

Prince George Land and Resource Management Plan



File: 31090-25-06

Dear Reader:

Re: Approval and Direction to Implement The Prince George Land and Resource Management Plan

On behalf Of Cabinet, we are pleased to approve the Prince George Land and Resource Management Plan (LRMP) and direct participating ministries to implement the plan.

The LRMP is intended to guide ongoing resource management activities including designation of new provincial parks and planning for forest development. The Omineca-Peace Interagency Management Committee is charged with ensuring that the plan is implemented monitored and reviewed.

We would like to thank members of the LRMP table for the considerable dedication and effort that they brought to the table in developing this plan for the management of land, and resources in the Prince George LRMP area. The table has demonstrated that diverse interests can work together to develop consensus on future management of land and resources. Their cooperative approach and commitment in negotiation at the community level are exemplary for other Land and Resource Management Planning processes. We encourage table members to continue to participate in plan monitoring.

Your ongoing interest and involvement will ensure that the Prince George LRMP in the Prince George LRMP area.

Dan Miller
Minister of Energy and
Mines

Cathy McGregor
Minister of Environment, Land and
Parks

David Zirnhelt
Minister of
Forests

**Prince George Land and Resource Management Plan
Monitoring Committee
Summary of Activities
1999 - 2004**

January 1999	LRMP approved by Ministers of Energy and Mines; Environment, Lands and Parks; and, Forests
March 1999	LRMP Meeting #109
May 1999	Mailed Up-date
October 1999	Monitoring Committee meeting.
May 2000	Most of our LRMP Protection RMZs are established as Parks.
May 2000	Monitoring Committee meeting
October 2000	Monitoring Committee field trip.
April & May 2001	Interagency Planning Team (IPT) prepared a Draft Implementation Report which was presented to the Monitoring Committee for review and comment.
June 2001	Monitoring Committee field trip.
June 2001	Final version of the Implementation Report was produced and submitted to the Interagency Management Committee.
September 2001	Special presentation was provided to the Monitoring Committee. Dr. Gilbert Proulx, had completed a report for the Prince George Forest District titled Characteristics and Management of American Marten Habitat at Stand and Landscape Levels.
June 2002	Monitoring Committee field trip.
June 2002	Monitoring Committee meeting.
November 2003	Monitoring Committee meeting.
October - December 2004	LRMP / Mountain Pine Beetle Action Plan development.
December 2, 2004	Monitoring Committee meeting.

Introduction

A group of people from the Prince George area started work on a Land and Resource Management Plan (LRMP) in 1993. The approved plan will govern all land use activities on Crown lands within the Prince George planning area over the next ten years.

The Prince George Land and Resource Management Plan is set forth in this document. It contains:

- ➔ A description of the planning area and an overview of the planning process. (Section 1)
- ➔ A set of management directions for a number of specific resource values. These directions apply to the entire planning area. (Section 2)
- ➔ Resource Management Zone (RMZ) definitions and a discussion of Protected Area Strategy (PAS). (Section 2)
- ➔ Resource Management Zone (RMZ) descriptions, objectives and strategies. (Section 2)
- ➔ Implementation. (Section 3)
- ➔ Transition. (Section 4)
- ➔ An Interpretation, Monitoring and Amendment Plan. (Section 5)
- ➔ Issues Outside of LRMP Terms of Reference. (Section 6)
- ➔ A Glossary and other supporting documents. (Section 7)

1.1 The Planning Area

The area covered by the Prince George Land and Resource Management Plan (LRMP) is located in east-central British Columbia and is consistent with the administrative area known as the Prince George Forest District (see Map 1). The total area encompassed by the LRMP is 3.4 million hectares.

1.1.1 Biophysical Description

The LRMP area has a diverse landscape which varies from dry, rolling plateau country in the south and west, to wet foothill and mountainous terrain in the north and east associated with the Rocky and Cariboo Mountains. Major rivers in the area include the Fraser, Nechako, McGregor, Salmon, Blackwater, Willow, Bowron, Crooked and Parsnip. The large watersheds feeding these rivers were used to subdivide the planning area into smaller geographic areas called Resource Units. Resources and values considered in the LRMP planning process are documented in the reference document "Watershed Profiles". These are available from the Prince George Forest District office.

The LRMP planning area can roughly be divided into three northwest trending geological belts of bedrock. In the southwest part of the planning area, the subsurface is dominated by relatively young volcanic rocks. They form a thin skin over older rocks, which are locally exposed. The central belt is comprised of a package of volcanic rocks and a succession of sedimentary rocks that form subdued topographic features in the

Salmon River and Willow River regions. To the northeast, low grade metamorphic rocks, such as slate, quartzite and marble and higher grade metamorphic rocks are exposed in the rugged highlands of the McGregor Plateau. There is significant metallic and industrial mineral resource potential in the planning area supported by a mineral occurrence inventory, tenure holdings and past and present levels of mining and exploration activity. Moderate to high gas potential is indicated in the eastern portion of the planning area and important aggregate deposits (sand & gravel) are mainly found in the vicinity of Prince George and in neighbouring esker complexes to the west and north.

Terrain and landforms are best described by ecosection as they represent contiguous areas with broadly similar climate and topography. Nine ecosections are represented in the planning area and are summarized following and illustrated on Map 3.

Table 1. Ecosections in Prince George LRMP area

Ecoprovince	Ecosection	Area (hectares)	% of Planning Area
Sub-boreal Interior	Nechako Lowland	1,003,000	29
	Hart Ranges	951,000	28
	McGregor Plateau	618,000	18
	Bowron Valley	291,000	9
	Nazco Upland	213,000	6
Southern Interior Mountains	N. Columbia Mountains	184,000	5
	Upper Fraser Trench	93,000	3
	Front Ranges	48,000	1.5
	N. Park Ranges	19,000	0.5

Most of the western portion of the planning area is part of the **Nechako Lowland** ecosection. This is a large, flat, glaciated plain. It contains the Nechako, Stuart and Fraser Rivers and hundreds of small lakes and wetlands linked by very slow, meandering streams. The area has experienced high levels of timber harvesting and periodic wildfires. Because of the generally flat terrain, visual landscape values are relatively low, except along major river corridors. Moose, deer, black bear, grizzly bear, coyote and wolves and other fur bearers are common. Streams in the Fraser River watershed are valuable for salmon production and possess a good sport fishery. Major urban and agricultural development exists along the major highways and rail lines and virtually no large tracts of the ecosection remain undeveloped.

Agriculture in the LRMP planning area is located predominately in the **Nechako Lowland** ecosection. Significant areas are also being farmed and there are areas with agricultural potential in the Nazko Upland, McGregor Plateau and Upper Fraser Trench ecosections. The largest areas suitable for agricultural development are found in glacial lake clay and silt deposits found between 610 to 790 metres elevation adjacent to the Nechako, Fraser, Salmon, Willow and Bowron river systems and in the Reid, Eaglet and Hansard Lake areas. Silty to sandy river terrace and bottomland deposits of the Fraser, Chilako and Salmon Rivers, between 580 and 610 metres elevation are much smaller in area.

Within the LRMP, the best climates for agriculture producers are ranked as Canada Land Inventory Climate Class 2, found below 640 metres elevation, and Class 3 between 640 to 790 metres elevation. Vegetables, small fruits, grains and most forage crops are grown in these climate classes. There is potential for forage crops and improved pastures at elevations between 790 to 915 metres. Growing season precipitation varies across the region, drier in the west and southern areas and increasing toward the north and eastern parts of the planning area. Summer droughts are common and supplemental irrigation is necessary for intensive crop production in most years.

Most crops grown in the planning area supply feed (forage, grain and improved pastures) for a livestock industry. Livestock farms are found on all soils and elevation levels. Vegetable farms and tree seedling nurseries are located along the Fraser and Chilako rivers and in the Reid Lake area. Non-soil bound farming enterprises (greenhouse nursery and poultry operations) are scattered around the City of Prince George.

The McGregor Plateau ecosection extends as far north as McLeod Lake and is bounded on the west by the Crooked River and on the east by the Parsnip River. In the south it extends just south of Highway 16. Bears, wolves and fur bearers are all common and the area contains excellent moose winter range. Trumpeter swans winter on the Crooked River. The communities of Sinclair Mills, Upper Fraser, Willow River, Shelley and McLeod Lake are all contained within this ecosection. It is extensively roaded and is readily accessible to a large local population.

The Hart Ranges ecosection is bounded to the south by stretches of the Fraser River and includes the McGregor, Herrick and Torpy Rivers (all in the Pacific drainage), as well as the headwaters of the Parsnip and Kakwa Rivers (in the Arctic drainage). It is typically higher elevation terrain with a colder and wetter climate, dominated by alpine, sub-alpine, parkland and upper elevation forest types. The terrain is generally rugged

and mountainous and offers backcountry recreation opportunities. In these areas of high relief, visual landscape values are relatively high. This ecosection has high wildlife values. Grizzly bears are found in very high concentrations, especially in spring and fall. Black bear, wolf, coyote and wolverine are prevalent. Caribou and goat frequent the mountainous areas. Moose are widespread and there are smaller numbers of deer and elk. The area has a diversity of fish species including arctic grayling, bull trout and chinook salmon. The area has few permanent residents. While there has been extensive logging in valley bottoms, especially in the McGregor, Torpy and Parsnip drainages, the core of the area remains relatively unmodified.

The extreme southeast corner of the planning area extends into the **Upper Fraser Trench** ecosection. The area is lower elevation with wet snowy climate. Wildlife species include caribou, moose, deer, elk and black bear and variety of upland birds, waterfowl and raptors. This small area is traversed by Highway 16 and the Canadian National Rail line. It has seen extensive timber harvesting. Recreational activities include fishing, low elevation hiking, boating and wildlife viewing. Highway 16 is an important travel corridor and receives a high level of tourist traffic.

The **Bowron Valley** ecosection covers the south central portion of the planning area and mostly consists of the Upper Bowron and Upper Willow River valleys. Wetlands are common in the Bowron River valley. There are high habitat values for caribou, grizzly bear, moose and black bear. Wolf and coyote are widespread.

Map 3. Ecosection Boundaries

Fur bearers are common, especially in riparian areas. The Bowron River supports sockeye and chinook salmon. Bowron Provincial Park, a significant recreation area, lies just south of the planning area boundary.

The **Northern Columbia Mountains** ecosection is an area of rugged, high relief mountains along the west side of the Upper Fraser Trench, extending into the southeast corner of the planning area. The Bowron River and Slim Creek watersheds drain the northern part of the ecosection. The area contains significant caribou and grizzly bear habitat. There are significant backcountry recreation opportunities and visual landscape values.

The very southwest portion of the planning area is in the **Nazko Upland** which is characterized by broad river valleys (such as the Blackwater) draining east to the Fraser River. The area is the driest in the LRMP. Because of frequent wildfires in the past, there is a mosaic of forest ages and old forests are relatively uncommon, except at higher elevations. There is a wide range of wildlife throughout the area. Grizzly and black bear, moose, mule deer, wolf, coyote, cougar and fur bearers such as wolverine and marten, are all widespread. A large variety of lake and stream habitats support a diverse selection of fish species. The Blackwater River valley has significant fisheries, recreation, scenic and archaeological values. About 55 kilometres of the Alexander Mackenzie Heritage Trail runs along the north side of the Blackwater River.

Small portions of two ecosections occur in the very east side of the planning area. The **Front Ranges** ecosection and the **Northern Park Ranges** ecosection are rugged

mountainous terrain. Alpine and sub-alpine habitats are particularly important to grizzly bear and caribou.

Terrestrial ecosystems are defined for the area with the Biogeoclimatic Ecosystem Classification System. The classification for the LRMP area is summarized below and illustrated on Map 4.

Biogeoclimatic Ecosystem Classification ZONE	Description
Sub-Boreal Spruce (SBS)	The climate of the SBS zone is continental and is characterized by seasonal extremes of temperature: severe, snowy winters; warm, moist and short summers and moderate annual precipitation. Upland coniferous forests dominate the landscape. White spruce and sub-alpine fir are the dominant climax tree species. Lodgepole pine is common in mature forests in the drier part of the zone and both lodgepole pine and trembling aspen pioneer the extensive seral stands. Paper birch is another pioneer tree often found on moist, rich sites. Douglas-fir is usually a long-lived seral species occurring abundantly on dry, warm, rich sites. Black spruce also occurs occasionally in climax upland forest. Most of the planning area is within the Sub-Boreal Spruce Zone.
Engelmann Spruce – Sub-alpine Fir (ESSF)	The ESSF occurs predominantly in mountainous terrain that is often steep and rugged. It has a cold, moist and snowy continental climate. It includes continuous forest at its lower and middle elevations and sub-alpine parkland at its upper elevations. Engelmann spruce and sub-alpine fir are the dominant climax tree species. Spruce usually dominates the canopy of mature stands and sub- alpine fir is most abundant in the understory. At high elevations, however, sub-alpine fir frequently dominates the forest canopy.
Interior Cedar-Hemlock (ICH)	The ICH has an interior, continental climate dominated by easterly moving air masses that produce cool, wet winters and warm, dry summers. The zone is one of the wettest in the interior of the province. Upland coniferous forests dominate the ICH landscape, however it has the highest diversity of tree species of any zone in the province. Western red cedar and western hemlock dominate mature climax forests. White spruce, Engelmann spruce, and sub-alpine fir are common and can form a part of climax stands.
Alpine Tundra (AT)	The AT zone occurs on high mountains and its alpine

climate is cold, windy, snowy and characterized by low growing season temperatures and a very short frost-free period. The zone is mostly treeless but stunted forms of sub-alpine fir, white spruce and Engelmann spruce are common at lower elevations.

Map 4. Biogeoclimatic Ecosystem Classification within the LRMP

1.1.2 Socio-Economic Description

The Prince George LRMP area has a population of 83,259 (1991). The City of Prince George is the largest community within the LRMP area, with a population of 79,251 (1996). The population in the planning area increased by a total of 1% between 1986 and 1991, with growth in the City of Prince George offsetting decline elsewhere within the area. Other communities in the area include Bear Lake, Summit Lake, Hixon, Longworth, Penny, Sinclair Mills, Willow River, Upper Fraser, McLeod Lake, Nukko Lake, Giscome, Shelley, Dome Creek, Aleza Lake, Red Rock, Stoner, Beaverley, Mud River, Punchaw, Strathnaver and Isle Pierre.

The original inhabitants of the planning area are the Sekani and the Carrier First Nations people. The Sekani people occupied the northern regions of the planning area. Their territory extended from the Takla Lake area in the west, to Bear Lake in the east, and north along the Finlay, Parsnip and Peace River systems. Today, the Sekani community within the Prince George planning area is centred in and around the McLeod Lake area. The Carrier people (known in the Prince George area as the Lheidli T'enneh Nation), occupied the southern portion of the planning area. Their community is centred in Shelley, just east of Prince George. The total population of the McLeod Lake Indian band and Lheidli T'enneh Nation is about 600 people. About half of those people live on reservations. The Nazko, Stoney Creek, and Nakazdli bands also claim traditional lands within the LRMP planning area.

Alexander Mackenzie was the first European to visit the area in 1793. Simon Fraser followed in 1806, establishing a series of fur trading posts throughout the region, including a fort at McLeod Lake which was the first European settlement west of the Rocky Mountains. The arrival of the Grand Trunk Railway around 1915, brought the first wave of permanent settlers to the Prince George area. Many small bush mills sprang up along the Grand Trunk Railway line, to saw logs for the railway construction teams. The bush mills continued to operate after the rail line was finished, but were gradually amalgamated into a number of larger enterprises that produced commercial grade lumber for local and export markets. This consolidation trend within the forest industry has continued throughout the 20th Century. A number of small farms also grew up along the river valleys and in a few localized areas scattered throughout the region, supplying meat and produce to the growing community. The completion of the John Hart Highway, connecting Prince George to the Peace River district in the mid 1950's, cemented Prince George's position as the commercial centre and transportation hub of northern BC.

The Prince George economy has been diversifying in recent years with strong growth in the commercial and service sectors. It is a regional centre for retail, health care, sports, entertainment, and the performing and visual arts. The forestry sector still dominates, however and accounts for 32% of basic sector employment. Employment in forest product manufacturing decreased between 1981 and 1991 but this has been offset by gains in harvesting and silviculture activity. The Prince George LRMP area is part of the Prince George Timber Supply Area (TSA). The Prince George LRMP has an apportioned cut of 4.5 million cubic metres per year (1996) which is about 50% of the entire TSA allowable annual cut. Two Tree Farm Licences account for another 0.55 million cubic metres per year. There are 12 major sawmills, 1 plywood mill, 3 large pulp and paper mills and 9 value-added manufacturing operations. The forestry sector accounts for an estimated 5,600 direct jobs in harvesting, processing, value-added, pulp and paper and silviculture.

Prince George is a transportation hub for the northern interior of BC. Highways 16 and 97 meet within the city boundaries. The British Columbia Railway and Canadian National Railway rights-of-way run through the city. Prince George is also served by a national airport.

The agriculture sector accounts for 3% of total basic sector jobs in the LRMP area with 439 farm operations covering about 73,000 hectares of developed agricultural land. 253 of these operations are beef cattle ranches and 64 of them depend on Crown land grazing for about 15,000 Animal Unit Months of forage. The area around Prince George has some of the best growth potential for grazing/forage lands in the province.

The mining and energy sector accounts for 4% of total basic sector jobs in the planning area. There are a number of existing mining operations and Prince George is a centre for mining supplies in the northern interior. The industrial mineral potential is rated as high on a significant portion of the planning area.

The planning area has significant recreation opportunities with a number of existing Provincial Parks, recreation sites and heritage sites. Both front country (camping, fishing, hunting, etc.) and backcountry (hiking, skiing, etc.) activities are popular with locals and have considerable potential for commercial tourism. The tourism sector accounts for about 9% of total basic sector jobs.

1.2 The Planning Process

The LRMP planning process was designed to provide an opportunity for licensed resource users, community groups, aboriginal peoples, interested citizens and government agencies to work together using principles of shared decision making and consensus. The objective of the process was to produce a sub-regional land use plan for Crown land that considered all resources and values, and the needs and interests of the people and industries that use them. The LRMP process began in December 1992. An invitation to participate was extended to over 300 tenure holders, community groups, local governments and native bands.

Public information meetings were held in Prince George, Bear Lake, Hixon, Dome Creek and Sinclair Mills and with the McLeod Lake, Lheidi T'enneh and Nazko First Nations.

LRMP principles and intent were presented at these meetings and interested groups and individuals were invited to participate. Notices were also placed in a Prince George newspaper. The first Working Group meeting was held in March, 1993. The Working Group met approximately twice monthly for three hour meetings over the four years between 1993 and 1997. They went on four trips to look at and discuss resource management issues in the field. A number of open houses were held periodically during the planning process to solicit input and comment from the general public.

Major steps in the LRMP planning process are summarized below:

Step 1 Preliminary Organization

- ➔ conduct public information meetings
- ➔ create Working Group and supporting government teams (Interagency Management Committee (IAMC), Interagency Planning Team (IPT))
- ➔ develop Terms of Reference

Step 2 Information Collection

- ➔ presentations from Working Group members
- ➔ identification of issues
- ➔ establish broad goals
- ➔ collection and review of resource value maps
- ➔ Watershed Profiles

Step 3 Delineation of Resource Management Zones (RMZ)

- ➔ subdivide planning area into unique geographic areas based on common resource values, issues and anticipated management intent
- ➔ review and provide comment on preliminary Protected Area Strategy work provided by Regional Protected Area Team (RPAT) and make final recommendations on new Protected Areas

Step 4 Develop Resource Management Objectives and Strategies

- ➔ develop Resource Management Objectives and Strategies for each Resource Management Zone
- ➔ develop recommendations for permitted uses in proposed Protected Areas

Step 5 Resource Analysis

- ➔ assess the impacts of recommended land uses and resource management strategies on the environment, economy and communities

Step 6 Preparation of Draft LRMP

- ➔ write draft plan
- ➔ ratification by Working Group
- ➔ general public review and comment
- ➔ submission to government for approval

Step 7 Plan Implementation, Monitoring and Review

The LRMP planning process commenced with the understanding that portions of the planning area were under the direction of existing plans. These plans had been produced with considerable public involvement and the commitments documented in them were acknowledged by the LRMP working group. Existing plans included the *Cariboo-Chilcotin Land-Use Plan*, *Herrick Creek Local Resource Use Plan*, *Lower Blackwater Local Resource Use Plan*,

Prince George Area Crown Land Plan and the Robson Valley Crown Land Plan.

1.3 Guiding Principles

The LRMP process was initiated within the framework of a number of guiding principles. The key principles are summarized below.

LRMP is an **Integrated Resource Management** process. It involves the identification and consideration of all resource values, including social, economic and environmental needs, in land use decision-making. It focuses on resource and land management and is based on current understanding of ecological systems, the capability of the land and the mixture of possible benefits. When resource uses are incompatible, it attempts to minimize the conflicts and/or the negative impacts of development.

LRMP participants acknowledged the inequities in the quality and availability of information on resource values. A commitment was made to do the best possible job with existing information.

Sustainability means being able to meet economic, social and environmental needs today, without compromising future generations' ability to meet their needs. Applying this principle to natural resources implies that the rate at which people use resources does not impair those resources' ability to sustain all life forms, including humans.

Industrial resource development (e.g., forest resource development, mineral and energy resource exploration and development, commercial recreation and tourism and related access needs, etc.) are acceptable uses of suitable Crown lands.

LRMP objectives related to resource use (e.g., industrial resource development, trapping, cattle grazing, recreation, etc.) are recommended within this context of

integrated resource management and sustainability. Planning for resource use shall give full consideration to other land and resource values.

All land and resource developments shall comply with the existing regulatory framework including relevant legislation, regulation and government policies.

Consensus is a way of making decisions and is generally described as broad agreement. Operational consensus for the purposes of the Prince George LRMP has been defined in the Working Group's Terms of Reference as: "Agreement such that all participants are willing to support the outcome or use it as a basis for further discussion. The outcome must show how dissenting points of view were accommodated and record what has and has not been agreed upon."

1.4 Planning Goals

The Working Group identified some general goals prior to area specific development of resource management objectives and strategies. The goals are:

Water: To protect the quality and quantity of ground and surface water. To encourage the conservation and efficient use of water. To manage natural stream flow levels to safeguard fisheries, other wildlife, recreational values and ecosystem functioning.

Fisheries: To conserve and enhance fisheries resources and associated habitats and values.

Biological diversity: To maintain the diversity, distribution and abundance of native species and their natural habitats throughout the planning area and to increase the populations of native endangered, threatened and vulnerable plant, animal and fish species.

Wildlife: To plan and manage the land so as to reduce conflicts between wildlife and human activities, while ensuring a variety of opportunities for the use and enjoyment of wild plants and animals.

Sensitive Areas: To ensure that environmentally sensitive areas are identified and are appropriately managed to respect their sensitivity and maintain their inherent value.

Soil: To protect soil and soil fertility by minimizing activities that cause soil erosion and degradation and by rehabilitating damaged sites.

Pollution: To minimize pollution.

Protected Areas: To protect viable, representative examples of the natural diversity of the planning area. To protect special natural, cultural heritage and recreational features of the planning area.

Sustainable Economic Development: To encourage and promote the sustainable development of natural resource lands by:

(a) identifying and assessing areas of significant resource use potential and ensuring that their economic, social and environmental importance is fully considered in all planning activities.

(b) establishing a secure resource land base that can provide raw materials and other economic resources.

This will involve identifying, maintaining and ensuring access to areas that are particularly suited for:

- ➔ agriculture/food production
- ➔ forestry
- ➔ energy, minerals and petroleum resources
- ➔ fisheries
- ➔ trapping, hunting and gathering
- ➔ tourism
- ➔ other economic uses

based upon the following factors:

*the inherent capabilities of the land, water and air
economic, environmental and social needs
opportunities for integrated management*

(c) enhancing the natural productivity of appropriate areas.

Subsurface Resources: To ensure opportunities and access for exploration and development of subsurface resources.

Recreation: To maintain and enhance recreational values of natural resource values.

Access: To manage access in a manner which recognizes and supports the need to explore and develop renewable and non-renewable resources while minimizing impacts to other resource values and users.

Economic Development: To promote diverse and regionally balanced economic development that equitably meets human needs and supports healthy, vibrant communities. To promote resource use that provides "value added" to resources and thereby enhances employment and other economic and social benefits. To reduce uncertainty with respect to land user rights, in order to encourage a stable investment climate.

Cultural Heritage: To maintain good stewardship of and where appropriate, beneficial use of: land, sites and structures with cultural, traditional, historic, spiritual, archaeological or architectural significance

Aboriginal Peoples: To ensure that land use decisions do not infringe on aboriginal rights or prejudice treaty negotiations. To ensure, whenever possible, that planning and management is conducted cooperatively with native people.

1.5 Issues Identified

Issues are perceived problems and opportunities related to the use and management of land and resources. The Working Group discussed many issues associated with the sustainability of local fish and wildlife populations and ecosystems, and social and economic factors. Some of the issues were outside of the Terms of Reference of the LRMP but are identified to government as suggested areas for policy or legislation review. A complete list of identified issues can be seen in a Reference Document titled Issues Report.

2.0 Management Direction

2.1 Introduction

Management direction in this plan consists of two main components:

1) General Management Direction - *consists of resource management objectives and strategies that apply to all Crown land in the planning area (with the exception of protected areas). General management direction indicates how Crown land will be managed so that outside of protected areas, the lands are open for resource development (except where specifically stated for a particular RMZ), including the development of roads where they are needed. General management direction applies as a baseline management guide; where no objectives or strategies are listed for a particular resource within a specific Resource Management Zone, then general management direction applies.*

2) Resource Management Zone (RMZ) - *an RMZ is a division of the planning area that is distinct from other zones with respect to biophysical characteristics, resource issues or resource management direction. Each RMZ is given a category and management intent. RMZ's are further defined using descriptive resource management objectives and strategies that outline future land use and resource management activities. These zones provide policy direction; although this policy can be transformed through the Forest Practices Code as a legally binding direction for certain operational plans. RMZ's in this plan include protected area recommendations, however, no resource management objectives and strategies are listed for protected areas.*

The resource management regime for any specific area of Crown land (except protected areas) is defined by the **General Management Direction** plus the **Resource Management Zone Direction**. Both levels of direction must be referenced together to determine the overall management direction.

Except where specifically stated for a particular RMZ, and where permitted by existing laws, **resource development is permitted on all suitable submitted Crown land outside of protected areas** (e.g., mineral/energy exploration and mining, commercial timber harvesting, tourism development, and associated road development).

Resource management objectives and strategies were developed for a comprehensive set of resources and values including:

- ➔ water
- ➔ fish
- ➔ biological diversity (old growth forests, wildlife habitat, Douglas-fir)
- ➔ sustainable economic development (timber harvesting, agriculture, range, trapping, commercial guiding)
- ➔ subsurface resources (mineral, energy, gravel and petroleum resources)
- ➔ recreation and tourism
- ➔ access
- ➔ economic development
- ➔ culture/heritage

2.2 General Management Direction

The following objectives and strategies apply to the entire planning area, with the exception of protected areas:

Water

Objective:

Maintain the natural standard of water quality, quantity and regime.

Strategies:

- ➔ Prioritize watersheds requiring assessment based on water values.
- ➔ Conduct Level I Watershed Assessment and higher level Watershed Assessment, if deemed necessary and incorporate recommendations into resource development plans.
- ➔ Minimize detrimental, human-made soil disturbance and sedimentation near watercourses.
- ➔ Revegetate areas of soil disturbance within riparian management areas, as soon as is practical.
- ➔ Prepare and implement plans to rehabilitate areas of soil disturbance, stream channel disturbance, or other types of disturbance that may impact water values.
- ➔ Maintain existing “no staking placer reserves” except where a review determines the reserve is no longer needed for the stated purpose.

Fisheries

Objective:**Strategies:**

Maintain the physical and biological diversity of fish habitats.

- ➔ Ensure that habitat is maintained for all native fish populations (e.g., spawning, incubation, migration, refuge and rearing).
- ➔ Prioritize watersheds requiring assessment based on fisheries values.
- ➔ Conduct Level I Watershed Assessment and higher level Watershed Assessment, if deemed necessary and incorporate recommendations into resource development plans.
- ➔ Prepare and implement plans to rehabilitate areas of soil disturbance, stream channel disturbance, or other types of disturbance that may impact fish habitat.
- ➔ Endorse BC Lands policy to protect riparian reserve zones when issuing new Crown tenures.
- ➔ BC Environment or designate to identify and map critical habitat areas for red listed (e.g., arctic grayling, sturgeon) and blue listed (e.g., bull trout) fish species.

Maintain critical habitat for red listed (e.g., bull trout) fish species.

- ➔ BC Environment or designate will consult with other users to develop and implement management plans to conserve or provide habitat needs of critical habitat for red listed (e.g., arctic grayling, sturgeon) and blue listed (e.g., bull trout) fish species.

Manage access to reduce impacts on fish resources.

- ➔ Targets should be set in a plan lower in hierarchy for the number of walk-in, drive-in and wilderness lakes, once lakes have been classified and inventoried.

Bio-diversity**Objective:****Strategies:**

Manage for biodiversity by maintaining a pattern of mature and old growth forest at the landscape level.

- ➔ Mimic the natural pattern of size, shape, spatial and temporal distribution of forest stands, considering all resource users.
- ➔ Mimic natural patterns of connectivity to provide for movement corridors across disturbed landscapes.
- ➔ Manage for a sustainable seral stage distribution, including old growth and deciduous leading stands, at the landscape level.
- ➔ Silviculture prescription should reflect the pre-harvest

species diversity.

- ➔ Maintain old growth attributes (e.g., snags consistent with Workers' Compensation Board regulations, leave patches for wildlife, coarse woody debris, etc.) in areas harvested. Develop compatible strategies to deal with forest health issues (blowdown, insects, fire, etc.)

Structural Forest Attributes

Objective:

Maintain structural forest attributes on harvest blocks.

Strategies:

- ➔ Retain coarse woody debris (CWD), wildlife trees, green tree retention and large organic debris (LOD).

Rare and Uncommon

Objective:

Maintain rare and uncommon habitats, plants and/or animal species.

Strategies:

- ➔ BC Environment or designate will identify rare and uncommon habitats, plants and/or animal species and plant associations.
- ➔ BC Environment or designate will consult with other users and resource agencies to develop and implement management plans to protect rare and uncommon habitats, plants and/or animal species and plant associations.

Other Wildlife

Objective:

Maintain other wildlife species.

Strategies:

- ➔ BC Environment or designate will identify critical habitat for other wildlife species.
- ➔ BC Environment or designate will consult with other users to develop and implement wildlife management plans on a prioritized basis.

Waterfowl

Objective:

Maintain the high quality waterfowl lakes and wetland complexes (e.g.,

Strategies:

- ➔ BC Environment or designate will identify high quality waterfowl lakes and wetland complexes.
- ➔ Discourage marsh/wetland crossings.

Hominka Marsh, Eaglet, Toneko and Swamp Lakes).

- ➔ Any activity adjacent to the marsh/wetland must maintain the integrity of the waterfowl habitat.
- ➔ Limit developments and activities which erode the integrity of the waterfowl habitat.

Timber

Objective:

Provide timber harvesting opportunities. (This objective and associated strategies does not apply to RMZ 39.)

Strategies:

- ➔ Harvest blocks greater than 60 hectares can be considered, provided they are consistent with characteristics of the Natural Disturbance Type (NDT) and incorporate the following:
 - ➔ *distance to standing tree cover not to exceed 250 metres and on average to be less. The effect of possible increased snow depth on distance to cover should be considered (i.e., if snow depth increases, ungulates may need to stay closer to cover).*
 - ➔ *anticipate forest health problems (i.e., insect and disease) in reserve patches (both within the block and outside) and use precautionary principles to help ensure the reserve values are maintained. These measures might include: selecting younger, less insect-prone stands for reserve patches/blocks; using "oversized" reserves to allow some salvage while maintaining reserve values; and developing a list of circumstances when salvage can occur and conditions on harvest. The intent of the plan for the reserve should be considered as a priority in other management decisions.*
 - ➔ *specific attention needs to be paid to achieving wind-firm edges.*
 - ➔ *minimize impacts to hydrologic regimes (timing and magnitude of spring melt and run off).*
 - ➔ *consider a transition in management conditions near the boundary between NDTs. The NDT grade from one type to another and management should reflect this gradual shift.*
 - ➔ *consider site specific management to reflect local conditions not typical to the NDT or localized requirements of other resources.*

- *maintain representative old growth forests distributed across the landscape.*
- *provide for a variety of sizes of coarse woody debris dispersed on the landscape.*
- *examine the possible consequences to tree regeneration and other forest resources of changes to micro-climate (i.e., heat stress, cold stress).*
- *the proportion of blocks of each size range would follow those outlined in the Forest Practices Code Biodiversity Guidebook.*
- ➔ Strive for reduced regeneration delays (i.e., after harvest, fire and blowdown).
- ➔ Enhance the productive capacity of sustainable forests by using the appropriate silviculture systems.
- ➔ Develop timber harvesting and silviculture plans in cooperation with resource users.
- ➔ Consider other resource values when planning vegetation management operations.
- ➔ Refer applications for vegetation management to range tenure holders.
- ➔ Encourage opportunities for small scale forest management operations.
- ➔ Promote communication and awareness of forest management activities to the general public.
- ➔ Establish plans to minimize non-recoverable timber losses from forest insects, diseases, wind damage and fire

Agriculture and Range

Objective:

Encourage the future growth of agriculture and aquaculture enterprises in suitable areas.

Strategies:

- ➔ Ensure the availability of basic natural resources, land, water and vegetation resources.
- ➔ Improve communication between government resource agencies and other tenure holders with the range tenure holders, through referrals, dialogue and written notices that allow for adequate response time. Investigate the feasibility of producing a consolidated forest development plan.
- ➔ Where protected areas and/or parks are adjacent to private land, costs for managing conflicting

adjacent uses should be negotiated between the government and the land owner.

Guiding and Trapping

Objective:

Maintain the existing viability of commercial guiding and trapping interests.

Strategies:

- ➔ Improve communication between government resource agencies and major tenure holders with the commercial guiding and trapping tenure holders, through referrals, dialogue and written notices that allow for adequate response time.
- ➔ Resource developers must cooperate with commercial guides and trappers to minimize impacts on each other's operations.
- ➔ Promote the production of a consolidated forest development plan, to aid commercial guides and trappers in assessing the individual and cumulative impacts to their operations.
- ➔ Encourage effective management of traplines through: using approved types of traps; monitoring species numbers to ensure animals trapped do not jeopardize species population; and complying with BC Environment requirements for traplines.

Other Potential Economic Activities

Objective:

Recognize other potential economic activities (e.g., botanical products, potable water, medicinal plants, eco-tourism).

Strategies:

- When a new economic activity is identified, the responsible agency or proponent will identify: the area of interest; the scope of the project; the impact to other resource values; and create a management plan to address issues.

Sub-Surface Resources

Objective:

Maintain the availability of and access to land for exploration and development of

Strategies:

- ➔ All Crown land, outside of Protected Areas and where permitted by law, is available for subsurface exploration and development.
- ➔ Encourage subsurface exploration and development activities within the regulatory framework.

mineral, gravel and energy resources.

- ➔ Coordinate new mining access with access requirements of other resource users.
- ➔ Exploration trails will be kept as narrow as possible.
- ➔ Construct and deactivate exploration trails in a manner that is consistent with the objectives of the RMZ.
- ➔ Access concerns and RMZ objectives should be considered for proposed large mines and petroleum projects which are currently subject to the British Columbia Environmental Assessment Process.
- ➔ All mineral and/or petroleum exploration and development sites will be restored to a condition that considers the needs of other resource values and uses.
- ➔ Encourage standards of practice and permitting processes to provide consistency with the Forest Practices Code and other relevant legislation.
- ➔ Exploration site and access disturbance will be minimized in areas of sensitive wildlife habitat, wildlife winter ranges, salt licks and all alpine and sub-alpine areas. Rehabilitation of disturbed sites will be mandatory.
- ➔ The opportunity to identify no staking reserves (NSRs) over site specific areas may arise in plans lower in hierarchy.
- ➔ Conduct appropriate public review regarding advanced exploration activities for specified areas of concern.

Recreation and Tourism

Objective:

Encourage a variety of recreation and tourism opportunities.

Strategies:

- ➔ Ministry of Forests or designate will inventory scenic areas and recreation values.
- ➔ All resource exploration and development plans must identify recreation values (e.g., recreation sites, hiking and horse trails, ski and snowmobile areas, guiding base camps, etc.) and must develop specific strategies, to minimize or mitigate impacts on this resource.
- ➔ Establish Visual Quality Objectives for high priority scenic areas.
- ➔ Avoid square or rectangular cutblocks and linear boundaries to minimize visual impacts on dominant

views and within scenic areas.

- ➔ Create more forest recreation sites, in response to demand, where compatible with other resource values.
- ➔ Create more recreation trails, in response to demand where compatible with other resource values.
- ➔ Discourage impacts from recreationalists on the environment (e.g., litter, damage to soil, vegetation, wildlife, livestock, pastures etc.)
- ➔ Consult with guides and outfitters to minimize impact on their operations.
- ➔ BC government agencies will develop management plans that reduce conflicts between recreation users through a variety of means that may include: signing, education, consultation or zoning. Consider solutions developed in other planning processes, such as the Provincial Back Country Skiing - Snowmobiling Committee Report.
- ➔ BC government agencies and the Regional Districts will identify and classify lakes, in consultation with the public, for recreation and set targets for walk-in, drive-in, cottages and wilderness lakes.
- ➔ Consider roaded recreation in access management planning, specifically in deactivation plans.

Access

Objective:

Maintain the opportunity to develop access to resources

Strategies:

- ➔ New access will be coordinated with access requirements of other known resource users.
- ➔ Develop all access plans in cooperation with other users and in recognition of known resource values.
- ➔ The proponent of road deactivation will initiate contact with all tenure holders to allow for adequate response time before roads are deactivated.
- ➔ The proponent of road deactivation will provide the opportunity for input from other resource users through reviews of operational plans.
- ➔ Ministry of Forests will produce and maintain an access needs map and will make this information available to resource developers.

Economic Development

Objective:

Utilize natural resources to maintain or increase jobs.

Support future economic development proposals.

Strategies:

- ➔ Encourage environmentally sensitive, value-added industry.
- ➔ Maintain or enhance resource based industries.
- ➔ Identify opportunities for commercial activities considering impacts to values and uses.
- ➔ Encourage commercial ventures that diversify the local economy.
- ➔ Opportunities for economic development should be identified by plans lower in hierarchy (e.g., recreation, grazing tenures, etc.)

Cultural and Heritage

Objective:

Manage the cultural and heritage resources within the planning area.

Strategies:

- ➔ Manage impacts to archaeological sites through application of relevant legislation and policy (e.g., Forest Practices Code, Heritage Conservation Act, Protocol Agreement on the Management of Cultural Heritage Resources and the British Columbia Archaeological Impact Assessment Guidelines).
- ➔ Inventory cultural and heritage values and their locations (e.g., 'old Anzac pack trail', Collins Telegraph trail) for the purpose of maintaining their integrity.
- ➔ Recognize the known historical and cultural values within the LRMP area, including but not limited to, the Alexander Mackenzie water route, features associated with the Fraser River, the Telegraph Trail and the McLeod Lake to Fort St. James trail.

First Nations

Objective:

Provide an opportunity for a cooperative relationship with First Nations in the planning for Crown

Strategies:

- ➔ Continue to provide an opportunity for consensus based, shared decision making that includes interested First Nation groups and Aboriginal people, during LRMP planning processes.
- ➔ Government agencies will consult with First Nations prior to approval of operational plans.

land and resources.

2.3 Resource Management Zone Direction

The planning area has been subdivided into 54 Resource Management Zones.

Of these, 24 RMZ's are new protected areas or additions to existing Provincial Parks.

The RMZ category for the remaining 30 RMZ's was assigned based on a synthesis of the resource management objectives and strategies that were developed for each zone. The RMZ category, combined with the management intent, provides general direction on the resource management priorities. The specific objectives and strategies must be referred to, however, for determining the relevant management direction for the zone. Map 2 indicates the location and category of the RMZ's.

2.3.1 Introduction

There are five categories of Resource Management Zone for the planning area:

1) Agriculture and Settlement:

- ➔ land currently used or proposed for settlement use by an Official Community Plan, Crown Land Plan or LRMP
- ➔ includes land that is primarily planned and managed by local government under the Municipal Act
- ➔ land currently used or proposed by LRMP for food production activities
- ➔ resource development activities are subject to all relevant provincial laws and regulations (e.g., the *Forest Practices Code of British Columbia Act*, *Forest Act*, *Range Act*, *Municipal Act*, etc.)
- ➔ other resource development and enhancement activities which are compatible with priority objectives are permitted
 - ➔ includes land in the Prince George Area Crown Land Plan and Robson Valley Crown Land Plan currently zoned as:
 - ➔ Agricultural Development Area - land that is most suitable for agriculture production. These areas are managed by BC Lands to provide opportunities to expand the agricultural industry.
 - ➔ Settlement Reserve Area - land that has been reserved for future residential, commercial, industrial or institutional uses. Development must meet local government zoning. Disposition of Crown land for non-settlement is discouraged.
 - ➔ Recreation and Conservation Management Area - land that is set aside for possible future municipal or regional parks, recreation areas for public and community groups and for the management of heritage sites.
 - ➔ Wildlife Habitat Management Area - land that provides important habitat for wildlife. The dominant use of these areas is to protect and enhance the

habitat to maintain the abundance of wildlife species. BC Environment has the responsibility to manage these sites.

- ➔ *Sand and Gravel Reserve - land that is of prime importance to the construction and maintenance of public roads. The management, development and reclamation of gravel reserves is the responsibility of the Ministry of Transportation and Highways.*
- ➔ *Aggregate Management Area - land that is considered suitable for extraction of sand and gravel by the private sector. Gravel removal from these sites is authorized by BC Lands.*
- ➔ *Community Pasture Area - land within the Provincial Forest that is managed intensively for cattle grazing. Local Livestock Associations, under agreements with the BC Forest Service, manage these areas.*
- ➔ *Natural Environment Area - sensitive areas that are to be retained for the most part in their natural state. BC Lands administers these sites. A range of activities may be permitted on an integrated basis, including selective logging, provided the integrity of this designation is not compromised. Areas that are subject to flooding and erosion are identified. Where streams have high fish values, wind-firm green belts are required for protection.*
- ➔ *Community Leases and Licenses - these are areas currently leased to the community for such purposes as community halls, gun clubs, refuse disposal, recreation, conservation areas and parks and are managed by local governments.*
- ➔ *Integrated Forest Management Area - land designated for forest production and managed by the BC Forest Service. The dominant use is forestry, but this category permits other uses such as grazing, fish and wildlife habitat, watershed management, outdoor and commercial recreation, conservation and sand and gravel extraction.*

2) Enhanced Resource Management:

- ➔ land identified, on the basis of suitability, for intensive development of resources such as timber, minerals, petroleum and destination resorts
- ➔ resource development activities are a priority in this zone
- ➔ incremental silviculture activities are encouraged
- ➔ resource development activities are subject to all relevant provincial laws and regulations (e.g., the Forest Practices Code of British Columbia Act.)
- ➔ resource management guidelines will be applied in a way that recognizes the resource development priority of the zone, while minimizing the impact on other resource values

3) General Resource Management:

- ➔ land to be managed for a wide array of resource values and permissible uses
- ➔ guidelines for non-extractive resource values may modify resource development activities while recognizing this zone's role in supporting economic development
- ➔ resource development activities are subject to all relevant provincial laws and regulations (e.g., the Forest Practices Code of British Columbia Act.)

4) Special Resource Management:

- ➔ land for which the conservation of one or more resource values such as habitat, recreation, scenery and community watersheds is a priority
- ➔ resource development activities are subject to all relevant provincial laws and regulations (e.g., the Forest Practices Code of British Columbia Act.)
- ➔ resource development activities may be subject not only to provincial regulations and guidelines, but also to more comprehensive resource conservation strategies
- ➔ these areas are frequently a high priority for the completion of more detailed lower level plans (e.g., Landscape Unit Plans)
- ➔ **there are three sub-categories related to specific values:**

A Special Resource Management - Habitat: *area with sub-regional to provincial significance for plant and animal habitat*

B Special Resource Management – Recreation/Scenery/Tourism: *area with sub-regional to provincial significance for scenery and recreation values*

C Special Resource Management – Community Watershed: *designated community watersheds are included in this category*

5) Protection:

- ➔ land protected for its natural, cultural heritage and/or recreation values as defined by the Protected Area Strategy

Goals of the Protected Area Strategy:

Goal 1 Areas: *To protect viable, representative examples of the natural diversity of the province, representative of the major terrestrial, marine and freshwater ecosystems, the characteristic habitats, hydrology and landforms and the characteristic backcountry recreational and cultural heritage values of each ecosection.*

Goal 2 Areas: *To protect the special natural, cultural and recreational features of the province including rare and endangered species and critical habitats, outstanding or unique botanical, zoological, geological and palaeontological features and outstanding outdoor features such as trails*

- ➔ logging, mining, hydro-electric dams and oil and gas development are prohibited

The LRMP recommendations for Protection Resource Management Zones do not differentiate between Goal 1 and Goal 2 Areas.

2.3.2 Protected Area Strategy

2.3.2.1 Introduction

Government's objective of increasing protected areas in BC to 12% of the total area of the province was one of the more challenging aspects of the LRMP process. Preliminary work was carried out by a team of government staff and lead to development of criteria for new protected areas, analysis to identify where gaps existed in the system of existing protected areas, setting of planning area targets and recommending candidate areas. Candidate areas considered the public input received in an initiative undertaken in 1990 called Parks and Wilderness for the 90's. The LRMP working group was given the opportunity to review and comment on this preliminary work and then, using it as a source of information, make the final recommendations on new protected areas. It must be noted, however, that in the absence of an LRMP process, or if the LRMP working group had chosen not to make protected areas recommendations, government would still have implemented a Protected Area Strategy for the Prince George area. The impact of new Protected Areas on the land base available for resource development activities such as timber harvesting and mining should not, therefore, be attributed to the LRMP working group.

The protected area target, set by government, for the Prince George LRMP area was 8.3%, with an allowable range of +/- 0.25%. The total area of existing and proposed protected areas, summarized in Table 2, meets this target. The LRMP Working Group worked with the Regional Protected Area Team to ensure that proposed protected areas met Provincial criteria.

2.3.2.2 Summary of Protected Areas

The new protected areas are listed in Table 2, with the existing protected areas. A description and summary of management intent is included in Section 2.3.3 for each Protection Resource Management Zone. Map 2 illustrates the location of all the zones within the LRMP, including the new protected areas.

Table 2: Existing and New Protected Areas

Existing Protected Areas	Area (hectares)
Crooked River Provincial Park.....	870
Eskers Provincial Park	1,600
Carp Lake Provincial Park	19,000
Dahl Lake Provincial Park	750
West Lake Provincial Park.....	250
Purden Lake Provincial Park	320

Aleza Lake Ecological Reserve	240
Tacheeda Lakes Ecological Reserve	500
Whiskers Point Provincial Park	50
Nechako River Ecological Reserve	130
Cinema Bog Ecological Reserve	70
MacKinnin Esker Ecological Reserve	600
Fort McLeod Provincial Park	10

Total Existing Protected Areas 24,000

New Protected Area	Area (hectares)
Crooked River Provincial Park Addition	70
Carp Lake Provincial Park Additions	18,000
Stuart River	7,700
Eskers Provincial Park Additions	2,800
Fort George Canyon	160
Dahl Lake Extension	740
Bobtail Mountain	1,300
Fraser River	4,800
Three Sisters Lakes	1,000
Purden Lake Provincial Park Addition	2,200
Giscome Portage Trail	160
Arctic/Pacific	14,000
Fang Mountain	1,600

Close to the Edge	580
Monkman Provincial Park Addition	22,000
Kakwa Recreation Area	121,000
Kakwa South Addition	18,000
Grand Canyon of the Fraser	670
Sugarbowl/Grizzly Creek	23,000
Bowron Provincial Park Addition (Wolverine River)	5,200
Ptarmigan Creek	4,600
Erg Mountain	1,200
Slim Creek	470
Whiskers Point Provincial Park Addition	40
Total Proposed Protected Areas.....	251,000
Total Existing and New Protected Areas.....	275,000

275,000/3,400,000=**8.1% of total LRMP planning area in Protected Areas**

2.3.2.3 Permitted Activities

The management of protected areas differs markedly from that of other lands and waters. Maintaining ecological integrity, consistent with supporting recreational and cultural experiences where and when appropriate, will be the primary factor in management decisions. The management principles are intended to provide overall management guidance and to serve as a decision-making framework for determining appropriate uses in protected areas. The principles and accompanying recommendations on permitted activities within protected areas should be viewed as guidelines rather than absolutes (**Sources: 1-11 - Protected Area Strategy Report; 12 - LRMP working group.**)

1. The protected areas system comprises a family of protected areas. The system, rather than individual areas, provide for the diversity of ecosystems, special features and outdoor recreation opportunities and experiences sought. As such, not all allowed uses are appropriate within every protected area.

2. A permitted activity may not be appropriate within all areas of a protected area. Individual protected areas may be zoned to provide optimum protection to protected area values. Zones within protected areas should range from areas which exclude public access in order to protect fragile and vulnerable ecosystems and sensitive, rare and endangered species, to zones which accommodate and/or enhance recreational and cultural opportunities and experiences.
3. Protected areas are established in perpetuity so that the ecological systems they encompass can continue to evolve with the minimum of intervention. Active management/habitat manipulation may be allowed when the structure or formation of ecosystems is seriously altered and manipulation is the only possible or best alternative available to restore ecological integrity.
4. Use of protected areas will be encouraged, where appropriate and consistent with the principle of maintaining ecological integrity, in order to realize the spiritual, recreational, educational, cultural, tourism and health benefits that protected areas can provide. Permitted activities and uses should draw their meaning from association with and direct relation to the natural and cultural resources of the protected area. All uses of protected areas must be assessed in regard to their impact on the ecological systems and the key natural, cultural and recreational values of particular areas.
5. Land use activities and traditional cultural uses that have changed a landscape and have acquired significance in their own right, may be recognized and respected.
6. The Protected Areas Strategy respects the treaty rights and Aboriginal rights and interests that exist in British Columbia. Aboriginal peoples may use protected areas for sustenance activities and traditional ceremonial and spiritual practices, subject to conservation objectives.
7. Developments within protected areas should be fully compatible with the principles of maintaining ecological integrity and minimum intervention with natural processes. Developments should directly complement and be integral to the opportunities being provided and complement the purpose, objectives and role of the particular protected area. Wherever possible, intensive recreational and tourism developments should occur in adjacent areas outside of protected area boundaries.
8. Recognition and special consideration will be given to existing tenures, licences, authorizations and public use where uses are compatible with the objectives for which the area was established. Uses which have been approved for continuation in protected areas will be fully respected.
9. Protected areas are not islands; they exist as part of larger ecosystems and cultural landscapes. Therefore, management decisions, both inside and outside of protected areas, should be coordinated and integrated to the greatest extent possible while recognizing that resource development activities outside of protected areas are appropriate and necessary.
10. Protected areas are a public trust and opportunities for the public to provide input into the planning and management of the protected areas must not be abridged. Planning and management should be done in partnership with key public stakeholders and government agencies.

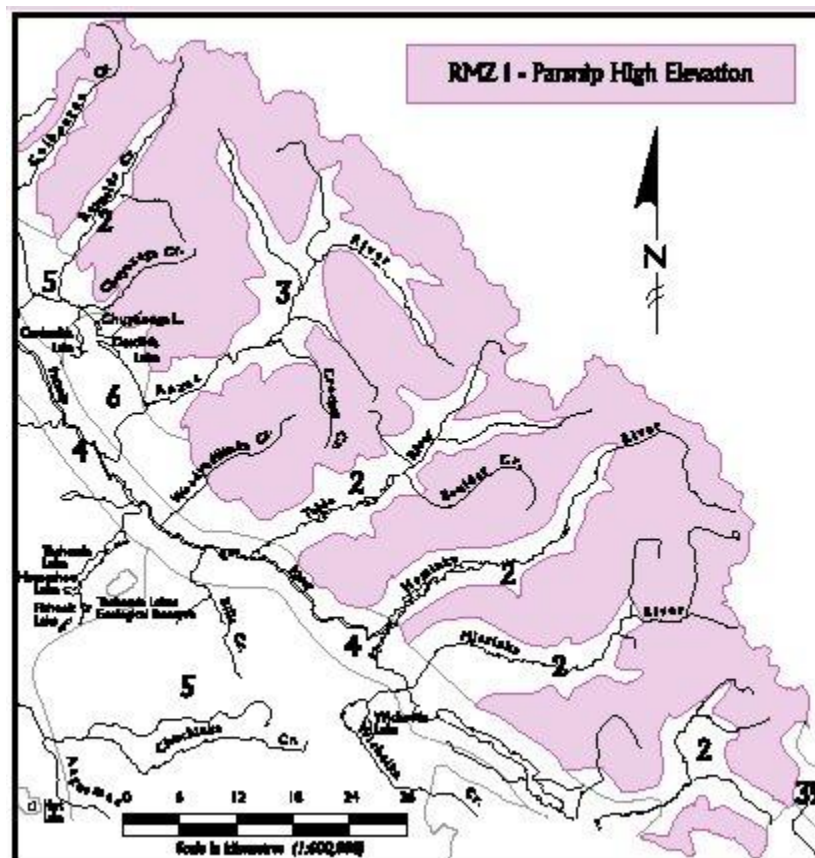
11. Protected area management plans will be established through an open public process
12. The public should not be excluded from using their parks except for the valid restrictions that are outlined by legislation, regulation, codes, or management plans regarding rights of tenure, protection of the environment, protection of wildlife and the safety of the public.

2.3.3 Resource Management Zones, Objectives and Strategies

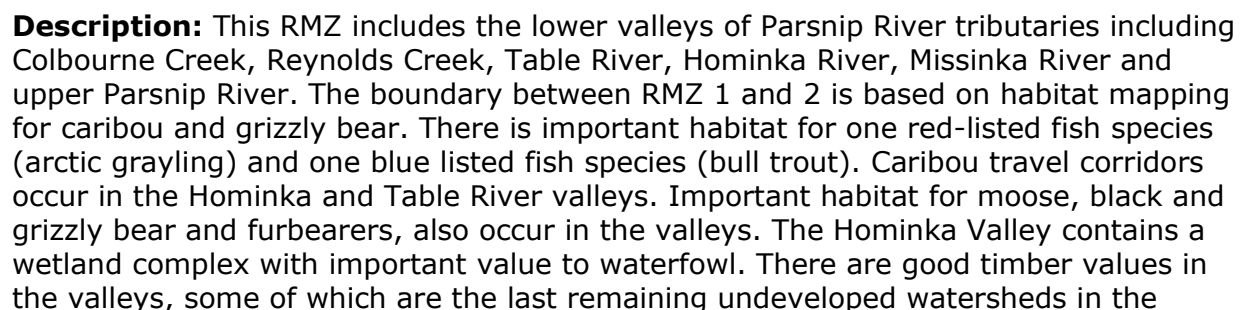
RMZ # 1 - Parsnip High Elevation

RMZ Category: Special Resource Management - Natural Habitat

Management Intent: Conservation of resource values including wildlife habitat, water quality and backcountry recreation. Resource development will include measures to conserve these priority values. Caribou habitat mapping should be referred to for additional detail.



Description: Most of this RMZ is rugged mountainous terrain with alpine and sub-alpine ecosystems. The headwaters of the Parsnip River and many of its tributaries occur in the zone. The main criteria for delineating this RMZ was high suitability habitat



planning area. There are considerable existing and potential front country or roaded recreation values. High gas and industrial mineral values are indicated in this RMZ, including important aggregate deposits used in forest development roads.

Area: 67,000 hectares

General Management Direction

The resource management objectives and strategies in Section 2.2, General Management Direction, apply to this Resource Management Zone.

Caribou

Objective:

Manage caribou habitat to provide opportunity for population levels to increase.

Strategies:

- ➔ Maintain the integrity of caribou movement corridors.
- ➔ In areas with caribou movement corridors, winter logging must be planned to minimize the amount of plowed roads.

Grizzly Bear

Objective:

Manage grizzly bear habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate will identify areas of critical habitat for grizzly bear (e.g., riparian areas, seeps and springs).
- ➔ In areas of critical habitat for grizzly bear, undertake access management planning with the intent of deactivating non-essential roads and minimizing the amount and duration of new roaded access.
- ➔ In areas of critical habitat for grizzly bear, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for grizzly bear.
- ➔ Avoid disturbance to known grizzly bear denning sites.

Marten

Objective:

Strategies:

Manage marten habitat to provide opportunity for population levels to increase.

- ➔ BC Environment or designate will identify areas of high suitability marten habitat.
- ➔ In areas of high suitability marten habitat, manage dead and down woody material and wildlife tree retention in the harvested areas to maintain habitat (denning, habitat) for marten. Use a variety of cutblock sizes and shapes.
- ➔ Maintain a distance to shelter of less than 160 metres by combination of cutblock design and/or retention of wildlife trees, windrows, debris piles or non-merchantable trees.
- ➔ In areas of high suitability marten habitat, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for marten.

Moose

Objective:

Manage moose habitat to provide opportunities for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate to identify critical winter and calving range.
- ➔ Maintain the suitability of known areas of critical habitat for moose.
- ➔ Avoid construction of permanent roads in riparian habitats, except where alternate road location results in higher environmental risks/impact (e.g., unstable soils, critical habitat areas) or where terrain precludes other road location.
- ➔ Minimize the length and duration of non-permanent roads in riparian habitat.
- ➔ Use existing stream crossings, wherever practical.
- ➔ Minimize the negative impacts of brush control on forage in riparian habitat and areas of critical winter range.
- ➔ Mimic natural patterns of connectivity to provide for movement across disturbed landscapes.

Waterfowl

Objective:

Maintain the high quality waterfowl lakes and wetland complexes (e.g., Hominka Marsh).

Strategies:

- ➔ Maintain a 50 metre riparian reserve zone on the Hominka Marsh waterfowl sanctuary.
- ➔ Deactivate all non-permanent roads within 30 metre of wetland, as soon as practical.

Timber

Objective:

Encourage timber harvesting and intensive silviculture.

Strategies:

- ➔ Utilize improved seedlings where appropriate, while maintaining genetic diversity.
- ➔ Encourage growth and yield research in stands to determine appropriate site index (site productivity and growth potential) on managed stands.
- ➔ Encourage efficient, effective and ecologically sound, site specific vegetation management.
- ➔ Provide opportunities to increase timber utilization.
- ➔ Utilize cost effective intensive silvicultural treatments, including spacing, commercial thinning, fertilization and pruning, on a site specific basis.

Sub-Surface Resources

Objective:

Maintain the availability of and access to land for exploration and development of mineral, gravel and energy resources.

Strategies:

- ➔ Ensure mineral and/or petroleum exploration activities are undertaken with sensitivity to other resource values.

Backcountry Recreation and Tourism

Objective:

Maintain the integrity of suitable areas for backcountry recreation and

Strategies:

- ➔ Wherever industrial development is proposed in mountainous terrain, the tenure holders must consider block or other disturbance

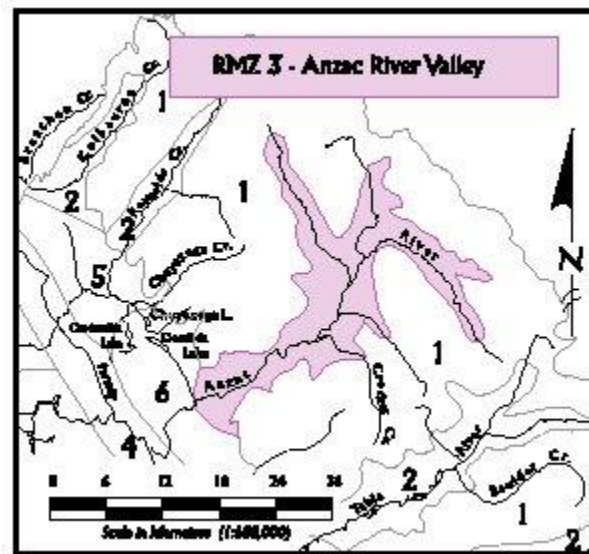
tourism.

design for visual impact to recreation and tourism.

RMZ # 3 - Anzac River Valley

RMZ Category: Special Resource Management Zone - Natural Habitat

Management Intent: Conservation of resource values such as fish and wildlife habitat, water quality and tourism. Resource development will include measures to conserve these priority resource values.



Description: The Anzac River is a tributary of the Parship River but it differs from other tributaries with respect to the resource values that occur in the valley, current uses and its' relatively undeveloped current condition. The Anzac River has some of the best habitat for arctic grayling (red-listed) and bull trout (blue-listed) in the planning area. A number of caribou travel corridors traverse the valley. There is significant spring grizzly bear habitat in the valley bottoms. Guide/outfitters in the area are diversifying their operations in order to attract a wider array of tourists. The boundary between RMZ 1 and 3 is based on caribou and grizzly bear habitat mapping. High gas and industrial mineral values are indicated for this RMZ. Limited petroleum exploration for gas has recently taken place.

Area: 25, 000 hectares

General Management Direction

The resource management objectives and strategies in Section 2.2, General Management Direction, apply to this Resource Management Zone.

Caribou

Objective:

Manage caribou habitat to provide opportunity for population levels to increase.

Strategies:

- ➔ Maintain the integrity of caribou movement corridors.
- ➔ In areas with caribou movement corridors, winter logging must be planned to minimize the amount of plowed roads.

Grizzly Bear

Objective:

Manage grizzly bear habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate will identify areas of critical habitat for grizzly bear (e.g., riparian areas, seeps and springs).
- ➔ In areas of critical habitat for grizzly bear, undertake access management planning with the intent of deactivating non-essential roads and minimizing the amount and duration of new roaded access.
- ➔ In areas of critical habitat for grizzly bear, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for grizzly bear.
- ➔ Avoid disturbance to known grizzly bear denning sites.

Marten

Objective:

Manage marten habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate will identify areas of high suitability marten habitat.
- ➔ In areas of high suitability marten habitat, manage dead and downed woody material and wildlife tree retention in harvested areas to maintain habitat (denning, hunting) for marten.
- ➔ In areas of high suitability marten habitat manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes

that mimic habitat suitable for marten.

- ➔ Maintain a distance to shelter of less than 160 metres by combination of cutblock design and/or retention of wildlife trees, windrows, debris piles or non-merchantable trees.

Moose

Objective:

Manage moose habitat to provide opportunity for population levels to increase.

Strategies:

- ➔ BC Environment or designate to identify critical winter and calving range.
- ➔ Provide an effective forested buffer around all known areas of critical habitat for moose (e.g., licks, seeps, rutting areas, calving areas and winter range).
- ➔ Avoid construction of permanent roads in riparian habitats, except where alternate road location results in higher environmental risks/ impact (e.g., unstable soils, critical habitat areas) or where terrain precludes other road location.
- ➔ Minimize the length and duration of non-permanent roads in riparian habitat.
- ➔ Use existing stream crossings and discourage new crossings.
- ➔ Avoid brush control in riparian habitat and areas of critical winter range.
- ➔ Establish or maintain connectivity between riparian complexes, island remnants of timber and upland areas of mature forest.
- ➔ Maintain the amount and distribution of deciduous forest cover found in unmanaged stands within the RMZ.
- ➔ Maintain a windfirm riparian management zone along watercourses that meets or exceeds FPC requirements.
- ➔ Minimize the amount of vegetation management in riparian habitat and areas of critical winter range.

Timber

Objective:

Permit timber harvesting with silviculture systems which are compatible with priority/emphasis resource values.

Strategies:

- ➔ Minimize the use of chemicals, such as herbicides and fertilizers in stand management.
- ➔ Consider alternative harvesting practices where silviculturally appropriate, economically viable and environmentally appropriate and while managing for the recreation, water quality, wildlife and visual quality values.
- ➔ Encourage a diversity of silvicultural systems across the landscape in order to maintain natural landscape patterns and stand structure. All options should be considered, including patch cutting, group selection, clear-cutting with reserves and conventional clear-cutting.

Sub-Surface Resources

Objective:

Maintain the availability of and access to land for exploration and development of mineral, gravel and energy resources.

Strategies:

- ➔ Ensure mineral and/or petroleum exploration activities are undertaken with sensitivity to other resource values.
- ➔ Permit road building into currently unroaded areas only when sufficient exploration demonstrates that road access is required for further development.

Backcountry Recreation and Tourism

Objective:

Maintain the integrity of suitable areas for backcountry recreation and tourism.

Strategies:

- ➔ Encourage inventory of commercial backcountry recreation and tourism opportunities, by the Provincial Government or designate.
- ➔ All resource exploration and development plans must identify backcountry recreation and tourism values (e.g., hiking and horse trails, ski and snowmobile areas, guiding base camps, etc.) and must develop specific

strategies, with the stakeholders, to minimize or mitigate impacts on this resource.

- ➔ Wherever industrial development is proposed in mountainous terrain, the tenure holders must consider block or other disturbance design for visual impact to recreation and tourism.
- ➔ Encourage the recreation and tourism user groups to provide a map of areas of interest to government agencies and tenure holders.
- ➔ Known recreation and tourism user groups will be notified of proposed industrial development, within a mapped area of interest. Contact will be initiated to allow for adequate response time, preferably at the time when the development is first proposed in a plan.

Recreation and Tourism

Objective:

Encourage a variety of recreation and tourism opportunities.

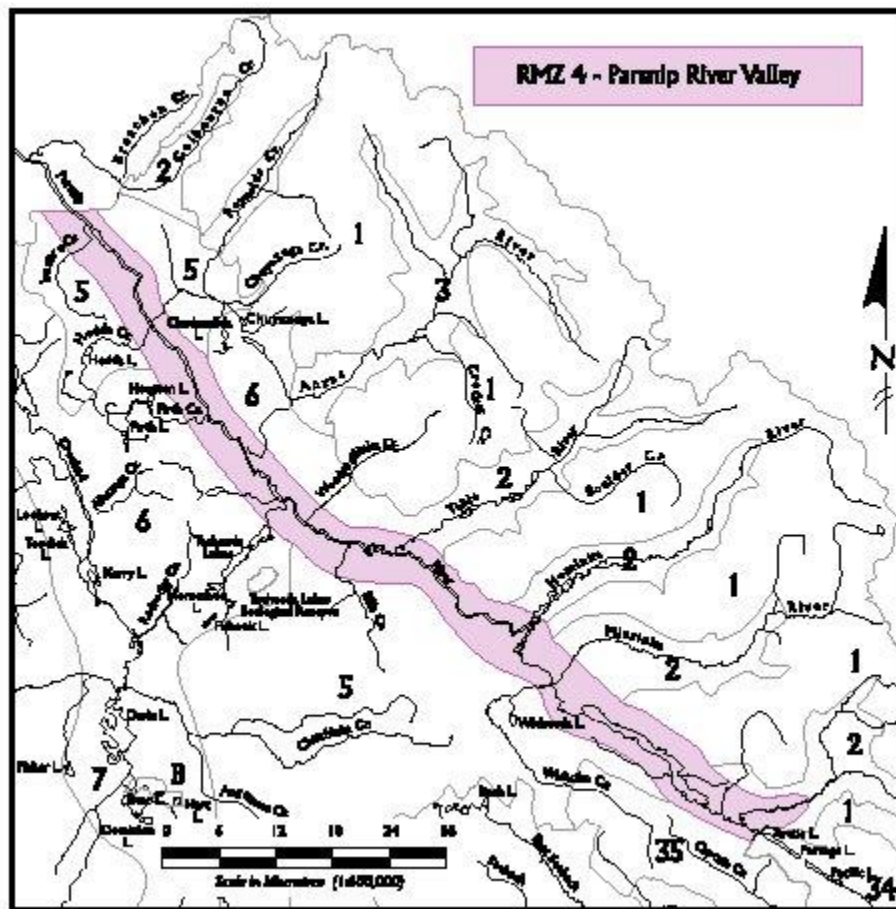
RMZ # 4 - Parsnip River Valley

Strategies:

- ➔ Identify scenic areas visible from the Parsnip River.

RMZ Category: General Resource Management

Management Intent: Integrated resource management of a wide array of resource values and permissible uses.



Description: The Parsnip River flows northwest from its origins in the Rocky Mountains and eventually drains into Williston Lake. RMZ 4 is long and narrow and follows most of the river within the planning area. There is a wide array of resource values within this RMZ, including front country recreation, scenic values and wildlife habitat for species such as moose. The boundary of RMZ 4 was delineated to capture riparian and bench land terrain adjacent to the Parsnip River. There is some high mineral potential in the valley. The RMZ has high gas and mineral values. Aggregate deposits provide a source of sand and gravel for forest road development.

Area: 52,000 hectares

General Management Direction

The resource management objectives and strategies in Section 2.2, General Management Direction, apply to this Resource Management Zone.

Grizzly Bear

Objective:

Strategies:

Manage grizzly bear habitat

➡ BC Environment or designate will identify

to provide opportunity for population levels to be maintained.

areas of critical habitat for grizzly bear (e.g., riparian areas, seeps and springs).

- ➔ In areas of critical habitat for grizzly bear, undertake access management planning with the intent of deactivating non-essential roads and minimizing the amount and duration of new roaded access.
- ➔ In areas of critical habitat for grizzly bear, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for grizzly bear.
- ➔ Avoid disturbance to known grizzly bear denning sites.

Marten

Objective:

Manage marten habitat to provide opportunity for population levels to increase

Strategies:

- ➔ BC Environment or designate will identify areas of high suitability marten habitat.
- ➔ In areas of high suitability marten habitat, manage dead and down woody material and wildlife tree retention in the harvested areas to maintain habitat (denning, hunting) for marten. Use a variety of cutblock sizes and shapes.
- ➔ Maintain a distance to shelter of less than 160 metres by combination of cutblock design and/or retention of wildlife trees, windrows, debris piles or non-merchantable trees.
- ➔ In areas of high suitability marten habitat, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for marten.

Moose

Objective:

Manage moose habitat to provide opportunity for population levels to

Strategies:

- ➔ BC Environment or designate to identify critical winter and calving range.
- ➔ Provide an effective forested buffer around

increase.

all known areas of critical habitat for moose (e.g., licks, seeps, rutting areas, calving areas and winter range).

- ➔ Avoid construction of permanent roads in riparian habitats, except where alternate road location results in higher environmental risks/impact (e.g., unstable soils, critical habitat areas) or where terrain precludes other road location.
- ➔ Minimize the length and duration of non-permanent roads in riparian habitat.
- ➔ Use existing stream crossings and discourage new crossings.
- ➔ Avoid brush control in riparian habitat and areas of critical winter range.
- ➔ Establish or maintain connectivity between riparian complexes, island remnants of timber and upland areas of mature forest.
- ➔ Maintain the amount and distribution of deciduous forest cover found in unmanaged stands within the RMZ.
- ➔ Maintain a windfirm riparian management zone along watercourses that meets or exceeds FPC requirements.
- ➔ Minimize the amount of vegetation management in riparian habitat and areas of critical winter range.
- ➔ Maintain a distance to cover of less than 200 metres in all cut blocks.

Waterfowl

Objective:

Maintain the high quality waterfowl lakes and wetland complexes (e.g., Hominka Marsh).

Strategies:

- ➔ Maintain a 50 metre riparian reserve zone on the Hominka Marsh waterfowl sanctuary.
- ➔ Deactivate all non-permanent roads within 30 metres of wetland as soon as practical.

Timber

Objective:

Encourage timber harvesting

Strategies:

- ➔ Utilize improved seedlings where appropriate, while maintaining genetic

and intensive silviculture.

diversity.

- ➔ Encourage growth and yield research in stands to determine appropriate site index (site productivity and growth potential) on managed stands.
- ➔ Encourage efficient, effective and ecologically sound, site specific vegetation management.
- ➔ Provide opportunities to increase timber utilization.
- ➔ Utilize cost effective intensive silvicultural treatments, including spacing, commercial thinning, fertilization and pruning, on a site specific basis.

Sub-Surface Resources

Objective:

Maintain the availability of and access to land for exploration and development of mineral, gravel and energy resources.

Strategies:

- ➔ Ensure mineral and/or petroleum exploration activities are undertaken with sensitivity to other resource values.

Recreation and Tourism

Objective:

Encourage a variety of recreation and tourism opportunities.

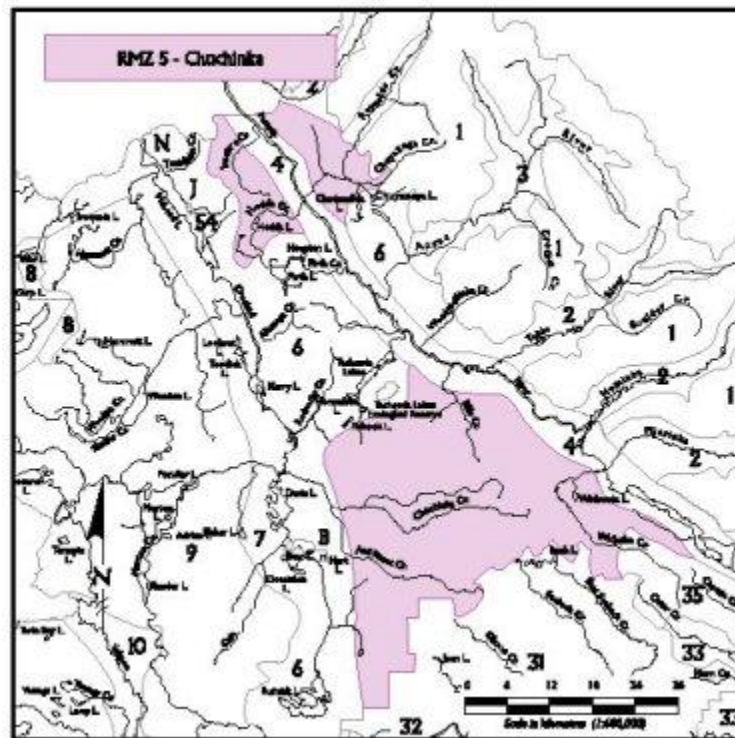
RMZ # 5 - Chuchinka

Strategies:

- ➔ Identify scenic areas visible from the Parsnip River.

RMZ Category: Enhanced Resource Management

Management Intent: Development and enhancement of the timber resource consistent with the objectives of the RMZ.



Description: This RMZ consists of three parcels which are located in the vicinities of Chuchinka Creek, Hodda Creek and Reynolds Creek. These areas have significant timber values, and harvesting operations supply mills in Bear Lake and Prince George. Significant industrial mineral values are demonstrated in this RMZ, including dolomite, niobium and aggregate which is an important source of gravel for forest road development.

Area: 122,000 hectares

General Management Direction

The resource management objectives and strategies in Section 2.2, General Management Direction, apply to this Resource Management Zone.

Grizzly Bear

Objective:

Manage grizzly bear habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate will identify areas of critical habitat for grizzly bear (e.g., riparian areas, seeps and springs).
- ➔ In areas of critical habitat for grizzly bear, undertake access management planning with the intent of deactivating non-essential roads and minimizing the amount and duration of

new roaded access.

- ➔ In areas of critical habitat for grizzly bear, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for grizzly bear.
- ➔ Avoid disturbance to known grizzly bear denning sites.

Marten

Objective:

Manage marten habitat to provide opportunity for population levels to increase.

Strategies:

- ➔ BC Environment or designate will identify areas of high suitability marten habitat.
- ➔ In areas of high suitability marten habitat, manage dead and down woody material and wildlife tree retention in the harvested areas to maintain habitat (denning, hunting) for marten. Use a variety of cutblock sizes and shapes.
- ➔ Maintain a distance to shelter of less than 160 metres by combination of cutblock design and/or retention of wildlife trees, windrows, debris piles or non-merchantable trees.
- ➔ In areas of high suitability marten habitat, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for marten.

Moose

Objective:

Manage moose habitat to provide opportunity for population levels to increase.

Strategies:

- ➔ BC Environment or designate to identify critical winter and calving range.
- ➔ Provide an effective forested buffer around all known areas of critical habitat for moose (e.g., licks, seeps, rutting areas, calving areas and winter range).
- ➔ Avoid construction of permanent roads in riparian habitats, except where alternate road location results in higher environmental risks/impact (e.g., unstable soils, critical

habitat areas) or where terrain precludes other road location.

- ➔ Minimize the length and duration of non-permanent roads in riparian habitat.
- ➔ Use existing stream crossings and discourage new crossings.
- ➔ Avoid brush control in riparian habitat and areas of critical winter range.
- ➔ Establish or maintain connectivity between riparian complexes, island remnants of timber and upland areas of mature forest.
- ➔ Maintain the amount and distribution of deciduous forest cover found in unmanaged stands within the RMZ.
- ➔ Maintain a windfirm riparian management zone along watercourses that meets or exceeds FPC requirements.
- ➔ Minimize the amount of vegetation management in riparian habitat and areas of critical winter range.

Timber

Objective:

Optimize timber growth and implement silviculture strategies to produce a broad spectrum of forest products.

Strategies:

- ➔ Enhance the productive capacity of forest stands by using appropriate silviculture systems.
- ➔ Utilize improved seedlings where appropriate, while maintaining genetic diversity.
- ➔ Promote growth and yield research in stands to determine appropriate site index (site productivity and growth potential) on managed stands.
- ➔ Encourage efficient, effective and ecologically sound, site specific vegetation management.
- ➔ Provide opportunity to alter stocking standards to optimize timber production.
- ➔ Utilize cost effective intensive silvicultural treatments, including spacing, commercial thinning, fertilization and pruning, on a site specific basis.
- ➔ Provide opportunities to increase timber

utilization.

- ➔ Provide the opportunity to change the rotation ages to reflect product objectives, on a site specific basis.

Recreation and Tourism

Objective:

Encourage a variety of recreation and tourism opportunities.

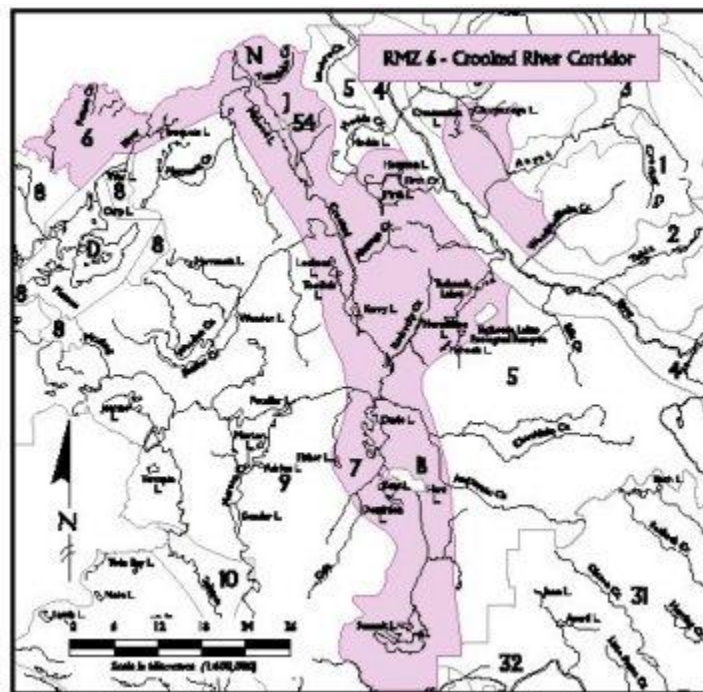
RMZ # 6 - Crooked River Corridor

Strategies:

- ➔ Identify scenic areas visible from the Parsnip River.

RMZ Category: General Resource Management

Management Intent: Management of a wide array of resource values including wildlife habitat, front country recreation and scenic values and timber values.



Description: This RMZ follows the valley of the Crooked River from Summit Lake north to McLeod Lake and also includes other important lake features including Tacheeda, Firth, Destilida and Iroquois lakes. The main criteria for delineating this RMZ included: recreation and scenic values associated with Highway 97; the Crooked River and the major lakes; and wildlife habitat. The Crooked River has significant moose habitat and trumpeter swans over-winter on some sections of the river. There are significant mineral values indicated throughout this RMZ, including the developed limestone

resource at Tacheeda Lakes, the past limestone producer at Redrocky and demonstrated placer gold and platinum deposits alongside the McDougall and McLeod Rivers.

Area: 162,000 hectares

General Management Direction

The resource management objectives and strategies in Section 2.2, General Management Direction, apply to this Resource Management Zone.

Fisheries

Objective:

Maintain the physical and biological diversity of fish habitat

Strategies:

- ➔ Endorse development of placer mining standards to adequately protect riparian values.
- ➔ Maintain riparian management areas to maintain water quality and fish habitat appropriate for stream size in areas of residential development or industrial facilities on Crown Lands.

Grizzly Bear

Objective:

Manage grizzly bear habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate will identify areas of critical habitat for grizzly bear (e.g., riparian areas, seeps and springs).
- ➔ In areas of critical habitat for grizzly bear, undertake access management planning with the intent of deactivating non-essential roads and minimizing the amount and duration of new roaded access.
- ➔ In areas of critical habitat for grizzly bear, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for grizzly bear.
- ➔ Avoid disturbance to known grizzly bear denning sites.

Marten

Objective:

Manage marten habitat to provide opportunity for population levels to maintain.

Strategies:

- ➔ BC Environment or designate will identify areas of high suitability loose marten habitat.
- ➔ In areas of high suitability marten habitat manage dead and downed woody material and wildlife tree retention in harvested areas to maintain habitat (denning, hunting) for marten.
- ➔ In areas of high suitability marten habitat manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat suitable for marten.

Moose

Objective:

Manage moose habitat to provide opportunity for population levels to increase.

Strategies:

- ➔ BC Environment or designate to identify critical winter and calving range.
- ➔ Provide an effective forested buffer around all known areas of critical habitat for moose (e.g., licks, seeps, rutting areas, calving areas and winter range).
- ➔ Avoid construction of permanent roads in riparian habitats, except where alternate road location results in higher environmental risks/impact (e.g., unstable soils, critical habitat areas) or where terrain precludes other road location.
- ➔ Minimize the length and duration of non-permanent roads in riparian habitat.
- ➔ Use existing stream crossings and discourage new crossings.
- ➔ Avoid brush control in riparian habitat and areas of critical winter range.
- ➔ Establish or maintain connectivity between riparian complexes, island remnants of timber and upland areas of mature forest.
- ➔ Maintain the amount and distribution of deciduous forest cover found in unmanaged

stands within the RMZ.

- ➔ Maintain a windfirm riparian management zone along watercourses that meets or exceeds FPC requirements.
- ➔ Minimize the amount of vegetation management in riparian habitat and areas of critical winter range.

Deer

Objective:

Manage deer habitat to provide the opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate to identify critical deer habitat.
- ➔ Manage critical Douglas-fir stands for mule deer habitat requirements.

Douglas Fir

Objective:

Maintain Douglas-fir component.

Strategies:

- ➔ Retain large old Douglas-fir during forestry operations in order to provide structural diversity.
- ➔ Encourage partial cutting systems in Douglas-fir stands, where stand attributes allow.
- ➔ Retain some mature Douglas-fir where they constitute a minor component of the stands and where stand attributes allow.
- ➔ Encourage a component of the regenerated stand to be Douglas-fir where Douglas-fir was a component of the harvested areas.

Trumpeter Swan

Objective:

Manage over-wintering trumpeter swan habitat to provide the opportunities for population levels to be maintained.

Strategies:

- ➔ Identify and map over-wintering trumpeter swan habitat.
- ➔ Restrict winter logging and other human activities to minimize disturbance of over-wintering trumpeter swan habitat.

Timber

Objective:

Encourage timber harvesting and intensive silviculture.

Strategies:

- ➔ Utilize improved seedlings where appropriate, while maintaining genetic diversity.
- ➔ Encourage growth and yield research in stands to determine appropriate site index (site productivity and growth potential) on managed stands.
- ➔ Encourage efficient, effective and ecologically sound, site specific vegetation management.
- ➔ Provide opportunities to increase timber utilization.
- ➔ Utilize cost effective intensive silvicultural treatments, including spacing, commercial thinning, fertilization and pruning, on a site specific basis.

Agriculture and Range

Objective:

Maintain agriculture and range opportunities.

Strategies:

- ➔ Maintain opportunities for Canada Land Inventory (CLI) agriculture land classed 1-5 to be developed for agriculture/food production.
- ➔ Allow expansion for range tenures and/or Animal Unit Months (AUMs).
- ➔ Encourage range enhancement activities, and identify and minimize impacts on other resource values.
- ➔ Agricultural producers wishing to expand their private land base can apply for additional Crown land under the BC Lands Agricultural Policy. Encourage agricultural producers to maintain forest stands on non-arable portions.
- ➔ Encourage Regional Districts to consider agricultural sectors' needs during planning for rural residential development so that conflicts can be avoided.
- ➔ In a cooperative effort BC Lands, Ministry of Agriculture, Fisheries and Food and the Ministry of Forests will identify land with agricultural potential and determine and map

soil capability at an appropriate scale before land is designated as Forest Land Reserve.

- ➔ Support the purpose and intent of the Agricultural Land Reserve.
- ➔ Sensitive ecosystems should be excluded from Crown land dispositions.
- ➔ Ensure access to safe water supply for agriculture use (e.g., stock watering and irrigation).

Recreation and Tourism

Objective:

Encourage a variety of recreation and tourism opportunities.

Strategies:

- ➔ Provide recreational opportunities for seniors and people with special needs. MOF or designate will identify specific lakes to manage for these recreational opportunities.
- ➔ Conduct detailed visual landscape inventories for: Firth, Tacheeda, Carp, Summit, Davie, Kerry and McLeod lakes; the Crooked River; and Highway 97 corridor.
- ➔ Minimize further access and recreational development on Tacheeda and Firth Lakes.
- ➔ Identify scenic areas visible from the Parsnip River.

RMZ # 7 - Crooked River Provincial Park Addition

RMZ Category: Protection

Management Intent: Provincial Park; logging, mining and related development are prohibited. Refer to Table 3 for recommended permitted activities.



Description: Crooked River Provincial Park is located on Highway 97 near the community of Bear Lake. The existing Park has intensive recreation use with a 90 site campground, day-use picnic and beach area and hiking trails. The proposed addition improves the protection of Livingston Springs, one of the Park's unique features.

Area: 70 hectares

RMZ # 8 - Carp Lake Provincial Park Additions

RMZ Category: Protection

Management Intent: Provincial Park; logging, mining and related development are prohibited. Refer to Table 3 for recommended permitted activities.



Description: Carp Lake Provincial Park is located in the northwest corner of the planning area. The park has considerable recreation use with a 102 site campground, small island campsites, hiking trails and fishing on Carp Lake. The proposed additions to the Carp Lake Provincial Park create a contiguous area of the moist cool Sub-boreal Spruce forest ecosystem and provides the best representation of the Nechako Lowland Ecoregion. Other values included in this expanded protected area include: important glacio-fluvial features (drumlins), Class 1 capability for moose, and the scenic and recreational values of Carp Hill.

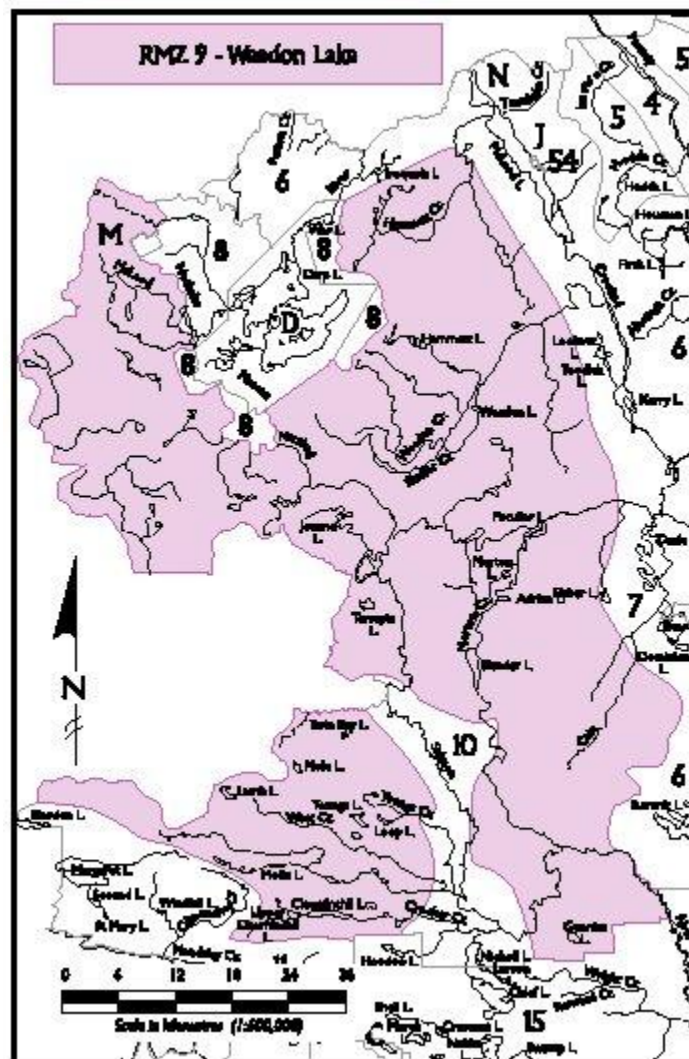
Area: 18,000 hectares

RMZ # 9 - Weedon Lake

RMZ Category: Enhanced Resource Management

Management Intent: Development and enhancement of the timber

resource consistent with the objectives of the RMZ.



Description: This large RMZ extends from the headwaters of the McLeod River in the northwest corner of the planning area, to Gunniza Lake. Another portion of the RMZ occurs further west in the vicinity of Youngs Lake. The southwest boundary of this RMZ is the height of land between the Salmon and Nechako watersheds. Forest management operations within this RMZ are largely impacted by spruce beetle activity. The older spruce stands are very susceptible to spruce beetle infestation.

Area: 297,000 hectares

General Management Direction

The resource management objectives and strategies in Section 2.2, General Management Direction, apply to this Resource Management Zone.

Fisheries

Objective:

Maintain the physical and biological diversity of fish habitats.

Strategies:

- ➔ Maintain riparian management areas to maintain water quality and fish habitat appropriate for stream size in areas of residential development or industrial facilities on Crown lands.

Grizzly Bear

Objective:

Manage grizzly bear habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate will identify areas of critical habitat for grizzly bear (e.g., riparian areas, seeps and springs).
- ➔ In areas of critical habitat for grizzly bear, undertake access management planning with the intent of deactivating non-essential roads and minimizing the amount and duration of new roaded access.
- ➔ In areas of critical habitat for grizzly bear, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for grizzly bear.
- ➔ Avoid disturbance to known grizzly bear denning sites.

Marten

Objective:

Manage marten habitat to provide opportunity for population levels to increase.

Strategies:

- ➔ BC Environment or designate will identify areas of high suitability marten habitat.
- ➔ In areas of high suitability marten habitat, manage dead and down woody material and wildlife tree retention in the harvested areas to maintain habitat (denning, hunting) for marten. Use a variety of cutblock sizes and shapes.
- ➔ Maintain a distance to shelter of less than 160 metres by combination of cutblock design and/or retention of wildlife trees, windrows,

debris piles or non-merchantable trees.

- ➔ In areas of high suitability marten habitat, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for marten.

Moose

Objective:

Manage moose habitat to provide opportunities for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate to identify critical winter and calving range.
- ➔ Maintain the suitability of known areas of critical habitat for moose.
- ➔ Avoid construction of permanent roads in riparian habitats, except where alternate road location results in higher environmental risks/impact (e.g., unstable soils, critical habitat areas) or where terrain precludes other road location.
- ➔ Minimize the length and duration of non-permanent roads in riparian habitat. Use existing stream crossings, wherever practical.
- ➔ Minimize the negative impacts of brush control on forage in riparian habitat and areas of critical winter range.
- ➔ Mimic natural patterns of connectivity to provide for movement across disturbed landscapes.
- ➔ Maintain amounts and distributions of deciduous forest cover throughout the RMZ in a variety of patch size that mimic the natural patch size distribution on a site specific basis, particularly in critical winter range and calving area.
- ➔ Maintain riparian management zones that are as windfirm as possible.

Deer

Objective:

Manage deer habitat to provide the opportunity

Strategies:

- ➔ BC Environment or designate to identify critical deer habitat.

for population levels to be maintained

- ➔ Manage critical Douglas-fir stands for mule deer habitat requirements.

Timber

Objective:

Optimize timber growth and implement silviculture strategies to produce a broad spectrum of forest products.

Strategies:

- ➔ Enhance the productive capacity of forest stands by using appropriate silviculture systems.
- ➔ Utilize improved seedlings where appropriate, while maintaining genetic diversity.
- ➔ Promote growth and yield research in stands to determine appropriate site index (site productivity and growth potential) on managed stands.
- ➔ Encourage efficient, effective and ecologically sound, site specific vegetation management.
- ➔ Provide opportunity to alter stocking standards to optimize timber production.
- ➔ Utilize cost effective intensive silvicultural treatments, including spacing, commercial thinning, fertilization and pruning, on a site specific basis.
- ➔ Provide opportunities to increase timber utilization.
- ➔ Provide the opportunity to change the rotation ages to reflect product objectives, on a site specific basis.

Agriculture and Range

Objective:

Maintain agriculture and range opportunities.

Strategies:

- ➔ Maintain opportunities for Canada Land Inventory (CLI) agriculture land classed 1-5 to be developed for agriculture/food production.
- ➔ Allow expansion for range tenures and/or Animal Unit Months (AUMs).
- ➔ Encourage range enhancement activities, and identify and minimize impacts on other resource values.
- ➔ Agricultural producers wishing to expand their private land base can apply for additional

Crown land under the BC Lands Agricultural Policy.

- ➔ Encourage agricultural producers to maintain forest stands on non-arable portions. Encourage Regional Districts to consider agricultural sector's needs during planning for rural residential development so that conflicts can be avoided.
- ➔ In a cooperative effort BC Lands, Ministry of Agriculture, Fisheries and Food and the Ministry of Forests will identify land with agricultural potential and determine and map soil capability at an appropriate scale before land is designated as Forest Land Reserve.
- ➔ Support the purpose and intent of the Agricultural Land Reserve.
- ➔ Sensitive ecosystems should be excluded from Crown land dispositions.
- ➔ Ensure access to safe water supply for agricultural use (e.g., stock watering and irrigation).

RMZ # 10 - Salmon River

RMZ Category: General Resource Management

Management Intent: Integrated resource management of a wide array of resource values and permissible uses. Resource management activities should not reduce the land's potential for future agricultural development. This area should be prioritized for more detailed arability studies.



Description: This RMZ follows a short section of the Salmon River between the planning area boundary and Nicholl Lake. A major influence in the delineation of this RMZ was soil classification showing potential for agriculture.

Area: 23,000 hectares

General Management Direction

The resource management objectives and strategies in Section 2.2, General Management Direction, apply to this Resource Management Zone.

Fisheries

Objective:

Maintain the physical and biological diversity of fish habitats.

Strategies:

- ➔ Maintain riparian management areas to maintain water quality and fish habitat appropriate for stream size in areas of residential development or industrial facilities on Crown lands.

Grizzly Bear

Objective:

Manage grizzly bear habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate will identify areas of critical habitat for grizzly bear (e.g., riparian areas, seeps and springs).
- ➔ In areas of critical habitat for grizzly bear, undertake access management planning with the intent of deactivating non-essential roads and minimizing the amount and duration of new roaded access.
- ➔ In areas of critical habitat for grizzly bear, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat most suitable for grizzly bear.
- ➔ Avoid disturbance to known grizzly bear denning sites.

Marten

Objective:

Manage marten habitat to provide opportunity

Strategies:

- ➔ BC Environment or designate will identify areas of high suitability marten habitat.

for population levels to be maintained.

- ➔ In areas of high suitability marten habitat, manage dead and downed woody material and wildlife tree retention in harvested areas to maintain habitat (denning, hunting) for marten.
- ➔ In areas of high suitability marten habitat, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat suitable for marten.

Moose

Objective:

Manage moose habitat to provide opportunities for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate to identify critical winter and calving range.
- ➔ Maintain the suitability of known areas of critical habitat for moose.
- ➔ Avoid construction of permanent roads in riparian habitats, except where alternate road location results in higher environmental risks/ impact (e.g., unstable soils, critical habitat areas) or where terrain precludes other road location.
- ➔ Minimize the length and duration of non-permanent roads in riparian habitat.
- ➔ Use existing stream crossings, wherever practical.
- ➔ Minimize the negative impacts of brush control on forage in riparian habitat and areas of critical winter range.
- ➔ Mimic natural patterns of connectivity to provide for movement across disturbed landscapes.
- ➔ Maintain amounts and distributions of deciduous forest cover throughout the RMZ in a variety of patch size that mimic the natural patch size distribution on a site specific basis, particularly in critical winter range and calving area.
- ➔ Maintain riparian management zones that are as windfirm as possible.

Deer

Objective:

Manage deer habitat to provide the opportunity

Strategies:

- ➔ BC Environment or designate to identify critical deer habitat.

for population levels to be maintained.

- ➔ Manage critical Douglas-fir stands for mule deer habitat requirements.

Timber

Objective:

Encourage timber harvesting and intensive silviculture.

Strategies:

- ➔ Utilize improved seedlings where appropriate, while maintaining genetic diversity.
- ➔ Encourage growth and yield research in stands to determine appropriate site index (site productivity and growth potential) on managed stands.
- ➔ Encourage efficient, effective and ecologically sound, site specific vegetation management.
- ➔ Provide opportunities to increase timber utilization.
- ➔ Utilize cost effective intensive silvicultural treatments, including spacing, commercial thinning, fertilization and pruning, on a site specific basis.

Agriculture and Range

Objective:

Encourage and enhance agriculture and range opportunities.

Strategies:

- ➔ Maintain opportunities for Canada Land Inventory (CLI) agriculture land classed 1-5 to be developed for agriculture/food production.
- ➔ Allow expansion for range tenures and/or Animal Unit Months (AUMs).
- ➔ Encourage range enhancement activities, and identify and minimize impacts on other resource values.
- ➔ Agricultural producers wishing to expand their private land base can apply for additional Crown land under the BC Lands Agricultural Policy.
- ➔ Encourage agricultural producers to maintain forest stands on non-arable portions. Encourage Regional Districts to consider agricultural sectors' needs during planning for rural residential development so that conflicts can be avoided.
- ➔ In a cooperative effort BC Lands, Ministry of Agriculture, Fisheries and Food and the Ministry of Forests will identify land with agricultural potential and determine and map soil capability at

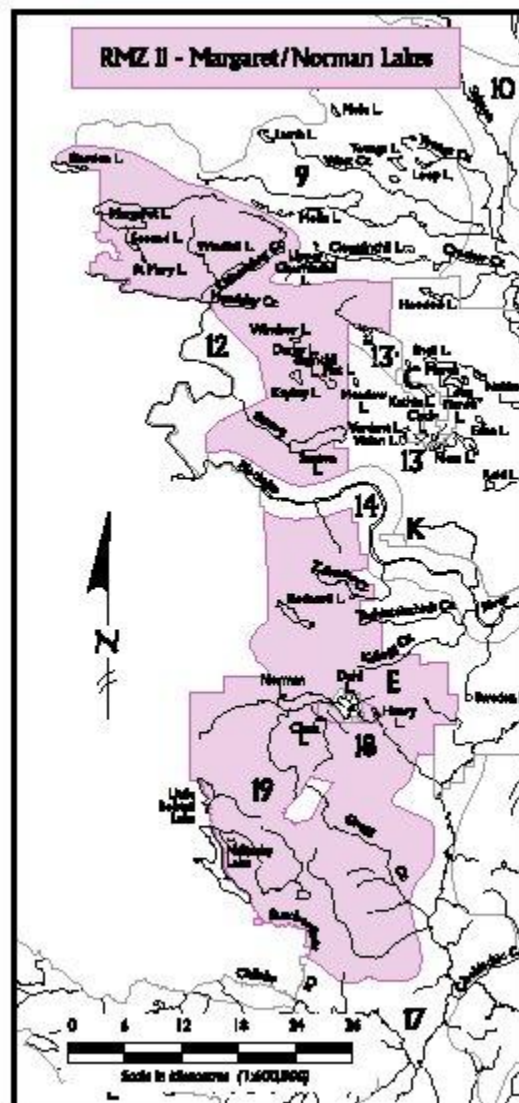
an appropriate scale before land is designated as Forest Land Reserve

- ➔ Support the purpose and intent of the Agricultural Land Reserve.
- ➔ Maintain or expand existing community pastures and create new community pastures when needed.
- ➔ Sensitive ecosystems should be excluded from Crown land dispositions.
- ➔ Ensure access to safe water supply for agricultural use (e.g., stock watering and irrigation).

RMZ # 11 - Margaret/Norman Lakes

RMZ Category: Enhanced Resource Management

Management Intent: Development and enhancement of the timber resource consistent with the objectives of the RMZ.



Description: This RMZ is made up of two portions on the north and south sides of the Nechako River and in the vicinities of Margaret Lake and Norman Lake. Significant mineral values in this zone include an intermittently active limestone quarry at Dahl Lake with established reserves, and aggregate deposits for forest road development.

Area: 131,000 hectares

General Management Direction

The resource management objectives and strategies in Section 2.2, General Management Direction, apply to this Resource Management Zone.

Marten

Objective:

Manage marten habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate will identify areas of high suitability marten habitat.
- ➔ In areas of high suitability marten habitat, manage dead and downed woody material and wildlife tree retention in harvested areas to maintain habitat (denning, hunting) for marten.
- ➔ In areas of high suitability marten habitat, manage for a mosaic of habitat types and characteristics (vegetation types, age class and spatial distribution) and stand attributes that mimic habitat suitable for marten.

Moose

Objective:

Manage moose habitat to provide opportunities for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate to identify critical winter and calving range.
- ➔ Maintain the suitability of known areas of critical habitat for moose.
- ➔ Avoid construction of permanent roads in riparian habitats, except where alternate road location results in higher environmental risks/ impact (e.g., unstable soils, critical habitat areas) or where terrain precludes other road location.
- ➔ Minimize the length and duration of non-permanent roads in riparian habitat. Use existing stream crossings, wherever practical.
- ➔ Minimize the negative impacts of brush control on forage in riparian habitat and areas of critical winter range.
- ➔ Mimic natural patterns of connectivity to provide for movement across disturbed landscapes.
- ➔ Maintain amounts and distributions of deciduous forest cover throughout the RMZ in a variety of patch size that mimic the natural patch size distribution on a site specific basis, particularly in critical winter range and calving

area.

- ➔ Maintain riparian management zones that are as windfirm as possible.

Elk

Objective:

Manage elk habitat to provide opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate to identify and map critical habitat areas for elk.
- ➔ Minimize access to currently unroaded elk winter range areas.
- ➔ Minimize impacts to agriculture/range resources from elk management.
- ➔ Develop elk management plans with consultation of bonafide farmers and ranchers and other affected stakeholders to address the impacts on agriculture and range.
- ➔ Conduct elk transplants only where an elk management plan is in place and where potential negative impacts on agriculture and range have been evaluated and are insignificant.

Deer

Objective:

Manage deer habitat to provide the opportunity for population levels to be maintained.

Strategies:

- ➔ BC Environment or designate to identify critical deer habitat.
- ➔ Manage critical Douglas-fir stands for mule deer habitat requirements.

Timber

Objective:

Optimize timber growth and implement silviculture strategies to produce a broad spectrum of forest products.

Strategies:

- ➔ Enhance the productive capacity of forest stands by using appropriate silviculture systems.
- ➔ Utilize improved seedlings where appropriate, while maintaining genetic diversity.
- ➔ Promote growth and yield research in stands to determine appropriate site index (site productivity and growth potential) on managed

stands.

- ➔ Encourage efficient, effective and ecologically sound, site specific vegetation management.
- ➔ Provide opportunity to alter stocking standards to optimize timber production.
- ➔ Utilize cost effective intensive silvicultural treatments, including spacing, commercial thinning, fertilization and pruning, on a site specific basis.
- ➔ Provide opportunities to increase timber utilization.
- ➔ Provide the opportunity to change the rotation ages to reflect product objectives, on a site specific basis.

Agriculture and Range

Objective:

Maintain agriculture and range opportunities.

Strategies:

- ➔ Maintain opportunities for Canada Land Inventory (CLI) agriculture land classed 1-5 to be developed for agriculture/food production.
- ➔ Allow expansion for range tenures and/or Animal Unit Months (AUMs).
- ➔ Encourage range enhancement activities, and identify and minimize impacts on other resource values.
- ➔ Agricultural producers wishing to expand their private land base can apply for additional Crown land under the BC Lands Agricultural Policy. Encourage agricultural producers to maintain forest stands on non-arable portions.
- ➔ Encourage Regional Districts to consider agricultural sector's needs during planning for rural residential development so that conflicts can be avoided.
- ➔ In a cooperative effort BC Lands, Ministry of Agriculture, Fisheries and Food and the Ministry of Forests will identify land with agricultural potential and determine and map soil capability at an appropriate scale before land is designated as Forest Land Reserve.
- ➔ Support the purpose and intent of the Agricultural Land Reserve.

- ➔ Sensitive ecosystems should be excluded from Crown land dispositions.
- ➔ Ensure access to safe water supply for agricultural use (e.g., stock watering and irrigation).

Recreation and Tourism

Objective:

Encourage a variety of recreation and tourism opportunities.

Strategies:

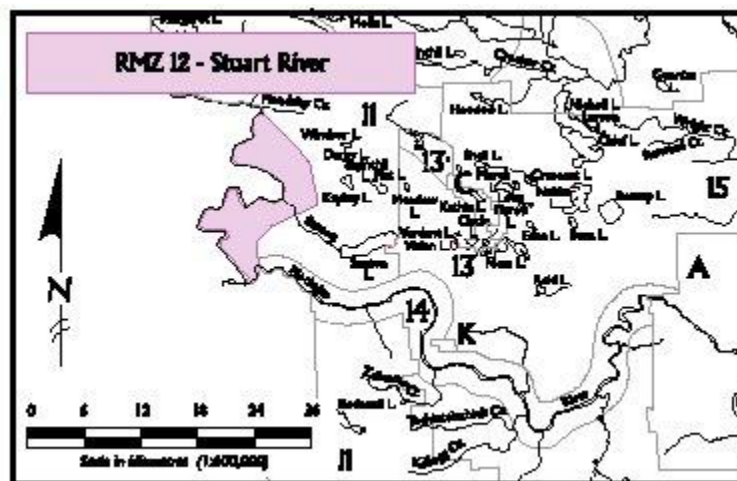
Provide recreational opportunities for seniors and people with special needs. MOF or designate will identify specific lakes to manage for these recreational opportunities.

Conduct detailed visual landscape inventories for: Dahl, Norman and Bednesti Lakes; the Nechako River; and Highway 16 corridor.

RMZ # 12 - Stuart River

RMZ Category: Protection

Management Intent: Provincial Park; logging, mining and related development are prohibited. Refer to Table 3 for recommended permitted activities.



Description: This proposal for a new provincial park is located on the east side of the Stuart River and is part of a larger protected area proposal which includes lands further to the west within the Vanderhoof and Ft. St. James LRMP areas. The area has very high conservation, recreation and cultural values. It provides good representation of dry warm Sub-boreal Spruce forest and examples of typical riparian and upland forest (lodgepole pine, Douglas-fir and cottonwood) associated with a major central interior river system. The area provides critical habitat for chinook salmon and white sturgeon,

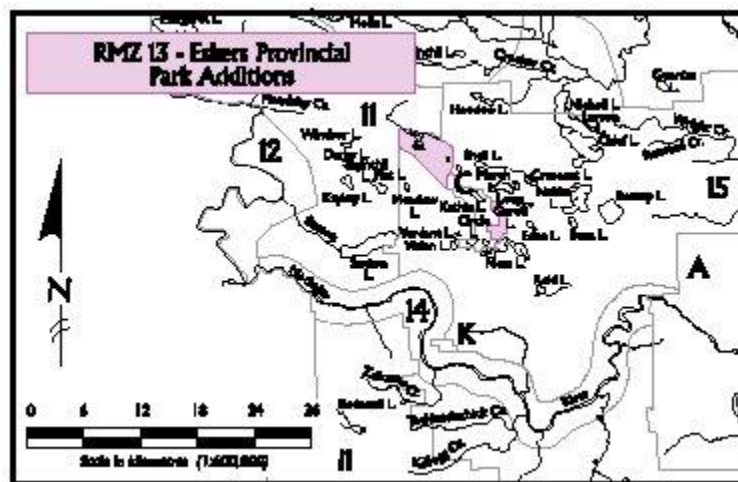
Class 1 capability for moose and important winter range values for ungulates. Recreational values include boating, canoeing, fishing and wildlife viewing. There are numerous archaeological sites associated with the Carrier people and Simon Fraser travelled the River in the early days of the fur trade.

Area: 7700 hectares

RMZ # 13 - Eskers Provincial Park Additions

RMZ Category: Protection

Management Intent: Provincial Park; logging, mining and related development are prohibited. Refer to Table 3 for recommended permitted activities.



Description: Eskers Provincial Park is located northwest of the city of Prince George and includes unique glacial - esker land formations. The existing park is popular with locals for hiking, picnics, fishing and cross-country skiing. The two areas proposed for addition to the park protect additional esker formations and recreational values and contribute to the viability of the park.

Area: 2800 hectares

3.0 Implementation

The Prince George LRMP establishes direction for Crown land use and specifies resource management objectives and strategies. It provides a comprehensive framework for guiding resource development and more detailed planning. More detailed plans or "plans lower in hierarchy" guided by the LRMP include:

- ➡ operational plans required pursuant to the Forest Practices Code:

- *Forest Development Plans*
- *Silviculture Prescriptions*
- *Stand Management Prescriptions*
- *Range Use Plans*

- ➔ plans for Landscape Units and Sensitive Areas
- ➔ plans for recreation sites, interpretive forest sites and recreation trails
- ➔ Tree Farm License and Woodlot License Management Plans
- ➔ plans prepared pursuant to Section 4(c) of the Ministry of Forests Act (e.g., Local Resource Use Plans)
- ➔ Provincial Park Management Plans
- ➔ Crown Land Plans (e.g., Prince George Area and Robson Valley Crown Land Plans)
- ➔ other resource management plans (e.g., fish and wildlife management plans)

Managers of agencies with a mandate for land and resource management are responsible for implementing the LRMP.

Operational plan consistency with the approved LRMP will occur according to transition provisions documented in Section 4.0. In the interim, resource agency managers will review the recommended LRMP and incorporate its management direction where it will assist in the management and conservation of natural resources under their jurisdiction.

3.1 Protected Area Strategy Completion

An important component of the implementation process is completion of the Protected Area Strategy for the planning area. Boundaries for proposed Protected Areas have been delineated on 1:20,000 scale maps and legally described, and land and tenure statusing will be completed. BC Parks is in the process of revising the master planning process for parks. In the short-term, Management Direction Statements will be developed to direct land use decisions. When the revised master planning process is complete, it will be applied to new protected areas on a prioritized basis. This process will include a range of public consultation and participation methods based on the size of the protected area, the issues requiring resolutions and recommendations from the LRMP.

The Working Group recommends that where new protected areas are established adjacent to existing private land, costs for managing conflicting adjacent uses should be negotiated between the government and the land owner.

3.2 Completion of Plans Lower in Hierarchy

The LRMP has identified a number of issues that will require resolution through a planning process which is lower in hierarchy. These issues typically had either site specific or operational elements that were beyond the scope of the LRMP. Some of the

plans will be largely technical in nature (e.g., wildlife species habitat plans) and will be completed on a prioritized basis by government agency staff. Other plans will need public consultation with government leadership and may take the form of periodic review of existing plans (e.g., Prince George Area Crown Land Plan) or deal with new or emerging matters (e.g., resolution of back-country recreational use conflicts). Government agencies will need to be directed to initiate the plans to address issues for which they are primarily responsible. The non-prioritized list of plans lower in hierarchy identified through the LRMP is as follows:

- ➔ Develop and implement water quality/fish habitat rehabilitation plans
- ➔ Review existing no staking reserves
- ➔ Develop and implement management plans for red and blue listed fish species
- ➔ Establish targets for walk-in, drive-in and wilderness lakes
- ➔ Develop and implement rare/uncommon species and habitat management plans
- ➔ Develop and implement wildlife management plans
- ➔ Develop management plans for new economic activities
- ➔ Develop a plan to separate potentially conflicting back country recreation and wildlife (non-mechanized/ motorized, motorize, caribou, other)
- ➔ Complete access management plans for high suitability grizzly bear areas
- ➔ Develop insect/forest health plans for large block management
- ➔ Establish plans to minimize non-recoverable timber losses from forest insects, diseases, wind damage and fires
- ➔ Review Prince George Area Crown Land Plan
- ➔ Review Robson Valley Crown Land Plan
- ➔ Develop management plans that reduce conflicts between recreation users

New management plans will include an analysis phase that will provide estimates of costs and benefits. These analyses will be made available to decision makers along with the draft plan.

RMZ 28 - Tabor Mountain is in close proximity to the City of Prince George and has diverse resource values and interests. The Working Group recommends that a more detailed planning process be undertaken for this RMZ with full participation of stakeholders, local community associations and the general public.

There are existing documents that are available for reference in the preparation of plans lower in hierarchy. One such has been prepared by the Federal Department of Fisheries and Oceans and is titled "Salmon Watershed Planning Profiles for the Fraser River Basin." A copy of this document can be viewed at the Department of Fisheries and Oceans office.

3.3 Inventory Needs

The Working Group has identified the need for additional information to assist in resource and land use decisions. Government agencies are encouraged to seek resources required to collect the necessary information. A non-prioritized list of the recommended inventories is as follows:

- ➔ Develop methodologies/criteria to prioritize watersheds for Interior Watershed Assessment Processes
- ➔ Conduct priority Interior Watershed Assessment Processes
- ➔ Establish baseline water quality values
- ➔ Conduct the appropriate level of watershed assessment on Pritchard Creek Community Watershed
- ➔ Identify critical fish habitat areas for red listed and blue listed fish species
- ➔ Identify rare/uncommon habitat areas
- ➔ Identify high suitability and critical habitat for grizzly bear
- ➔ Identify high suitability habitat for marten
- ➔ Identify critical habitat for moose
- ➔ Identify critical habitat for elk
- ➔ Identify critical habitat for deer
- ➔ Identify critical habitat for prioritized wildlife species
- ➔ Develop methodologies/criteria to prioritize wildlife species for habitat mapping
- ➔ Identify over-winter habitat for trumpeter swans
- ➔ Identify land with agriculture potential through soil capability mapping (Forest Land Reserve will be addressed after arability surveys and mapping are complete)
- ➔ Identify commercial back country recreation and tourism opportunities

New plans lower in hierarchy and resource inventories will be carried out subject to available funding.

3.4 Research Needs

The Working Group has identified several areas where additional research is needed to assist in making resource and land use decisions. A list of the research needs is as follows:

- ➔ Develop methods to reforest subalpine forests
- ➔ Conduct growth and yield research
- ➔ Conduct research on the possible consequences to tree regeneration and other forest resources of changes to micro-climate (i.e., heat stress, cold stress) as a result of large block size

- ➔ Conduct research related to the integration of commercial timber harvesting with caribou habitat needs.

This list should be provided to institutes that undertake or fund research to make them aware of LRMP research interests.

3.5 Relationship between the Prince George LRMP and the Cariboo Chilcotin Land Use Plan

The Cariboo Chilcotin Land Use Plan was declared a higher level plan pursuant to the Forest Practices Code of BC Act in January 1996, and now guides lower level plans and operations. The boundary of the Cariboo Chilcotin Land Use Plan overlaps the Prince George LRMP area in the southwest corner of the LRMP planning area. In this overlap area, LRMP Resource Management Zone boundaries, management intents and objectives are consistent with the Cariboo Chilcotin Land Use Plan. It is recommended that the Prince George LRMP guide plans lower in hierarchy, in this area.

3.6 History of Caribou Management in the LRMP Area

In 1990, management guidelines were developed to manage and conserve mountain caribou habitat in the Prince George Forest District. These species-specific guidelines were developed in recognition of caribou's blue-listed classification (sensitive or vulnerable), their dependence on existing high elevation old growth forests, existing and forecast harvest pressures for this forest type, and a currently poor understanding of how to mitigate impacts from forest harvesting. Commercial timber harvest and the associated road network is believed to be incompatible with long-term maintenance of caribou populations. Research was initiated, and continues, to determine if or how harvesting can be conducted with minimal impacts on these mountain caribou.

The mountain caribou guidelines are applied primarily in Englemann - Spruce Fir (ESSF) forest types and on the basis of habitat value. Caribou habitat mapping was completed for the Prince George LRMP area in 1990, except for the Parsnip drainage. Habitat mapping for the Parsnip area was completed in 1995. In areas determined to have high value for caribou, commercial timber harvesting is deferred until it can be shown that caribou and timber harvesting can coexist. It will remain deferred until more information becomes available through research that is currently underway in Englemann Spruce-Subalpine Fir (ESSF) forests on land that is less valuable to caribou (medium habitat). Hopefully, this will demonstrate how to best harvest some timber while still maintaining lichen and caribou habitat and preventing new predation problems.

These guidelines have been implemented since 1991 and were supported by BC Environment and Ministry of Forests. In the 1995 Timber Supply Review, the guidelines were recognized as netdown criteria and the Chief Forester reflected them in his Allowable Annual Cut determination for the Timber Supply Area. The more recent mapping of caribou habitat in the Parsnip drainage was not included in timber supply analysis netdowns, however, it was considered by the Chief Forester as a downward pressure on Allowable Annual Cut. The LRMP has objectives and strategies that support

the guidelines. The LRMP recognizes the needs for careful management for caribou, and the need for access and resource development that can accommodate caribou.

4.0 Transition

Agreement holders under the Forest Act and Range Act, especially Forest Licensees, were involved in a substantive way during the development of the LRMP. Therefore, the opportunity has been available to begin the design of forest practices that would be consistent with the general intent of the LRMP. Operational plans must be consistent with an approved LRMP. To ensure continuity of operational plan activity, however, phase-in provisions are necessary to allow a smooth transition from the operational plans in effect at the time the LRMP is approved to the new operational plans that will be consistent with the approved LRMP. Issued cutting authorities, road permits or silviculture prescriptions previously approved by the District Manager and having had public

review, should not have to be amended for consistency with the approved LRMP, when the forest development plan is next approved. Furthermore, landscape level assessments or stand level assessments conducted in conjunction with an operational plan and submitted up to twelve months after the approval of the LRMP should be approved based on approval criteria existing prior to the LRMP. When feasible, plan implementation will be done as soon as possible.

5.0 Interpretation, Monitoring and Amendments

Especially in the early days of plan implementation, it is anticipated there will be the need for interpretation of the LRMP. The intent or reasoning for particular objectives or strategies may need to be explained to individuals or parties that did not participate in LRMP development. The first avenue for interpretation is the Interagency

Planning Team. Interpretation by the Interagency Planning Team should be done in consultation with Working Group members who were directly involved in the development of the LRMP. If the Interagency Planning Team can not provide adequate interpretation, the inquiry will be referred to the appropriate agency to interpret in light of existing legislation, regulation and policy. If this step fails to resolve the matter, it will be referred to the Interagency Management Committee.

The term of the Prince George LRMP is 10 years. This document will provide consistency in land and resource management decisions that reflect the goals identified by the Working Group. However, periodic review will be needed during the life of the plan.

An annual report and meeting will enable continued contact with the plan for Working Group members and the public. This annual event will allow for:

- ➔ report on implementation. An assessment of how well the direction from the plan is being reflected in operations.

- ➔ review of minor amendments. As the plan is implemented, changes may be needed to refine it. Amendments required as a result of new information will be presented to the Working Group.
- ➔ identification of major amendments. Where significant changes to the plan are needed, they will be identified to the Working Group. The Interagency Management Committee will recommend the terms of reference (time frame, type of public involvement, scope of issue) to affect the change.
- ➔ field tour of selected sites. An opportunity will be provided for Working Group members to visit sites and see some of the successes and difficulties of field implementation of the LRMP

A more structured formal review will occur five years after initial plan implementation. This review will examine:

- ➔ progress to full implementation (Protected Areas Strategy, operational plan compliance). At the mid-point of the plan, the Working Group can assess how well the strategic direction is being delivered. The culmination of the "start-up" amendments plus the results of major amendments to date can be examined.
- ➔ review recommendations on inventory, research, plans lower in hierarchy, and policy. The Working Group can see progress on those aspects of the plan where there is an expectation for government agencies to collect information and carry out additional planning.

The LRMP cycle will wrap up with a revisit of the whole plan in 8 years.

6.0 Issues Outside of LRMP Terms of Reference

The Working Group discussed several issues that were outside the LRMP terms of reference. These concerns are not part of the consensus recommendation but warrant recording and forwarding to government for information. A list of these issues is as follows:

No motorized access for hunting in RMZ 28 (Tabor Mountain), through revision of the Hunting Regulations.

Range enhancement funding should be provided through a provincial government agency.

Recognize the extreme sensitivity to elk management in areas with agriculture activity. The agriculture representatives have strong concerns about the potential for disease transfer from elk to livestock and for crop damage from trampling and feeding. Government agencies are advised to give very serious consideration to these concerns prior to considering any artificial population transplants and to undertake effective consultation with potentially affected parties to mitigate impacts.

Free growing standards should be revised to reflect the evolving objectives of forest management such as biodiversity. For example, a free growing stand that

must be 100% conifer and 150% the height of competing vegetation, may not reflect current stand level biodiversity objectives.

A 400 metre wide “no hunting” corridor should be established on both sides of the main haul road in the Anzac drainage.

Government should recognize fur trapping as a compatible use in a protected area that preceded the protected area and trappers should not be required to have any other licenses, fees or restrictions on their activities.

The public should not be excluded from using their parks except for the valid restrictions that are outlined by legislation, regulation, codes or management plans regarding the rights of tenure, protection of the environment, protection of wildlife and the safety of the public. The guiding principle in respect to access should be based on the principles found in the work place regarding discrimination and duty to accommodate. Stated simply - there is a duty to accommodate and not to discriminate with individual rights unless it presents undue hardships.

The mining industry did not participate in the LRMP. The Ministry of Energy and Mines provided information on mineral and energy values within the planning area

Reference Documents (under separate cover available from the Prince George District Forest Office)

- 8.1 Terms of Reference
- 8.2 Working Group Endorsement Letters
- 8.3 Public Input
- 8.4 Base Case
- 8.5 Environmental Assessment
- 8.6 Socio-Economic Assessment
- 8.7 Watershed Profiles
- 8.8 Issues Report
- 8.9 Map of the Prince George Area Crown Land Plan
- 8.10 Map of the Robson Valley Crown Land Plan
- 8.11 Cariboo Chilcotin Land Use Plan
- 8.12 Herrick Local Resource Use Plan
- 8.13 Lower Blackwater Local Resource Use Plan
- 8.14 Bowron River Interior Watershed Assessments

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