Natural and Cultural Values Management

Introduction

Height of the Rockies and Elk Lakes provincial parks have long been recognized as outstanding wilderness areas. The high profile of these parks, the significance of their natural values and an increasing demand for backcountry recreation suggests that these parks must be protected and managed wisely. The parks play an important role in protecting wildlife populations and habitat while adding to the biodiversity and connectivity values of the Southern Rocky Mountains ecosystem. To this end, the following section sets resource management objectives and describes the actions to protect these natural values and processes.

Land and Natural Resource Tenures

Park Tenures

There are a number of pre-existing tenures and rights issued in these parks, including guide-outfitting, trapping, grazing, mineral and gas tenures. Also, the Association of Canadian Mountain Guides (ACMG) holds a province wide tenure for mountain guiding covering BC Parks throughout the province including Elk Lakes and Height of the Rockies provincial parks. The only area in both parks not included in a guide-outfitting territory or range tenure is the Middle Fork of the White River.

The Kootenay and Boundary Land Use Plan required that the legal rights of pre-existing tenure holders and landowners within newly established parks in the region be recognized and that their interests be dealt with fairly (Appendix C). Some tenures that were not compatible with protected areas such as timber and minerals were to be discontinued through negotiation under provincial policy respecting resource rights compensation while others were permitted to continue in accordance with the existing management conditions attached to those tenures.

Height of the Rockies Park Tenures

Height of the Rockies Adventure Company Ltd. operates in the Palliser and Joffre Creek drainages and at Queen Mary Lake and Ralph Lake. This guide-outfitting company provides commercial guiding services, including big game hunting, pack trips, nature viewing and photography, and angling under Park Use Permit. Elk Valley Bighorn Outfitters provides similar services under permit in the Forsyth, Quarrie and Bleasdell Creek drainages of the park. Use of the range in these areas associated with guide-outfitting, is authorized by a tenure issued under the *Range Act* and administered by the BC Ministry of Forests in consultation with BC Parks.

Trapping permits have been issued for the Palliser River, the Middle Fork of the White River and the Forsyth/Quarrie/Bleasdell Creek drainages. Other tenures include portions of six mineral claims which overlap the boundary of the park.

Elk Lakes Park Tenures

Elk Valley Bighorn Outfitters also provides a range of guide-outfitting services in Elk Lakes Provincial Park; mostly in the Cadorna Creek area. The only other tenure is a trapping license that covers the entire park. There are no mineral tenures.

Adjacent Land Use/Tenures

Both parks have forest harvesting occurring in the adjacent forest land as well as tenured coal-bearing land just outside park boundaries. Exploration for coal in this vicinity has been dormant in recent years; in fact, one area adjacent to Elk Lakes Park has had its coal rights reserved to the Crown since 1974. Government has started a process to assess the need for continuing to reserve these coal rights. Removal of the reserve would make the large belt of coal bearing lands along the eastern boundaries of the parks available for tenure acquisition and possible evaluation (exploration). The likelihood of any site advancing to the development stage in the future is unknown at this time.

In addition to tenures, land use in areas adjacent to the park is governed by resource management zones and guidelines established in the Kootenay and Boundary Land Use Plan Implementation Strategy (KBLUP-IS). Portions of the western boundary of Height of the Rockies Park and the southern boundary of both parks are bounded by a Special Management Zone where greater emphasis on retaining conservation values is to be considered. One of the purposes of these Special Management Zones was to maintain a north to south regional connectivity corridor linking the protected areas in the vicinity to other important habitats in the region. East to West connectivity was also recognized in the KBLUP-IS although Special Management Zones were not established. The rest of the park boundaries are adjacent to Integrated Resource Management zones and Coal Enhanced Resource Development zones.

In order to manage the park values in the context of surrounding land uses, BC Parks must work cooperatively with other park managers (i.e. Alberta Natural Resources and Parks Canada) as well as the BC Ministry of Forests, BC Ministry of Energy and Mines, BC Environment and First Nations in the management of park values, both within the parks and outside their boundaries.

Objectives:

To recognize historic uses.

To minimize the impacts of park tenures.

To discontinue non-conforming tenures

To work with adjacent land managers to minimize the impact of adjacent land use on park values.

To work within local planning processes to minimize impact on areas adjacent to the park that have high natural, cultural and recreation values.

Actions:

- Authorize current trapping and guide outfitting operations by issuing Park Use Permits for these activities, associated structures and spike camps.
- Acquire trapping rights as they become available.
- Discontinue mineral claims in accordance with provincial government policy on resource rights compensation.
- Participate in coordinated management planning to address the impact on park values of industrial activities in adjacent resource management zones.

Vegetation

Plant Communities

There are four plant communities of note in Height of the Rockies and Elk Lakes provincial parks.

Valley bottom meadows found in the White River and Cadorna Creek are important ecological and scenic features. These meadows offer superb vistas, diverse plant growth and are important habitat for wildlife. They have historically been used by hunters and guide-outfitters for grazing their horses.

Secondly, extensive alpine meadows and lush avalanche paths are found in such areas as Sylvan Pass, the slopes adjacent to Mt. Queen Mary and Mt. King George in the Royal Group, the southerly flanks of Mt. Sir Douglas, and at higher elevations in Quarrie and Cadorna Creeks. These communities are important habitat for grizzly bears.

Thirdly, mid-elevation forests of fir and spruce are the most prevalent communities providing the main setting for the park and habitat for most of the parks' wildlife. Fourthly, there is a blue-listed (at risk) plant species in Elk Lakes Park. Slender Paintbrush (Castilleja gracillina) can be found on Elkan Creek.

Like most of the Rocky Mountains, the forests here have experienced fire many times. A massive fire in 1936 burned most of the forests in the south end of Height of the Rockies Park while remnant old forests can be still found around the Elk lakes, Cadorna Creek, the upper end of the White River, Joffre and Queen Mary Creek. Natural ecosystem processes affecting vegetation like fire, insects, disease, weather (wind, avalanches etc.), and grazing by wildlife, are recognized as natural occurrences shaping vegetation. Managing ecosystems will be required to maintain ecosystem processes in as natural a state as possible. A high level of information and understanding of these natural processes is essential.

Range Management

Open meadows of the park are used for forage by wildlife and park visitors' horses. Management of range in these parks is divided between two jurisdictions. The management of grazing license areas, tenured at the time the parks were designated, is the responsibility of the Ministry of Forests under the *Range Act* and the*Forest Practices Code of British Columbia Act*. Untenured range in the parks is the management responsibility of BC Parks. This condition, established by the KBLUP at the time the parks were designated, recognized the economic importance of continued range use by guide-outfitters. It also acknowledged the Ministry of Forests' historic and statutory role in managing range in the former Height of the Rockies Wilderness Area. The BC Ministry of Forests - Invermere Forest District developed a Range Use Plan (1997) for the grazing tenures in the Palliser area. It identifies range and other resource values as well as strategies for sustainable grazing. A Protocol Agreement between the BC Ministry of Forests and BC Parks is also in place to facilitate inter-ministry cooperation in the management of range.

One of the main impacts on range is over-use by horses. Over-grazing has been observed in some areas as a result of inadequate horse management and sheer numbers of horses at popular camp locations. Appropriate watering facilities, monitoring watering regimes and changing management practices such as salting[1] need to be considered to maintain healthy and productive plant and wildlife communities.

Objectives:

To maintain natural plant communities for their inherent value and for their contribution to the diversity of wildlife habitats and visual and recreation attractions of these parks.

To protect rare, endangered and sensitive native plant communities and species as they are identified and to prevent the establishment of non-native species.

[1] A technique of using salt blocks to control grazing stock but also used to attract wildlife which alters their natural behavior.

To maintain the parks' natural forage and range resources in a natural condition.

To maintain forage for wildlife and range use.

Actions:

- Complete a vegetation inventory to locate, identify and map plant communities, rare species and threatened plant communities in the Special Features Zones, Natural Environment Zones and areas that could potentially be impacted by recreation.

- Prepare a vegetation management plan for the above mentioned areas that will identify management strategies for specific issues such as insect infestation, disease, and blowdown, in consultation with other agencies.

- Prepare a fire management plan that defines the role of these natural disturbances in the maintenance of natural ecosystem diversity. This plan will also consider fire history, natural fire regimes, impacts of suppression, historical use of fire by humans, concerns of other agencies and values in need of protection.

- In the interim, until the fire management strategy is prepared, undertake an initial attack on all wildfire by either Ministry of Forests or BC Parks to control the fire until the situation is assessed. The fire may be allowed to run its natural course as long as it meets landscape biodiversity objectives, and visitors, adjacent commercial forests and park facilities are not in danger. The intent is to allow natural fires that occur under normal environmental (non-extreme) conditions to run their natural course. Use of mechanized heavy equipment will not be permitted.

- Retain wildlife trees except where there is a hazard to visitors or facilities.

- Apply low impact horse management practices such as hobbling[2] and use of supplemental feed for all horse-packing groups. Limit the number of horses in a group where/when necessary.

- Encourage the use of processed feed.

- Work with the Ministry of Forests to develop a range use plan that includes Elk Lakes Park.

- Monitor and assess the presence of noxious weeds.

[2] To fasten together the legs of a horse to prevent straying.

- Monitor and evaluate periodically the effectiveness of the Range Use Plans in cooperation with the Ministry of Forests. The guidelines may be modified, if necessary, to achieve the objectives of this plan.

- Reconsider the practice of salting in cooperation with the Ministry of Forests.

Water

Height of the Rockies and Elk Lakes provincial parks lie within the Kootenay River watershed. They are drained by the Palliser River, the Middle Fork of the White River and the headwaters of the Elk River. The area accumulates a considerable snowpack in the winter. It functions as an important water source in summer for areas further down in the Kootenay River system, particularly the dry-belt zone of the Southern Rocky Mountain Trench.

There are over 60 alpine and sub-alpine lakes in these two parks. These range from larger mid-altitude lakes such as the Connor Lakes in the southeast, to smaller high altitude lakes such as the Westside lakes in the White River drainage.

Objective:

To maintain the quality of water in the parks.

Actions:

- Ensure recreational activities have minimal impact on erosion of surface materials and do not compromise water quality.

- Assess and manage use to ensure proper disposal of human waste.

- Ensure sanitary facilities are properly designed and located.

Fish Values

Fish species in Height of the Rockies and Elk Lakes Parks include cutthroat trout, rainbow trout and bull trout. A cutthroat trout fishery is found in the Middle White River. The major lakes such as Connor Lakes and Upper and Lower Elk lakes are self-sustaining fisheries while the numerous smaller alpine lakes such as Frozen Lake and Driftwood Lake have been stocked by BC Environment over the past 40 years. Little is known about the current state of the fisheries in the parks.

The pure stock of Westslope cutthroat trout (indicated by DNA testing) in Connor Lakes is an important source of brood stock for the Kootenay Fish Hatchery, which supplies lakes throughout the Kootenays. Connor Lakes were originally surveyed in the 1950's and

found to be barren of fish. In 1952 they were stocked with cutthroat trout and have since become a self-sustaining fishery. Removal of brood stock began in 1971 and has continued every other year through a Transplant License issued by the Department of Fisheries and Oceans. This is the only source of Westslope cutthroat trout brood stock in the interior of the province.

BC Parks must consider several fish values issues, including the continued stocking of lakes; the removal of brood stock from Connor Lakes for the Kootenay Fish Hatchery; the management of resident and introduced fish stocks; and the use of regulations and closures to ensure viable populations.

Objective:

To maintain and enhance natural fish habitat.

Actions:

- Conduct inventories of indigenous and resident fish populations as required in concert with BC Environment.

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

- Ensure the parks' sanitary facilities are non-polluting.

- Authorize the continued use of Connor Lakes as a source of Westslope cutthroat trout through Park Use Permit subject to the BC Parks Impact Assessment Policy.

Wildlife

These parks are home to significant populations of every big game species native to the Southern Canadian Rocky Mountains, including elk, mule and white-tail deer, moose, big horn sheep, wolf, wolverine, lynx, cougar, black and grizzly bear. Grizzly bears are a blue-listed (at risk) species provincially, but recent DNA research in the parks indicates that grizzly bears are abundant and not at risk in this area. The parks also contain what is believed to be one of the largest, most densely populated mountain goat areas in the world but, as with most wildlife species in these new parks, there is very little inventory information to confirm their significance or determine management requirements.
There is a need for current information on the habitat and the health of all wildlife species for these parks and in addition, an assessment of the significance of the grizzly bear and mountain goat populations.

BC Parks undertakes management activities in support of provincial, national and international wildlife initiatives. Memoranda of Understanding are in place with BC Environment for the cooperative management of shared wildlife resources, procedures for setting hunting regulations and procedures for setting freshwater fishing regulations. However, in provincial parks the conservation of viable, natural wildlife populations, their habitat and ecological processes that affect them will always take precedence over their use by people.

Objectives:

To maintain the natural diversity of wildlife species and habitat, with special consideration given to rare, endangered or threatened species.

To contribute to the maintenance of opportunities at the regional level for genetic interchange between populations inside and outside the parks.

To increase the knowledge and understanding of wildlife and their habitat requirements both inside and outside the parks' boundaries.

To encourage research aimed at a better understanding of mountain goats and grizzly bears.

To keep wildlife wild and natural with its behavior altered as little as possible by human impacts.

Actions:

- Develop a wildlife inventory of key species including red and blue-listed species and mountain goats.

- Develop a coordinated long term approach to wildlife management with other government agencies including BC Environment, BC Ministry of Forests, Parks Canada, First Nations and Alberta Natural Resources, with emphasis on the following key elements:

    - habitat improvement, nuisance wildlife, transplantation;
    - access, connectivity and range management;
    - coordinating wildlife management objectives.

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

- Investigate opportunities to establish grizzly bear benchmarks for scientific study and management.

- Encourage the assistance of volunteers to collect wildlife data with BC Parks Observation Cards; e.g., bird watching clubs, anglers etc.

- Manage bear/human conflict in accordance with the BC Parks' Bear-People Conflict Prevention Plan

- Ensure the protection of rare, endangered and at risk species from visitor impacts.

Cultural and Historic Values

Although only preliminary archeological work has been done in the two parks, there is abundant evidence of prehistoric occupation suggesting human presence in the East Kootenays for at least 10,000 years. In more recent times, the Ktunaxa made use of this area for hunting and as a route to buffalo hunting areas on the prairies. The Elk Lakes area was also frequented by the Stoney Indians in the late 19th century. They hunted in the area and named many of the surrounding peaks.

Prior to the arrival of the Stoneys, the sole inhabitants of the Southern Rockies were the Ktunaxa. Written history of the area dates back to the arrival of David Thompson in 1811, when he established a trading post near Invermere. In 1858, John Palliser came over the North Kananaskis Pass to the river that now bears his name. At the turn of the century, W.D. Wilcox explored the area extensively, and wrote an article for the 1902 edition of National Geographic Magazine detailing his trip through what is now Height of the Rockies and Elk Lakes provincial parks.

The next visitors to the area were members of the British Columbia/Alberta boundary survey in 1916. The lure of unclimbed summits soon attracted mountaineers and by 1919, the three highest peaks had been climbed.

These two parks have a rich First Nations and post-contact history; however, there has been relatively little archeological research conducted in the area. Aboriginal use, early exploration, and historic trail use need to be better understood.

Objectives:

To gain a better understanding of the pre and post-contact history associated with the parks.

To locate important cultural heritage sites and ensure their protection.

To work with First Nations, other government agencies and Alberta Natural Resources to ensure First Nations access to important cultural heritage sites.

Actions:

- Protect 'in situ' important features, sacred sites and archeological sites. To protect them from damage they will not be identified on any park literature.

- Adopt the BC Archeological Assessment Guidelines whenever development plans for other resources have the potential to disturb archeological sites.

- In concert with First Nations, inventory the cultural and archeological features in the parks.

- Work with First Nations and the Heritage Conservation Board in managing the archeological and heritage resources in the parks.

Paleontological Values (Fossils)

Fossil deposits have been reported in Height of the Rockies and Elk Lakes provincial parks, although little information exists about their nature and location in the parks. A few have been photographed. Most information on the fossils consists of anecdotal accounts from long time users of the parks. These accounts suggest that some of the fossils could be nationally significant. Management direction is required to determine the significance of the fossils and ensure these deposits are maintained in their current natural condition and not disturbed. Although fossil collecting is prohibited by the *Park Act* these valuable features are vulnerable to collectors.

Objectives:

To determine the significance of these fossils.

To encourage a better understanding of the geological history of the area through research.

To protect and maintain the fossil deposits in a natural condition.

Actions:

- Inventory the main fossil features in the parks and assess their significance.

- Maintain the confidentiality of the location of fossils for their protection.

- Assess the threat to fossil features by natural forces such as erosion or by public extraction.

- Develop preventive measures (i.e. monitoring, education and enforcement) to address the threat of extraction or impacts.

Scientific Research and Education

We know little and need to know more about these parks. Knowledge of the details of the natural and cultural values is critical to meaningful management. As these parks are situated next to a World Heritage Site (the four Rocky Mountain National Parks), Mount Assiniboine Provincial Park and Peter Lougheed Provincial Park in Alberta, there are excellent opportunities for collaboration and cooperation in the fields of research , education and management.

Objectives:

To encourage approved scholarly research relating to the archeological and cultural history of the parks.

To encourage multi-agency cooperation in the field of protected areas planning and management.

To promote education and conservation through increasing understanding of the natural and cultural values of the park.

To encourage study of the parks as comparative benchmarks for monitoring ecological change.

Actions:

- Work with local colleges, universities, other agencies and corporate sponsors to establish funding and appropriate and timely research opportunities such as inventory and monitoring.

- Limit scientific research which involves collecting specimens by the specific terms of a research permit.

Ensure that any material that is collected for scientific research will remain the property of the Province of British Columbia, regardless of where it is stored.