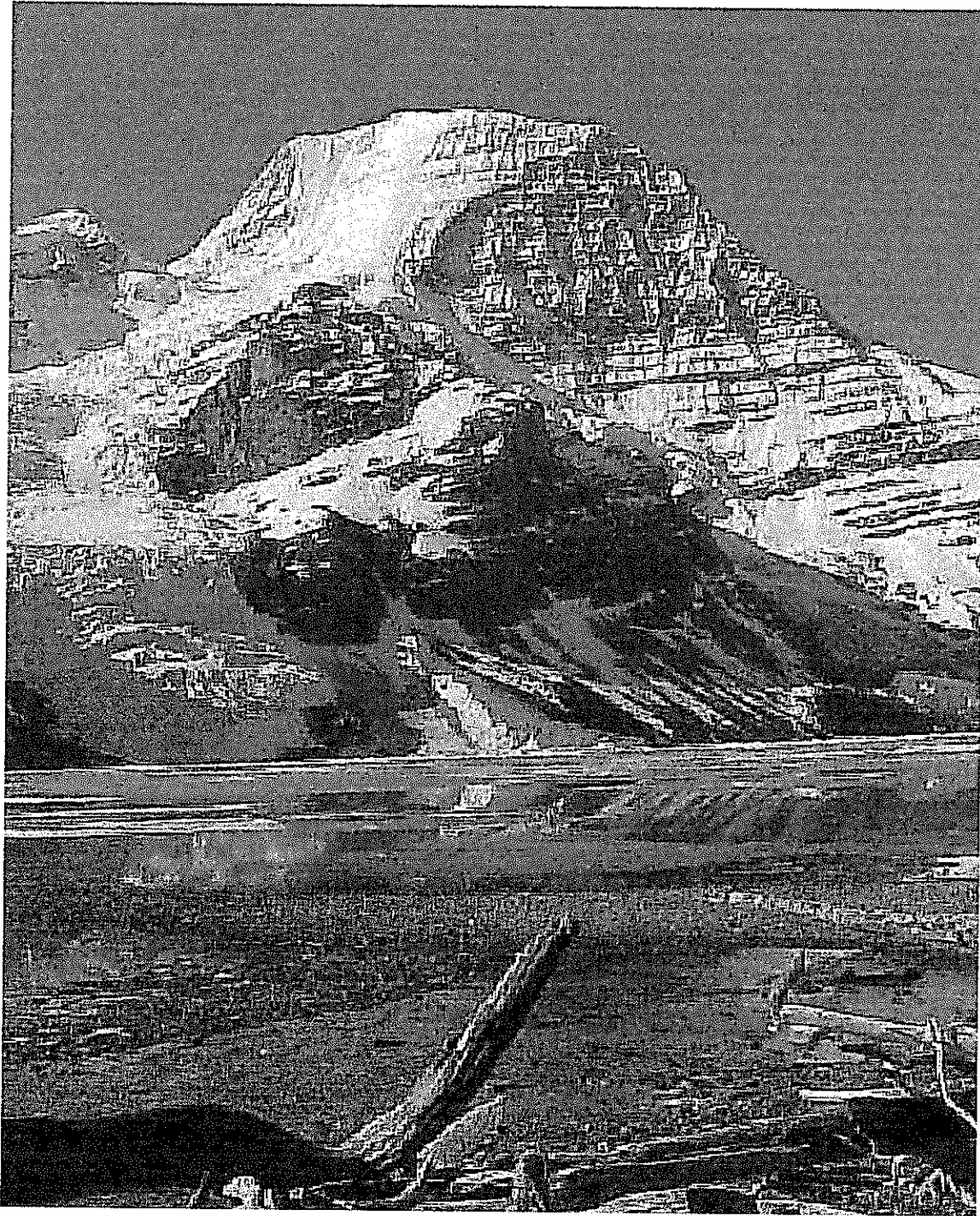


BERG LAKE CORRIDOR PLAN



July, 2000
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BERG LAKE CORRIDOR PLAN

INTRODUCTION

The Berg Lake area has been the focus of increasing and intensive recreation use during the last 80 years.

Concern about preserving the environmental and social integrity resulting from the impacts of long-term recreation has resulted in several studies being done on the Berg Lake Trail during the past 20 years. One of the recommendations from the 1992 Mount Robson Master Plan was to develop a management plan for the trail to include: assessment of carrying capacity, means of controlling numbers, specific trail and facility planning and development; day hike opportunities from Berg Lake; horse use on the trail; reservation system for the Robson Pass horse camp; and firewood use.

Feedback from the Master Plan, user surveys, and on site-interviews have been used to shape the direction of this document. A Masters thesis which developed a methodology for Limits of Acceptable Change monitoring was completed and implemented.

This plan describes proposed management direction for dealing with how visitor experiences and the resource base may be managed and monitored to ensure the long-term environmental sustainability and recreational sustainability of the Berg Lake area.

VISION STATEMENT - FOR THE YEAR 2025

The Berg Lake area is recognized by visitors as a special place within Mt. Robson Provincial Parks where visitors can experience the natural heritage values and cultural traditions of Mount Robson.

The visitor to this area will view and experience the most singularly spectacular peak contained in any park in Canada from two different sides in a natural setting that is managed to maintain the integrity of its ecological processes.

Visitors coming to Berg Lake will have the freedom to choose between methods of access that are ecologically sustainable. Each method will have management objectives, quotas and restrictions to minimize environmental impact. Visitors will have the freedom to choose from a variety of day hikes in the Berg Lake area. Visitors will be given the opportunity to have the necessary awareness and understanding to behave in an appropriate manner and to participate in the mission of environmental stewardship.

The level of development provided in the Berg Lake Management Plan will not have expanded. When renovated or redeveloped, structures and trails will be located and designed in harmony with the landscape and cultural heritage.

Environmental stewardship will be practised by BC Parks and promoted to visitors to the Berg Lake area.

THEMING

Theming or packaging, is a method of identifying the experience which BC Parks is trying to offer in an area through management objectives. As part of the the Mt. Robson Master Plan, the following two themes were identified:

1. "Hiking the Berg Lake Trail" is an internationally popular backcountry experience for hikers and is ranked as one of the ten best hikes in Canada. The spectacular vistas of waterfalls, forests, glaciers and mountains make this one of the outstanding hikes of the Rocky Mountains, attracting visitors regionally and internationally. Visitors generally take two to three days to enjoy this part of the park; however, some take a week to explore the backcountry around Berg Lake.

2. "Climbing the Monarch of the Rockies" rates as a world-class climb. Mt. Robson is sought by experienced climbers internationally. Depending on the route and the weather, this gruelling climb takes between four days to a week.

ECOSYSTEM INTEGRITY

ZONING

In planning and managing parks, BC Parks relies on zoning, which divides a park into logical units to apply uniform and consistent management objectives. Through identification of natural and recreational values, and analysis of existing and projected patterns of access and recreation use, the zoning defines levels and criteria for resource and visitor services management.

The Berg Lake area encompasses three different zones. Although zones usually cover larger areas, features within a zone may have special protection beyond the general zone. i.e. a sensitive aquatic habitat may have full protection within an intensive recreation zone. (include map)

Wilderness Conservation Zone

The objective of this zone is to protect a remote, undisturbed natural landscape and to provide unassisted backcountry recreation opportunities dependent on a pristine environment where no motorized activities are allowed. Development is nonexistent and management strategies are directed towards conservation of the resource while allowing wilderness recreation use.

The Mumm Basin and Whitehorn Mountain area is included in this zone.

Wilderness Recreation Zone

The objective of this zone is 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. Facility development is minimal, at a level sufficient to satisfy user needs and concentrate use to protect the overall environment of the park.

Mt. Robson and Snowbird Pass area are included in this zone.

Natural Environment

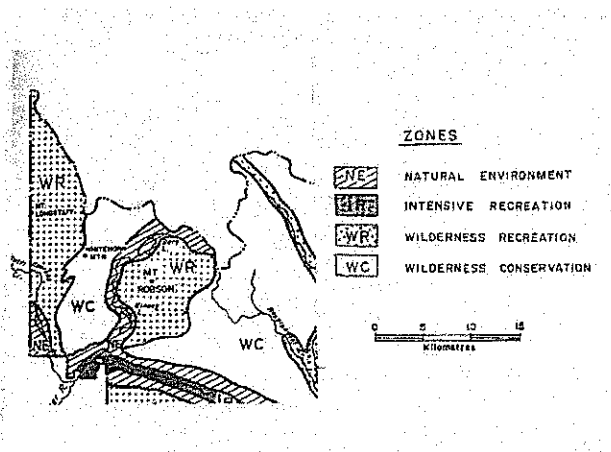
The objective of this zone is to protect scenic values and to provide for backcountry recreational opportunities in a largely undisturbed state. The main management concern is keeping impacts below levels that will impair park resources or significantly reduce user satisfaction.

The 22 km trail corridor is included in this zone.

Intensive Recreation

The objective of this zone is to provide for a variety of readily accessible, facility-oriented outdoor recreation opportunities.

The Berg Lake trailhead and parking area is included in this zone.



RESOURCE MANAGEMENT

The following sections highlight components of the biophysical and cultural resources of Mt. Robson Provincial Park which are particularly significant in the management of the Berg Lake corridor area.

Conservation Policies

The following policies and guidelines will direct the backcountry management of Berg Lake:

Bear - People Conflict Prevention Plan

BC Parks Conservation Program Policies

Impact Assessment - all new, or enhanced, facilities and activities will be subject to a pre-screen assessment prior to consideration being given to the project. The complexity of the project will determine the need for a more enhanced assessment.

Wildlife/Danger Tree Assessment - any danger trees removed will only be done according to the provincial criteria and by certified staff. No trees will be cut or removed unless they are determined to present a hazard to the public or to facilities.

Vegetation

Efforts will be made to inventory any rare and/or localized plant communities of significant botanical and ecological value. All new developments will be subject to an Impact Assessment.

Known areas of significance to date

- *Cypripedium passerinum* and *Cypripedium parviflorum* orchids in the gravel flats at Kinney Flats & Whitehorn campground.



Wildlife

Grizzly bear(blue listed species), mountain goat, caribou and harlequin duck are some of the species of concern found within the area. Work to be done includes:

- grizzly migration corridors - assessment of need for fall closure in Mumm Basin
- determination of any critical habitat requirements for grizzly, caribou or any blue listed species
- harlequin duck survey

Geological

Efforts will be made to inventory any known fossil (trilobites) sites in the area.

Aquatic Resources

Water quality will continue to be monitored in areas of highest human use. Information and education goals will be used to maintain water quality and safeguard visitor health.

Cultural Resources

Hargreaves Cabin, built by the Hargreaves Brothers in 1927; the Alpine Club of Canada Inscription Rock; the Canadian National building at Kinney; and the bolts from the suspension bridge at Emperor Falls are all important cultural elements of the Berg Lake experience.

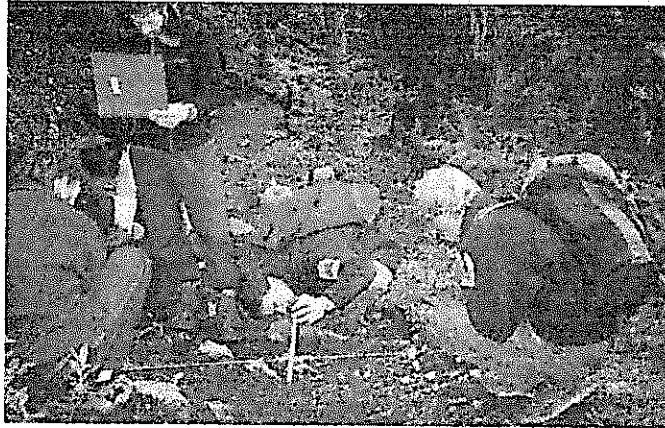
Further ongoing work will be required to identify and record any other cultural values of significance.

Limits of Acceptable Change

Limits of acceptable change (L.A.C.) is a tool which will be used to measure the effectiveness of ecosystem protection and the delivery of visitor opportunities in the planning area.

The concepts of limits of acceptable change will be applied annually at Berg Lake to monitor the health of the biophysical components of the ecosystem, specifically trails and campsites. The types of indicators which will be monitored include soil compaction, vegetative cover and conditions of trails. Monitoring is an integral part of the management of natural systems and is essential if BC Parks is to meet its conservation goals.

Periodically additional surveys will be conducted to assess perceptions of crowding, and the physical and aesthetic conditions of the trail and associated resources.



RECREATION OPPORTUNITIES AND MANAGEMENT

Hiking

The international popularity of the Berg Lake Trail has resulted in increasing use in the area. From 1987 to 1991, visitation increased from 2146 to 3663 parties, a 59% increase in 5 years. Concerns about crowding and environmental degradation were raised as issues in the Master Plan.

In 1993 user nights, rather than parties, were used to record visitation. Since then, the use has seen a gradual increase from 12,858 in 1993 to 13,660 in 1998. This stabilization in use can in part be attributed to a quota system for overnight use which was initiated in 1997. The use for 1999 dropped to 11,762 which can mainly be attributed to poor weather.

In addition to overnight use, during the 1998 season 43,193 day users hiked part of the Berg Lake Trail and 45,843 in 1999.

OBJECTIVE:

- a) To maintain all trails to an acceptable standard and to ensure environmental degradation does not occur. The trail standard will be as follows:

Parking Lot to Kinney Lake - Type 1
Kinney Lake - Berg Lake - Type 2
Other Trails - Type 3

- b) To provide a high quality backcountry experience for all hikers along the Berg Lake Trail.

ACTIONS:

- a) Continue annual LAC monitoring along the Berg Lake Trail.
- b) Identify trails requiring rehabilitation, reconstruction, construction, abandonment or seasonal or permanent closure.
- c) Record and monitor the amount of day use on the Berg Lake trail.
- d) To reduce incremental vegetation damage and avoid disturbance in a caribou calving area, the upper section of Snowbird Pass will be closed at the beginning of each season.
- e) To complete, on a priority basis, the following projects:
 - Emperor Hill
 - Kinney Lake high trail
- f) Investigate possibility of volunteer trail projects.

Backcountry Camping

Presently, 98 tentpads are found along the Berg Lake Trail. An established overnight capacity has been determined based on the number of developed tent pads. Through the establishment of a maximum capacity, the intent is to ensure that visitors continue to enjoy their backcountry experience in an "uncrowded setting"

The 98 site quota system and a reservation system were initiated in 1997. 25% of the backcountry campsites are available through reservation, the remaining 75% are available on a first come - first served basis.

Established Backcountry Campsites

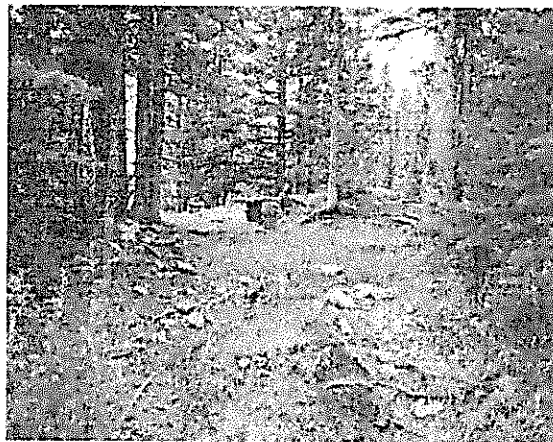
Kinney Lake	14
Whitehorn	22
Emperor Falls	9
Marmot	7
Berg Lake	26
Rearguard	5
Robson Pass	15

OBJECTIVE:

- a) To provide a high quality backcountry camping experience for all users along the Berg Lake Trail, without compromising the environmental integrity.
- b) To regulate the amount of overnight use on the Berg Lake trail by defining the maximum overnight carrying capacity - which will in turn be enforced by the mandatory registration procedure at the Visitor Centre.
- c) To maintain defined and designated wilderness campsites (tent sites) to minimize social and environmental impact.

ACTIONS:

- a) Rehabilitate any sites/trails that are discontinued or relocated.
- b) Recommend action for repair, reconstruction and upgrading of campsites and trails.
- c) Each campground will be furnished with a small map/info sign that will show the campground lay-out, campsites, pit toilet locations, bear poles, group use area and any restricted or sensitive areas.
- d) To complete the following projects:
 - Whitehorn & Berg Lake site re-habilitation
 - Marmot re-habilitation



Commercial Group Use

OBJECTIVE:

- a) To allow group use and/or recreational guiding that is compatible with the social and environmental carrying capacity.

STRATEGY:

- a) There will be no overnight commercial use of the Berg Lake Trail without a Non-Exclusive Commercial Guiding Single Trip Permit for the Berg Lake Trail.
- b) All groups must preregister.
- c) All commercial groups are restricted to camping at Whitehorn and Robson Pass.
- d) Maximum commercial group size along the Berg Lake Trail will be 12. (including the guides and support staff).
- e) No additional commercial facilities or developments will be permitted along the Berg Lake Trail.
- f) All commercial guided trips must be covered by a minimum of \$1,000,000 liability insurance.

ACTIONS:

- a) Park information and signing will be modified to inform visitors of the size restrictions and permit requirements for the season.
- b) Formal group sites will be developed at Whitehorn and Robson Pass.

School Group Use

OBJECTIVE:

- a) To provide a high quality backcountry learning experience for students - focusing on minimum impact camping/visitation and the values of a World Heritage Site.

STRATEGY:

- a) Maximum school group size to be 24 (20 students + 4 teachers/chaperones)
- b) Student/teacher ratio is to be 1:5.
- c) Whitehorn and Robson Pass will only be available to school groups. Advance reservations are required. A maximum of 9 tent pads will be allocated per group.
- d) Viewing of the Berg Lake orientation video in the Visitor Centre is mandatory for all members of the group prior to departure on the trail.
- e) School group use is limited to May - June 25 only.

ACTIONS:

- a) Investigate corporate funding possibility for Robson Pass shelter.

Helicopter Access

OBJECTIVE:

- a) To permit controlled, regulated helicopter access into the Robson River drainage.

STRATEGY:

All flights which land at either of the two designated landing spots, with the exception of management and emergency and/or rescue, will be according to the following conditions:

- a) Flights will be permitted Monday and Friday between the hours of 8 AM - 5 PM only.
- b) Landings will be restricted to the designated site at Robson Pass and south of the Extinguisher Tower and the Robson Glacier.
- c) A maximum of 32 people will be transported in any day.
- d) The flight path to Robson Pass will be as westerly up the Robson Valley as possible, minimum 1000' above ground level. All flights will exit via the Swift Current Valley. This route will only be altered by adverse weather conditions.

e) The flight path to Robson Glacier will be via the Robson or Swiftcurrent Valleys. The return route when there are no passengers will be through the Mt Robson/Resplendent Col as weather conditions permit.

f) Management flights will also be subject to these conditions.

g) These restrictions apply between the May long weekend and September 20th.

However, as BC Parks can only control landings, and not air space, there is presently no control for helicopter and/or aircraft flightseeing which are not landing in the park. Given the significant increase in the frequency of this activity, it is anticipated that there will be a corresponding increase in complaints from backcountry users.

	BERG LAKE TRAIL AIR TRAFFIC				
	95	96	97	98	99
Overflights	70	112	113	111	150
Landings	61	91	91	98	37
BCParks	42	35	22	15	32
TOTAL	173	238	226	224	219

ACTIONS:

- a) Park information and signing will be modified to inform visitors that flights to Berg Lake may operate on Mondays and Fridays. This will allow visitors to plan a mid-week trip from Tuesday to Thursday if they want to avoid helicopters.
- b) Surveys and on-site interviews and assessments will be conducted to evaluate visitor acceptance of this activity.

Horse Use THIS ITEM IS CURRENTLY UNDER REVIEW.

OBJECTIVE:

- a) To provide a backcountry experience for riders on commercial trips that will have minimal impact on the environment or conflict with other users.

CURRENT STRATEGY:

- a) Horse use on the Berg Lake Trail will be limited to the existing permittee.
- b) Horse travel to Berg Lake will be permitted from Monday to Friday.
- c) Horse travel will not begin prior to June 15th. Other restrictions will be imposed as trail conditions warrant.
- d) The only site on the Berg Lake Trail where horses will be accommodated is at Robson Pass.

ACTIONS:

- a) A small corral will be built near the border to provide a holding facility for riders from the North Boundary Trail wishing to view the Berg Lake area.
- b) The hitching rack will be relocated to the corral area to preserve water quality in the area.
- c) Surveys and on-site interviews and assessments will be conducted to evaluate the effectiveness of this strategy.

Mountain Bikes

OBJECTIVE:

- a) To provide the opportunity for mountain bikers to experience the lower section of the Berg Lake Trail with minimal impact on the environment and without jeopardizing the safety of any user of the trail.

STRATEGY:

- a) Mountain bikes will be permitted from the trailhead to Kinney Lake (Km 7) .

Firewood:

OBJECTIVE:

- a) To ensure the safety of all visitors by providing warming stoves in established shelters for emergency purposes..
- b) To ensure the preservation of the forest resources in Berg Lake by eliminating open fires.
- c) To ensure the air quality in the backcountry is maintained.

STRATEGY:

- a) All visitors will be required to take stoves and fuel for all cooking along the Berg Lake Trail.
- b) Log length wood will be supplied for the stoves in the existing shelters, but stoves will be modified so that they can not be used for cooking. From June 25 to the end of season stoves will only be available for EMERGENCY purposes.
- c) School groups will not be permitted to use the fires except for emergency situations.
- d) Signs and publications will be used to convey this message to the public.

ACTIONS:

- a) Brochures will be updated informing all visitors that cooking stoves and fuel are mandatory in the backcountry.
- b) Stoves will be unavailable after June 25th except for emergency use.
- c) Firewood conservation information will be posted and provided.
- d) Wood will only be provided from highway woodstocks unless available as avalanche debris or campground hazard trees. A hazard tree assessment must be completed by a certified employee prior to the removal of any tree.

Dogs

OBJECTIVE:

- a) To reduce the impact of dogs on visitors, wildlife and vegetation at Berg Lake.
- b) To continue to provide an opportunity for travellers to take their dogs on daytrips.

STRATEGY:

- a) Dogs on leashes will be allowed on the Berg Lake Trail. They will not be permitted to remain overnight.

COMMUNICATION

Orientation Objectives

All efforts will be made to provide visitors with the maximum amount of pre-trip and orientation information to ensure their visit is safe and enjoyable. The Berg Lake Trail handout will be provided to anyone requesting it and to all overnight users upon registration at the Visitor Centre. A Berg Lake trail orientation video has also been developed which is recommended for all users, and mandatory for all first-time visitors and school and commercial groups..

ACTIONS:

- a) the Mt. Robson park brochure and Berg Lake handout will be updated to include information on mandatory backcountry registration, quota system, helicopter access, open fire closures and other required information.
- b) orientation information will continue to be provided and updated at the Trailhead and Berg Lake shelter.
- c) in keeping with reducing visual impact on the intended backcountry experience, emphasis on safety and orientation will focus on personal media such as maps and pamphlets rather than on site displays.
- d) all groups to the backcountry are required to view the Berg Lake Orientation video.

Interpretation Objectives

Berg Lake, as a major backcountry destination in a World Heritage Site, has a significant role to play in increasing appreciation, understanding and support of heritage values in visitors to this area. Through funding by Trans Mountain pipeline, interpretive signs have been installed along the Berg Lake Trail to Kinney Lake and an interpretive shelter will be installed near Hargreaves shelter.

Environmental Stewardship

Environmental stewardship is the process whereby BC Parks, in partnership with visitors and other stakeholders, will achieve the goals of ecosystem protection and intended visitor experiences.

BC Parks will ensure that visitors to the area are aware of the stewardship role that both BC Parks and visitors have in the Berg Lake area.

ACTIONS:

- a) Include messages on firewood conservation, minimum impact backcountry ethics and other identified resource management issues on all publications, promotions and interpretive initiatives.

Marketing Objectives

Given the existing popularity of the Berg Lake Trail, no promotional initiatives will be undertaken by BC Parks. Efforts will be made to inform potential visitors to Berg Lake of high levels of use on summer weekends and the probability of hearing helicopters flying on Mondays and Fridays. Shoulder season and mid-week visits will be encouraged, rather than weekend use. Overflow use will not be re-directed to any specific area.

ACTIONS:

- a) These messages will be included in all brochures and handouts as well as video and interpretive presentations.
- b) A list of alternative hiking areas will be developed in consultation with District staff.

Public Safety and Regulations

The very features that attract visitors to the Berg Lake Trail can also provide safety hazards to the inexperienced and the young. In an effort to reduce hazardous situations BC Parks will continue to inform and educate visitors about the risks wherever required. Facilities will be designed that provide optimum safety for park visitors.

ACTIONS

- a) Promote backcountry safety as a component of the interpretation program.
- b) Include messages on firewood conservation and minimum impact backcountry use on all publications, promotions and interpretive initiatives.

