. Some basic facilities at access points, e.g. dock, primitive shelter, etc.	None.
None; resources to be maintained unimpaired.	Natural area generally free of evidence of modern human beings. Evidence of human presence is confined to specific facility sites. Facilities are visually compatible with natural setting.	Natural area generally free of evidence of modern human beings.
High level of management protection with ongoing monitoring. Oriented to maintaining resources and, where appropriate, a high quality recreational and interpretative experience. Active or passive management depending on size, location, and nature of the resource. Visitor access may be restricted to preserve the recreation experience and to limit impacts.	Oriented to protecting a pristine environment. Management actions are minimal and not evident. Managed to ensure low visitor use levels. Visitor access may be restricted to protect the natural environment and visitor experience.	Oriented to protecting a pristine environment. Management actions are minimal and not evident. Managed to ensure low visitor use levels. Visitor access may be restricted to protect the natural environment and visitor experience.
Tidepools in Botanical Beach Park; Sunshine Meadows in Mount Assiniboine Park.	Quanchus Mountains Wilderness in Tweedsmuir Park; Wilderness Zone in Spatsizi Park.	Central Valhalla Wilderness in Valhalla Park; Garibaldi Park Nature Conservancy area.

APPENDIX D

Summary Of Park Activities

Summary Of Park Activities

The following table provides a summary of commitments made through land use processes with regard to acceptable uses, activities and facilities in the protected area.

Activity/Use/Facility	Acceptable Uses
Hunting	Y
Fishing	Y
Trapping	Y
Grazing (domestic livestock)	Y
Recreational Gold Panning/Rock Hounding	N
Utility corridors	N
Communication Sites	N2
Horse Use/ Pack Animals	Y
Guide Outfitting (hunting)	Y
Guide Outfitting (fishing)	Y
Guide Outfitting (nature tours)	Y
Guide Outfitting (river rafting)	N
Cat-Assisted Skiing	N
Ski Hills	N
Commercial Recreation (facility-based)	N
Backcountry Huts	N
Water Control Structures	N2
Fish Stocking and Enhancement	Y
Road Access	Y
Off-road Access (snowmobiling)	N(trapline only)
Off-road Access (motorized)	N(tenured only)
Off-road Access (mechanical activities)	M
Motorized Water Access	N
Aircraft Access	N1
Fire Management (suppression)	Y
Fire Management (prescribed fire management)	M
Fire Management (prevention)	M
Forest Insect/Disease Control	M
Noxious Weed Control	N1
Exotic Insect/Disease Control	M
Scientific Research (specimen collection)	M
Scientific Research (manipulative activities)	M

Y= allowed subject to conditions identified in the management direction statement or management plan
M= may be permitted if compatible with protected area objectives
N= not allowed
N1= allowed for expressed management purposes only
N2= present and allowed to continue but not normally allowed

APPENDIX E

Public Recommendations for Adjacent Lands

PUBLIC RECOMMENDATIONS FOR ADJACENT LANDS

One of the functions of a park management plan is to make recommendations for future land acquisition that reflect the relative importance of specific lands considered for addition to a park; that is, considering whether one property is more important than another. Plans should also include a description of the values that the property would add to the park, if acquired. Examples would be conservation of water quality, critical wildlife habitat or a special feature; or on the recreation side, management of values such as access, visual quality or exceptional camping areas.

Land acquisition is always a long-term park management objective, subject to:

- o land acquisition directives and policy, such as found in the CCLUP and Protected Areas Strategy;
- o availability of the property and the willingness of the vendor to sell to government;
- o availability of BC Parks financial resources to pay market value;
- o contributions that the property addition would make to the prime purpose of a park;
- o relative value of the property compared with that of other properties on the provincial property acquisition list.

Interest in adjacent lands for possible future park additions has been expressed by local residents for the following areas, ranked by relative priority of park values:

- Mt. Bowman area
- Clinton Creek watershed
- Jesmond Lookout
- 57 and 59 Creeks area

These adjacent areas have historically been of interest to local people for conservation and recreation values which are considered to be consistent with the values protected within the parks. The Clinton and District CORE Group presented these areas as part of their Marble Range and Edge Hills protected area proposals. These areas of public interest extend beyond the “save and except” mineral claim areas described in the CCLUP.

The following description of the attributes of each of these areas has been provided by Clinton and area residents. The areas of interest are shown on Map 8.

Mt. Bowman

Mt. Bowman, including the area of 11 Mile Creek, is the area of greatest interest to many local people and has been the area of greatest controversy during previous land use planning processes. It was excluded from Marble Range Park at the time the CCLUP was adopted because of a stated need to honor the existing mineral claims and mining development potential of the area. It is an area of interest important for Continental Lime's future operations.

Public submissions to the CCLUP that supported a protected area for the Marble Range identified Mt. Bowman as a central feature because of high scenic values, naturalness and significant wildlife habitat, including a movement corridor for migrating California bighorn sheep and mule deer.

Clinton Creek Watershed Area

The Clinton creek watershed drains the south end of the Marble Range on the east side. Known locally as "the big swamp", the property contains areas where the peat layer is perhaps as thick as 20 feet. In the generally dry and rocky Marble Range, this large wetland is a distinctive feature. When viewed from the Ministry of Forests's Lime Lookout, the Clinton Creek watershed forms a lush, spectacular panorama along the southern edge of Marble Range Park. Inclusion in the park would add a valuable ecosystem.

Water is one of this area's main values for local residents. The Village of Clinton obtains its water supply from this source. The combination of limestone and swamp provide large quantities of pure, high quality water. For this reason, the residents have always been sensitive to human activities occurring in the watershed. A number of years ago, when plans were presented to log in the area, residents formed a watershed committee and, through discussion and compromise, developed a watershed logging and management plan acceptable to all parties. Logging in the watershed has been very restricted and vehicular access has been strictly controlled through gated and locked access.

As a result of its wetland character, restricted access for hunters and contiguous vegetation cover, the area is prime moose habitat. While clearcuts and second growth can provide good feed, moose suffer from heat stress and require locations that are dark and cool. The Clinton Creek watershed meets these requirements for moose. Important calving grounds and mineral licks used by moose are reported within the area.

Jesmond Lookout Area

Traveling the roads around the parks and to Jesmond and Limestone Lookouts will be the main way that most people see these parks. The spectacular panorama from the Jesmond Lookout allows the less adventurous public to see Mt. Bowman, Mt. Kerr and the rocky tops and timbered slopes of the north half of the Marble Range. While already an attraction, the road and lookout would allow people with disabilities, the elderly and others to have access to park values. Inclusion of the Jesmond Lookout area would protect the visual features of the north end of the Marble Range as seen from the lookout, the main roads and adjacent guest ranch.

The area is important for mule deer. The west slope, with its large Interior Douglas-fir, is an important mule deer winter range. The east slope includes part of the mule deer migration route between Big Bar Mountain and the Bonaparte River.

Near the lookout is “the Bowl”. This deep, grassy, inverted cone is a feature that has long attracted the public. The Bowl is a limestone sink, formed by the collapse of an underground cavern when water eroded away the cavern’s roof. While trees do not grow in the Bowl, the area above is surrounded with wind-shaped whitebark pines.

Fifty-Seven and Fifty-Nine Mile Creeks

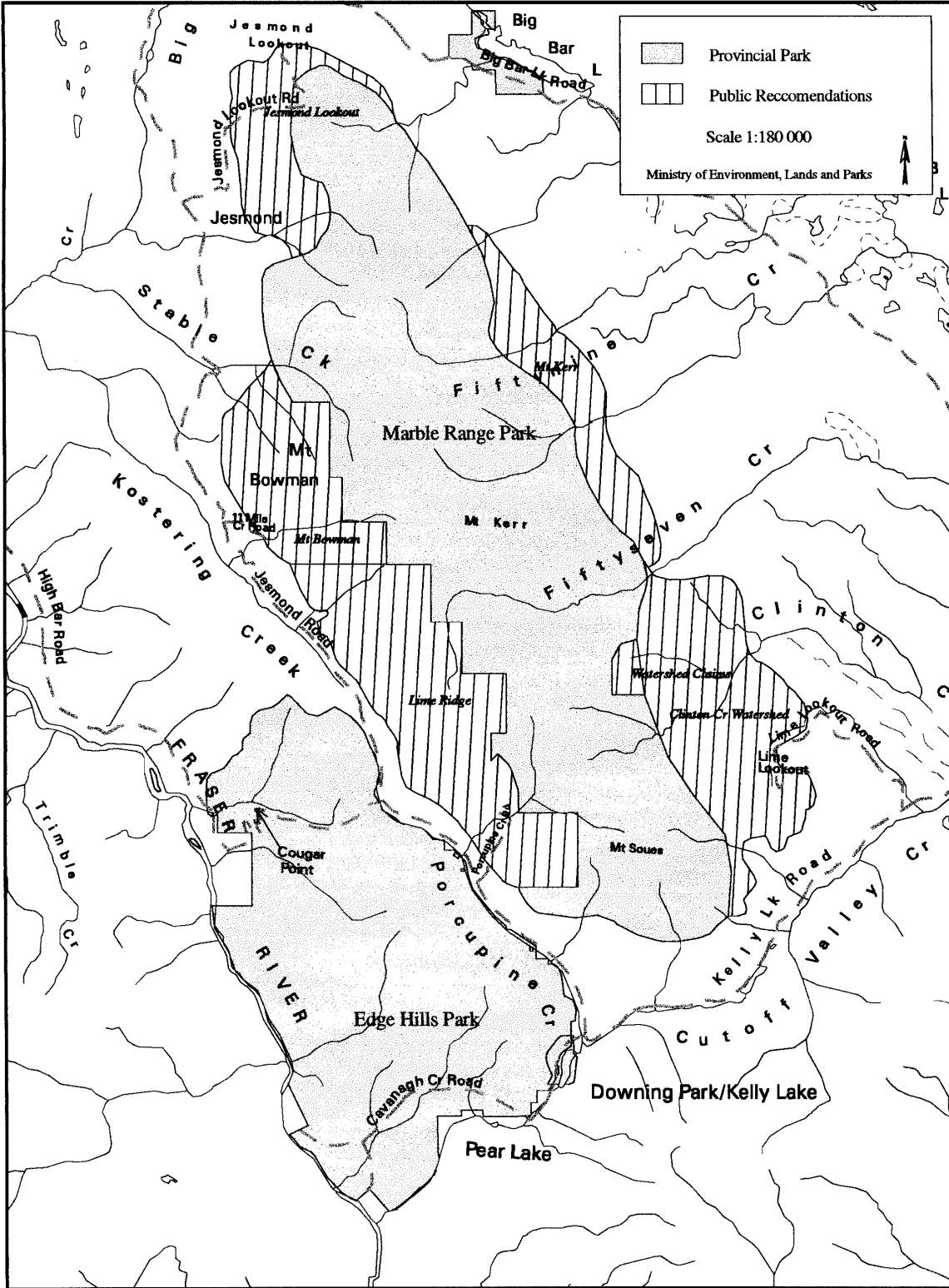
Important moose habitat exists along the wetlands of these two Creeks and in Mann Creek on the east side of the Marble Range. The portions that have been logged within this area (and within the present boundaries of Marble Range Park) will form better habitat for moose and bear if they are allowed to regenerate naturally, without silvicultural activities. A portion of the mule deer migration route between Big Bar Mountain and the Bonaparte River is through this area.

Another value of this area for park land is the ability to protect the integrity of the viewscape. By including this area in park, the views of the Marble Range from the Big Bar road and Highway 97 will be of the mountain range in its natural state.

Lime Ridge Area

The attributes of the Lime Ridge area, as described in section 6.1, are also of significant importance to local residents. Public recommendations for protection in this area extend beyond the “save and except” mineral claim areas, to include the lower slopes of Lime Ridge to the valley bottom.

Map 8. Public Recommendations for Adjacent Lands



APPENDIX F

Letters of Support from Cariboo Chilcotin Regional Resource Board and Cariboo Inter-Agency Management Committee (IAMC)

Cariboo Chilcotin Regional Resource Board

Box 4270
Williams Lake, BC
V2G 2V3
T. 250/398-6463 F. 250/398-6472

RECEIVED

MAR 26 1999

BC PARKS
CARIBOO DISTRICT

March 23, 1999

Steve Mazur

Ministry of Environment, Lands and Parks
BC Parks – Cariboo District
281 First Avenue North
Williams Lake, BC
V2G 1Y7

Dear Mr. Mazur:

The Cariboo Chilcotin Regional Resource Board reviewed the Marble Range/Edge Hills Park Master Plan September 15, 1998 and found it to be consistent with the spirit and intent of the Cariboo Chilcotin Land Use Plan.

Sincerely,



Wade Fisher,
Chair



File: 204-20/IAMC/Corr.

April 27, 1999

Steve Mazur
District Manager
BC Parks Cariboo District
181 N 1st Ave.
Williams Lake BC V2G 1Y8

Dear Steve:

RE: Marble Range/Edge Hills Park Master Plan

The Cariboo Mid-Coast Inter-Agency Management Committee have reviewed the above noted plan and, at our April 9, 1999 meeting, endorsed the plan as being consistent with the Cariboo Chilcotin Land Use Plan objectives, targets and strategies.

Yours truly,

A handwritten signature in black ink, appearing to read "Herb Langin".

Herb Langin
IAMC Chair

j SMP

Inter-Agency
Management
Committee

200 640 Borland St
Williams Lake BC
V2G 4T1

Telephone: (250) 398-4225
Facsimile: (250) 398-4674