MANAGEMENT PLAN March, 1999



for Bugaboo Provincial Park



Ministry of Enviror Lands and Parks BC Parks Division

Bugaboo Provincial Park

MANAGEMENT PLAN

Prepared by BC Parks Kootenay District Wasa BC V0B 2K0



Bugaboo Provincial Park

Management Plan

Approved by:	
Wayne Stetski Wayne Stetski District Manager	Date: <u>99.12.01</u>
Denis O'Gorman Denis O'Gorman Assistant Deputy Minister	Date: <u>99.03.18</u>

Canadian Cataloguing in Publication Data

BC Parks. Kootenay District
Bugaboo Provincial Park management
plan

Cover title: Management plan for Bugaboo Provincial Park. ISBN 0-7726-3902-7

- 1. Bugaboo Provincial Park (B.C.)
- 2. Parks British Columbia Planning. 3. Parks British

Columbia - Management. I. Title.

II. Title: Management plan for Bugaboo Provincial Park.

FC3815.B83B32 1999333.78'3'0971165C99-960184-9 F1089.B83B32 1999

TABLE OF CONTENTS

Plan Highlights	1
Introduction	3
The Management Planning Process	3
Background Summary	
Planning Issues	
Relationship to Other Land Use Planning	10
Role of the Protected Area	11
Provincial and Regional Context	11
Significance in the Protected Area System	11
Conservation Role	13
Recreation Role	14
Vision for Bugaboo Provincial Park	15
Relationship with First Nations	16
Protected Area Zoning	17
Introduction	17
Natural Environment Zone	17
Intensive Recreation Zone	17
Special Features Zone	19
Natural and Cultural Values and Their Management	20
Introduction	20
Land Tenures and Boundaries	20
Vegetation	21
Water	22
Wildlife	23
Cultural and Historic Values	24
Scientific Research and Education	25
Outdoor Recreation Opportunities and Management	26
Introduction	26
Rockclimbing and Mountaineering	26
Hiking and Backpacking	
Skiing (Backcountry)	
Nature Viewing	29
Heli-Skiing	29

Heli-Hiking	30
Other Commercial Recreation	31
Outdoor Recreation Features	32
Aesthetic Values	32
Access Strategy	33
Management Services	34
Communications	35
Introduction	35
Marketing and Promotion	35
Pre-Trip Planning	36
Natural and Cultural Heritage Education	37
Plan Implementation	38
Introduction	38
Highest Priority Actions	38
Project Oriented Actions	39
Ongoing Monitoring Actions	41
List of Figures	
Figure 1 Park Facilities and Natural Features	6
Figure 2 Regional Context Map	
Figure 3 Park Zoning Map	
List of Plates	
Plate 1. Climbers on Brenta Spire with Bugaboo Spire in the background	2
Plate 2. Conrad Kain Hut	9
Plate 3. Vowell Creek riparian habitat	19
Appendices	
A. BC Park System Goals	
B. Zoning in BC Parks	
C. Kootenay/Boundary Land Use Plan Chapter 4	
D. Summary/Analysis of Public Comments	57
References Cited	62

Acknowledgments

This plan was prepared by the consulting firm Pathmaker Consultants under the direction of BC Parks Kootenay District staff. The planning process was coordinated by Greg Chin, District Planner. Wayne Stetski, District Manager, provided general direction with technical assistance provided by Alex Green, Windermere Area Supervisor and Mike Gall, Resource Officer. Contributions were also made by Ida Cale, Extension Officer, Len Robbins, Operations Officer and Roger Tierney, Recreation Officer. Thanks to Roger Norrish, Management Planning Coordinator and all the other BC Parks staff in Victoria for their assistance.

BC Parks would like to give special recognition to the members of the public and the following organizations that provided helpful direction throughout the planning process.

BC Environment, Fish and Wildlife
East Kootenay Environmental Society
Lake Windermere Rod and Gun
Friends of the Purcells
Ministry of Forests, Invermere District
Golden Outdoor Recreation Association
Purcell Heli-skiing
Canadian Mountain Holidays
Mistaya Alpine Tours
Regional District of the East Kootenays
Alpine Club of Canada
Association of Canadian Mountain Guides
Bavin Consulting

This management plan is a component of the Kootenay - Boundary Land Use Plan and was developed through direction received from the Kootenay -Boundary Land Use Plan.

Plan Highlights

- Management emphasis will be on providing appropriate recreational opportunities and development while ensuring the protection and conservation of the natural and scenic values of the park.
- This plan recognizes the important role of this park in the BC Parks system as an area that
 protects outstanding scenic values and provides recreation opportunities of an international
 caliber.
- About 94% of the park will be zoned Natural Environment to protect scenic values and provide for backcountry recreation opportunities in a largely undisturbed natural environment. A Special Feature Zone covers about 6% of the park to protect the sensitive riparian habitats surrounding Vowell and Malloy creeks.
- The plan will consider exploring alternatives to the maintenance of facilities such as the Kain Hut, which absorb considerable public resources.

Commitments for the management of natural values in Bugaboo Park include:

- Human impacts will be managed to prevent degradation of natural values and processes.
- Detailed management plans will be prepared for vegetation and wildlife values.
- BC Parks will work with BC Environment and other agencies in integrated wildlife
 management planning both inside and outside park boundaries to ensure the protection of
 representative and migratory wildlife.
- BC Parks will work with Ministry of Forests to protect scenic values visible from the park.

Commitments for the management of the cultural values of the park include:

- Cooperative projects with First Nations will be implemented to inventory and assess cultural values and develop educational materials that foster appreciation of cultural values.
- Historic summit registers and cairns will be catalogued and preserved.

Commitments for the management of the recreational values of the park include:

- Managing the park as an internationally significant backcountry recreation area that can
 accommodate a wide range of year round outdoor recreation activities such as
 mountaineering, rockclimbing, hiking and heli-skiing.
- Developing a climbing management plan, in concert with the climbing community, that
 includes strategies to protect the natural environment of the park and preserve the climbing
 experience.
- Developing a backcountry management plan to balance commercial heli-skiing and backcountry touring to avoid conflicts.
- Requiring commercial permit holders to develop a five year business plan that is compatible
 with this management plan, to be updated and approved annually, for their operations in the
 park.



Plate 1.
Climbers on Brenta Spire with Bugaboo Spire in the background.

Introduction

The Management Planning Process

A management plan is intended to guide the park's management for a five to ten year period. It establishes objectives and actions for the conservation, development, operation and appreciation of the park. This plan relies on current information relating to park values obtained from the management plan background report. It is important to be familiar with the background report to fully understand this management plan. Additional information has been gathered from park managers, permittees, other government agencies, previous reports, public interest groups, First Nations and from the general public.

Preparation of the management plan involves a thorough analysis of the overall goals of the park, levels of use, management objectives, and public concerns. Through this process, various options for managing the park are developed and assessed.

BC Parks prepares management plans with a high degree of public involvement. The general public and public-interest groups have opportunities to provide comments to BC Parks through a variety of means, including public meetings and mail-outs.

In the case of Bugaboo Provincial Park, the management plan has been prepared by an independent consultant with direction and input from BC Parks staff. Additional information was gathered from the Kootenay-Boundary Land Use Plan (1995) and Implementation Strategy (1997) and the Draft Management Direction Statement (1996).

Public consultation was conducted by BC Parks primarily through a series of open houses held in various communities near the park. Most of the comments were provided though letters and comment forms that were received following these meetings. Details of the public consultation process are included in Appendix D.

The management plan focuses on management issues, objectives and recommended actions. It is presented in six main sections in this document:

- 1) Introduction highlights planning issues and provides a background summary of the park.
- 2) Role of the Park and Vision Statement describes the importance of the park and the overall guiding principles for management.
- 3) Park Zoning establishes management zones in accordance with the Park Act.

- 4) Natural and Cultural Objectives and Actions defines the management tasks for natural and cultural values and explains why they are being implemented.
- Outdoor Recreation Opportunities Objectives and Actions defines the management tasks for managing outdoor recreation opportunities and providing park information, including explaining why they are being implemented.
- 6) Priorities for implementing the management actions.

Background Summary

Bugaboo Provincial Park is situated within the Purcell Mountains in the East Kootenay region of British Columbia. The park is most commonly accessed by vehicle via logging road from Brisco, a small community north of Invermere. Helicopter access for commercial heli-skiing and heli-hiking is based out of two Canadian Mountain Holidays (CMH) lodges (Bugaboo and Bobby Burns) near the park and a helipad located 1 km south of Brisco.

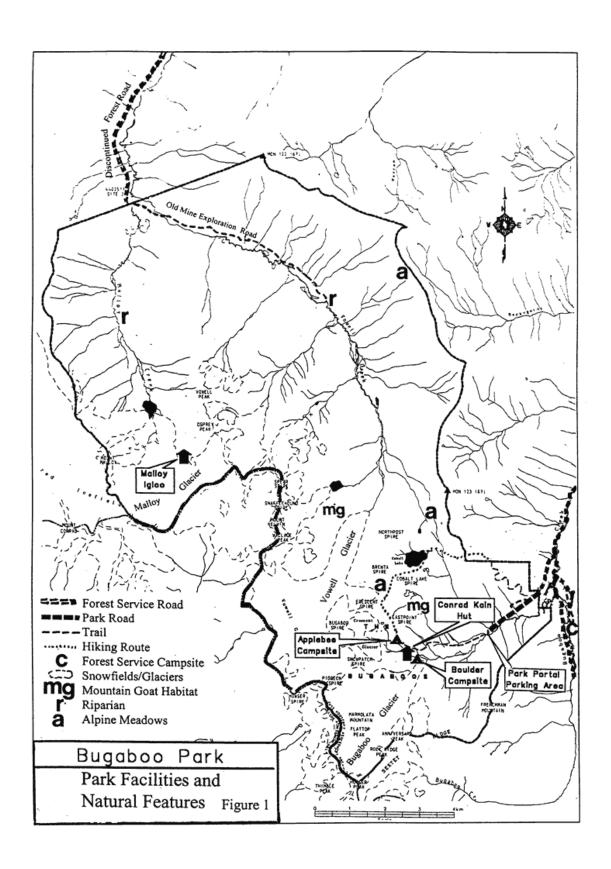
The park contains three large glaciers, Bugaboo Glacier, Vowell Glacier and Malloy Glacier (Figure 1). There are also many good examples of ice features associated with active glaciers, such as bergshrunds and seracs. Elevations are relatively high, ranging from 1500 meters to over 3000 meters along the Purcell Divide and it is here the highest of the granite spires are found, Howser Spires (3398m and 3307m), Pigeon Spire (3124m) and Bugaboo Spire (3176m). Although the general topography in the park is steep, the Vowell and Malloy Creek valleys contain numerous marshes and wetlands. A number of lakes are situated within the park, most formed by glacial meltwaters located at the 'toes' of the glaciers. The largest of these is Cobalt Lake, found at the headwaters of a tributary of Bugaboo Creek.

Unlike many areas in the Kootenays, Bugaboo Provincial Park has few large ungulates due to cool winters and heavy snow accumulation. Elk, mule deer and moose use the park in the summer, but withdraw to lower elevations in the winter. Mountain goats remain in the park year round. Both grizzly and black bears live in the park; however, their population levels are unknown. The numerous slide paths above Vowell and Malloy creeks provide suitable habitat for both species.

There are many outdoor recreation features in Bugaboo Provincial Park that attract visitors to the area. Most obvious are the spectacular granite spires and peaks surrounded by large glaciers and icefields. The granite peaks offer challenging climbing and mountaineering routes in a near wilderness setting.

¹ crevasse at head of glacier where glacier movement pulls ice away from mountain wall

² a jagged pinnacle of ice on the surface of a glacier



Other activities include overnight backpacking, day hiking, wildlife and wildflower viewing. Existing facilities include two alpine huts, trailhead parking lot and the main access trail along Bugaboo creek.

Although the scenery and climate are suited for winter activity, limited access, steep terrain and concerns about avalanches keep non-commercial recreation numbers low. Nonetheless, the large glaciers found in the park are used as part of longer ski traverses.

CMH has operated a commercial heli-skiing business in the area since 1965 and is the largest heli-skiing company in the world. The Bugaboos are considered to be the historic birthplace of the heli-ski industry in British Columbia. CMH operates out of two lodges, located outside the east and north park boundaries, that serve the park and surrounding area.

Little is known about First Nations' use of Bugaboo Provincial Park. There have been no archeological sites, historic travel routes or historic sites identified but the Ktunaxa and Shuswap people lived in the surrounding areas of the park.

The area that is now known as Bugaboo Provincial Park was first visited by prospectors and miners in the 1850 - 1860's. In 1910, mountaineers discovered the Bugaboo Spires and by 1916 serious climbing began. International interest in this area soon followed and attracted famous climbers of the era such as Conrad Kain, who made many first ascents.

As a response to increasing public use and demand, a 358 hectare area in a tributary valley of Bugaboo Creek was designated as Bugaboo Glacier Provincial Park in 1969. The primary reason for this designation was to protect the spectacular and internationally significant granite Bugaboo Spires. A much larger surrounding area (24,624 hectares, encompassing the Conrad Icefield, Vowell Glacier and Bugaboo Glacier) was also designated but given Recreation Area status, due to active mineral tenures and Tree Farm License 14.

In 1993-1994, the Commission on Resources and Environment (CORE) recommended upgrading the recreation area and adding the headwaters of Vowell and Malloy creeks to the existing park. Subsequently, the Kootenay Boundary Land Use Plan (KBLUP), released in 1995, reflected this recommendation and Bugaboo Provincial Park (13,646 hectares) received Class A Provincial Park status on July 12, 1995 under the *Park Amendment Act*.

Adjustments to the original park removed portions lying to the west of the Purcell Divide, but added to the headwaters of Vowell Creek. The park's new topographic boundary follows the height of land that includes Mount Malloy and lands east of Vowell Creek, notably Grizzly Ridge. This new boundary contributes to BC Parks' conservation objectives by including representative vegetation and riparian habitat in the Vowell drainage.

Planning Issues

This management plan addresses a number of planning issues identified by BC Parks through previous planning processes and through consultation with other government agencies, user groups and the public. Through the process of developing the background information for the plan, the following main issues have been identified.

Natural Values Management Issues

Boundaries

The new park boundary bisects a famous ridge of granite spires, leaving the western half of these features unprotected. Concern has been raised over the potential impact of commercial exploitation of staging areas and base camps outside of the park. As well, safety concerns have been raised, as BC Parks has no authority for regulating visitor use outside of park boundaries.

Adjacent Land Use

As portions of Bugaboo Creek immediately adjacent to the park are designated by the Kootenay and Boundary Land Use Plan (KBLUP) as Enhanced Resource Development Zone, extensive logging is expected to have significant impacts on access and visual qualities. The majority of the area adjacent to the park is zoned Integrated Resource Management while the southwest boundary of the park, which includes the spires of Malloy and Bugaboo Glaciers, is zoned for special management. The details on how Special Management Zones are to be managed are yet to be determined by government.

Ski Run Development

The glading of heli-ski runs by selective tree removal is permitted under the existing tenure as a resource activity undertaken within the new park area (KBLUP). Since CMH's development plan is now fully complete, an expansion of the glading program is not expected. Existing gladed areas need to be managed with consideration of park values.

Viewscapes

Logging or landscape modification outside the park boundaries must consider visual quality objectives and backcountry management guidelines. Coordination of management objectives for viewscapes needs to be considered.

Vegetation Impacts

Due to the growing popularity in heli-hiking and climbing, there is evidence of overuse in specific areas with sensitive alpine vegetation; i.e., Grizzly Ridge and Tamarack Glen, Kain Hut area. Assessment and monitoring will be necessary to ensure adequate rehabilitation and protection of these fragile areas.

Helicopter Impacts

Like other alpine recreation destinations (Mount Assiniboine and Kokanee Glacier Provincial Parks), the impact of helicopters has been identified as an issue. The long term impacts of noise and visitor access on wildlife and sensitive alpine areas must be addressed.

Visitor Management Issues

Access

Road building and improvement adjacent to park boundaries will increase access. The impacts of this increase must be examined.

Snowmobiling Adjacent to the Park

Snowmobiling is occurring next to the park and this could affect park values as well as CMH's commercial winter use of this area.

Climbing Management

A number of issues relating to climbing have been identified. The 'bolting' of climbing routes is a major concern for the climbing community and BC Parks. As well, there is concern about the use of old bivouac sites near the base of certain climbing routes. These activities may pose issues of public safety and impacts to natural values.

Hut Management

The maintenance of facilities such as the Kain Hut absorbs public resources. Alternatives for facility operations and management need to be considered.

Commercial Activity

Commercial activities in the park include heli-skiing and heli-hiking (CMH), commercial guiding by private guides (Association of Canadian Mountain Guides (ACMG)), commercial filming and sightseeing by fixed wing aircraft. BC Parks must address the potential for expansion of these

as well as the potential for new commercial activities in the park. Impacts on the quality of the visitor experience such as overuse and noise are important considerations.

Visitor Facilities

BC Parks is facing pressure to accommodate increasing numbers of park visitors while maintaining the integrity of the park's values and the quality of the visitor experience. This issue includes the maintenance of the current level of development in 'core areas' and keeping the backcountry areas undeveloped versus providing facilities to accommodate increased visitor use.

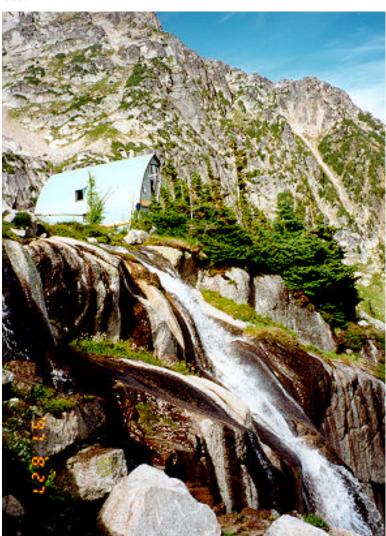


Plate 2. Conrad Kain Hut

Relationship to Other Land Use Planning

Land use planning in the Kootenay/ Boundary region of Southeastern British Columbia entered a new era with the provincial government's initiative to prepare a strategic land use plan. A major component of this plan was the designation of various land uses, including protected areas, for the entire region. Although the park and recreation designations of Bugaboo Park pre-dated the Kootenay-Boundary Land Use Plan (KBLUP), it was through this process that the park and recreation area boundaries were adjusted to enhance protected area values. The lands within the resulting boundaries were designated as a Class 'A' park.

In addition to allocating land use, the KBLUP also established land use management guidelines in the Kootenay-Boundary Land Use Plan Implementation Strategy (KBLUP-IS). These guidelines help to integrate land use management with a variety of government strategic policies, including the Forest Practices Code and the Provincial Grizzly Bear Conservation Strategy. It is intended to provide broad corporate guidance to managing agencies in the development of their individual and inter-agency program priorities.

With respect to protected areas, the KBLUP-IS emphasizes the importance of cooperative management of values within both the parks and adjacent areas "to ensure that parks can effectively protect sensitive values contained within them." (KBLUP-IS) To this end, general management objectives and strategies associated with environmental, recreation and tourism values are provided for inclusion in park management. The specific areas that are addressed in the KBLUP-IS include:

- Park Planning
- Pre-Existing Tenures and In-Holdings
- Natural Occurrences
- Park Management.

Details for each of these sections are included in Appendix C and specific actions are incorporated in this management plan. The KBLUP-IS also defines, in general terms, the management emphasis for the park. For Bugaboo Provincial Park, the KBLUP-IS recognizes "the very high wilderness recreation values for mountaineering and hiking. The climbing opportunities in the Bugaboo Spires are world class. As a result, the management emphasis will be on recreation." (KBLUP-IS)

The KBLUP-IS has allocated three resource development zones in areas adjacent to the park that are expected to have various degrees of impact on access, wildlife and visual qualities. The Enhanced Resource Development zone over portions of Bugaboo Creek permits intensive forest development beside the area of the park that experiences the most visitor use.

Role of the Protected Area

Provincial and Regional Context

Bugaboo Provincial Park lies in southeastern British Columbia in the Purcell Mountains between the communities of Golden and Invermere. It is flanked to the east by the Rocky Mountain Trench and to the west by the Selkirk Mountains. The closest major city is Calgary, Alberta, about a four hour drive away.

The mountain ranges of the Kootenay District provide a diverse range of natural values and recreational opportunities as evidenced by the numerous provincial and national parks (Figure 2). Although forestry and mining are the dominant land uses, the recent land use planning processes have reflected public concern and appreciation for protected areas. The result has been the protection of 18.5% of the East Kootenays and 11% of the West Kootenays.

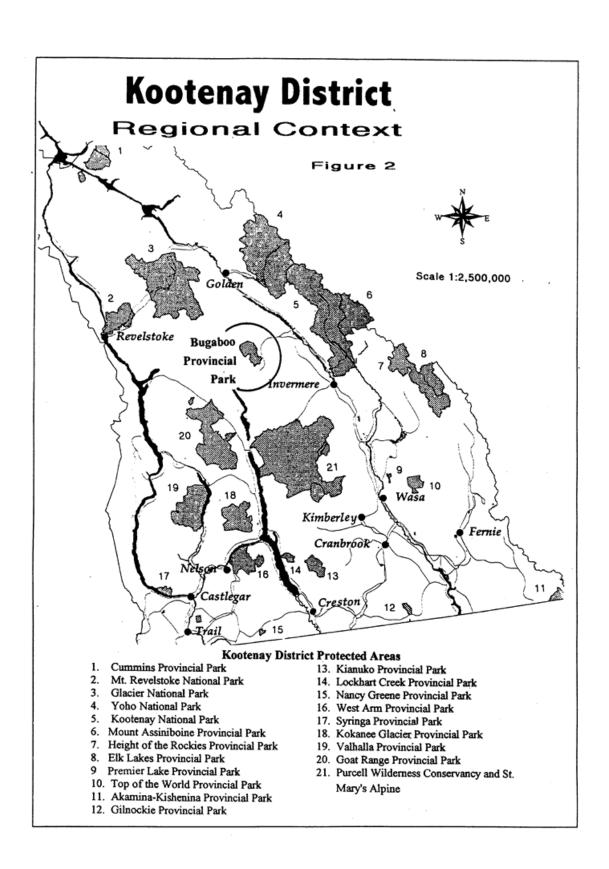
Bugaboo Provincial Park was the birthplace of helicopter skiing in British Columbia and has become a worldwide destination for this activity. The park is also internationally renowned for rockclimbing. Its numerous granite spires and challenging terrain provide world-class mountaineering and climbing opportunities.

Significance in the Protected Areas System

The 'Bugaboos' have long been acknowledged as an internationally significant backcountry recreation area. As the birthplace of mountaineering in the Kootenays and the home of the largest heli-skiing company in the world, the park is one of only a few protected areas in British Columbia providing such impressive opportunities.

Specifically, Bugaboo Provincial Park is important because of the following:

- The protection of outstanding recreation values: internationally significant rock climbing, heli-skiing and heli-hiking
- The provision of commercial and non-commercial recreation activities of international caliber
- Represents the largest amount of Engelmann Spruce-Subalpine Fir in a warm moist climate (ESSFwm) of any protected area in the East Purcell Mountain (EPM) ecosection
- It is provincially significant for post-contact history of early mountaineering and exploration



Conservation Role

BC Parks has two conservation goals (Appendix A):

- Goal 1 Representation ecosystem representation of the natural ecosystems of British Columbia
- Goal 2 Special Features conservation of the best provincially significant natural, recreation and cultural features.

While Bugaboo Provincial Park contributes to both goals, it contributes to Special Features' conservation to a greater degree than ecosystem representation.

Specifically:

- Bugaboo Provincial Park contributes to the conservation of representative ecosystems and biological diversity within the North Columbia Mountain (NCM) and East Purcell Mountain (EPM) ecosections. Although the high elevation zones are already well represented within other protected areas, Malloy Creek offers the best representation of the warm, wet variants of the Engelmann Spruce-Subalpine Fir biogeoclimatic subzone (ESSFwm) of any protected area in the EPM ecosection.
- The park contains habitat for large mammals such as grizzly bear, black bear and cougar and ungulates such as mountain goat, elk, mule and white-tail deer and moose.
- Includes riparian habitat important for moose and sensitive alpine habitats which may contain rare or endangered species.

Recreation Role

BC Parks has four recreation goals (Appendix A):

- Goal 1 Tourism Travel Routes to provide park attractions and services which enhance the province's major tourism routes
- Goal 2 Outdoor Recreation/Holiday Destination to provide park attractions that serve as or enhance outdoor recreation holiday destinations in key areas across the province
- Goal 3 Backcountry to provide outstanding backcountry adventure recreation experiences across the province
- Goal 4 Local/Regional Recreation to ensure access to local outdoor recreation opportunities for all residents of the province

Bugaboo Provincial Park contributes to the backcountry and local/regional recreation goals (Goals 3 and 4) by providing visitors (international, national, provincial, regional, local) with access to internationally significant recreation features which can be enjoyed in one day or in a multi-day excursion. The primary role will focus on the park's outstanding value as an outdoor recreation resource.

Specifically:

- The scenic qualities of the Bugaboo Spires contribute significantly to the amount of day use recreational activity.
- Bugaboo Provincial Park represents an internationally significant backcountry recreation area
 that can accommodate a wide range of year round outdoor recreation activities such as
 mountaineering, rockclimbing, hiking and nature viewing in a backcountry setting.
- This park is internationally renowned for its outstanding recreational features, and thus contributes to the overall tourism significance of the Kootenay region and the province.
- The early mountaineering heritage of this area and its natural values represent educational opportunities for all types of visitor.

Vision for Bugaboo Provincial Park

Being clear about the long-term vision helps to guide what should be done in the short-term. A Vision Statement is an important guide for reacting to changing demands for recreation or for incorporating new approaches to conservation management.

A Vision Statement for Bugaboo Provincial Park has been developed for 25 years into the future to set the tone for how the park may differ from what it is today. The Vision Statement for Bugaboo Provincial Park looks into the future when the park will have completed the actions of this and subsequent plans. The park continues to provide protection for the internationally significant recreation features and protects provincially significant alpine, sub-alpine and wetlands habitats. It provides a variety of top caliber recreation experiences ranging from those that provide a high level of service to self-contained expeditions.

Heli-hiking has grown in popularity, particularly due to the large number of retired and affluent 'baby boomers'. Rock climbing has also grown in popularity and the experience is enhanced as climbers explore beyond the historic climbing routes of the past 30 years.

Resource harvesting surrounding the park has significantly changed the landscape, but cooperation between resource and park managers in management of the adjacent Special Resource Management Zone of the KBLUP has ensured that the key scenic values in and adjacent to the Bugaboo and Vowell Glaciers areas of the park remain high. The small resident mountain goat population has flourished as a result of careful management. Deer and elk have flourished with the increase in habitat from forest harvesting. Other species such as the grizzly bear are now rarely seen in the park but healthy populations exist in nearby protected areas that have well established connectivity corridors.

Relationship with First Nations

With the emergence of treaty negotiations in British Columbia and the growing awareness of aboriginal rights, BC Parks has begun to forge relationships with First Nations across the province. The protected areas system contains cultural and natural values that are highly significant to First Nations. Some parks are important as sources of natural medicines and foods or as sacred sites. BC Parks needs to consider the traditional knowledge and concerns of First Nations. To this end, a staff member of the Ktunaxa Traditional Use Study was contracted in 1996 to compile existing information from traditional use sites for the East Kootenays. For Bugaboo Park there is little information available.

Bugaboo Provincial Park lies within the asserted traditional territory of the Ktunaxa/Kinbasket and Shuswap Tribal Councils. As stated in this management plan, BC Parks proposes to develop working relationships in a number of areas to ensure that management of the park considers the traditional uses of First Nations people. While direct consultation with tribal council representatives on the management plan was requested by BC Parks, limitations of time and resources have prevented First Nations from participating. However, this management plan provides a foundation upon which continued relationships between BC Parks and First Nation tribal councils are based.

Protected Area Zoning

Introduction

BC Parks uses zoning as a tool to assist in the planning and management of provincial parks. In general terms, zoning divides a park into logical units for management. It applies uniform and consistent management objectives based on natural, cultural and recreational values, and existing and projected patterns of access and use in relation to specific conservation goals. The zones reflect the intended land use, the degree of human use, and the level of management and development permit ted. The spectrum includes five zoning options: *Intensive Recreation*, *Natural Environment, Special Feature, Wilderness Recreation and Wilderness Conservation*. The BC Parks Zoning Policy is found in Appendix B.

Considering Bugaboo Provincial Park's features, its objectives for conservation and recreation, and its size and vision statement, almost the entire park falls into the Natural Environment Zone.

Natural Environment Zone

The objective of this zone is to provide for a variety of recreational activities in a largely undisturbed natural environment. The intent is to ensure that the activities and facilities do not dominate the natural setting.

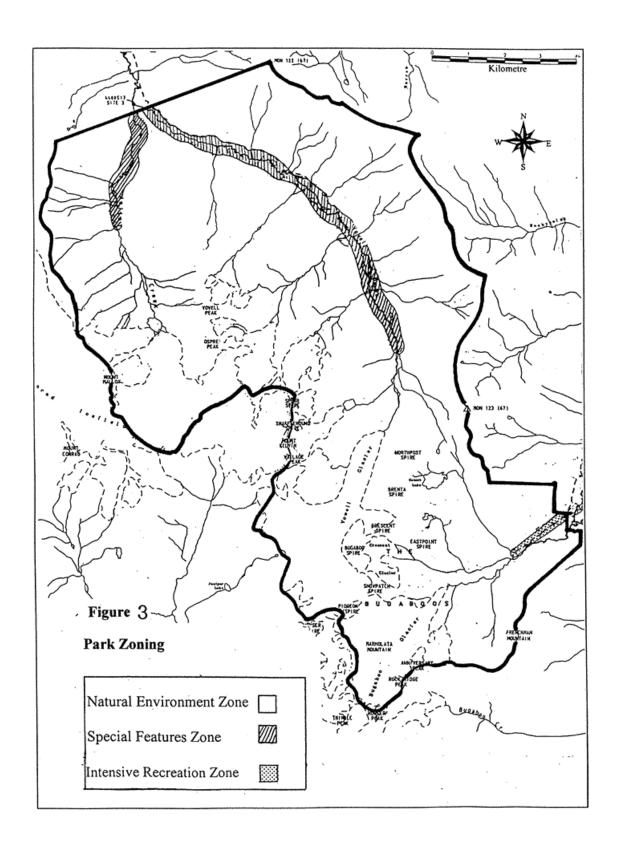
This zoning designation refers to the nodes of activity surrounding the Kain Hut and the Bugaboo Spires as well as the areas accessed seasonally by helicopters. Due to the types and levels of use in this park, it does not conform to the zoning specifications in the wilderness categories. Bugaboo Provincial Park would be more accurately described as a backcountry park.

The Natural Environment Zone covers about 12,821 hectares or 93.9 % of Bugaboo Provincial Park.

Intensive Recreation Zone

The objective of this zone is to provide for a variety of readily accessible, facility-oriented outdoor recreation opportunities. The intent is to manage areas of high facility development. This zone is applied to the road and parking area in Bugaboo Creek .

The Intensive Recreation Zone covers about 26 hectares or .2% of Bugaboo Provincial park



Special Features Zone

The objective of the Special Features Zone is to protect and present significant natural or cultural resources, features or processes because of their special character, fragility and heritage values. Facilities and activities are limited to those used for interpretation. A Special Features Zone has been identified to protect the sensitive riparian/moose habitats surrounding Vowell and Malloy creeks. Although the various spires in the park are special natural features they have not been zoned as such due to the extensive recreational climbing that occurs, which is incompatible with this zone, and by virtue of the fact that granite spires are generally not considered fragile. Management of the spires will be achieved by the specific management actions of the management plan.

The Special Features Zone covers about 800 hectares or 6% of Bugaboo Provincial Park



Plate 3 Vowell Creek riparian habitat.

Natural and Cultural Values Management

Introduction

Bugaboo Provincial Park was first established in 1969 and expanded in 1996, to protect the spectacular recreational opportunities and special features of the Bugaboo Spires. The objectives of natural and cultural protection in Bugaboo Provincial Park will stress managing human impacts to prevent degradation of natural values and processes and to preserve cultural heritage values that may be found in the park.

This section of the management plan outlines management objectives and actions that will provide general management direction. It also identifies priorities for specific management studies. These objectives and actions comply with the *Park Act, Park and Recreation Area Regulations* and relevant ministry policies.

Land Tenures and Boundaries

There are a number of land tenures in Bugaboo Provincial Park. These include Park Use Permits for heli-skiing, heli-hiking, guided mountaineering, guide-outfitting, and trapping. The guide-outfitting territory and heli-skiing permit cover the entire park while the trapping and commercial heli-hiking permits are site specific. CMH also has a license of occupation under the *Lands Act* in the vicinity of the park. The Kootenay-Boundary Land Use Plan encouraged the continuation of these tenures subject to review through the management planning process.

The new park boundary bisects a famous ridge of granite spires, leaving the western half of these features outside the park. Concern has been raised over the potential impact of commercial exploitation of staging areas and base camps established just outside the park. As well, safety concerns have been raised as BC Parks has no authority outside the park for regulating visitor use. Without proper planning and control, use levels could become sufficiently high at the spires to pose an increased risk to climbers.

Objectives:

To honour the commitments in the KBLUP to retain and consider existing recreation tenures.

To extinguish tenures that are in conflict with the *Park Act*.

To minimize the environmental impacts of commercial tenures to meet conservation objectives.

To protect wildlife, recreation and aesthetic values adjacent to the park where possible.

Actions:

- Retain existing guide-outfitting territory. No new expansions or additions to this territory will be permitted. Existing trapline holders will be permitted to continue trapping; however, BC Parks will endeavor to acquire trapping rights as they become available.
- Mitigate impacts of helicopter activity on visitors by establishing flight paths and landing sites away from areas of concentrated visitor activity.
- Existing heli-hiking and heli-skiing permits will continue. No increase in the number of trails for heli-skiing and heli-hiking.
- Work within local planning processes, other government agencies and public interest groups to minimize impacts of adjacent industrial, commercial and recreational uses on the park's important recreation and conservation values.
- Propose to the Protected Areas Strategy Goal 2 Process for the West Kootenays the addition of the western portions of Howser Spire.

Vegetation

The most extensive vegetation zone in the park is in the Alpine Tundra (AT) zone. It consists of alpine heath and sedge, mosses and lichen. Non-vascular plants such as snow algae are also found on the glaciers.

In the Engelmann Spruce-Subalpine Fir (ESSF) zone, Engelmann spruce and Alpine fir are the dominant tree species. Upper elevations are associated with open parkland, and scattered groves of Alpine fir set among meadows of alpine grasses, heaths and wildflowers. In the lower elevations, alder, willow, whitebark pine, lodgepole pine, grouseberry, creeping raspberry and willow sedge associations are found. Woodland riparian vegetation can be found in the Vowell Creek marshes and wetlands. Thickets of aspen, willow and water birch cluster around stream sides while reeds and grasses are interspersed with bog, muskeg and standing bodies of water.

Plant cover, particularly in the low elevation riparian area, has yet to be fully documented; however, these zones have proven to be critical in the support of rare plant species diversity and related animals. An inventory of plant species would prove the existence of such species. In addition, some lands included within the new park boundaries were previously modified by

some road building. BC Parks will consider a number of management options to rehabilitate these areas.

Objectives:

To protect, maintain, and enhance the park's vegetation, particularly remnant old growth, sensitive alpine meadows and riparian ecosystems.

To restore damaged vegetation to natural conditions.

To prevent the establishment of non-native species.

To expand the information on vegetation in the park to assist management and for public appreciation.

Actions:

- Institute a program of site rehabilitation of those areas of the park where road construction, trail construction and non-conforming public uses have had an impact.
- Complete a vegetation inventory to locate and identify plant communities, rare species and threatened plant communities in the special feature zones and in hiking areas.
- Prepare a vegetation management plan that addresses fire, disease and insect infestation in the special features zones.
- Protect sensitive or unique vegetation communities from the adverse impacts of recreational use by locating trails away from these areas.
- Develop a public awareness program to foster respect for the park's vegetation and natural processes.
- Encourage and support research aimed at a better understanding of the park's natural processes.
- Monitor the impacts of heli-hiking and other commercial activities on vegetation.

Water

The headwaters of Bugaboo, Vowell and Malloy Creeks as well as numerous lakes and creeks are contained in Bugaboo Provincial Park. These water bodies are significant to the plants and

animals of the park and to park visitors. Water quality may be compromised through contamination resulting from the commercial and recreational uses of the park.

Objective:

To maintain or improve the water quality in the park.

Actions:

- Monitor water quality periodically and protect the groundwater, streams and lakes in the park from any interference.
- Establish sanitary facilities that do not compromise environmental integrity of the park.
- Ensure that trail development and maintenance minimize erosion and water contamination.

Wildlife

Both grizzly and black bears live in the park. While their population levels and habitat preferences are unknown, the numerous avalanche tracks above Vowell and Malloy creeks provide suitable habitat for both species.

Use of Bugaboo Provincial Park by large ungulates is relatively low due to cool winters and heavy snow accumulation. Elk, mule deer and moose use the park in the summer, but withdraw to lower elevations in the winter. Mountain goats remain at higher elevations all year long.

The park also provides habitat for small mammals such as red-backed and heather vole, bushytailed woodrat, Columbia and mantled ground squirrel, porcupine and pika. Common birds in the area are white-tailed ptarmigan, spruce and blue grouse, Clark's nutcracker, hermit and varied thrush, red crossbar, dark-eyed junco, and the Townsend's, Wilson's and yellow-rumped warbler.

Objectives:

To maintain and protect the natural diversity of wildlife species and populations with special attention to rare, endangered, sensitive or vulnerable species.

To protect critical habitats.

To increase knowledge and understanding of wildlife species in and around the park.

To encourage scientific research projects in the park, particularly those aimed at better understanding of natural processes and wildlife habitats and the impact of helicopters on wildlife.

Actions:

- Develop a wildlife inventory, including baseline mapping for key species including mountain goat, grizzly bear, moose, caribou and amphibians.
- Develop, in concert with BC Environment, a long term wildlife management plan for the key species in the park. Major elements in this strategy include:
 - ongoing wildlife inventory;
 - role of park in providing 'connectivity' corridors for wildlife movement;
 - minimizing negative encounters between people and wildlife;
- Ensure that any recreational development minimizes impacts on wildlife and habitat.
- Cooperate with other government agencies, institutions and permit holders in gathering and sharing wildlife data.
- Monitor existing guide-outfitting, hunting, heli-skiing, heli-hiking and trapping activities to determine acceptable impacts.
- Work with BC Environment and other agencies in integrated wildlife management planning both inside and outside park boundaries to ensure the protection of representative and migratory wildlife.

Cultural and Historic Values

Little is known about the First Nations' use of Bugaboo Provincial Park. No archeological sites, historic travel routes or historic sites have been identified but the Ktunaxa and the Shuswap people lived in the surrounding areas of the park.

Post-contact history is similarly sparse. Trading and prospecting occurred mostly to the south, east or west of the park. It is thought that the term 'bugaboo' may be an old miner's term for *a worthless prospect*.

The recreation history of the Bugaboos is by far the most dominant cultural theme. The first sighting of the area occurred on a surveying expedition led by climbing legend Conrad Kain in 1910. In 1916, Kain led the first climbing expedition to the Bugaboos and made many first ascents. In 1959, Hans Gmoser had begun the first guided climbing in the park, and six years

later, he founded what is now the largest heli-skiing operation in the world, Canadian Mountain Holidays (CMH).

Objectives:

To increase the cultural and historic knowledge about the park.

To identify and protect the archeological, cultural and historic values.

Actions:

- Undertake, in cooperation with First Nations and the Heritage Conservation Branch, an inventory/assessment of the historic sites and values of the park.
- Catalog and preserve historic summit registers and cairns.

Scientific Research and Education

Knowledge of the natural and cultural values of the park is critical to meaningful management. The international stature of Bugaboo Provincial Park provides excellent research, outdoor classroom and educational opportunities.

Objectives:

To encourage approved research relating to the First Nations and post-contact history of the park.

To promote education and conservation through increasing environmental awareness, understanding and appreciation of the natural and cultural values in the park.

Actions:

- Work with local colleges, universities, permittees and corporate sponsors to establish funding and to develop appropriate and timely research activities.
- Ensure that research relating to the role of First Nations in the parks involves the First Nations and the Heritage Conservation Branch. Research opportunities require a Park Use Permit.

Outdoor Recreation Opportunities and Management

Introduction

With it's internationally significant recreation features such as granite spires, extensive icefields, alpine meadows, ridges and lakes, Bugaboo Provincial Park offers excellent year round alpine recreation opportunities. However, this sensitive alpine environment must be managed so these activities are compatible with the park's zoning; are compatible with natural and cultural values; are consistent with visitor's expectations; and respect the Vision Statement of this Management Plan.

A large number of those who visit Bugaboo Provincial Park are drawn by the park's ruggedness, scenery and relative ease of access. Review of park statistics reveals that visitor use has increased slightly over the past seven years, yet even this slight increase is noticeable to users.

This section of the management plan describes the strategies for managing outdoor recreation and park visitors and providing park information. It will consider:

- 1) Providing opportunities for people to experience the park in ways that are compatible with its features and that preserve its natural values;
- 2) Providing outdoor recreation activities in such a way that there are minimal conflicts between user groups;
- 3) Providing the tools for creating public awareness of and respect for the natural and cultural values in the park; and
- 4) Providing a plan that recognizes the special features found in Bugaboo Provincial Park and the need for efficient management of visitor use.

Rockclimbing and Mountaineering

Rockclimbing is one of the most popular activities in the park and was the major impetus for preservation of this area. Despite the rugged nature of the area, the Bugaboos core activity area no longer has true wilderness climbing quality. There is sufficient use of areas near the Kain Hut (Snowpatch Spire, Bugaboo Spire) that climbing use of the area has likely reached social carrying capacity. As well, the current level of use at the Kain Hut is approaching its physical and social carrying capacity. There has been a marked increase in the use of less technically

demanding routes (Pigeon Spire, Eastpost Spire, Brenta Spire). This has led to line-ups forming for access to these popular areas. Due to their relative popularity, this trend is expected to continue.

Sport climbing (indoor climbing walls) has seen a large increase in participation over the past decade. As a result, it is expected that there may be an increase in the number of people visiting the park to rock climb. This is supported by studies in outdoor recreation participation that forecast an increase in high risk sports, including rock climbing. However, rockclimbing in the Bugaboos has an added dimension of difficulty. Mountaineering skills and equipment for glacier travel are required for most climbs. Given that many sport climbers do not have these skills or equipment, it is important to convey this message to all who intend on climbing in the Bugaboos.

Increased concern about the 'bolting' of climbs on the spires has become an issue in other major climbing areas in North America and should be considered for the Bugaboos, given its international significance.

Mountaineering is one of the original recreational activities in the park. Individuals such as Conrad Kain made many of the first ascents, and accordingly have received legendary status among the mountaineering community. As a result, the 'Bugs' are considered to be a mecca for this type of activity.

Objectives:

To provide a high quality experience for rockclimbers.

To ensure that this recreational activity conforms with the overall conservation objectives of the park.

Actions:

- Monitor impacts of climbing use, including climbing camps, and identify areas of concern through BC Park's draft Backcountry Recreation Impact Monitoring (BRIM) process.
- Develop a climbing management plan, in concert with the climbing community, that includes strategies to address bolting, facilitating conflict resolution, consideration of reservations and protection of the natural climbing environment.
- Cooperate with the climbing community to distribute on-site information on rockclimbing and mountaineering ethics and safety.
- Investigate expansion of climbing opportunities.

• Continue to develop a database of climbing routes with the assistance of climbers.

Hiking and Backpacking

Next to rockclimbing and mountaineering, day hiking and backpacking are the park's most popular summer activities. The growing number of users indicates that there is significant day use hiking in the area. Day hikers limit their use of the park to a short hike to the viewpoint of the Bugaboo Spires or the Conrad Kain trail, which leads to the Kain Hut. Overall, the limited trail development, technical nature of the area, and short season limit the number of users. Expansion of the trail system to diversify the hiking and backpacking opportunities would provide more attraction for this type of recreational activity.

Objectives:

To provide opportunities for day and overnight use of the park while minimizing environmental impacts.

Actions:

- Investigate the development of new trails and routes.
- Monitor levels of use, site degradation, human waste and garbage disposal.

Skiing (Backcountry)

The impressive scenery and snow conditions represent good opportunities for backcountry skiing; however, lack of winter access limits the amount of this activity that takes place in the park. Those commencing and ending the extended ski tour from Roger's Pass to the Bugaboos likely use the Kain Hut during the winter. Due to the remoteness of the area and the lack of park staff, backcountry skiers touring in the Bugaboos are expected to be self-reliant and experienced. Public safety is a concern due primarily to high avalanche hazards.

Objectives:

To provide a high quality experience for backcountry skiers.

Actions:

- Record levels of backcountry skier use in the park and their destinations to provide baseline information to establish management actions where needed.
- Provide information and direction to backcountry users explaining winter hazards, personal safety concerns and wildlife viewing etiquette.

Nature Viewing

Bugaboo Provincial Park's outstanding recreational and scenic features have attracted many visitors. The Bugaboo Spires, glaciers, alpine meadows, Grizzly Ridge, waterfalls and avalanche chutes provide excellent opportunities for nature viewing. Given the presence of grizzly bear, mountain goats, moose, black bear, elk and deer, wildlife viewing is certainly possible. These activities are very popular and can build appreciation for the natural values of the park. They also promote stewardship and support for park values.

Objectives:

To promote stewardship for the park and its values.

To encourage visitor appreciation and understanding of the park's natural heritage.

To provide public viewing and non-consumptive appreciation of wildlife and native plants.

Actions:

- Provide the public with educational materials on safe wildlife viewing.
- Work with commercial tourism operators to ensure that information on nature viewing is implemented and is consistent.
- Upgrade Conrad Kain trailhead viewpoint with interpretation signs.

Heli-Skiing

The Bugaboos are the historic birthplace of the provincial heli-ski industry and are now home to the largest heli-ski company in the world. Canadian Mountain Holidays (CMH) operates commercial heli-skiing operations both inside and outside the park boundaries from the Bugaboo Lodge and the Bobbie Burns Lodge (located outside the park boundaries). Although the majority of heli-skiing occurs in areas surrounding the park, the heli-skiing opportunities in the park are preferred. The heli-skiing season begins the second week of December and finishes the beginning of May. The impressive terrain, appropriate climate, excellent snow conditions and spectacular scenery have attracted heli-skiers from all over the world. Heli-skiing runs in forested areas have also been developed through a process of selectively removing large trees (glading). Although the gladed areas are not left barren, there is a change in the appearance of the forest cover and possibly the ecology.

Heli-skiing occurs on the glaciers only when weather and snow conditions are ideal. From Bobbie Burns Lodge, the Vowell Home Runs and the Crystalline and Malachite Creek areas are most commonly used (60%). The accommodations and limited terrain keep visitor numbers low. There are approximately 4,800 user days for this activity annually. (CMH figures)

Objectives:

To manage heli-skiing for minimal impact so that the activity is sustainable and park values are protected.

Actions:

- Continue to authorize by Park Use Permit existing levels of commercial heli-skiing including retaining current number of ski runs and available terrain.
- Restrict glading to existing areas.
- Use the draft Backcountry Recreation Impact Monitoring (BRIM) process to assess with CMH the current conditions and the carrying capacity of the backcountry for commercial heli-skiing.
- Develop a backcountry management plan that considers the needs of heli-skiing and backcountry touring to avoid conflicts.
- Require commercial permit holders to develop a five year business plan that is compatible
 with this management plan, to be updated and approved annually for their operations in the
 park.

Heli-Hiking

Canadian Mountain Holidays (CMH) also provides commercial heli-hiking. This activity occurs in designated areas throughout the park under Park Use Permit, and is focused on allowing clients the opportunity to experience attractive scenery and wildlife viewing. A key area for this is the hiking route CMH has developed from Cobalt Lake to the end of Grizzly Ridge. There are approximately 1,200 user days for this activity annually. (CMH figures)

Objectives:

To manage heli-hiking for minimal impact so the activity is sustainable and park values are protected.

Actions:

- Continue to authorize by Park Use Permit existing commercial heli-hiking including retaining the existing number and length of heli-hiking trails.
- Use the draft Backcountry Recreation Impact Monitoring (BRIM) process to assess with CMH the current conditions and the carrying capacity of the backcountry for commercial heli-hiking.
- Require commercial permit holders to develop a five year business plan that is compatible
 with this management plan, to be updated and approved annually for their operations in the
 park.

Other Commercial Recreation

The Association of Canadian Mountain Guides (ACMG), the Alpine Club of Canada (ACC), Yamnuska Mountain School and the American Alpine Institute (AAI) offer commercial mountaineering, hiking and backcountry ski guiding in the park. These guides operate under a Park Use Permit that is applicable to a large number of provincial parks including Bugaboo Provincial Park. Pre-existing commercial backcountry recreation tenures are recognized in the Kootenay and Boundary Land Use Plan Implementation Strategy as a tenure type that should be continued in protected areas.

Commercial filming and guide-outfitting are also occurring in the park, but infrequently. As with all commercial services there are expected impacts that need to be assessed to determine the appropriateness of these activities.

Objectives:

To provide opportunities for commercial activities that benefit the public and assist in the management of the park.

Actions:

- Review new commercial recreation activities through BC Parks Impact Assessment Policy.
- Limit new commercial recreation services to low impact proposals that do not require infrastructure to be located in the park in accordance with the KBLUP-IS.

Outdoor Recreation Features

There are many outdoor recreation features in Bugaboo Provincial Park that attract visitors to the area. Most obvious are the spectacular granite spires and peaks surrounded by large glaciers and icefields. The granite peaks offer challenging climbing and mountaineering routes in a near wilderness setting. Other popular activities include overnight backpacking and day hiking, wildlife and wildflower viewing, and to some degree, mountain biking and horseback riding.

These combined features provide visitors with a wide range of outdoor recreation opportunities; however, all are affected by the conservation goals of the park. The amount of recreation at any one site will vary with the site's ability to support a given recreational activity. Consequently, management prescriptions will vary according to environmental sensitivity.

Objectives:

To ensure that park facilities, public use and park values are managed to minimize the impact on the park's outdoor recreation features.

Actions:

- Manage recreation use in accordance with park zoning and conservation goals so that natural values will be minimally affected.
- Locate and design all park facilities in harmony with the visual setting.
- Use knowledge gained from the proposed Backcountry Recreation Impact Monitoring (BRIM) assessments and the BC Parks Impact Assessment process to balance recreation use and preserve outdoor recreation features.

Aesthetic Values

The natural scenery found in the park is fundamental to the overall visitor experience. While the awesome granite spires are the focal point of the park, the viewscapes are impressive throughout. At higher elevations, the visitor is able to see far beyond the park boundaries, which currently is not too adversely affected by forestry development. This is likely to change as harvesting of the forests outside the park is expanded in the future. This has implications for the management of viewscapes both inside and outside the park.

Objectives:

To minimize unnatural changes to the views in the park so that the visual qualities and atmosphere of the park are protected and to minimize the visual impact of activities outside the park..

Actions:

- Provide input to the Ministry of Forests and forest licensees to help ensure, through the Forest Development Plan Review Process, that viewscapes outside the park boundary are managed in accordance with the *Forest Practices Code of British Columbia Act*.
- Locate and design any additional facilities in harmony with the visual setting and in accordance with park zoning objectives.
- Work with other agencies to minimize the visual impact of adjacent uses on the park.

Access Strategy

There are two vehicle accessible routes to Bugaboo Provincial Park. A good gravel road, open from late spring through fall, leads from Brisco, north of Radium Hot Springs on Highway 95, to Bugaboo Provincial Park via Bugaboo Creek, a distance of 45 kilometers. A rough road from the park boundary provides access to the Conrad Kain Hut trailhead. This road is in very poor condition. Access to the northern portions of the park via the Vowell Creek and Malloy Creek drainages is possible by leaving Highway 95 at Spillimacheen, north of Brisco, crossing the Columbia River and turning left on to the West Side Road up to the Bobbie Burns Creek drainage.

Snowmobiles are able to access the Rockypoint drainage adjacent to the park boundary. This could affect park values as well as CMH's commercial winter use of the area. CMH provides helicopter access into the park from two lodges outside the park boundaries and from a helipad located outside the village of Brisco.

Objectives:

To provide a reasonable level of access to the park while minimizing the effects on the environment, wildlife and other visitors' enjoyment of the park.

Actions:

- Continue to regulate helicopter access by Park Use Permit.
- Work with the Ministry of Forests to provide signage at Rockypoint Trail prohibiting snowmobiling in the park.

- Seek cooperation from other government agencies and communities surrounding the park to deal with the planning for any improvement of, or increase in access points to the park.
- Use registration boxes and visitor surveys at access points to monitor users' experiences and social conditions regarding access issues.
- Upgrade the Bugaboo Creek road access in the park to the Conrad Kain trailhead.

Management Services

Bugaboo Provincial Park is administered from BC Parks Kootenay District Office, located in Wasa, B.C. Staff ensure that various management responsibilities are carried out according to the *Park Act* and the *Parks and Recreation Area Regulations* and the established policy and procedures of the Ministry of Environment, Lands and Parks. This includes such priorities as regulating public use to ensure safe and appropriate use of the park; maintaining trails and facilities; managing permits for commercial uses and research within the park; minimizing effects from visitor use; conducting environmental rehabilitation and management projects; and collecting data on the park's natural and cultural values.

The maintenance of facilities such as the Kain Hut absorbs public resources. Alternatives to facility operations and management need to be considered.

Objectives:

To carry out management responsibilities according to the *Park Act, Parks and Recreation Areas Regulations* and the guidelines of this management plan.

To maintain a public role in park management.

To explore options for park management that are consistent with BC Parks policies and priorities.

Actions:

- Liaise on a regular basis with groups representing park users and commercial operators to ensure that park management benefits from the greatest possible input.
- Seek input from user groups and the public regarding alternatives for facility operations and management, including the management of the Kain Hut.

Communications

Introduction

Providing current information about provincial parks is an important aspect of visitor service management. Information about Bugaboo Provincial Park serves a number of functions. First, it assists visitors in planning their visit. Second, this information promotes outdoor recreation etiquette, respect for the natural environment, safe use and careful appreciation of the wide variety of values found within the park. Third, it fosters an awareness of the cultural and conservation values and features of this area.

Bugaboo Provincial Park provides opportunities for recreation in a semi-primitive and primitive setting. It offers challenges to the backcountry enthusiast who enjoys an experience in a rugged and remote area. The information provided about this park will reflect its wilderness recreation emphasis.

Marketing and Promotion

Promotion of a park can affect the level of use and the type of visitors it attracts. Consequently, promotion strategies must be consistent with the management plan of the park.

Besides BC Parks, CMH, mountaineering clubs, guide books and tourism agencies promote the Bugaboos. Coordination is needed to ensure that promotional information is consistent, accurate and in keeping with park objectives, and that marketing is consistent with the role of the park and objectives of the management plan. There are concerns that promoting backcountry recreation can lead to significant increases in visitors, which in turn can affect park resources and wilderness qualities.

Objectives:

To ensure the promotion and marketing of Bugaboo Provincial Park is consistent and appropriate with the principles and objectives established for this protected area.

To highlight the park's role in protecting internationally significant recreation features and in conserving important habitat and biodiversity values.

To provide accurate and appropriate information for low impact backcountry recreation opportunities.

Actions:

- Work with commercial operators, tourism associations, outdoor recreation clubs and the
 media to portray the park in an appropriate manner and create expectations befitting the
 remote backcountry nature of the park.
- Work with commercial operators through a code of conduct to develop a coordinated approach in advertising.
- Use an informal approach to promoting and advertising the park.
- Create an information strategy that will focus on maintaining low backcountry use levels. Focus promotions on retaining the backcountry character of the park.

Pre-Trip Planning

Awareness and pre-trip planning information can help to set expectations and influence attitudes and behaviors. Specific information on pre-trip planning can be found at the BC Parks District Office. Printed brochures detailing the park resources, facilities, trails and safety considerations can be found at local BC Tourism Infocentres.

Due to the variable climate, rugged nature and remoteness of this park, visitors are urged to be especially vigilant in their pre-trip preparations. They are encouraged to seek additional information, including weather reports and trail conditions, before planning a trip. Communications from within the park are limited to a park ranger's radio and rescue services are not readily available.

Objectives:

To provide consistent, current and accurate information to visitors to plan their trip to Bugaboo Provincial Park.

To clearly indicate to visitors and other tourism outlets that the rugged and remote nature of this park requires special pre-trip planning considerations.

Actions:

Work with local climbing communities and tourism associations and permittees in providing
appropriate pre-trip planning information in a responsible manner; e.g., the need for
mountaineering skills in order to climb the main routes in the park.

- Identify opportunities through park information for overnight camping outside the park, such as nearby Forest Recreation Sites.
- Ensure brochures and guides on Bugaboo Provincial Park are current and are updated periodically.
- Maintain the natural character of the park by limiting any signage to where it is necessary for visitor safety or the protection of sensitive sites.

Natural and Cultural Heritage Education

Bugaboo Provincial Park is a backcountry area that protects internationally significant recreation and natural values. It plays an important role in sharing information about natural processes and special features as well as playing a role in conserving biodiversity on a regional and provincial level.

The park contributes to the substantial mountaineering history of the East Kootenays along with several other National and Provincial Parks. There are several themes that could be explored in an education or research program. These include:

Natural Heritage: geological processes unique to the Bugaboos; active glaciation; alpine ecosystems.

Cultural Heritage: mountaineering history of the Bugaboos.

Backcountry Recreation: international stature of recreation activities found in the Bugaboos; outdoor safety and climbing ethics; human waste disposal.

Objectives:

To share information about the park's natural, recreation and cultural features and values in the park in order to foster and maintain appreciation and understanding for its significance and the importance of protecting these features and values.

Actions:

• Produce education and information brochures on the themes described above, such as an interpretive display at Kain Hut and trailhead signage.

37

Plan Implementation

Introduction

This section compiles all of the actions listed throughout this management plan and lists them according to the priority they will receive.

The first list includes the **Highest Priority Actions**. It highlights actions that require attention in the near future.

The second list is the **Project Oriented Actions**. These are the actions that are a specific task or project. Park staff will review this list for upcoming budgets and annual work plans.

The third list is the **On-going Monitoring Actions**, which describes the actions that require ongoing or monitoring types of tasks or projects. This list will be reviewed by park staff to ensure that the overall intentions of this management plan are being followed.

Implementation of actions in this management plan is dependent on available financial and staff resources. Approval of this plan does not automatically constitute approval of funding for implementation.

Highest Priority Actions

- Mitigate impacts of helicopter activity on visitors by establishing flight paths and landing sites away from areas of concentrated visitor activity.
- Institute a program of site rehabilitation of those areas of the park where road construction, trail construction and non-conforming public uses have had an impact.
- Complete a vegetation inventory to locate and identify plant communities, rare species and threatened plant communities in the special features zones and in hiking areas.
- Prepare a vegetation management plan that addresses fire, disease and insect infestation in the special features zones.
- Ensure that access routes (roads) and areas adjacent to the park are managed in accordance with the *Forest Practices Code* guidelines regarding visually sensitive areas.
- Develop a climbing management plan, in concert with the climbing community, that includes strategies to address bolting, facilitating conflict resolution, reservations and protecting the natural climbing environment of the park.

- Require commercial permit holders to develop a five year business plan that is compatible
 with this management plan, to be updated and approved annually for their operations in the
 park.
- Retain existing guide-outfitting territory. No new expansions or additions to this territory will be permitted. Existing trapline holders will be permitted to continue trapping; however, BC Parks will endeavor to acquire trapping rights as they become available.

Project Oriented Actions

- Existing heli-hiking and heli-skiing permits will continue. No increase in the number of trails for heli-hiking and heli-skiing.
- Develop a public awareness program to foster respect for the park's vegetation and natural processes.
- Establish sanitary facilities that do not compromise the environmental integrity of the park.
- Develop a wildlife inventory, including baseline mapping for key species including mountain goat, grizzly bear, moose, caribou and amphibians.
- Develop, in concert with BC Environment, a long term wildlife management plan for the key species in the park. Major elements in this strategy include:
 - ongoing wildlife inventory;
 - role of park in providing 'connectivity' corridors for wildlife movement;
 - minimizing negative encounters between people and wildlife.
- Investigate expansion of climbing opportunities.
- Continue to authorize by Park Use Permit existing commercial heli-skiing activity within defined limits.
- Continue to authorize by Park Use Permit existing commercial heli-hiking activity within defined limits.
- Cooperate with the climbing community to distribute on-site information on rockclimbing and mountaineering ethics and safety.
- Undertake, in cooperation with First Nations, an inventory of the historic sites and values of the park.

- Ensure that research relating to the role of First Nations in the park involves the First Nations peoples and the Heritage Conservation Branch. Relevant research opportunities will require a Park Use Permit.
- Catalog and preserve historic summit registers and cairns.
- Manage recreation use in accordance with the park's zoning plan so that natural values will be minimally affected.
- Use knowledge gained from the proposed Backcountry Recreation Impact Monitoring (BRIM) assessments and the BC Parks Impact Assessment process to balance recreation use and preserve outdoor recreation features.
- Locate and design any additional facilities in harmony with the visual setting and in accordance with park zoning objectives. Investigate the development of new trails and routes.
- Provide information to backcountry users explaining winter hazards, personal safety concerns and wildlife etiquette.
- Provide the public with educational materials on safe wildlife viewing.
- Work with commercial tourism operators to ensure that information on nature viewing is implemented and is consistent.
- Upgrade Conrad Kain trailhead viewpoint with interpretation signs.
- Restrict glading to existing areas.
- Use the draft Backcountry Recreation Impact Monitoring (BRIM) process to assess with CMH the current conditions and the carrying capacity of the backcountry for commercial heli-skiing.
- Develop a backcountry management plan to balance commercial heli-skiing and backcountry touring to avoid conflicts.
- Using suitable environmental and social indicators, assess the current conditions and the carrying capacity of the backcountry for commercial heli-hiking.
- Review new commercial recreation activities through BC Parks Impact Assessment Policy.
- Limit new commercial recreation services to low impact proposals that do not require infrastructure to be located in the park in accordance with the KBLUP-IS.

- Continue to regulate helicopter access by Park Use Permit.
- Work with the Ministry of Forests to provide signage at Rockypoint Trail prohibiting snowmobiling in the park.
- Upgrade the Bugaboo Creek road access in the park to the Conrad Kain trailhead.
- Seek input from user groups and the public regarding alternatives for facility operations and management, including the management of the Kain Hut.
- Produce education and information brochures on the themes described above, such as an interpretive display at Kain Hut and trailhead signage.
- Through park information identify opportunities for overnight camping outside the park, such as nearby Forest Recreation Sites.
- Work with commercial operators through a code of conduct to develop a coordinated approach in advertising so as to not unduly promote the park.
- Use an informal approach to promoting and advertising the park.
- Create an information strategy that will focus on maintaining low backcountry use levels. Focus promotions on retaining the backcountry character of the park.
- Work with local planning processes, other government agencies and public interest groups to minimize impacts of adjacent industrial, commercial and recreational uses on the park's important recreation and conservation values.
- Propose to the Protected Areas Strategy Goal 2 Process for the West Kootenays the addition of the western portions of the spires.

On-going Monitoring Actions

- Protect sensitive or unique vegetation communities from the adverse impacts of recreational use by locating trails away from these areas.
- Encourage and support research aimed at a better understanding of the park's natural processes.
- Monitor the impacts of heli-hiking and other commercial activities on vegetation.

- Monitor water quality periodically and protect the groundwater, streams and lakes in the park from any interference.
- Ensure that trail development and maintenance minimize erosion and water contamination.
- Ensure that any recreational development minimizes impacts on wildlife and habitat.
- Cooperate with other government agencies, institutions and permit holders in gathering and sharing wildlife data.
- Monitor existing guide-outfitting, hunting, heli-skiing, heli-hiking and trapping activities to determine acceptable impacts.
- Work with BC Environment and other agencies in integrated wildlife management planning both inside and outside park boundaries to ensure the protection of representative and migratory wildlife.
- Work with local colleges, universities, permittees and corporate sponsors to establish funding for and to develop appropriate and timely research activities.
- Monitor impacts of climbing use, including climbing camps, and identify areas of concern through BC Park's draft Backcountry Recreation Impact Monitoring (BRIM) process.
- Continue to develop a database of climbing routes with the assistance of climbers.
- Monitor levels of use, site degradation, human waste disposal and garbage.
- Record levels of backcountry skier use in the park and their destinations to provide baseline information to establish management actions where needed.
- Seek cooperation from other government agencies and communities surrounding the park to deal with the planning for any improvement of or increase in access points to the park.
- Use registration boxes and visitor surveys at access points to monitor users' experiences and social conditions regarding access issues.
- Liaise on a regular basis with groups representing park users and commercial operators to ensure that park management benefits from the greatest possible input.
- Work with local climbing communities and tourism associations and permittees in providing
 appropriate pre-trip planning information in a responsible manner; e.g., the need for
 mountaineering skills in order to climb the main routes in the park.

- Ensure brochures and guides on Bugaboo Provincial Park are current and are updated periodically.
- Maintain the natural character of the park by limiting any signage to where it is necessary for visitor safety or the protection of sensitive sites.
- Work with commercial operators, tourism associations and the media to portray the park in an appropriate manner and create expectations befitting the remote backcountry nature of the park.

Appendices

Appendix A

BC Protected Areas System Goals

The Protected Areas System administered by BC Parks has two mandates:

- conserve significant and representative natural and cultural values
- provide a wide variety of outdoor recreation opportunities

Conservation 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 and cultural heritage values of each ecosection.

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.

Recreation

Within the recreation mandate, BC Parks has four goals:

Goal 1 Tourism Travel Routes

To provide park attractions and services which enhance tourism travel routes.

Goal 2 Outdoor Recreation Holiday Destinations

To provide park 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 B

BC PARKS MANAGEMENT PLANNING ZONING SYSTEM DESCRIPTION

	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 Park Act.	Defined by ecosystem limits and geographic features. Will be designated under the Park Act.
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, crosscountry 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. Roads, trails, campgrounds, picnic/play areas, boat launches, visitor and administrative buildings, service compounds, gravel pits, disposal sites, parking lots, etc.	Moderately developed for user convenience. Trails, walk-in/boat-in campsites, shelters, service 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.
CONSERVATION MANAGEMENT GUIDELINES	Intensive management of natural values and/or control of visitor activities. Landscape changes may occur to increase carrying capacity of the area. Direct management intervention may occur to protect natural values and enhance recreation opportunities. Compatible scientific research and monitoring encouraged.	Management oriented to maintaining a natural environment where visitor access may be restricted to preserve the recreation experience or to limit impacts. Direct management intervention may occur to protect natural values or enhance recreation opportunities. Compatible scientific research and monitoring is encouraged.
RECREATION MANAGEMENT GUIDELINES	Management oriented toward maintaining a high quality recreation experience. Requires careful management and upkeep of intensive use outdoor recreation facilities. Facilities designed for efficient operation while remaining unobtrusive to the park visitor.	Management oriented to presenting high quality recreation experiences in a natural setting. Separation of less compatible recreational activities and methods 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	
Interpretive 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.	
Natural values are to be protected. Interpretation facilities to be limited to small areas.	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. Natural processes will normally be allowed to continue unhindered; in some instances, protection of rare, unique, outstanding, threatened and endangered natural values may require specific management intervention. Visitor access may be restricted to preserve the recreation experience and limit impacts. Any scientific study must be clearly justified and carried out under permit.	High level of management protection for pristine wildland. Active resource management programs may be allowed if essential for protection of significant natural values. Visitor access may be restricted to protect the natural environment and visitor experience.	Highest level of management protection for pristine wildland. Natural processes will be allowed to continue unhindered. Specific management intervention will not be permitted unless essential to protection or survival of significant natural values. Visitor access may be restricted to protect the natural environment and visitor experience.	
Management dedicated to educating visitors through interpretation of features. Visitor access may be restricted to limit damage to features. Facility development and visitor use will be determined by the area's carrying capacity.	Management dedicated to maintaining a visitor recreation experience of solitude, freedom, and physical challenge in a primitive natural setting. Facility development and visitor use will be determined by the area's carrying capacity.	Management dedicated to maintaining a visitor recreation experience of solitude, freedom, and physical challenge in a primitive natural setting. Visitor use will be determined by the area's carrying capacity.	
Tidepools in Botanical Beach Park; Sunshine Meadows in Mount	Quanchus Mountains Wilderness in Tweedsmuir Park; Moose River	Central Valhallas Wilderness in Valhalla Park; Garibaldi Park Nature	

Valley in Mount Robson Park.

Assiniboine Park.

Conservancy area.

Appendix C

Kootenay and Boundary Land Use Plan Chapter 4

4.1 **Introduction**

One of the purposes of regional and sub-regional land use planning processes, including the Kootenay/Boundary Regional Land Use Plan, has been to implement the provincial government's protected area strategy (PAS). The PAS has two goals:

Goal 1 - Ecosystem Representation: To protect viable 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.

Goal 2 - Special Features Protection: To protect the special natural, cultural heritage and recreation 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.

Through the Kootenay/Boundary Regional Land Use planning process, the provincial government, in July 1995, established sixteen new protected areas. Through designation under the provincial *Park Act*, all new protected areas have become class A provincial parks. Consequently, the terms 'provincial parks' and 'protected areas' are used interchangeably in the KBLUP Implementation Strategy.

The establishment of the new protected areas plays a key role in the realization of the Plan's environmental conservation objectives, particularly through contribution towards general biodiversity maintenance and the protection of key habitat areas for maintenance of species health. The parks also contribute significantly to regional recreational and cultural heritage objectives, as well as to long-term economic objectives.

The following section identifies general management objectives and strategies for the region's new protected areas. A description of each new part and an indication of further planning priorities is included in Table 4.1.

4.2 General Management Objectives and Strategies for New Parks in the Kootenay/Boundary Region

PROTECTED AREA OBJECTIVES	MANAGEMENT STRATEGIES
Park Planning	
1. To develop comprehensive park master plans, over time, for each new protected area in order to ensure the maintenance of the conservation, recreation and cultural heritage values within the new protected	1.1 Park master plans will be developed for each new protected area in accordance with the availability of budget resources and the general park planning priorities identified in the overview of new protected areas with Appendices 1-7.
areas.	1.2 Park master plans will be developed with the benefit of extensive public and inter-agency participation. Among other things, the plans will define park-specific management objectives, acceptable levels of use, accepted uses, zoning and other strategies that will minimize conflicts, and help ensure the integrity of important park values.
	1.3 Park master planning processes will consider existing uses and management objectives and strategies (as identified in this regional plan and in operational level plans) for lands that are adjacent to the protected areas.
	1.5 Provincial park master planning processes will include consultation with tourism industry representatives in order to examine potential commercial opportunities within provincial park land, subject to the prime goal to protect the conservation, recreation and cultural heritage values within the parks. Commercial opportunities will be assessed with a view towards limiting/locating the development of physical commercial infrastructure (e.g. roads, lodgings, staging areas, etc.) on the periphery of park boundaries in order to minimize park impacts.
	1.7 Pending the development of comprehensive park master plans for each new protected area, the management guidance provided in BC Parks' "Management Direction Statements" will be used to direct park management and operations

1.7 Upon completion of Goal 2, management direction
statements will be prepared for those new protected
areas.

1.8 Resource issues adjacent to park boundaries will be identified and the responsible government agencies will work together to address them.

Pre-Existing Tenures and In-Holdings

2. To recognize the legal rights of preexisting tenure holders and landowners within newly established parks in the region, and to deal fairly with those interests.

- 2.1 Pre-existing mineral and timber tenures and other tenures/encumbrances associated with commodity extraction (e.g. gravel reserves) will be discontinued within new protected areas. The terms of discontinuance will be negotiated with owners of pre-existing tenure interests, in accordance with provincial policy respecting resource rights compensation. Tenure discontinuance negotiations will also consider ongoing silviculture obligations (e.g. free-to-grow requirements), and rehabilitation of harvested areas and roads in key locations.
- 2.2 Pre-existing tenures within new protected areas for utility rights-of-way, communication sites, grazing, commercial backcountry recreation, commercial heliskiing or hiking, guide-outfitting, trapping, water works and use, etc., will be permitted to continue, in accordance with the existing management conditions attached to those tenures. In the future, the management conditions attached to those tenures may be amended to comply with the requirements of park master plans that are developed for individual protected areas.
- 2.3 Existing grazing authorizations issued under the *Range Act* within new (1995) protected areas will continue to be managed according to the *Range Act* and are fully transferable. Where pre-existing tenures other than *Range Act* tenures lapse or are voluntarily surrendered by a tenure holder, the province is under no obligation to re-issue the tenure rights to a new party. Whether or not tenure rights are to be re-issued should be resolved through the protected areas management planning process.

	2.4 Existing owners of private land in-holdings within
	new parks will continue to exercise their property
	rights, and existing opportunities for access to those
_	properties will be addressed.
Natural Occurrences	
3. To protect key park values and	3.1 Where appropriate, natural occurrences in new
adjacent private property, as appropriate,	parks, such as fires, insects, forest diseases, will be
from natural occurrences in protected	managed as in other provincial parks, through
areas.	consultation and joint action by BC Parks, BC
	Environment and the Ministry of Forests at the District
	level.
	3.2 Fire management plans will be developed for areas
	within new parks that are proximate to residential
	settlement, and where traditional land management
	includes burning for winter range enhancement.
Park Management	
4. To maintain ecosystem representation	4.1 Park management emphasis will be placed on
and ensure protection of key representative	maintaining the ecosystems and features for which
features.	these areas were established.
reatures.	
	4.2 Parks will be managed to complement biodiversity
	objectives across landscape units, where appropriate.
	4.3 Where existing grazing tenures occur, alpine and
	subalpine grassland meadows will be maintained in
	conjunction with MOF through application of high
	elevation grassland guidelines.
	4.4 Sound park management relies on good resource
	information. BC Parks, BC Environment and the
	Ministry of Forests will work together to collect
	resource inventory for the new parks.
	4.5 The natural diversity of previously harvested sites
	and affected habitats will be restored through
	negotiation of silvicultural obligations.
	negotiation of surfacement configurous.
	4.6 Previously open forests and grasslands have
	become ingrown as a result of fire suppression. Where
	appropriate, vegetation management will be
	undertaken primarily using fire to restore natural
	grasslands.

5. To ensure protection of key species and their habitats.	5.1 BC Parks will work with other agencies to ensure connectivity of wildlife habitat between the park and surrounding area.
	5.2 Opportunities to establish grizzly bear benchmarks for scientific study and management will be investigated.
	5.3 Rare, endangered and at risk species, and their habitats will be protected.
	5.4 Ungulate habitat and cover and site specific features will be considered in management processes.
6. To maintain backcountry recreation	6.1 While BC Parks will continue to manage parks to
opportunities.	provide a wide range of recreational experiences,
	protected areas will provide the primary opportunities
	for primitive and wilderness recreation. Where
	appropriate, existing access and trails within protected
	areas may be closed or decommissioned to support
	primitive recreational experiences. Similarly,
	recreational access to some areas may be limited to
	maintain the quality of recreational experience.
	6.2 Levels of recreational use and associated impacts
	will be monitored and management applied where
	necessary to maintain the wilderness qualities, where
	appropriate.
	6.3 BC Parks will work with MOF to promote good
	visual design of logging and appropriate access
	management in areas adjacent to parks.
7. To plan and manage parks in a manner	7.1 Local First Nations will be consulted to establish
which reflects the cultural heritage.	traditional use in the area.
	7.2 Options to work in cooperation with First Nations
	in the management of areas will be identified in the
	treaty process.
	7.3 European history will be considered in the
	management actions.

Table 4.1

New Protected Areas (Class A Provincial Parks)

Established as a Result of the Kootenay/Boundary Regional Land Use
Plan

Park Name		Approx. Area (ha)	Priority to Develop Park Management Plan
East Kootenay			
Akamina-Kishinena		10,921	Moderate
Bugaboo		13,646	High
Upper Cummins		61,081	Low
East Purcells		36,938	Moderate
Elk Lakes		17,245	High
Gilnockie		2,822	Low
Height of the Rockies		53,964	High
	subtotal	141,717	
West Kootenay			
Gladstone		39,361	High
Goat Range		78,936	High
Granby		40,845	High
Kianuko		11,677	Moderate
Lockhart Creek		3,751	Moderate
West Arm		25,254	High
Syringa		4.191	Low
Kokanee Glacier Extension		6,203	Moderate
West Purcells		32,662	Low
	subtotal	242,880	
	Total Area	383,182	

Note: the Findlay corridor within the East Purcells is protected under the *Environment and Land Use Act*.

Appendix D

SUMMARY / ANALYSIS OF PUBLIC COMMENTS FOR BUGABOO PROVINCIAL PARK and HEIGHT OF THE ROCKIES / ELK LAKES PROVINCIAL PARKS

In an effort to produce the best management plan possible for Bugaboos, Height of the Rockies and Elk Lakes Provincial Parks that addresses the needs of the general public, a major public consultation process was included in the planning process. This is standard policy of BC parks which is also consistent with the management direction for the planning of new protected areas established through the Kootenay and Boundary Land Use Plan Implementation Strategy (KBLUP-IS).

Public Process

The planning process had two stages of public involvement; firstly, working draft plans for both parks were prepared and mailed to various key interest groups in early November 1997 for review. From the comments generated the plan was revised and presented to the general public through a series of open houses.

Secondly, open houses were held in December at communities in close proximity to the parks, including Golden, Invermere, Cranbrook, and Sparwood. Displays with photographs and maps were used by park staff to explain the draft management plan to the public. About 120 people in total attended the meetings. A one month period was set aside to receive letters and comment sheets. Written submissions were received from a wide spectrum of park users. For Bugaboo Park eleven written submissions were received, while Height of the Rockies/Elk Lakes received seventeen.

General Public Comments

A number of people voiced their appreciation for the opportunity to contribute to the management plan. It has been nearly ten years since there has been public consultation for planning in the region. As many people were not very familiar with park planning concepts such as zoning or as familiar with some of the management strategies resulting from the KBLUP - IS such as recognition of existing tenures, many of the comments on the draft management plans reflected a need for clarification of these pre-determined conditions.

The following are the main comments provided by the public consultation process relating to the management issues for each park. These comments are not all inclusive. They do not include the numerous editorial comments or questions of clarification. In most cases these changes were incorporated in the revised plan and/or further explanation given for clarity. Also provided in the summary is a brief response and what the plan was recommending.

Specific Public Comments for Bugaboo Provincial Park Draft Management Plan

Issue: Park Role, Vision, Zoning

As Bugaboo Park is relatively large and has some outstanding natural features, there was a feeling that it should be managed as a wilderness area and that the park zoning should reflect this.

Response: The definition of Wilderness in the BC Parks Zoning Policy precludes the park from being zoned wilderness. Types and levels of use in the park exceed what is expected in wilderness areas. The concentration of climbers in the southern part of the park and the distribution of heli-hikers and heli-skiing throughout the rest of the core areas are key limiting factors.

Plan Recommendation: With the exception of zoning the riparian habitat in the valley bottoms of Vowell and Malloy Creeks as Special Features Zones, and a small Intensive Recreation Zone covering the main park road and parking lot, the rest of the park is zoned natural environment to reflect the requirements to manage backcountry recreation uses and their impacts.

Issue: Reduce and or Eliminate Air Access to the Park

Air access is viewed by many, especially non-resident visitors, as unique and necessary for their enjoyment of the park, while others believe the impacts on solitude and wildlife are too severe and should be discontinued.

Response Air access is a pre-existing use that began several years before the park was designated and it was recognized as important to continue in the Kootenay and Boundary Land Use Plan.

Plan Recommendation: To continue to allow air access, but within definable limits that would seek to reduce impacts. Mitigate impacts of helicopter activity on visitors by establishing flight paths and landing sites away from areas of concentrated visitor activity. Development of a backcountry management plan would also help to reduce impact on other users by establishing mechanisms where backcountry recreation could be coordinated between commercial and non-commercial users to avoid conflict.

Issue: Overcrowded Climbing/Poor Climbing Ethics

Most agree that the Conrad Kain Hut is at its maximum capacity for use, but the perception of overcrowding on the climbing routes varies. Many people have expressed concerns about debris left at the base of climbs and unregulated bolting of new climbing routes. Bolting of climbing routes is a benefit to many climbers who appreciate the convenience and added safety of the bolts while others believe it takes away from the natural climbing experience.

Response Overcrowding does occur at the most popular routes during peak times, as evidenced by lineups, but there appears to be a lack of awareness of the numerous other routes in the park. There are ample opportunities to meet the climbing needs and aspirations of visitors. A balance needs to be achieved to ensure a variety of opportunities is available.

Plan Recommendation: Develop with the climbing community a climbing management plan that seeks to better balance and manage this world class climbing resource.

Issue: Develop more trails and provide camping at the trailhead

Several people suggested expanding facilities in the park, with specific proposals for camping at the trailhead.

Response While some people do overnight in their vehicles at the trailhead, there is insufficient room to develop a campground at this location. A Forest Service Campground just outside the park boundary already provides overnight accommodation.

Plan Recommendation: The trailhead and road access will be improved but no camping facilities are proposed at the trailhead. Other hiking opportunities will be explored but no new trails are being proposed at this time.

Issue: Minimizing Impact from Adjacent Areas

The harvesting of resources adjacent to the park boundaries was brought forward as a major concern that needed to be brought to the attention of other governing agencies with the objective of ensuring that impact on park values is minimized. The impact of logging will affect both wildlife values and the visual integrity of the park.

Response While adjacency issues are outside BC Parks statutory authority, all participants in the Kootenay and Boundary Land Use Plan recognized the need to work in a cooperative manner to ensure the land use plan is implemented to the optimum benefit of the public.

Plan Recommendation: Provide advice to the Ministry of Forests and forest licensees to help ensure, through the Forest Development Plan Review Process, that areas outside the park boundary are managed in accordance with the *Forest Practices Code of British Columbia Act* to protect viewscapes.

Specific Public Comments for the Height of the Rockies / Elk Lakes Management Plan

Issue: Role, Vision Zone

Public opinion generally varied between having these parks developed and managed for increased recreational use and keeping these areas primitive and wild. The fundamental issue which would define the recreation role and affect the vision for the park was whether wilderness recreation zoning would be the dominant zoning of the park.

Response: The BC Parks Zoning Policy considers many factors in the selecting of zones, including existing uses and proposed management. A number of existing tenures; e.g., guide-outfitting, are required to be continued as a result of the Kootenay and Boundary Land Use Plan Implementation Strategy. These uses, including hunting, preclude applying the wilderness conservation zone.

Plan Recommendation: Three zones have been established - special features, natural environment and wilderness recreation. The latter covers 98.5% of the park.

Issue: Long Term Management of Wildlife Values

There was great concern expressed for a comprehensive strategy to manage wildlife for their long term sustainability. Mountain goats were of particular concern. The lack of good inventory and understanding of what needs to be done to accomplish this was emphasized, along with the need to do extensive monitoring of impacts.

Response BC Parks is in full agreement with these comments.

Plan Recommendation: Develop a separate wildlife management plan for mountain goats including determining the requirements for sustaining viable populations.

Issue: Adjacent Land Management

It is important to coordinate park management planning with land use planning outside the park. Currently there are plans to harvest the forests adjacent to the park as well as tenured coal resources which could be extracted at sometime in the future although there are no current exploration or development proposals.

Response While adjacency issues are outside the statutory authority of BC Parks, all participants in the Kootenay and Boundary Land Use Plan recognized the need to work in a cooperative manner to ensure the land use plan is implemented to the optimum benefit of the public.

Plan Recommendation: Participate in coordinated management planning to address the impact on park values of industrial activities in adjacent resource management zones. Provide advice to the Ministry of Forests and forest licensees to help ensure, through the Forest Development Plan Review Process, that areas outside the park boundary are managed in accordance with the *Forest Practices Code of British Columbia* to protect viewscapes. Work with the Ministry of Employment and Investment and BC Environment to ensure adequate re search and assessment to minimize the impact on park values in the event that coal resources are extracted in proximity to the park.

Issue: Stocking of Lakes

Some people felt that it is inappropriate to be artificially stocking lakes in a wilderness area

Response Most of the lakes in these parks are not natural fisheries. Prior to park designation they had been repeatedly stocked for decades and some are popular destinations for anglers.

Plan Recommendation: Assess the stocking of lakes in the parks in concert with BC Environment to determine which lakes should continue to be stocked. In the interim continue to stock Upper and Lower Aosta Lakes, Deep Lake, Driftwood Lake, Duck Lake, Frozen Lake, Riverside Lake and Monument Lake.

Issue: Snowmobile Use

Snowmobilers want to continue to use Abruzzi Creek while some people believe that they are having an impact on wildlife and certainly wilderness solitude values.

Response While the impact of snowmobiles has been documented for other jurisdictions the impacts can vary with site conditions. The impacts of this activity have not been assessed for these parks.

Plan Recommendation: Continue snowmobiling in Abruzzi Creek, but monitor and assess the impact of continuing snowmobile and mountain bike use in the Abruzzi Creek corridor (seismic road), through the BC Parks Impact Assessment Process Policy, including an impact assessment of these uses on wildlife values.

Issue: Expand trails and camping facilities

Some people felt that more trails and campsites should be built.

Response These parks are wilderness areas that currently experience very low use. Expanding facilities is neither justified nor desirable at this time. Increasing the man made elements in these parks reduces the quality of the wilderness experience and impacts natural values such as wildlife.

Plan Recommendation: Retain the existing level of facilities

References Cited

Government of British Columbia, The East Kootenay Land Use Plan, Queen's Printer, 1995

Government of British Columbia, <u>The Kootenay-Boundary Land Use Plan - Implementation Strategy</u>, Queen's Printer, 1997

Ministry of Environment, Lands and Parks, <u>Bugaboo Provincial Park Management Plan</u>
<u>Background Document</u>, unpublished, 25 pp., 1996

Ministry of Environment, Lands and Parks, <u>Bugaboo Alpine Recreation Area and Bugaboo</u> <u>Glacier Provincial Park Summary Report</u>, unpublished, 62 pp., 1992

Ministry of Environment, Lands and Parks, <u>Bugaboo Alpine Recreation Area and Bugaboo</u> <u>Glacier Provincial Park Background Report</u>, unpublished, 96 pp., 1992

Ministry of Environment, Lands and Parks, Ministry correspondence, 1996

Protected Areas Strategy of BC, <u>Outdoor Recreation in British Columbia</u>; <u>Supply and Demand</u>; <u>Issues and Trends</u>, Queen's Printer, 1994

Ministry of Environment, Lands and Parks, <u>Draft Management Direction Statement of Bugaboo</u>
Provincial Park, unpublished, 1996

Ministry of Environment, Lands and Parks, <u>Interim Policy Statement for Bugaboo Alpine</u> Recreation Area. Second DRAFT, unpublished, 1976

Ministry of Environment, Lands and Parks, <u>Bugaboo Provincial Park Brochure</u>, Queen's Printer, 1996

Ministry of Forests, <u>Height of the Rockies Wilderness Area Wilderness Management Plan</u>, Queen's Printer, 1993

Ministry of Environment, Lands and Parks, <u>Height of the Rockies Management Plan</u>
<u>Background Document</u>, unpublished, 1995

BC Parks, Elk Lakes Park and Recreation Area; Interim Management Statement, effective 1988 - 1990, unpublished, 1988

BC Parks, <u>Management Direction Statement: Elk Lakes Provincial Park</u>, compiled by J. Pinsonneault, unpublished, 1996

BC Parks, <u>Management Direction Statement: Height of the Rockies Provincial Park</u>, compiled by J. Pinsonneault, unpublished, 1996

Wayne McCrory and Erica Mallam, <u>Grizzly Bear Hazard Evaluation in Elk Lakes Park and Recreation Area</u>, Mt. Assiniboine Park and Purcell Conservancy for BC Parks Division, unpublished, 1988