4.0 Natural, Cultural Heritage and Recreation Values Management

4.1 Land and Resource Tenures Introduction

With the inclusion of Cariboo Mountains, Cariboo River Park and the additions to Bowron Lake Park into the protected areas system, timber harvesting, mineral exploration and hydrolectric activities in the parks have been halted. These uses are incompatible with provincial park policies and legislation, and will no longer be permitted. However, the *CCLUP*, which created Cariboo River and Cariboo Mountains Park, is quite clear in its direction that other existing licensed uses would be allowed to continue in the parks. These uses include trapping, grazing, and guiding (recreational, angling and hunting). In addition, private property would be respected inside park boundaries and traditional forms of access to that private property would be respected. This direction is similar for the additions to Bowron Lake Park that came from Prince George and Robson Valley LRMPs.

Other uses which would normally be considered incompatible with protected areas include right of ways for hydro lines, pipelines or roads, and radio transmission towers. These pre-existing uses will be permitted.

The accompanying map shows traplines, guide outfitter boundaries and mineral tenures close to the park boundaries.

Click to view Tenures Map

Objectives

• To manage tenures to meet the conservation roles of the parks and the obligation to established uses.

Strategies

• Authorize, by Park Use Permit, the continuation of pre-existing tenures including trapping (with trapline cabins), heli-hiking, heli-skiing, angle guiding, guide outfitting, horse tours, wildlife viewing

and recreational guiding within the parks. Allow the use of firearms and snowmobiles, within specific areas, for trapline management by the registered trapline holder and authorize this in permits. Permits should be issued only for those uses/activities that existed prior to October 1994 in Cariboo Mountains and Cariboo River Park and July 2000 for the additions to Bowron Lake Park.

- Require Fisheries and Oceans Canada to acquire a permit for the dam at Mitchell Lake.
- Work with Ministry of Forests to monitor logged blocks inside parks and to ensure they are free growing and roads are appropriately deactivated.⁴
- Prohibit trapping inside the pre-2000 boundaries of Bowron Lake Park and close the yearly trapping opportunity in the Betty Wendle addition to Bowron Lake Park. A trapping tenure has never existed in the Upper Cariboo River addition to Bowron Lake Park, and therefore will not be offered in the future.
- Require permit holders to clean camps and remove structures that are dilapidated or no longer required.
- Permit holders may improve or upgrade structures as long as they follow the same footprint as the existing structure and have the same use intent (e.g. old one story cabin can be replaced with a new one story cabin of the same dimensions, but not with an airplane hanger or a two story cabin). Bonds may be required for improved structures to ensure they are not abandoned. Local materials from the site should not be used.
- Permit holders must rehabilitate sites when the permit is terminated.

Click to view plate 16: Looking east down Mitchell Lake. The Mitchell River is in the foreground. The dam, which is discussed in the text of the plan, is visible in the foreground.

4.2 Vegetation Management and Forest Health

Introduction

Fire, disease, decay, windthrow, snow and debris avalanching, erosion on alluvial flood planes and insect infestations are the fundamental disturbances that can be found in the forested ecosystems of the Cariboo-Chilcotin. These influences have created a mosaic of forested and non-forested plant communities that change across the landscape according to regional-scale climatic variation, and more local-scale site factors. On the regional scale, vegetation is influenced by two climatic gradients – the west to east transition as moisture increases and the low to high transition as temperature decreases. On the local scale surficial material and local topographic also influence vegetation. Therefore the plant communities that exist today are the result of the environmental influences of climate and site, as well as the history of disturbance in that area.

As natural processes, these disturbances are generally allowed to continue within parks and protected areas. However, past interventions in natural disturbance patterns, particularly through the suppression of wildfires, have created 'unnatural' conditions that make ecosystem management more of a challenge.

⁴ Deactivation as required in the Silvicultural Prescription that was approved at the time of harvesting.

Suppression of fire, for example, results in large, homogenous areas of mature forest with higher fuel loading, which leads to an increased risk of forest pest outbreaks or catastrophic wildfire.

The parks contain variants of the Alpine Tundra (AT), Engelmann Spruce-Subalpine Fir (ESSF, 2 subzone variants), Interior Cedar Hemlock (ICH, 3 subzone variants), and Suboreal Spruce (SBS, 1 subzone variant) biogeoclimatic zones. Except for a few recently burned areas, the forest landscape within the parks is predominately mature and old-growth forest, with some non-forested wetlands and alpine communities.

In the Sub-boreal Spruce (SBS) zone, subalpine fir (*Abies lasiocarpa*) and hybrid spruce (*Picea engelmanni* x *P. glauca*) are the predominant trees in mature ecosystems. Douglas fir (*Pseudotsuga menziesi*) occurs commonly as large individuals in fire regenerated stands on morainal materials and often occurs with pockets of trembling aspen (*Populus tremuloides*), and paper birch (*Betula papyrifera*). Extensive areas of fire-regenerated forests dominated by young lodgepole pine (*Pinus contorta*) occur on dry outwash materials adjacent to the Swan-Spectacle lakes area.

The transition to Interior Cedar Hemlock zones (ICH) is marked by the presence of western red-cedar (Thuja plicata) and increasing amounts of western hemlock (Tsuga heterophylla). In many stands, hybrid spruce and subalpine fir are still the dominant trees within the ICH portions of the parks.

The Engelmann Spruce-Subalpine Fir (ESSF) zones occur above the Sub-boreal Spruce and Interior Cedar Hemlock. This zone is dominated by subalpine fir and Engelmann spruce is replaced by hybrid spruce. At higher elevations this zone is distinguished by having a discontinuous forest canopy in the form of islands of low, stunted trees interspersed between wet meadows and shrub communities.

Above the ESSF is the Alpine Tundra (AT) zone where trees can no longer grow due to colder temperatures, prolonged snowfall, short growing seasons and severe winter winds. The Alpine Tundra zone occurs above tree line at the highest elevation of the parks and is dominated by a mosaic of herb, sedge and shrub dominated communities. Other non-forested ecosystems occur on avalanche chutes, and in wetland complexes in areas of poor drainage.

The primary conservation management objective for the parks is the maintenance of natural ecosystem diversity and ecosystem processes. The primary ecosystem processes that have the potential to affect ecosystem diversity at a landscape level are natural disturbance factors, and the nature of ecological succession that follows disturbance. Forest fire and insects are the two natural disturbances that have the greatest potential to cause the most far-reaching effects on the parks landscape. Fire and forest health management must be integrated with control actions and management on the broader ecosystems of which the park is a component.

Management Using Ecological Integrity Principles: The Role of Fire

Allowing natural disturbances to run their course is an integral part of maintaining ecological integrity. Disturbance created by natural fires is a critical process in the type of forested ecosystems found in these parks. Fires will help to create a more natural mosaic of age classes, increasing forest health (e.g. by weeding out diseased individuals and making forests more resistant to insect outbreaks), longevity (through regeneration and seed distribution) and biodiversity (by creating a variety of habitat types suitable to a wide range of flora and fauna).

Recognizing the importance of fire in maintaining ecological integrity, the parks have been zoned for the type of fire management activities that will occur. Throughout most of the park, the strategy is to allow fires to take their natural course having consideration for other values in managing for ecological integrity. In the frontcountry areas of the parks, fires will be fought to protect visitor safety, structures, and other important features.

Rare and Endangered Plants and Vegetation

According to the British Columbia Conservation Data Centre, there are several species of plants that are listed for the Bowron Lake Park area or suspected to exist in the park. This list is not exhaustive, as no thorough vegetative inventory has been conducted for this area. The species mentioned should be considered only a starting point. They are as follows:

Plant Species	Status
Meadow Arnica (Arnica chamissonis ssp incana)	Blue
Hall's Willowherb (Epilobium halleanum)	Blue
Small-flowered willowherb (Epilobium leptocarpum)	Blue
Slender mannagrass (Glyceria pulchella)	Blue
Regel's Rush (Juncus regelii)	Blue
Slender sedge (Carex tenera)	Blue
Dry-land Sedge (Carex xerantica)	Blue
Kruckeberg's holly fern (Polystichum kruckebergii)	Blue
Booth's willow (Salix boothii)	Blue
Blunt-sepaled starwort (Stellaria obtusa)	Blue
White wintergreen (Pyrola elliptica)	Blue

Fire

Disturbance and the forest successions that result are integral and natural components that help to determine landscape level ecosystem diversity in the parks. Disturbance initiates forest renewal and ensures that a mosaic of forest age classes occur across the landscape – a process called *succession*. Each of these successional stages has unique ecosystem qualities and support species dependent on the particular habitat values of that age class.

The policy of extinguishing wildfires, which society has followed since the turn of the last century, has had the effect of removing the most effective agent of forest disturbance - fire. If this policy were completely successful and carried on for a long enough time it would result in a landscape composed almost entirely of mature and climax forests. Such a landscape would eventually exclude many early successional plant species, and the animal species that depend on them. Fire also has an important role to play in eliminating excessive fuel loads in older stands. Fuel can include dead branches, leaves, needles and other understory vegetation. With unnaturally high levels of fuel, what might be a small fire can turn into a catastrophic fire, burning so hot that it destroys soil and seed sources.

A 1993 analysis of the fire history in Bowron Lake Park showed that the majority of fire activity during the last century has been in the SBSwk1, where two major fires (1898 and 1893) burned a significant

portion of the lower and middle elevations of the north-western corner of Bowron Lake Park. In the ICHmk3, which is located around Spectacle, Babcock and Unna Lake, three large fires were dated from 1905, 1850 and 1749. By contrast, in the ICHwk4 near Issac Lake, fire evidence at the stand level was non-existent on cool northeast aspects. On the warmer and drier southwest aspects on the east side of Issac Lake the observed pattern was for fires to be much smaller. It is evident by the analysis that the size and frequency of fires varies significantly between the different biogeoclimatic units. The important implication for vegetation management is that fires can be expected to be larger and much more difficult to control in lower and warmer sections of the parks and it would not be advisable to permit fires to burn in these variants. By contrast, fires in the ICHwk4 and ESSF are much smaller. Given considerations for other factors, it may be possible to permit natural burning cycles to occur in portions of these areas.

Insects Posing Risks to Forest Health

Insects, along with fire and windthrow, are the major causes of natural disturbance in forested landscapes. As with all natural processes, it is BC Parks' policy that insect infestations will be allowed to follow their natural course. However, as with any natural process, unacceptable impacts may occur on other park values or on values adjacent to the parks. Therefore, forest health concerns should focus on events which:

- 1) Cause unacceptable changes in the forest landscape
- 2) Reduce the desired level of biodiversity
- 3) Unreasonably threaten adjacent forests managed for other resources uses, or
- 4) Otherwise adversely detract from the park environment

This basically limits forest health concerns to those events which result in periodic outbreaks that cause large scale and widespread impacts to vegetation (e.g. disease is not a major management concern because it tends to affect individual trees and progresses very slowly). In the interior wetbelt these types of widespread events are limited to outbreaks in some species of trees by bark beetles and to some extent, defoliating caterpillars. Weather and climate can play a major role in beetle survival and thus impact potential for, and timing of epidemic situations.

The principal resident bark beetles capable of reaching epidemic proportions are the spruce beetle, (*Dendroctonus rufipennis*), the Douglas-fir bark beetle (*Dendroctonus pseudotsugae*), the mountain pine beetle (*Dendroctonus ponderosae*) and the western balsam bark beetle, (*Dryocoetes confusus.*)

Although widespread outbreaks by defoliators in the park area are unlikely, the spruce budworm, (*Choristoneura occidentalis*), the two year budworm, (*Choristoneura biennis*) and the western hemlock looper, (*Lambdina fiscellaria*) are resident species with the potential to reach epidemic numbers.

Bark beetle outbreaks result from a combination of biological and environmental conditions that favour beetle reproduction and survival. The primary factors in bark beetle outbreaks are host suitability and availability. Park management efforts that allow fire protection, yet focus on maintaining natural processes in a continuous, unaltered form, result in forest structures tending toward older trees with larger diameters. In some species of trees, these are precisely the hosts most suitable for bark beetle outbreaks. In addition, large blocks of older stands, combined with certain weather and climate conditions, tend to create circumstances conducive to large patches of blown down trees, which in turn attract some types of beetles.

The spruce beetle generally requires some significant area of blown down trees to become epidemic. Areas of blown down trees are rapidly colonized by these beetles that then produce large numbers of new beetles, which in turn places greater pressure on adjacent standing trees.

The area around and including Bowron Lake Park has a long history of spruce beetle infestations. The first quantitative records of infestation in the Prince George Forest Region occurred in the years 1962 - 1965.

Mountain pine beetle, like spruce beetle, prefers older and larger trees. Bowron Lake Park currently has large, homogenous areas of fire-regenerated lodgepole pine, which is now becoming susceptible to this bark beetle. As these stands continue to mature over the next twenty to fifty years, the probability of their supporting a bark beetle outbreak will increase.

The balsam bark beetle attacks true fir species in the higher elevation areas and will likely not create adverse impacts. Similarly, because these parks lack large contiguous stands of older aged Douglas-fir, Douglas-fir beetle outbreaks would likely pose minimal risks. Cariboo River Park has some large diameter Douglas-fir, however, that will have to be monitored.

Management Tools Available in Parks

The *Park Act* does not allow commercial, salvage or sanitation logging in parks or protected areas. Tools which are available include:

- 1. Falling and burning of identified attacked trees (e.g. usually identified through aerial surveys).
- 2. Trap trees can be used to attract beetles to certain trees. The tree is felled and left to attract beetles. Following the beetle flight the tree is burned. This is most commonly used for spruce trees.
- 3. Pheromone baiting is used for bark beetles (pine, fir and spruce). Pheromone baited trees are generally dealt with in one of three ways:

a) Baited trees that become infested can be felled and burned.

b) For pine trees, pheromones are used to bait insects into the tree. After the tree is infested, an arsenic compound called MSMA is injected into the tree to kill the beetles.

c) For spruce trees, the MSMA is injected into healthy trees and then baited with pheromones. Beetles are drawn to the tree by the pheromones and are killed by the arsenic. These are called "lethal trap trees." These trees can be left to stand or felled and burned

- 4. Antiaggregation pheromones may be used to repel insects by sending the message that "this tree is already full." These are experimental at this time.
- 5. Spraying biocontrols for defoliators such as Hemlock Looper.

Objectives

- To maintain natural ecosystem diversity and a range of succession stages
- To allow natural disturbance agents and natural processes to continue
- To allow pest infestations in a manner that maintains the integrity of the natural conditions within this system of parks while integrating with management and control actions on the broader ecosystem.
- To maintain natural plant and forest communities for their inherent value and their contribution to wildlife habitats, biodiversity and aesthetics.

- To protect rare, endangered and sensitive native plant communities.
- To manage for low impact scientific studies to improve the knowledge of park values and management activities.

Strategies (Fire)

- Allow wildfires to burn where impacts to other values are considered.
- Define areas within the parks where fire will be controlled or allowed to burn. An interim "Management Zone" has been identified. See attached map.
- Continue research into the role and application of fire in the parks and refine the fire management plan over time.
- Protect important recreation facilities around the canoe circuit and consider public and commercial recreation use areas.
- Manage wildfire so public safety is a priority.
- Stop initial attack on fires in "No Management" zones. See attached map.
- Apply prescribed burning as a tool to reintroduce natural fire events where fire suppression has effectively removed it or to reduce fuel accumulations that have become a fire hazard.
- Use mechanical treatment of excessive fuels to reduce fuel loading.

Strategies (Pest Management)

- Two zones have been identified for the parks a "Management Zone" and a "No Management Zone." See attached map.
- In Management Zones, aerial and ground monitoring will be used in conjunction with beetle probes to determine infestations. Appropriate management tools from the list above may be used to control the infestation if it is determined to place park values or values of areas adjacent to the park at risk.
- Control actions will only be undertaken if forest and/or vegetation loss is expected to be severe and detrimental to the ecosystem and/or the value of affected features within or adjacent to the protected area is high.
- In No Management Zones, allow natural processes to occur unimpeded. Large events, such as wildfire damaged trees and large areas of blow down, should be monitored for beetle activity. The management options listed above will be considered if these infestations are considered a threat to other park resources or forests adjacent to the park.
- Update Forest Cover mapping and complete hazard mapping for major insect species.
- Educate park users about natural processes such as fire insects and blow down.

Click to view Forest Health and Fire Management Zones

Click to view plate 17. Looking west over Summit and Stranger lakes at Quesnel Lake in the background. This area has seen high levels of activity by the Hemlock Looper, a defoliating caterpillar which targets cedar and hemlock trees.

4.3 Wildlife and Fish

Introduction

The interior wetbelt ecosystems of Bowron Lake, Cariboo Mountains and Cariboo River parks support a tremendous variety of animal species and a diversity of habitats. Combined with Wells Gray Park to the southeast, these parks form the fifth largest system of contiguous protected areas in the province, protecting a huge mountainous predator–prey ecosystem. This large unroaded and unfragmented landscape is considered especially vital for large carnivores such as grizzly bears. These carnivores require large areas of undisturbed habitat because of their relatively large home ranges, low densities, low reproduction rates and sensitivity to disturbance.

These parks contain a mosaic of low elevation valley bottoms with winding riparian corridors, lakes, rivers, avalanche chutes, alpine and subalpine areas, old growth spruce, hemlock, cedar, fir and pine forests as well as luxuriant wetlands rich in grasses, shrubs, forbs, willows and other herbaceous vegetation. This diversity supports populations of grizzly and black bears, moose, mountain goats, mule deer, cougars, lynx, hares, picas, beavers, porcupines, marmots, wolverine, wolves and mountain caribou as well as many smaller furbearing animals, birds, bats, amphibians and reptile species. The wetlands and marshes distributed throughout the parks support populations of resident and migratory waterfowl and songbirds. The parks contain a superb range of habitats for fish, and populations of bull trout, coho, chinook, and sockeye salmon, kokanee, rainbow trout, char and other species of fish are widely distributed throughout the watersheds.

Wildlife

Grizzly bears

A relatively large population of grizzly bears is distributed throughout these parks. This population is unique in the province because, unlike many other areas of the interior, these bears have access to large runs of sockeye salmon in natural undisturbed areas. The grizzly bear population tends to congregate on the Upper Bowron River and on the Mitchell River in late August and September, when the runs of sockeye salmon return to spawn.

In the spring, after emerging from hibernation, the grizzlies tend to move on to the many south facing avalanche tracks to consume the newly greened-up grasses. They will also consume carrion from winter killed animals they find and will prey on moose and caribou calves. They move to low gradient riparian areas and moist seepage sites, eating cow parsnip, horsetails, skunk cabbage and grasses. As the season progresses, they can be found in the alpine areas, eating roots, picas and marmots, raiding squirrel middens and ant nests and eating alpine vegetation. As the fall approaches, they move to open areas such as old clearcuts or burn areas to eat the blueberries and huckleberries as they ripen. In September they congregate on the rivers to eat salmon in preparation for hibernation. Denning areas are believed to be in the mid-elevation, north facing slopes, but more research is required on this topic.

Little inventory or research work has occurred on grizzly bears in the parks, although some habitat work is currently taking place in the Mitchell Lake Landscape Unit.

Black bears

These parks contain large populations of black bears, which are considered common throughout the area. Habitat requirements and lifestyles are similar to those of the grizzly bear described above, although grizzly bears will tend to displace black bears when in direct competition for food.

Again, little research has taken place on black bears, with the exception of bear hazard mapping for Bowron Lake Park and the Lower Mitchell River. Bear/human conflicts have traditionally been a problem in Bowron Lake Park, with many bears destroyed over the years. However, the introduction of new bear caches and a vigorous bear aware education program, combined with strict enforcement have virtually eliminated these conflicts and it has been a number of years since a bear has been destroyed.

Wolves

It is believed there are at least three packs of wolves that live in and around these parks. One consists of 6 - 8 animals that travel a circuit from the east arm of Quesnel Lake up the Niagara Creek, across to Mitchell Lake and then down the north arm of Quesnel Lake. Another pack focuses its effort on the Cariboo River and the west side of Bowron Lake Park and the third is believed to live on the east side of Bowron Lake Park on Isaac Lake and its tributaries. Wolves feed primarily on moose, but will also opportunistically target caribou. Some telemetry work was completed on two of these wolf packs in the mid 1990s.

Mountain caribou

The red-listed mountain caribou is quite well studied throughout these three parks. There are a number of unique herds or sub-populations of caribou that overlap the area. The range of the Wells Gray North sub-population includes Cariboo Mountains Park and the mountains to the west and south adjacent to Quesnel Lake. There are less than 200 animals in this herd, and those numbers appear to be declining. The Wells Gray North herd is separated from the North Cariboo Mountain sub-population that occupies Bowron Lake Park by the icefields and rugged mountains south of Lanezi Lake and Mount Ishpa, which forms a natural barrier to movement. About 30 caribou usually occupy Bowron Lake Park, but the entire herd numbers about 400. The Barkerville herd, which numbers about 40 animals, ranges to the west of Bowron Lake Park. Cariboo River Park is considered the boundary between the Wells Gray North herd and the Barkerville herd.⁶

Mountain caribou summer in high elevation ESSF forests near the treeline. In early winter caribou will move down into lower elevation old-growth Interior Cedar Hemlock forests to avoid the deep snow that has not yet formed a crust. If the lower elevation forests are not Cedar Hemlock (such as the west side of Bowron Lake Park, which is primarily Sub-boreal Spruce), the majority of animals will stay in higher elevation areas. In January, when a crust has formed on the snow, the caribou that moved to lower elevations will return to the high elevation ESSF forests, where they forage for arboreal lichens which grow in the old-growth sub-alpine forests.

The behavior, habitat and populations of the mountain caribou in this area are relatively well understood. Population monitoring has been underway for a number of years which involves radio-telemetry and winter population surveys.

⁶ These numbers reflect current inventory figures, and should not be interpreted as targets.

Wolverine

Little is known about the habitat use or population status of these blue-listed animals. They are opportunistic feeders, often eating carrion left by wolves or bears as well as eggs, insect larvae, berries and small animals. They appear to den in high elevation basins in rocky outcroppings, having offspring in the late winter or early spring. They travel alone except when breeding.

Wolverine have been observed in the parks, generally in the winter travelling over open snow, but no formal program of research or inventory has occurred.

Moose

Moose are commonly found throughout all of these parks. In the summer, moose will move to mid-elevation ESSF forests to calve. The bulls tend to stay in these higher elevation areas while the cows will move back to the lower elevation wetlands and riparian areas. As winter arrives and snow depths increase, moose will move to lower elevation wetlands and riparian areas to feed on willow and other deciduous plant species. A large population of moose winter in Cariboo River Park. The river valley provides the highest ranked moose habitat in the whole Cariboo-Chilcotin region.

Cariboo River had a moose telemetry study completed in the mid 1980s and the population is occasionally surveyed in the winter to determine population size and trend.

Click to view plate 18: Cow moose feeding in the Bowron wetlands.

Mountain Goats

The mountain goat population in these parks appears to be relatively stable. These hardy animals will winter on very steep rocky slopes called "escape terrain." Birthing areas are generally in the roughest terrain of the mountain goat range, and kids are born in May or early June. In the spring, goats can be found in lower elevation areas browsing on newly greened-up grasses and forbs and will progressively move higher as the summer progresses, but they never range far from escape terrain.

Winter surveys of goat populations in these parks have only been undertaken over the last several years.

Birds and Waterfowl

Over 130 species of birds have been reported in Bowron Lake Park alone, including great horned owls, kingfishers, eight species of woodpeckers, mockingbirds, several waxwing species, loons, pelicans, herons, 18 species of ducks and geese, hawks and ospreys, cranes, plovers and sandpipers, finches, warblers and vireos.

Little inventory is currently available regarding other waterfowl.

Species at Risk

In addition to the above noted large species, Bowron Lake, Cariboo Mountains and Cariboo River also provide habitats for a significant number of other red and blue listed species.

Some of the specific species at risk that may inhabit these parks include:

Species	Class	Occurrence
Mountain Caribou	Red	Known
Grizzly Bear	Blue	Known

Wolverine	Blue	Known
Northern Long-eared	Blue	Suspected
Bat		
Sandhill Crane	Blue	Suspected
Short-eared Owl	Blue	Possible
American Bittern	Blue	Known
Great Blue Heron	Blue	Known
Fisher	Blue	Possible
Bull Trout	Blue	Known

- "Known" species are those which have been observed in these parks.
- "Suspected" species are those likely to occur in the parks based on known distributions of the species.
- "Possible" species are those that could potentially occur in these parks but are less likely.

Objectives (Wildlife)

- To manage for the habitat needs of all species by providing a range of natural habitats and functional integrity between these habitats, both inside and adjacent to the parks.
- To maintain and/or recover to optimal levels⁷ species and habitats at risk.⁸
- To maintain viable predator-prey relationships and natural behavior patterns.
- To maintain distribution and abundance of wildlife species.
- To protect wildlife habitat features⁹
- To maintain ungulate winter and spring ranges in a condition that will support populations during critical winter conditions.
- To minimize displacement of wildlife from preferred habitats.
- To prevent the introduction of exotic plant and animal species.
- To provide hunting opportunities in Cariboo River Park, Cariboo Mountains Park and in the additions to Bowron Lake Park (Wolverine, Betty Wendle, and Upper Cariboo River) for game species that support sustainable populations.
- To maintain Bowron Lake Park as a wildlife refugia where hunting and trapping is not permitted (trapping permitted in the Wolverine addition and hunting is permitted in Wolverine, Upper Cariboo River and Betty Wendle additions).
- To minimize the risk of encounters between bears and humans.
- To minimize the impacts and stress of recreational activities on wildlife populations and habitats.

Strategies (Wildlife)

Wildlife – General

• Develop a long-term management plan for wildlife.

⁷ "Optimal" is a combination of historic levels and the area's carrying capacity - this concept requires more research.

⁸ "At Risk" refers to species or habitats that are rare, endangered, sensitive or vulnerable (red and blue listed).

⁹ "Wildlife Habitat Features" are specific features of wildlife habitat that support specific wildlife or groups of wildlife such as mineral licks, nest trees, denning sites or nest sites etc.

- Ensure long-term monitoring of wildlife populations inside the parks and coordinate this monitoring with areas outside and adjacent to the parks.
- Develop specific habitat prescriptions for species or habitats at risk.
- Develop a better understanding of the complex predator-prey system within and surrounding the park ecosystems.
- Manage human behavior in order to minimize impacts to wildlife. Education, voluntary practices, interpretation and guidelines are all possible tools.

Biodiversity

- Where compatible with critical habitat needs (i.e. mountain caribou) and other park objectives, maintain areas of old forest in the parks, consistent with the Cariboo Chilcotin Land Use Plan. Consult with Ministry of Forests to achieve, where possible, stand level Old Growth Management Areas (OGMAs) and *CCLUP* old growth targets.¹⁰
- Standing dead trees over 10 cm in diameter except as necessary for development or safety should not be cut in order to provide perch trees and habitat for cavity nesting species.

Bears

- Map bear habitat and connectivity corridors within and adjacent to the parks.
- Do not permit the construction of trails, campsites or facilities in high value black bear and grizzly bear habitats.
- Strictly enforce all bear management guidelines (e.g. use of bear caches, food storage and handling etc)
- Educate park users about bear hazards and safe behavior in bear country.
- Continue to restrict public access to the Upper Bowron River.
- Consider seasonally restricting the use of the Mitchell River spawning grounds to minimize bear human conflicts.

Wolves

- Identify and map wolf ranges and movement patterns.
- Increase knowledge relating to wolf foraging strategies as they relate to predator-prey ecosystems.
- See Predator Control.

Wolverine

- Inventory distribution and abundance; and map connectivity corridors.
- Report all sightings and known use areas.

¹⁰ The Cariboo-Chilcotin Land-Use Plan makes the assumption that, on a landscape unit basis, many requirements for old growth can be met by assuming all the area inside of parks is old. However, this assumption may contradict with the desire to recreate a more natural mosaic of age classes in the parks through fire management (e.g. prescribed burns and less fire suppression). These homogenous old forests are also more susceptible to catastrophic fire and forest pest outbreaks.

- Maintain 2 km buffer of non-use from recreational uses from known or suspected denning sites from January to May.
- Minimize human activities in known use areas.
- Develop facilities and manage use to minimize impacts to potential prey species, food, cover and denning sites.

Moose

- Manage use so there are buffer zones between humans and wintering moose and create or maintain sight barriers, noise barriers and hiding cover between areas of human use and winter ranges.
- Locate transportation routes and snowmobile corridors outside of critical winter ranges.
- Where ungulates travel on plowed roads, ensure frequent escape breaks are created in the bermed snow to allow animals to exit the road to avoid vehicle traffic.
- Identify and map winter ranges and identify critical periods.

Mountain Caribou

- Maintain stands of old growth forest important to caribou winter needs.
- Seasonally close highly sensitive habitats to snowmobiles and helicopters.
- Regulate snowmobile and helicopter use within habitats of moderate sensitivity.
- Schedule fixed wing and helicopter flights to avoid calving and rutting times, as well as late winter.
- Limit aircraft altitudes to a minimum of 500 m over designated caribou habitats and develop operating procedure/flightlines to avoid disturbance of caribou.

Mountain Goats

- Identify and map seasonal mountain goat habitats.
- Avoid disturbance of kidding areas between May 1 to July 15 by directing activity away from these areas.
- Avoid disturbance of designated winter ranges between December 1 to April 30 by directing activity away from these areas.
- Establish no-fly zones located 2000 meters horizontal and vertical from designated goat habitats.
- For existing helicopter operations, maintain no-fly zones that are a minimum of 500 meters horizontal and vertical from designated goat habitats.

Predator Control

- Predators may be controlled in order to re-establish short term ecosystem balance, but only for red listed or endangered species.
- Consider various methods of predator control, such as sterilization, transplants and increased trapping. Directly killing predators should be considered a last resort.

Fish

Bowron Lake, Cariboo Mountains, and Cariboo River encompass a number of very large watersheds. Lakes on the north, south and east sides of Bowron Lake Park drain south into the Cariboo River, pass through Cariboo River Park, then continue on to join the Quesnel River and eventually flow into the Fraser River. Lakes on the west side of Bowron, as well as the majority of the interior of the park, drain north into the Bowron River, which eventually drains into the Fraser River near Prince George. Two of the three watersheds in Cariboo Mountains Park – the Mitchell and the Niagara – flow southwest into Quesnel Lake, which is drained by the Quesnel River into the Fraser. The third main watershed in Cariboo Mountains – the Matthew River – has its headwaters deep in the park above Ghost Lake. The Matthew River leaves the park at the outflow of Ghost Lake and continues on to join the Cariboo River just above Cariboo River Park. Fish are widely distributed throughout the parks in the various rivers, creeks and lake. Some of the major areas include:

Betty Wendle Creek

An initial survey of the Betty Wendle in the late 1980s showed the presence of rainbow trout, bull trout and a large number of spawning kokanee. This large creek has very high fisheries values including excellent spawning gravel, rearing and holding habitat and is considered an important nursery stream to Isaac Lake.

Wolverine River

The Wolverine River drains into the northeast corner of Isaac Lake. It is 10 km long and contains three distinct reaches, with the upper and lower reaches having excellent gravel beds for spawning as well as a range of rearing and holding areas. Rainbow trout were present.

Upper Cariboo River

The new addition to Bowron Lake Park contains a tributary of the Cariboo River as well as a small portion of the mainstem of the Cariboo River. A natural barrier to fish is located on the lower portion of the tributary. The fisheries values on the Cariboo River itself are largely unknown, but may be negatively affected due to the glacial nature and low visibility of the river.

Cariboo River

This large river has 21 tributaries draining into it within the park alone. Approximately a quarter of these tributaries, including the Little River, Kimball Creek, Cunningham Creek and Harvey Creek, contain spawning habitat. The mainstem of the river contains chinook salmon and bull trout.

Mitchell River

The Mitchell River is the second largest inlet stream to Quesnel Lake. It is fed by Mitchell Lake, a 1,900 hectare lake in a very steep sided basin. The river travels 19 kilometers from the outlet of the lake to the point where it joins Quesnel Lake. The last 14 kilometers of the river meanders through a series of oxbows and wetlands. The Penfold and Cameron creeks are its two main tributaries.

The lower 14 kilometers of the Mitchell River and its tributaries provide critical spawning, rearing and foraging habitat for large-sized rainbow and bull trout from Quesnel Lake. In terms of juvenile rainbow trout production, the lower Mitchell produces approximately 10,000 migrants to Quesnel Lake annually. It also supports a variety of other important freshwater and anadromous salmon species including

kokanee, sockeye, chinook and coho. Sockeye are the major anadromous species, with a reported run of up to 250,000 in high cyclic years. This river contains exceptional fisheries values.

To increase winter water flows and enhance river conditions for incubating sockeye eggs, Fisheries and Oceans Canada constructed a flow-control structure at the river outlet on Mitchell Lake in 1988. Little is known about the positive or negative effects of this structure on the ecology of the river.

Niagara Creek/Christian Lake (a.k.a Windy Lake)

Niagara Creek contains three main reaches; each separated by falls that form a barrier to fish. These three main reaches contain wide, meandering, braided channels which have a wide variety of fish habitats such as small oxbow lakes, beaver ponds, relic channels and bogs. The main channel is quite turbid due to its glacial nature. Rainbow trout are present in many of the off-channel habitats and probably originated from the small creek that connects Christian Lake to Niagara Creek.

Christian Lake has large numbers of small rainbow trout and, as noted, may be a source for the fish in the Niagara Creek. It is not known if this is an introduced or natural population of fish. At one point a creek connected Christian Lake to Mitchell Lake, and it is possible the fish may have come from Mitchell Lake.

Upper Bowron River

The upper portion of the Bowron River above the river cabins at site #54 has been closed to all public access and provides an area of protection to all fish species. No human fishing pressure is present. Good fish habitat starts approximately 5 km up the river above the lake where the river begins to rise off the valley floor. Many creeks flow out and feed the river from McCabe, Tediko and Mcleod ridges, Huckey Creek is one that provides good spawning beds.

Sockeye and chinook salmon use the stream and lake habitat in Bowron River system. The Bowron River is utilized as spawning grounds for adults of both species and as nursery habitat for juvenille chinook salmon. Bowron Lake provides rearing habitat for juvenile sockeye salmon. These spawning salmon provide critical protein for the grizzly and black bears just before hibernation. Bird species such as bald eagle and gulls also rely on the spawners. Rainbow trout and bull trout are present and have been seen feeding on the eggs of the salmon.

Ghost Lake/Matthew River

Ghost Lake is a 365 hectare, relatively shallow lake with steep shoreline which is drained by the Matthew River. It was found to be barren of fish, but was stocked with rainbow trout in 1986 (75,000), 1987 (15,000), and 1988 (15,000). The inlet of the Upper Matthew is very turbid and glacial with low, unstable banks. The Matthew River upstream of Ghost Lake has good rearing habitat and the lower sections and its tributaries are important trout nursery areas for the lake.

Mitchell Lake

Rainbow trout and bull trout are present. Bull trout spawn in first reaches of many of the creeks around the lake and the Upper Mitchell River where it drains into Mitchell Lake.

Bowron Lake

This lake contains populations of bull trout, lake char, rainbow trout, suckers, mountain whitefish, kokanee, sockeye, peamouth chub and northern pike minnow (previously called squawfish). It was stocked in the late 1940s and early 1950s.

Kibbee Lake

Kibbee is a somewhat shallow lake fed by a small inlet from Thompson Lake and has primarily a gravel and sand bottom. It has kokanee, mountain whitefish, suckers, rainbow trout, northern pike minnow and peamouth chub.

Indianpoint Lake

This is a relatively deep lake fed by a number of small creeks. The bottom is mostly sand, gravel and silt, and contains rainbow trout, northern pike minnow and peamouth chub.

Isaac Lake/Isaac River

Isaac Lake is the largest lake in Bowron Lake Park. It is very deep, with the average being almost 200 feet and almost 600 feet at the deepest point. A dozen tributaries enter this lake, with the largest being the Betty Wendle, Wolverine and Moxley. It is drained by the Isaac River, a large river that flows into McLeary Lake. Isaac Lake and River contains kokanee, mountain whitefish, lake char and bull trout.

McLeary Lake

McLeary is fed by the Isaac river, and is the shallowest lake on the Bowron Lake circuit, with an average of only five feet. Rainbow trout is the only species reported, however other fish species likely utilize the lake.

Lanezi Lake

Another very deep lake, Lanezi is fed by the Cariboo River and as a result is very silty. It is an unproductive lake with steep sides, a sand bottom and few organisms. Fish present included bull trout, rainbow trout, peamouth chub, mountain whitefish, suckers and lake char.

Babcock Lake

This lake is fed by a clear, fast flowing creek with a gravel bed. It has a sand, gravel and mud bottom, and contains mountain whitefish, bull trout, rainbow trout and peamouth chub.

Sandy Lake

A very shallow and very silty lake (mean is 9 feet), Sandy Lake is fed by the Cariboo River, which appears to account for the large silt deposits. No fish have been documented, however there may be fish present.

Hunter Lake

This small lake is located adjacent to the boundary of the park and is accessed from a small path on Sandy Lake or from logging roads next to the park. It is quite shallow, is fed by a marsh and drains into Sandy Lake. Rainbow trout and peamouth chub are present in the lake. This lake was historically stocked.

Unna/Rum Lake

Another shallow lake typical of the west side of the Park, this lake has a sand bottom. Peamouth chub, suckers, mountain whitefish and kokanee were found to be present.

Skoi Lake

Another very shallow lake (mean is 13 feet) believed to be spring fed with no inlet and a small connection to Spectacle Lake. Muddy and silty bottom with no fish documented.

Spectacle Lake/Swan Lake

Relatively shallow lake with mud and weed covered bottom. Species present include rainbow trout, northern pike minnow, peamouth chub, kokanee, mountain whitefish and suckers.

Objectives (Fish)

- To increase the understanding of fish habitat and populations in and adjacent to the parks through standardized fish inventory and assessment projects.
- To provide a range of quality fishing experiences in the parks and monitor angler effort and catch on selected waters.
- To protect bull trout spawning and rearing habitat.

Strategies (Fish)

- Prohibit the stocking of lakes and streams in the parks, with the exception of Ghost Lake¹⁵.
- Prohibit the transplant of fish within the parks. Fish transplants out of the park may be permitted to increase the viability and distribution of populations if the impact to the park donor population is minimal.
- Consider Isaac Lake as a refugia lake for large rainbow trout and lake char by continuing regulations on size and number of fish that can be caught.
- Utilize Resource Inventory Committee (RIC) standards for all inventory and monitoring within the parks.
- Improve relationships with Fisheries and Oceans Canada and share information and data on fisheries values.

¹⁵ Ghost Lake was considered "barren" until it was stocked in the late 1980s. While stocking is inconsistent with BC Parks Conservation Policies, it may be appropriate on Ghost Lake, considering the lack of competition with anadramous salmon populations, the lake's capability to support fish populations and the presence of the campground.

Mitchell River

Prepare a fisheries management plan for the lower Mitchell River. The plan should include commercial guides and public users. The plan should reflect the following key elements:
a) Spawning beds (7 km up the river from the mouth to the confluence of the Mitchell and Cameron

Creek) closed to motorized access September 15 – July 1. Foot access only. b) Recommendation to Canadian Coast Guard that a 200+ horsepower restriction be placed on the whole river year round.

c) Recommendation to Canadian Coast Guard that personal watercraft (e.g. jet-skis) be banned from the river year-round.

d) Consider a recommendation to Fisheries Branch that the river be designated a "Class One" River.e) Minimize the number of daily trips per boat on the river.

f) Utilize education and advertising to inform the public about grizzly bear hazards and potential impacts of fishing on bull trout habitat and populations.

g) Recommendation to Fisheries Branch that the fishing regulations close the river to all fishing from October 1- June 30 (open July 1 – September 30) to protect bull trout spawning habitat and populations.

h) Consider fly only (no tackle) restriction in order to more effectively protect bull trout populations.

- The fisheries management plan should address allocation of angler rod days, impacts and potential conflicts with grizzly bears, impacts to spawning beds and bull trout populations and methods of travel on the river.
- Monitor commercial use of rod days on the Mitchell River. If operators are not utilizing rod days to full capacity, unused days may be re-allocated to other existing or new operators on a competitive basis.
- Commercial/public use on the river will be based on a 30% commercial and 70% public allocation. This split will be reviewed in 2005 to determine the appropriate mix between public and commercial use.

Bowron Lake

• Prepare a fisheries management plan for Bowron Lake. The plan should utilize the Bowron Lake Advisory Group (see section 4.4 Bowron Lake). The plan should address topics such as new regulations to ensure healthy populations of kokanee and other species, monitoring of catch rates, angler days and fish size, information and education. Consider partnerships with the local community to more effectively monitor the fishery (i.e. the July 1st fishing derby to monitor the historical catches of kokanee on the lake).

Cariboo River

• Undertake research in Cariboo River Park to better understand waterfowl patterns and usage. In addition, research should also be considered which will monitor potential impacts of motorized boat use. Restrictions similar to the Mitchell River may be considered if adverse impacts are demonstrated.

Fisheries Research

• Undertake research on spawning locations of bull trout.

- Increase understanding of the Isaac Lake rainbow trout population. This population may be unique and similar to the late maturing Gerrard and Quesnel Lake rainbows, producing extremely large fish. Research should focus on spawning areas, potential numbers on spawning grounds, life history and genetic relationships to other rainbow trout populations.
- Increase understanding of the relationship between the Mitchell Lake/Mitchell River and Quesnel Lake rainbow trout populations using genetic testing. There is some question as to whether the Quesnel Lake rainbows had their origins in Mitchell Lake.
- Investigate, in partnership with Fisheries and Oceans Canada, the effectiveness and future of the water control structure at the outflow of Mitchell Lake. In particular, the potential effect of the structure on overall fish production in Mitchell Lake should be examined, with particular emphasis on rainbow trout spawning areas and bull trout populations and trends.
- Update fisheries inventory throughout Bowron Lake Park according to formalized RIC (Resource Inventory Committee) standards.
- Increase understanding of life history strategies of bull trout and lake char throughout the system of parks. In particular focusing on age/growth curves. Spawning locations throughout these systems are poorly understood at the current time.
- Increase understanding of public angler effort and use, focusing on Mitchell Lake, Ghost Lake, Cariboo River and the lower Mitchell River. Consider using aerial surveys, volunteer wardens and other methods.

4.4 Bowron Lake

Bowron Lake is located at the northwest corner of Bowron Lake Park. The lake is important as the start and end point of the Bowron Lake canoe circuit, but is also significant to local and regional recreational users, cabin owners, resorts and businesses that are located along its shoreline.

The lake itself is about eight kilometers long, with the outflow of Bowron River at the north end and the inflow coming from the headwaters of the Bowron River deep in the interior of the park. The most significant feature of Bowron Lake is the large and extremely productive wetland located at the south end of the lake. The Bowron River meanders slowly through the wetland. The area is considered very valuable moose range, and is one of the most significant areas for migratory waterfowl and birds throughout the whole region.

There are approximately 25 private properties located at the north end of Bowron Lake. Many of these properties have been developed and have cabins or houses built upon them, while others have not been developed and still have their forest cover intact. A number of these properties can only be accessed by water, with the park behind them. Two resorts are located along the shores of the lake, with most of the easily accessible land behind the beaches privately owned.

The majority of Bowron Lake is zoned as Natural Environment (see 3.0 - Zoning for details) with the northern extent around the private property and Registration Center zoned as Intensive Recreation.

Objectives

- To minimize impact of recreational activities on wildlife and wildlife habitat.
- To minimize the impact of motorized watercraft on the natural quiet and natural environment of Bowron Lake.
- To ensure visitor expectations are consistent with zoning and acceptable activities on Bowron Lake.
- To ensure Bowron Lake remains accessible to local and regional day and multi-day visitors.
- To ensure the safety of visitors on Bowron Lake.
- To promote good communications between BC Parks, regional visitors, and local businesses and residents.

Strategies

Personal Watercraft (jetskis)¹⁶

- Prohibit the launching of personal watercraft on Bowron Lake.
- Work with the Coast Guard to prohibit the operation of personal watercraft on Bowron Lake.

Houseboats

• Prohibit houseboats on Bowron Lake.

¹⁶ This is a generic term to describe watercraft such as seadoos and jetskis, and does not apply to outboard and inboard boats, kayaks or canoes.

Motorized Watercraft

- Horsepower restrictions will not be considered at the present time. Use will be monitored and restrictions may be recommended if unacceptable impacts are demonstrated.
- Educate canoe circuit paddlers that Bowron Lake is multi-use and motorboats can be expected. Possible strategies include signing the end of the wetland where the Bowron River enters Bowron Lake with a notice; and including this message in the Registration Center video.
- Develop a Code of Ethics for motorboats in cooperation with Coast Guard and inform motorboaters.

Trail Development

- Consider establishing day use trails to Sugarloaf Mountain and another to Devils Club Mountain.
- Horses will not be allowed on trails.

Frontcountry Development

- Consider developing a small day use area in the vicinity of the Registration Center/Canoe Dock on the shore of Bowron Lake, using the existing parking lot at the Registration Center.
- The existing service dock is confirmed as an operational dock and will be closed to public access. Consider constructing another dock in this area for local anglers. The existing dock may be used until such time as a new dock is constructed or other access provided.

Click to view plate 19: Looking south into the Bowron River/Lake wetlands.

Snowmobile and All Terrain Vehicles (ATV) Access

- Prohibit snowmobiles and ATVs on Bowron Lake, except for park operations.
- Property owners must obtain a Letter of Permission¹⁷ from BC Parks to access their property directly via snowmobile or ATV during the winter.
- Sign Bowron Lake closed to snowmobiling without a Letter of Permission.

Commerical Tourism Opportunity

- A new opportunity will be offered for a commercial wildlife viewing/birdwatching operation. Conditions are outlined in Appendix A.
- An existing commercial flightseeing opportunity is currently operating from Bowron Lake. This opportunity will be limited to the existing operator and the permit will not be transferable or issued to a new operator if the current operator does not renew. Use will be monitored and restrictions may be placed in effect if unacceptable impacts are demonstrated.

Winter Use

- Confirm snowshoeing, dogsledding, skiing and ice fishing are acceptable uses on Bowron Lake.
- Modify the *Park and Recreation Area Regulations* to allow dogs on the canoe circuit from November 1 April 1.

¹⁷ Or another appropriate instrument under the Park Act.

Monitoring

- Complete a survey addressing public perceptions of management issues on Bowron Lake.
- On a long-term basis, monitor the level of Bowron Lake, with the goal of working to re-establish natural lake levels and minimize loss of lakeshore property.

Communication

- Establish a Committee that meets annually to discuss communication, information needs and management issues around Bowron Lake.
- Construct an information kiosk at the entrance to the community at Bowron Lake. The kiosk should include a map of private property, services available at the park and access to Bowron Lake.

Private Property

- Encourage and support owners of private property to meet "best practices" standards for development (e.g. sewage disposal, aesthetics) in order to minimize impacts on the values and resources of Bowron Lake.
- Consider purchasing or entering into a private/public partnership for use of the private property at the outflow of the Bowron River and the beach at the tail of the lake to improve public access, use and enjoyment of Bowron Lake.

4.5 Access and Adjacency

Introduction

This large and diverse block of parks is surrounded by an equally diverse landscape with a number of government jurisdictions, land use plan objectives and access issues and opportunities. In some cases, direction on managing adjacent areas is outlined quite clearly in recent land use plans, while in other cases direction is somewhat more vague. In all cases, BC Parks only has the legal jurisdiction under the *Park Act* to manage lands, waters and resources inside the parks. With this limitation acknowledged, BC Parks endeavours to work on a "good neighbour" basis to ensure management both inside and outside the parks addresses the sensitivity of resources as well as land use plan objectives around access to resources.

There are four land use plans that provide direction on areas adjacent to the parks:

- Robson Valley Land and Resource Management Plan provides direction on management of the areas to the east of the parks;
- Prince George Land and Resource Management Plan provides direction on management of the areas to the north of the parks;
- □ *Cariboo Chilcotin Land Use Plan* provides direction on management of the areas to the west and south of the parks; and,
- □ *Wells Gray Provincial Park Master Plan* provides direction on the areas to the south.

This management plan will provide direction to BC Parks staff when responding to referrals on development (e.g. tourism, mining, forestry) adjacent to the parks. These responses should be in the context of direction from the land use plans. For example, the land use plans do not provide for a "buffer" of non-development around the parks. However, BC Parks staff will still have the ability to work with development proponents on methods that allow access to resources while mitigating, minimizing or eliminating impacts to values within the parks (e.g. water quality, visual or noise impacts, increased access to Bowron Lake canoe circuit).

Wolverine/Goat/Littlefield Corridor

Through this management planning process, there has been interest expressed in corridors connecting the Robson Valley to the Cariboo¹⁸. This interest dates back to the late 1800s and before, when First Nations used the Goat River as a low elevation corridor, and miners and railroad engineers were looking for new east - west connections and routes.

The Prince George LRMP provided some direction on a possible road following the Goat/Wolverine route, saying:

"A road has been proposed through this area which would connect Highway 16 (near McBride) with Highway 26 (near Wells). The road is not feasible at this time, however, and therefore, a corridor has not been delineated. In the event that it becomes feasible in

¹⁸ It should be acknowledged that BC Parks only has the management jurisdiction for those portions of any linkage that fall within the Wolverine addition to Bowron Lake Park (approximately 15 kilometers long).

the future, the corridor location and the impacts on the protected area will be considered and addressed at that time."

Click to view plate 20: Looking northeast across Isaac Lake up the Wolverine Creek. The approximate location of the trail would be where the dotted line is. The approximate boundaries of the Wolverine addition are shown as grey shading. No access to the Bowron canoe circuit would be permitted from the trail.

With the wording from the LRMP as direction, the management planning process discussed a number of <u>options</u> for the Wolverine/Goat/Littlefield route. These options included:

- 1) No managed access through the Wolverine (i.e. no trail or corridor);
- 2) A non-motorized trail (hiking, horses, skiing);
- 3) A multi-use, all season trail (hiking, horses, skiing, snowmobiles);
- 4) Single-lane gravel road;
- 5) Double-lane paved road; and ,
- 6) Other linkages from Cariboo to the Robson Valley outside the park.
 - a) Slim Creek;
 - b) Dome Creek;
 - c) Bowron River Road;
 - d) Southern routes through Cariboo Mountains Park.

Given the present direction in the *Park Act*, only options 1, 2, 3, and 6 are available. Any future road corridor would involve deleting a right of way from the park, which would require an amendment to the *Protected Areas of British Columbia Act*. Therefore, options 4 and 5 will not be pursued at the present time, and option 3 has been selected. This issue may be revisited when the management plan is reviewed or when a political decision directs otherwise.

Objectives

- Minimize the impact of adjacent development on the resources and recreational experiences within the parks.
- Communicate with other agencies and licensees concerning development activities and management in areas adjacent to the parks.
- Afford appropriate four-season recreational connections between the Cariboo and the Robson Valley.
- Ensure traditional use and access to Cariboo River and Cariboo Mountains Parks continues in accordance with the *CCLUP*.
- Ensure private landowners have access to their property.
- Provide an appropriate level of visitor access to recreation opportunities with the parks.

Strategies

General

• No new roads should be considered. Aside from the roads accessing the Ghost Lake and the Bowron Lake Intensive Recreation Zones, existing roads should not be improved.

Aircraft

- Floatplane access to Ghost Lake, Mitchell Lake, Christian Lake (a.k.a. Windy Lake), Summit Lake, Stranger Lake and Bowron Lake is confirmed.
- Work with BC Floatplane Association and Thompson Region, Environmental Stewardship Division, to develop access guidelines for floatplane use on Twin Lakes. Commercial use levels outlined in Appendix A.
- Aircraft assisted recreational activities (e.g. heli-hiking) will only be permitted in specific areas at certain times of year. Guidelines and use levels can be found in Appendix A.

Click to view plate 21: Twin Lakes in the alpine of Cariboo Mountains Park and Wells Gray Park. The approximate boundary between the two parks is shown as a dotted line.

Bowron Lake Park - Wolverine/Goat River

- The Wolverine/Goat River Corridor will be a four-season connection from the Robson Valley to the Cariboo. The hiking trail can be signed, and limited facilities (for safety and sanitation) can be developed to support the trail corridor experience.
- This route will be the only corridor that snowmobiles may be permitted to use through the parks.
- Complete, in partnership with the BC Snowmobile Federation, local snowmobile clubs (Quesnel, McBride, Valemount, Wells) and other affected government agencies, a feasibility study on the snowmobile route through the Wolverine. The feasibility study should address safety (avalanches), site lay-out, potential direct impacts on wildlife populations (focus on caribou, but also include other components, such as denning areas for bears, moose wintering areas, etc) and habitat fragmentation. If the use is considered appropriate, the study should suggest spatial and temporal mitigation strategies for wildlife.
- Work with licensees and agencies to ensure any new access roads developed adjacent to the park (i.e. Goat drainage) are sensitive to park values and are consistent with the recreational trails in the park.
- Work with permittees, licensees and agencies to ensure recreational users entering Bowron Lake Park from the Robson Valley or from Littlefield Creek are aware there is no access to the Bowron Lake Circuit from this trail.

Bowron Lake Park - West Side

- Work with licensees and agencies to ensure Visual Quality Objectives are maintained from viewpoints on the Bowron Lake canoe circuit.
- Work with licensees and agencies to ensure no new access to the Bowron Lake canoe circuit is developed.
- Work with licensees and agencies to ensure noise and light impacts from industrial activity adjacent to the park do not have an adverse impact on wilderness experiences in the park. Mitigation tools may include season and timing of operations (e.g. winter logging or limiting night-time operations).

Bowron Lake Park –South Side – Hunter Lake

• Snowmobile access to Hunter Lake is not permitted. Use appropriate signage to communicate this closure to users.

Bowron Lake Park - East Side - Cariboo River Drainage

- As per direction in the *RVLRMP*, work with licensees, agencies and any Access Management Plans to ensure no new access to the Bowron Lake canoe circuit is developed.
- As per direction in the *RVLRMP*, work with licensees and agencies to reduce the audible impacts of resource develop activities on wilderness canoeing experiences.
- As per direction in the *RVLRMP*, work with licensees and agencies to maintain water quality values in the Cariboo River system above the park.

Cariboo Mountains Park - Z Road – Lower Mitchell River

- Allow private landowners at the north end of Quesnel Lake to continue to use traditional means of transportation to access their properties. Only these private land owners may use ATVs on the Z-road.
- BC Parks will not upgrade or maintain the Z Road. Local users can maintain the road to the quality it was in the year 2001 and will be issued a Park Use Permit for these activities.¹⁹
- The Z Road inside the Park will be opened to snowmobiles in the winter. The area will be signed, and if the wetlands are being used, or if impacts to wildlife (moose, swans etc) are demonstrated, the corridor may be closed.
- Access to Quesnel Lake via the Z Road is permitted. All users should respect private property.
- Access to the Mitchell River via the Z Road will be by foot only. No roads or trails will be constructed to the Mitchell River from the Z Road due to extremely high bear hazard.
- Access to Mitchell River will not be signed at the 3100 Road.
- Public access to the old cutblocks, logging roads and ridgelines on the north/east side of Cameron Creek will continue. The in-block logging roads will be deactivated as per licensee plans and access to the park will be non-motorized.

Cariboo Mountains Park – West Side - Cunningham-Matthew Forest Service Road (B Road)

- Work with licensees and agencies to ensure continued access to the west side of Cariboo Mountains Park via the B Road.
- Public access to the old cutblocks, logging roads and valleys in Cariboo Mountains Park via the B-Road will continue. The in-block logging roads will be deactivated as per licensee plans and access to the park will be non-motorized.

Cariboo Mountains Park – West – Penfold Creek Drainage

- Work with licensees (West Fraser) and agencies (BCAL, MoF) to ensure development at the head of Penfold Creek does not allow motorized ATV or snowmobile access into the alpine of Cariboo Mountains Park.
- The new roads constructed in Penfold Creek represent one of the best opportunities for accessing the recreationally significant alpine ridges along the Niagara Creek drainage. Work with the licensee (West Fraser) and agencies to ensure any new public or commercial recreational activities in this area of high backcountry recreation value are sensitive to park values.

¹⁹ Appropriate authorization may be required from other agencies for areas of the road outside the park.

Cariboo Mountains Park - North Side - Castle Creek Drainage

- Work with licensees, agencies (BCAL, MoF) and any Access Management Plans to ensure any new public or commercial recreational activities in this area of high backcountry recreation value are sensitive to park values.
- Work with licensees and agencies to ensure snowmobilers are aware Roberts Peak is open for snowmobiling, but access into the Niagara drainage for snowmobiling is not permitted.

Cariboo Mountains Park – South Side – Blue Lead, Summit and Stranger Lake

- Work with licensees, agencies (BCAL, MoF) and any Access Management Plans to ensure any new public or commercial recreational activities are sensitive to park values.
- Work with licensees and agencies to ensure snowmobilers are aware the park is closed to snowmobiles
- Work with licensees and agencies to ensure road construction in the Blue Lead does not allow motorized access to the alpine in Cariboo Mountains Park.
- Trail access to Summit and Stranger Lakes may be permitted.
- Work with Thompson Region, Environmental Stewardship Division, on co-ordinating use of the Summit Lake Trail between Wells Gray and Cariboo Mountains parks.

4.6 Cultural Heritage

Introduction

This block of mountain parks has a strong history of First Nations and European use and settlement. Much of this use has been intertwined with the presence of rich wildlife and fish values in the parks. The physical evidence of this use and history is distributed throughout the parks. Some evidence, like the old trapper cabins, is in plain sight while some evidence lies buried. In other cases, the history of the area exists only in the memories and stories of First Nation elders or handed down to second and third generation landowners and local historians. All of these resources will be managed in a sensitive way and in accordance with the appropriate legislation.

While the word "wilderness" is often used to describe these parks, the mountains, lakes and rivers in the area have been used for food, shelter and sustenance, economic development and recreation long before society decided to protect these areas as provincial parks. Evidence of past use can be found in the old trapper cabins, trails, axe blazes, crumbling chimneys, rotting mileposts, the occasional projectile point and the long since removed rail portages.

Many of the first visitors to the area wrote about the First Nations people they encountered. They talked about the trapping, hunting, fishing and gathering activities of these people and speculated about which "people" they were. Early accounts suggest they were the "Takulli" or Carrier people, but others mentioned Shuswap or even Iroquois. Many of these accounts refer to a village situated at Bear (Bowron) Lake complete with between 9 - 11 keekwillee houses and approximately 100 people. Like many First Nation's communities, the smallpox epidemics of the 1860s struck hard in this community. The village site itself apparently sloughed into Bowron Lake in 1964. Some reports attribute this sloughing to undermining and mud slides, while others blame the event on the seismic shock from the 1964 earthquake in Anchorage Alaska.²⁰ Other First Nations sites have been noted through these parks, including clam middens, buried campfires, projectile points and cache pits, but little formal archaeological or traditional use work has occurred.

Many of the place names in Bowron Lake Park have their origins in the Carrier language, including Mt. Ishpa (meaning "my father"), Kaza Mountain (meaning "arrow"), the Itzul Range (meaning "forest") and the Tediko Range (meaning "girls"). Lanezi Lake is also derived from Carrier language and means "long". Lanezi was known as Long Lake for years.²¹

The Cariboo Gold Rush of the 1860s brought many of the first non-natives into the Cariboo Mountains. Miners and prospectors working along the Fraser River tributaries eventually founded the mining town at Quesnel Forks. Continuing upstream past Cariboo Lake, they came upon what they called Swamp River. This may have been the area of Cariboo River Park. As the miners and prospectors continued on, they would have found Cariboo Falls, and then Unna Lake, Babcock Lake and others in the chain. They likely would have continued up the Matthew River, exploring the valley and perhaps spending time at Ghost Lake. Little documented information exists about these areas. Miners prospecting from Williams Creek

²⁰ Report of 1972 Survey by Ken Marten and Mike Robinson for *System 'E' Wells Gray Provincial Park, Bowron Lake Park* and Upper Fraser Trench. Source is Barkerville Archives

²¹ Jean E. Spear, 1983, *Bowron Chain of Lakes - Place Names and People*. High Plateau Publishing, Quesnel. B.C.

and Antler Creek would have eventually found Bowron Lake (then known as "Bear Lake"), since the Antler River joins the Bowron River right below Bowron Lake.

Exploration of the Bowron and Cariboo Mountains country continued throughout the 1860s and onward. Canadian Pacific Railroad engineers looked for links through the mountain passes and John Bowron, the Gold Commissioner, sent parties exploring into the hills to look for new gold-bearing ground and routes. One of the routes from the Cariboo to Tete Jaune Cache in the Robson Valley was located along the Goat River Pass. Mileposts were put in and the trail was cleared enough for dog sleds in the winter. The Grand Trunk Railroad, which was built in 1914, put an end to the effectiveness of the Goat River route. Another route through the mountains, called the "Dominion Route" was located between Lanezi Lake and Castle Creek.

From the earliest days of non-native settlement in the Cariboo Mountains, Bowron Lake played a central role. Early entrepreneurs in Barkerville caught kokanee on the lake and sold them to the hungry miners. (Rumour has it an ounce of gold bought a pound of the tasty salmon!) After the gold rush was over, trapping and guiding began to play a larger role in the economy of the area. After the First World War, returning soldiers were given land grants, and a number of families began farming along the Bowron River. Several lodges were built around the lake, and guides with names like Kibbee and Wendle were bringing in tourists for big game hunting.

By the early 1920s there was a concern that wildlife populations were under increasing stress in the Bowron Lake area. Thomas McCabe, John Babcock and Joe Wendle proposed a no-hunting conservation area around the inside of the chain of lakes as a wildlife sanctuary where animals could reproduce without disturbance, using Yellowstone and Glacier national parks as examples. A 240 square mile reserve was established in 1925. Since 1925, Bowron Lake Park has been enlarged a number of times in order to make the boundaries make more ecological sense and to increase recreational access to the lakes. The largest additions came in 1961 when it was originally designated a park and in 2000 with the addition of the Betty Wendle, Wolverine and portions of the Upper Cariboo River.²²

Objectives

- To protect and preserve archaeological values and resources within the parks.
- To recognize the historic use of the area by First Nations, guides, outfitters, trappers, and local settlers through interpretive media and management.
- To educate park users regarding the importance and sensitivity of surface and subsurface remains.
- To improve relationships and communications with those First Nations with asserted traditional territories in the parks.
- To increase archaeological, cultural heritage and historic knowledge relating to the parks.
- To work in conjunction with community or special interest groups who have an interest in maintaining the heritage values in the parks.
- To honour existing aboriginal rights.

²² Richard Wright. 1994. Bowron Lake Provincial Park. Heritage House Publishing Ltd. Surrey BC.

Strategies

- Archaeological Impact Assessments are required for all major developments, but not minor ones.²³
- Complete a Cultural Overview Assessment (COA) of Bowron Lake canoe circuit.
- Acknowledge and document the source of place names, both Aboriginal and European.
- Undertake a photo-inventory of all known structures in the parks and classify structures in the parks as Type A, B or C. Type A structures would be old, abandoned and unused with heritage value; Type B would have heritage value but still receive use by the public. Type C structures would have minimal heritage value but still receive use by the public.
- Consider short interpretive trails and signage describing the history of Type A structures. Consider signage describing the history of Type B structures. Type C structures do not require interpretation.
- Focus the collection of new cultural heritage knowledge on Cariboo Mountains and Cariboo River parks, using sources such as Victoria Archives, Barkerville Archives, Quesnel, Wells, Bowron Lake and Likely museums and other local sources of historical information.
- Work with other agencies, organizations, and universities to develop partnerships to increase knowledge of heritage values.
- Theme to be used in cultural heritage interpretation of the parks is "First Nations, fur trade, guide outfitting and early efforts in grassroots conservation."
- Protect the integrity of gravesites and graveyards in the parks.
- Undertake interpretation and/or investigation of First Nations' heritage in the parks only with the participation of First Nations.

Click to view plate 22. One of the old trapper cabins located on the Bowron canoe circuit which are heavily used in summer and seeing increasing use in winter. This one is located on McLeary Lake.

²³ Major work includes new development such as trails, campsites, boat launches. Minor is defined as maintenance to existing facilities and road, repairs to septic systems, installing signposts, fire rings, bear caches etc.

4.7 Bowron Lake Canoe Circuit

Introduction

Bowron Lake Park is famous for its unique canoe circuit of ten lakes that takes from six to ten days to paddle. The rugged snowcapped peaks of the Cariboo Mountains form a majestic backdrop to the east side, while the west side of the circuit meanders through the gentler Quesnel Highlands. The circuit totals 116 kilometres, including the lakes, sections of the Isaac, Cariboo and Bowron rivers, and several portages. As an alternative to the complete circuit, the west side route from Bowron Lake to Unna Lake and return is a 3 to 4 day canoe trip.

The circuit can be paddled any time from mid-May, when the ice melts, to mid-October. July and August are usually busiest. September, when the deciduous trees are displaying their fall colours, is often the best time to visit. The lakes are over 900 m (3000 ft) in elevation, so nights are cool, even cold, particularly after mid-September.

Visitor information is available at the Registration Centre located adjacent to the main parking lot. All visitors travelling the circuit or the West Side route must register and view a short video at the Centre. There is a vehicle-access campground with 25 campsites on the north shore of Bowron Lake, near the Registration Centre. A gravel boat launch is located at the north end of Bowron Lake near the private lodges.

Cooking shelters, camping areas, and cabins are strategically located around the circuit. The shelters are open log structures intended for cooking and drying equipment, not for camping. There are 54 camping spots around the circuit, ranging from large group sites to small, two pad sites. Camping areas have fire rings, bear-proof food caches and pit toilets. The cabins are intended only for emergency use or for drying out. Emergency radios and staff patrol cabins are placed strategically around the circuit.

On the northwest shore of Bowron Lake near the park entrance are privately operated camping areas and lodges. They provide canoe and kayak rentals, accommodation, supplies, and meals.

The "canoe circuit" is defined as the whole chain of 10 lakes and the "west side" of canoe circuit as Bowron Lake, Swan Lake, Spectacle Lake, Skoi Lake, Babcock Lake and Unna Lake.

Objectives

- To manage the Bowron Lake canoe circuit as a safe, wilderness-oriented canoeing experience.
- To provide a destination, 6 10 day canoeing opportunity for intermediate canoeists and kayakers.
- To accommodate a 1 3 day canoeing opportunity for regional and local users.
- To minimize the impact of visitors on the natural values and wildlife of the park.
- To accommodate a minimal level of winter activities in the park.
- To maintain a level of infrastructure on the canoe circuit consistent with a wilderness experience.

Strategies

Carrying Capacity

- Manage use levels to, over the medium to long term, achieve a target of a maximum of 46 users to depart on the Bowron canoe circuit (including the west side) on any given day. Departures should be staggered over the course of the day and all measures should be taken to ensure visitors are evenly distributed throughout the canoe circuit. Visitors should be informed that some campsites (e.g. Isaac Lake, Turner Creek) tend to be more crowded than others.
- Of the 46 users, 4 are reserved as daily "drop-ins", allowing 42 to be reserved ahead of time.²⁴
- Use number of people, not number of canoes, as primary counting mechanism.²⁵
- Continue to provide a 6 10 day backcountry canoeing experience, and accommodate a 1- 3 day backcountry canoeing experience on the west side of the circuit.
- Monitor visitor use on the west side of the circuit, and if congestion is occurring, consideration will be given to discourage this use (e.g. fee increases, restrictions, etc)
- Monitor the perceptions and satisfaction levels of park visitors on a regular basis.

Group Use

• Groups of more than 14 people will not be permitted on the canoe circuit. All groups will be required to use the designated reserved group campsites.

Use of Firewood and Gas Stoves

- Fires will continue to be permitted on the canoe circuit.²⁶
- Encourage the use of single burner gas stoves in order to reduce firewood consumption.
- Educate canoe circuit users about firewood conservation.
- Prohibit multi-burner stoves on the canoe circuit, except for group use.
- Use only dead and down wood for firewood.

Trail Development

- Maintain the existing portage trails to the current standards.
- Do not develop destination trails around the Bowron Lake canoe circuit or to the interior of the park.
- The Wolverine/Goat River trail re-enters Bowron Lake Park north of Kibbee Lake near Thompson Lake. The old corduroy road may be upgraded to a passable trail. It is expected this trail will join the portage somewhere between the Registration Center and Kibbee Lake. Use of this trail will be managed very carefully to ensure no damage occurs to the sensitive ecosystems in the area. The trail will be closed if impacts are demonstrated.
- Permit the development of short trails to specific unique natural or cultural features around the Circuit.

²⁴ These numbers are targets and should be seen as guidelines for park managers to minimize impacts on the natural values of canoe circuit while enhancing the experience of visitors.

²⁵ Note that both the SuperNatural British Columbia reservation service and the *Park Act* regulations use number of canoes. They assume an average of 2 people per canoe, but permit up to three people in a single canoe. There are special rates for single canoeists and kayakers, as well as for 4 or more people in a large canoe.

²⁶ Due to the wet nature of Bowron Lake Park and the importance of campfires to visitors, fires are viewed as being integral part of the canoe circuit experience.

Click to view plate 23: Trails on the Bowron Circuit have been vastly improved from the knee high mud that existed in 1973. Some say this is good, others like the old ways

Bear Caches

- Replace elevated bear caches with ground level, box style bear caches.
- Place bear caches at both ends of portage trails.

Powerboats

- Powerboats will not be permitted on the Bowron Lake canoe circuit, except for park operations and safety.
- Powerboats are permitted on Bowron Lake below the Bowron wetlands (See Section 4.6 Bowron Lake, for specific conditions.)

Commercial Use

- Permit a maximum of 20 canoe trips per year on the canoe circuit during the prime operating season from July 1 –Aug 31. Additional commercial trips may be permitted outside the core season.
- Commercially guided groups will use group campsites.

Facility Development

- Do not permit the development of new facilities or campsites on the canoe circuit, with the exception of those necessary for public safety.
- Existing facilities can be repaired or upgraded.
- Increase number of tent pads at group sites to a standard of eight per site where physically possible.

Winter Use

- Allow backcountry and cross-country skiing, dogsledding, snowshoeing.
- Consider clearing small corridors around water hazards during winter months (e.g. Cariboo River)
- Any winter activities will have to be at the user's own risk and hazards indicated clearly.

Education and Communication

- Develop and publish a pamphlet (complete with photographs and examples) informing canoe circuit visitors about safe packing techniques (e.g. using dry bags with straps and waterproof food containers), appropriate equipment for the trip (e.g. one burner stoves, no coolers, no suitcase style luggage) and how to store and pack food to reduce possibilities of conflicts with wildlife.
- <u>Strictly</u> enforce all those regulations and guidelines intended to reduce or prevent bear-human conflicts.

Natural Processes

- Allow natural processes to continue.
- Where a natural process conflicts with the management of the canoe circuit (e.g. siltation of lakes, vegetation in-growth etc) assess the risk to natural and cultural values before undertaking management actions.

Click to view plate 24: The west side of the Bowron Lake canoe circuit. Cariboo River in foreground, with Babcock, Skoi, Spectacle and Swan can be seen in the distance. Sugarloaf Mountain, at the end of Bowron Lake, can be seen in the background. Forest development can also be seen at the top left adjacent to the approximate park boundary, shown as a dotted line.

Canoe Carts

- Permit the continued use of canoe carts on the Bowron Lake canoe circuit.
- Encourage the use of new technology carts using wide, low impact tires.

Cabins

- Maintain cabins using historic materials where possible. Consider accepting corporate donations and recognizing/acknowledging these donations within the park.
- Educate park visitors regarding etiquette of cabin use.
- Provide interpretive materials to inform visitors about the history of the public cabins in the park.

4.8 Outdoor Recreation Opportunities Management

Introduction

Cariboo Mountains, Cariboo River and Bowron Lake are three very different parks. Each park has a range of recreational use and opportunities that vary by the amount of access, public information and the nature of their landscapes. The following describe the recreational vision (or "concept") for each park. The main tools used to implement these visions are the recreational objectives and strategies found below and the zoning of each park.

Bowron Lake – Recreation Concept

Bowron Lake is one of the busiest and best known backcountry parks in British Columbia. Many books have been published on the chain of lakes, over a thousand websites are devoted to providing information on the area, and between 5,000 - 7,000 visitors use the backcountry canoe circuit every year. The majority of the use occurs between the months of May and September, with July and August being the busiest. Winter use is currently very low and is limited to local residents skiing and snowshoeing. The vast majority of use in the park occurs on the chain of lakes, with negligible use of the surrounding mountains or the interior of the park.

The recreation concept for Bowron Lake Park is focused on maintaining the wilderness nature of the canoe circuit. Daily use numbers will remain at status quo or be reduced slightly in order to minimize impacts on wildlife, facilities and other users. Facilities will be maintained and restored, with no new facilities constructed (with the exception of those related to safety and managing bear-human interactions). Winter use of the circuit will be permitted, with the circuit cabins made available for winter users. Small bypass trails may be marked which would enable areas of unsafe ice during the winter to be avoided.²⁷

The actual use of the backcountry of Bowron will change very little from status quo. No new long trails would be constructed into the interior or periphery of the park, although short interpretive trails to specific features (e.g. waterfalls or heritage cabins) will be considered. Bowron Lake itself would become more welcoming to local and regional users through the development of a small day use area, improved interpretation and signage, and the construction of one or more short interpretive trails.

The Wolverine addition to Bowron will provide the access through the park to the Robson Valley for a summer hiking and horse trail and a potential winter snowmobile trail. No connections between this trail and the Bowron canoe circuit will be permitted. This potential snowmobile corridor will be the only motorized recreation allowed in this park.

²⁷ Since the parks are not patrolled in the winter, BC Parks considers any winter use of the park completely at the user's own risk.

Cariboo Mountains – Recreation Concept

As a relatively new park in British Columbia's protected areas system, current recreational use of Cariboo Mountains Park is quite limited. Currently, the main uses are guided hunting and fishing with some limited frontcountry camping and boating at Ghost Lake. Helicopter skiing occurs in approximately 30% of the park near the headwaters of the Mitchell and Niagara drainages. Access to the park is primarily by jetboat in the case of the Mitchell River, by floatplane to Mitchell, Christian (a.k.a. Windy) and Ghost lakes, or by vehicle to the recreation site at Ghost Lake. The side valleys of the park can also be accessed on foot by old deactivated logging roads adjacent to the park.

The recreation concept for this park is to retain its remote, wilderness character and to provide recreational opportunities compatible with its significant wildlife values. Access to the park would still be permitted by floatplane or helicopter for fly-in hiking and other backcountry opportunities, and by vehicle to Ghost Lake. Due to the high potential for human-grizzly bear conflicts in this park, trails and campsites will generally not be constructed in the backcountry and the Mitchell River Special Feature Zone will be closed to overnight camping.

Winter use in the park will be allowed, with emphasis on non-motorized recreation or limited mechanized use for pick-up and drop off only. The main consideration for managing winter use is to limit impacts to the significant goat and mountain caribou populations in the park as well as denning bear and wolvernine populations.

The Ghost Lake recreation site is envisioned as the main use node for the park. The campsite will be upgraded as use increases and demands warrants, and park directional signage will be provided on the 3100 Road.

Click to view plate 25: Another side valley draining into the Matthew River Valley. Approximate park boundary is shown by the dotted line. The lake in the foreground is popular among local fishers.

Cariboo River – Recreation Concept

Cariboo River was managed as a Wildlife Management Area (WMA) by the former Ministry of Environment from the early 1980s to 1995 when the area was established as a Class A park. The primary reason for the WMA designation was to conserve critical moose winter range. Under the WMA designation, recreation continued to be an acceptable use in the area.

The recreation concept for this small park is to provide opportunities that are compatible with the moose populations and vegetation it was designed to protect. Water-based activities such as fishing, driftboating, wildlife viewing and motorized boating are all considered compatible, with hunting recognized as a permitted traditional activity. The main access to this park will continue to be at the Cariboo River bridge crossing. A small day use area will be considered near the bridge as demand warrants. Due to the high wildlife values in the park, overnight camping will not be permitted.

Commercial Recreation Opportunities

Part of the rationale for completing a management plan for this block of parks was to recognize the potential for commercial tourism opportunities. Wells, for example, is part of the former Ministry of Tourism's "Gateway Community" program, which has the goal of providing links between protected areas and adjacent communities. There is also land use plan direction for these uses. The *CCLUP* states that parks:

...will be available, in principle and where appropriate, for commercial tourism and recreation. Development opportunities will be identified during area-specific management planning which will recognize the protection of the special natural values of each area and the provision for public non-commercial recreation. In some circumstances, development opportunities may include "fixed roof" accommodation. (*CCLUP* 90 Day Implementation Report).

One of the issues with commercial tourism opportunities in parks has been the challenge of finding opportunities that are compatible with the natural values for which the park was created. For the purpose of this plan, 17 activities/opportunities have been identified. The identified activities:

- are compatible with park values and the management plan;
- are located in areas with few conflicts between wildlife and/or other users;
- will have spatial and temporal boundaries placed on them; and,
- will be advertised on a competitive basis to ensure the best-qualified operator is successful.

More details on these opportunities can be found in Appendix A.

Objectives

- To provide high quality, low impact recreation activities that have minimal impact on wildlife and other park values.
- To enhance visitor awareness of wildlife populations and possible human-wildlife conflicts.
- To ensure recreation activities are managed and monitored for their potential impacts on natural and cultural heritage values, particularly on wildlife and fish populations.
- To provide opportunities for commercial recreation which are compatible with the values of the parks.
- To ensure public access to the parks is not pre-empted by commercial recreation activities.
- To issue, in Cariboo Mountains and Cariboo River Parks, Park Use Permits for those activities that existed prior to October 1994.
- To issue, in the Betty Wendle, Wolverine, and Upper Cariboo River additions to Bowron Lake Park, Park Use Permits for those commercial activities that existed as of June 2000.

Strategies

Frontcountry Camping and Day Use Areas

- Develop a day use area at Bowron Lake adjacent to the canoe dock (See 4. 4 Bowron Lake for more details)
- Over the medium term or as demand warrants, upgrade the Ghost Lake campsite and install a boat launch.

- Over the medium to long term or as demand warrants, develop a day use area, boat launch and interpretive site at the bridge crossing the Cariboo River in Cariboo River Park.
- No other frontcountry camping permitted outside of the Intensive Recreation Zone.

Non-Mechanized Public Recreation (backcountry hiking, backpacking, mountaineering etc)

- Permit public, non-mechanized recreational use throughout all of the zones in all of the parks.
- Ensure that all park information specifies the undeveloped nature of the backcountry so that conflicting expectations are avoided.
- Provide education to large groups of hikers to minimize impacts and human-wildlife conflicts, and encourage smaller groups of hikers.
- No overnight camping in the Mitchell River Special Feature Zone.

Angling

- Manage natural stocks in conjunction with Fish and Wildlife, Science and Allocation Section (Ministry of Water, Land and Air Protection) and Fisheries and Oceans Canada, using regulations to maintain natural fish diversity and populations viability.
- See 4.2 Wildlife and Fish, for specific direction on Bowron Lake and Mitchell River.
- Guided angling will not be permitted on the Bowron Lake Chain of Lakes.

Boating

- Boats are not permitted above the limits to navigation sign on the Upper Bowron River (See 4. 4 Bowron Lake section)
- The following restrictions apply to boating on the Mitchell River:

a) Spawning beds (7 km and up) closed to motorized access September 15 – July 1. Foot access only b) Recommendation to Canadian Coast Guard that a 200+ horsepower restriction be placed on the whole river year round.

c) Recommendation to Canadian Coast Guard that personal watercraft (e.g. jet-skis) be banned from the river year-round.

d) Recommendation that the river be considered as a "Class One" River.

e) Minimize the number of daily trips per boat on the river

f) Utilize education and advertising to inform the public about grizzly bear hazards and potential impacts of fishing on bull trout habitat and populations.

• The following restrictions apply to boating on Bowron Lake:

a) prohibit the launching of personal watercraft (jet-skis) on Bowron Lake.

b) work with the Coast Guard to prohibit the operation of personal watercraft on Bowron Lake c) prohibit houseboats on Bowron Lake.

d) horsepower restrictions will not be considered at the present time. Use will be monitored and restrictions may be recommended if unacceptable impacts are demonstrated.

e) educate canoe circuit paddlers that Bowron Lake is multi-use and motorboats can be expected. Possible strategies include signing the end of the wetland where the Bowron River enters Bowron Lake; and including this message in the Registration Center video.

f) develop a Code of Ethics for motorboats in cooperation with Coast Guard and inform motorboaters.

• Motorized boats permitted on all lakes throughout the parks, with the exception of the Bowron Lake canoe circuit, Hunter Lake, Christian Lake and Twin Lakes. Motorized boats may be used for park management purposes (e.g. ranger patrols, park facility operators and transporting supplies and equipment)

Management Using Ecological Integrity Principles: Recreation

BC Parks recognizes that recreation in a natural environment is a key function of protected areas. As such, the management of protected areas must ensure the maintenance of the natural environment as the basis for visitor use and enjoyment. The management of human recreation in protected areas must reflect the principles of ecological integrity by allowing activities that are appropriate and not detrimental to the local environment.

A wide variety of types of recreation are allowed within these parks. No-trace camping, canoeing, angling and existing heli-skiing and heli-hiking, for example, are all deemed acceptable uses within these parks. However, where certain activities are allowed is based on sensitivities of the ecosystem. And while humans are a part of the parks' ecosystem, we recognize that there are areas where the needs of other species prevail.

Horse and Llama Use

- Horses and llamas are permitted in the Natural Environment and Wilderness Recreation zones, but not in the Intensive Recreation, the Wilderness Conservation or Special Feature zones.
- Horses are not permitted on the portages in Bowron Lake Park.
- Undertake forage assessments in frequently used areas.
- Assess conditions and monitor the effects of horse use and regulate as necessary. Trails may be closed during certain conditions (extended periods of rain, late thaws, etc.)
- Encourage all horse users to follow a Code of Ethics and to use weed-free pellets for large groups.

Hunting

- Recognize hunting as a pre-existing and allowable activity in Cariboo Mountains and Cariboo River parks, as well as the Wolverine, Betty Wendle and Upper Cariboo River additions to Bowron Lake Park.
- No hunting in the pre-2000 boundaries of Bowron Lake Park.
- Access to the Betty Wendle and Upper Cariboo River for hunting purposes will not be permitted through the Bowron Lake canoe circuit.

Mountain Biking

- Mountain biking is permitted throughout these parks with the exception of the Wilderness Conservation Zone. Users will be encouraged to use existing trails and roads. Levels of use and areas of use may be adjusted over time if impacts are demonstrated or user conflicts develop.
- Bicycles are not permitted on any of the Bowron Lake portage trails, except for park management purposes.

Helicopter Hiking

- Existing helicopter hiking is permitted in the Betty Wendle drainage.
- Access by helicopter to several areas for hiking may be permitted. These commercial opportunities and the conditions placed on them are outlined in Appendix A.

Helicopter Skiing

One of the major issues that arose during the planning process was the appropriateness of motorized recreation in general and heliskiing in particular. Public input generated during the planning process identified three major concerns with motorized recreation. These concerns included the potential impact on wildlife; the lack of information on critical habitats in the park; and the impacts on existing or anticipated wilderness recreation activities in the park.

Concerns with wildlife focused primarily on the endangered mountain caribou. Mountain caribou, which include the caribou in this area, were placed on the red-list of "species at risk" by the Conservation Data Centre in 2000 because of continuing declines in abundance and current threats. In 2000, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) listed these caribou as nationally threatened.

In response to this listing, British Columbia is currently developing a Provincial Mountain Caribou Recovery Plan (PMCRP) that addresses the threats to this species and its habitat. A short-term goal of the PMCRP will be to encourage scientific research that will provide recommendations on ways to manage recreational access to minimize negative effects of disturbance on caribou movements and habitat use.

- Helicopter skiing is permitted in the Betty Wendle, north half of the Upper Cariboo River and the headwaters of the Niagara and Mitchell drainages consistent with tenures that existed at the time of park creation.
- New or expanded helicopter skiing will only be considered when it can be demonstrated, through scientific research and consistent with the Provincial Mountain Caribou Recovery Plan, that helicopter skiing can be done in a manner that is not detrimental to the local population of mountain caribou.
- Work in partnership with academic institutions, other government agencies and helicopter skiing organizations to increase knowledge about the interactions between helicopters and wildlife, focusing on mountain caribou.

Nature Study and Cultural Appreciation

- Develop educational materials for wildlife viewing including ethics.
- Work with First Nations and museums, organizations and agencies (e.g. universities, Barkerville Historic Town) to develop interpretive materials.

Winter Recreation

- Backcountry skiing and snowboarding, cross country skiing, dogsledding and snowshoeing are all permitted activities throughout all zones in all of the parks.
- Short routes or trails may be blazed or cleared around the Bowron Lake Chain of Lakes in order to bypass areas of ice hazard (e.g. Cariboo River).
- Dogs must be controlled at all times in order to minimize impacts on wildlife during the critical winter period.
- Provide information to winter users about potential hazards.

Recreational Guiding

• Types of acceptable recreational guiding are outlined in Appendix A.

Trail Use and Identification

- Due to the wilderness nature of these parks, formal trails will not be built or signed (exceptions include short interpretive trails around the Bowron Circuit and short interpretive trails from the Bowron Lake campground. See 4.4 Bowron Lake and 4.7 Bowron Lake canoe circuit for details).
- Routes and trails may be seasonally closed due to bear and wildlife hazards or during certain conditions (late thaw, extended periods of rain, blowdown).

Caving

- Discourage public use of caves by not publishing or promoting cave locations or values.
- Prohibit the use of caves in the parks for commercial recreation. Some very limited public use may be permitted by Park Use Permit under special conditions.

Snowmobiling

- Snowmobiling is permitted as an existing use on Ghost Lake and Roberts Peak. While snowmobiling is permitted in these areas, use will not be signed, promoted or encouraged.
- Snowmobiling also permitted at the north end of Bowron Lake only for residents travelling to cabins accessible by water (special conditions apply on Bowron Lake, see 4.4 Bowron Lake for more details).
- A snowmobile corridor will be considered through the Wolverine addition to Bowron Lake Park (see 4.5 Access and Adjacency for more details).
- A snowmobile corridor will be permitted along the Z-Road from outside Cariboo Mountains Park to Quesnel Lake. The area will be signed open. If the Mitchell wetlands are being used, or if impacts to other park values are being demonstrated (e.g. swans, moose etc), the corridor will be closed.