

Cariboo-Chilcotin Land-Use Plan

Chilcotin Sustainable Resource Management Plan

June 2007

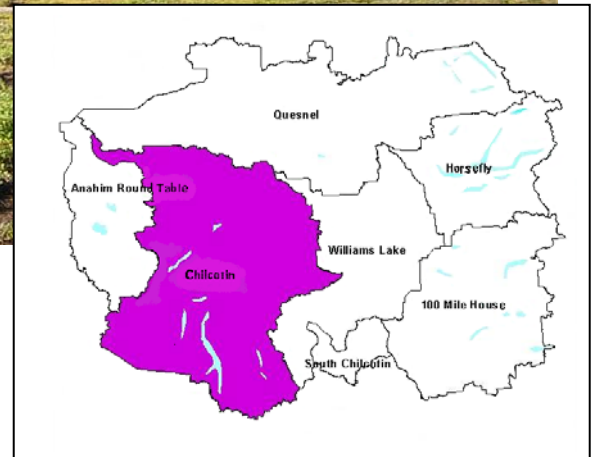


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1 EXECUTIVE SUMMARY

The Chilcotin Sustainable Resource Management Plan (CSRMP) is one of seven plans covering the Cariboo-Chilcotin Region, including the previously endorsed South Chilcotin, Anahim Round Table, Williams Lake, and Horsefly plans. SRMPs are a spatial application of the Cariboo-Chilcotin Land Use Plan (CCLUP) direction at the sub regional planning level. The Chilcotin SRMP covers a gross area of approximately 2,234,288 hectares, with approximately 1,302,505 hectares being productive forest landbase. The Chilcotin SRMP plus the area covered in the ART SRMP coincides with the Chilcotin Forest District.

The CSRMP have Provincial Red-listed; Badger, Pika, American Avocet, American White pelican, Double crested Cormorant, Lark Sparrow, Peregrine Falcon *anatum ssp*, Praire Falcon, Upland Sandpiper, Western Grebe, and Swainson's Hawk, all within its planning area.

There are 46 objectives in the plan to guide operational planners. Supporting strategies provide more detail regarding proposed practices for meeting objectives. Recommendations are also provided within the plan where planning advice was considered appropriate but not necessarily associated with a specific CCLUP requirement. First Nation, stakeholder, public, and multi-agency involvement was solicited to develop the objectives and to map specific values.

The twelve maps included within this document represent the strategic level spatial information used in analysis of values with the CCLUP targets. Analysis of the mapped products reveals that the SRMP objectives can be met within the regional timber targets.

2 INTRODUCTION

The Chilcotin Sustainable Resource Management Plan (Chilcotin SRMP) is one of seven SRMPs in the region. These plans are important elements of the Cariboo-Chilcotin Land Use Plan (CCLUP)¹ implementation. They provide the spatial reference and detailed objectives needed to implement the land use plan over the long term.

The SRMP is based on the 90-Day Implementation Process Final Report, released in 1995, which provided detailed area-based resource targets and strategies for timber, range, mining, fish, wildlife, biodiversity conservation, water management, tourism, recreation, agriculture and wildcraft/agro-forestry.

The CCLUP, including the 90-Day Implementation Report, was declared a higher level plan in 1996 under the *Forest Practices Code of British Columbia Act* (FPC)². It was later amended in 1999³. As a higher level plan, the CCLUP guides application of the FPC and other resource management activities. In 1998 the *Integration Report*⁴ was released. This policy report provided a strategic scenario which showed how all the targets could be achieved and served to further guide planning at the sub-regional level. Sub-regional planning began in 1996, to provide more detailed spatial representation of CCLUP values at the district level. Information describing the sub regional planning process was advertised and widely distributed throughout the plan area in 2001 through 2004. In order to facilitate the public input process workshops were initiated at various locations in the district and inventory maps were available for review.

Legal objectives will be established based on the SRMPs. These objectives will complement other regulations declared under the *Forest and Range Practices Act* (FRPA).

It should be noted that, in the interests of brevity, objectives provided by the CCLUP are not necessarily repeated in the Chilcotin SRMP. Nevertheless, the CCLUP objectives still represent legal requirements that must be met as compliance with a higher level plan.

Within each section the text provides context for the objectives and strategies. References to the CCLUP are documented, and footnotes provide additional information. References to other documents are often paraphrased and brief. Readers should consult original documents where more comprehensive understanding is required.

¹ Cariboo-Chilcotin Land-Use Plan 90-Day Implementation Process Final Report, February 15, 1995 (207 pages). Cariboo-Chilcotin Land-Use Plan Addendum to the Ninety-Day Implementation Process: Final Report, April 20, 1995 (6 pages).

² Order Declaring the Cariboo-Chilcotin Land-Use Plan to be a Higher Level Plan Pursuant to Section 1(1) of the *Forest Practices Code of British Columbia Act*, January 23, 1996 (2 pages).

³ Order Varying the *Cariboo-Chilcotin Land-Use Plan 90-Day Implementation Process Final Report*, February 1995 Resource Management Zone Objectives Pursuant to Section 3(2) of the *Forest Practices Code of British Columbia Act*, June 22, 1999 (2 pages).

⁴ Cariboo-Chilcotin Land-Use Plan Integration Report, April 6, 1998 (59 pages).

The 2.2 million hectare plan area of the Chilcotin SRMP coincides with the Ministry of Forests Chilcotin Forest District excluding the Anahim Round Table (ART) Sub Regional Plan area. The CCLUP Resource Development Zones within the Chilcotin SRMP are shown on Map 2.

The SRMP does not apply to private land or protected areas and the Chilcotin SRMP conforms with the Province's two-zone approach to mineral resource management. Consistent with Section 14 of the *Mineral Tenure Act*, the objectives and strategies in this plan do not restrict or prohibit responsible mining exploration or development activities.

The maps in the printed plan are for general information purposes only. Planners should contact the Integrated Land Management Bureau (ILMB) for appropriate scale maps and digital files for the purpose of operational planning.

3 Economic Security

SRMPs are the key mechanism for increasing certainty with regard to land and resource use, which in turn is the foundation for economic investment. The objectives and strategies contained in Section 6 provide specific, area based commitments to the resource based industries that drive the economy of the Cariboo Region, and clear strategic management direction to statutory decision makers. Establishment of objectives for non-market resources such as biodiversity also allow the forest industry to more easily address forest certification needs and will greatly facilitate implementation of FRPA.

3.1 Forest Industry

The timber access targets achieved in the Chilcotin SRMP provide assurance that the forest industry will continue as a major economic driver in the Cariboo Region. The Chilcotin SRMP is one of five SRMPs that contribute to the Williams Lake Timber Supply Area (TSA). Approximately 90 percent of the timber harvested in the SRMP area is processed in the Williams Lake TSA.

The allowable cut in the Williams Lake TSA is forecasted to generate up to 58.6 million⁵ dollars in provincial government revenues yearly.

The Cariboo forest industry's manufacturing facilities are concentrated within the communities of 100 Mile House, Clinton, Williams Lake, Anahim Lake, and Quesnel and these facilities rely upon a fibre supply accessed across the entire Cariboo area. The forest industry within the Cariboo is diverse. Regional facilities include:

- 12 sawmills
- 4 plywood/veneer plants
- 1 oriented strand board plant
- 1 medium density fibreboard plant
- 2 pulp mills
- numerous value-added manufacturing facilities
- associated logging operations

Based on the Williams Lake Timber Supply Analysis Report (2001), the capital employed in these regional facilities totals 946 million dollars. A total of 78 million dollars in capital expenditures was made in maintaining and improving these facilities. These facilities produced 1,820 million foot board measure of structural lumber, 1.1 billion square feet of panel products and 500,000 tonnes of pulp. The production of these products required the consumption of 8, 815,000 m³ of logs. The accumulated sales value of lumber, panel, pulp, and value-added products amounted to 1.53 billion dollars. The total value of the logs used to create these products totalled 505 million dollars.

⁵ Chilcotin TSA Timber Supply Review – (TSA Analysis Report) – September 2001

For the region as a whole, the forest industry provided 8,470 full time jobs in 2001. While the area covered within the Chilcotin SRMP represents only a portion of the area included within the Cariboo-Chilcotin Land Use Plan, it nonetheless has made a significant contribution to the fibre supply and manufacturing required to maintain the industry here in the Cariboo. Over the last number of years, the average volume of timber removed annually from the Chilcotin SRMP area has been 1.4 million cubic meters per year or approximately 16 percent of the total volume of timber utilized by the regional industry in 2001.

One lumber mill is located within the Chilcotin SRMP area. The continued viability of small communities located in the Chilcotin is closely linked to maintenance of the regional forest industry.

Map 1 provides a spatial representation of the areas that contribute to meeting the regional timber access targets. The map includes conventional harvesting areas where the primary focus is timber management, modified harvesting areas, that support a range of values and uses, including harvesting, and no harvest areas.

The completed SRMPs are expected to accommodate the short term needs of the timber industry while ensuring appropriate levels of management for other values.

3.2 Mining

The Chilcotin SRMP ensures access to 100 percent of the plan area for mineral and aggregate exploration and potential development, excluding protected areas and Goal 2 areas. (See map 2). This is consistent with government's two-zone approach to mineral exploration and development. The comprehensive nature of the Chilcotin SRMP objectives will assist the mineral sector in making informed choices. Mine development is addressed under the Environmental Assessment Process. In general developed mines are a very small part of any strategic planning area; they are however an important economic driver for the province.

All mining projects must pass through several stages of exploration and development, assessment and permitting, and coincide with favourable economic conditions for their successful exploitation to occur.

3.3 Tourism and Recreation

Tourism, which includes portions of several service sectors including accommodation, retail trade, and transportation, has demonstrated significant growth and investment in recent years. Businesses in the SRMP area service visitors' needs, including outdoor recreation facilities, tours and attractions, retail and service businesses, food and beverage facilities, and accommodations.⁶ Access to crown land for the development of

⁶ Chilcotin TSA Timber Supply Review – (TSA Analysis Report) – September 2001

new tourism, commercial recreation, and backcountry opportunities and to provide for the expansion of existing operations is essential for the encouragement of economic development of the area.

In March of 2001, the Ministry of Small Business, Tourism and Culture released the Chilcotin Wilderness Tourism Study⁷. The objective of the study was to review existing and identify potential tourism products. These products include: wilderness lake and river fishing, canoeing, kayaking, hiking, backpacking, mountaineering, heli-hiking, wildlife viewing, nature photography, flight seeing and air tours, trail riding, wilderness lodging, hunting, backcountry skiing, and snowmobiling. Within the Chilcotin SRMP area this study focused on wilderness tourism in the Niut Range, Potato Range, Brittany Triangle, and Taseko Lake SRDZs. These opportunities were identified and prioritized based on their potential to maximize social and economic benefits, while minimizing the negative social and environmental impacts.

3.3.1 Recreation Corridors and Trails

The Chilcotin SRMP area has a unique world class system of trails and recreation corridors. There are a number of comprehensive inventories of these elaborate trail systems. The Chilcotin SRMP addresses this potential by providing a recreation corridor management objective to maintain viability of key trail corridors and managing visuals from identified viewpoints. Examples of key trails in the Chilcotin includes the Alexander Mackenzie Heritage Trail and the West Branch Heritage trail to Butte Inlet.

3.3.2 Fishing

The Chilcotin Wilderness Tourism Study identifies a high opportunity for wilderness fly-in fisheries as a key tourism development opportunity. The Chilcotin SRMP supports both existing tourism operators and development opportunities through:

- Protection of habitat adjacent to identified critical fish habitat
- Establishment of Lake Management Objectives
- Identification of scenic areas in viewsheds surrounding existing operations
- Assessment of lakes to determine the potential for both recreational sales and commercial development

3.4 Agriculture

The beef industry represents 50 percent of the agriculture sector within the Cariboo Region, and accounts for 20 percent of the provincial beef cattle population. The value of the cattle marketed through the Williams Lake Stockyards is in excess of 23.5 million dollars annually. The Chilcotin SRMP supports the regional agriculture sector through commitments to maintain or enhance livestock grazing opportunities on Crown range. The agriculture sector is an important part of the local economy. The SRMP recognizes the industry's need to enhance access to Crown land and water in support of agricultural economic development opportunities.

⁷ Chilcotin Wilderness Tourism Study, by West Chilcotin Tourism Assoc., March 2001, 51 pages, 4 maps

4 Background Planning Initiatives

4.1 Chilko Lake Study Team and the Taseko Management Zone

The Chilko Lake Study Team signed off a Consensus report for the Chilko Lake Study area in September 1993. In this report the Chilko Lake study area was divided into the Chilko Lake Protected Area and the Taseko Management Zone (TMZ). The Chilko Lake Protected Area was declared the Ts'yl'os Provincial Park and the park Master Plan was completed in 1996. The CCLUP (p. 38) mentions the TMZ as a special interest area and that any planning in this area should be guided by the recommendations of the Chilko Lake Study team and the results should be considered in the general framework of the targets and the strategies for the entire SRDZ area. A planning process for the TMZ was initiated in 1996 but failed to reach a consensus. Information collected through the TMZ process has been used in the preparation of the Chilcotin SRMP and this plan is consistent with the TMZ terms of reference. The Local Advisory Group for the Chilko Lake Study Area will continue to provide advice to local government agencies with regards to monitoring and assessment of any management issues in either the Chilko Lake Protected area or the Taseko Management Zone area.

4.2 Tatla Resource Association

The Tatla Resource Association and the Niut Wilderness Society have completed the following reports:

- Trail Strategy for the Tatla Community Plan area
- West Branch IRMP
- A Proposal for a Chilcotin Mountain Trail System
- Tatla Resource Association Access Management Recommendations

These three documents and associated maps were presented as input to the Chilcotin SRMP. In addition, the Tatla Resource Association Community Plan completed in November 2001, provided valuable background information used in the development of the Chilcotin SRMP.

4.3 West Chilcotin Demonstration Project

Riverside Forest Products, the Tatla Resource Association, Tsi Del Del Enterprises, the West Chilcotin Tourism Association, and the Wilderness Tourism Association of BC have collaborated on the development of a management proposal for a portion of the Chilcotin SRMP covering approximately 700,000 ha.

The proposal identifies a balance between community, forest industry, and wilderness tourism interests that will allow for the maintenance and expansion of the forest and tourism industries in a manner that is consistent with the Tatla community vision for the area. The project has been reviewed by ILMB and endorsed subject to confirmation that implementation of the project is consistent with CCLUP area based targets. Map

based information provided by the demonstration project has been included in the Chilcotin SRMP as shown on map 1.

5 FIRST NATIONS

The province is committed to working with First Nations on a government-to-government basis without limiting aboriginal rights or treaty negotiations. This plan is not intended to nor is it to be interpreted to create, recognize, acknowledge, affirm, limit, or deny any aboriginal right, title, or interest. The province has a policy of sharing information and of offering First Nations opportunities to be involved in the planning process. The CCLUP encourages First Nations to play a direct role in the implementation of the plan.

The Chilcotin SRMP overlaps with the asserted traditional territories of the following councils and their associated bands. Carrier-Chilcotin Tribal Council including: the (i) Kluskus band, the Ts'ilhqot'in National Government including the:(ii)Tsi Del Del, (iii) Tl'etinnqox, (iv) Yunesit'in and the(v) Xeni Gwet'in band, the Cariboo Tribal Council including the: (vi) T'exelc and the (vii) Xats'ull band, the Shuswap Nation Tribal Council including the (viii) High Bar band. Other bands, not affiliated with specific tribal councils include the (ix) Homalco, (x) Laich-Kwil-Tach, (xi) Esketemc and the (xii) Nazko band.

The Chilcotin SRMP planning team reviewed Traditional Use Studies, as well as the Cultural Heritage Overview of the Cariboo Forest Region (completed by Diana Alexander in 1997), and an Archaeological Overview Assessment (AOA). The Cultural Heritage Overview extensively covers, among other things, the historical patterns of band membership, subsistence, and settlement patterns and cultural practices of native groups in the area. This overview is a literature review and was not based on interviews with First Nations. The AOA defines areas of archaeological potential and lists all recorded archaeological sites.

Objective 1 Manage industrial and commercial land development to prevent or mitigate physical damage to cultural and heritage features as identified by First Nations, consistent with the *Heritage Conservation Act*.

Table 1 Some Examples of First Nations Cultural and Heritage Features

Trails
Burial sites
Archaeological sites (artefacts, lithic scatter)
Battle sites
Occupation sites (campsites, pithouses)
Village sites
Quarries
Culturally modified trees (where some or all of the CMTs were modified before 1846)
Pictographs
Petroglyphs
Recreation sites
Cache pits, roasting pits

Definition **Maintain (where applied to ecological values):** *To prevent decline from current condition, excluding naturally caused perturbations such as wildfire, insect infestations and extreme weather events.*

Objective 2 **Maintain First Nations' trails identified by government or First Nations, free of debris from industrial and commercial development.**

To continue to promote First Nations' access to their traditional cultural and heritage sites, it is expected they will be involved in any future access management planning.

Recommendation Identify and attempt to address the concerns of First Nations in relation to access to identified cultural heritage sites when awarding Crown land tenures.

6 GOAL 2 PROTECTED AREAS

Under CCLUP, 17 large new “Goal 1” parks and other protected areas were established. In the Chilcotin area these include the Nazko, Nunsti, Ts’yl-os, Stum Lake, Itcha-Ilgachuz Provincial Parks and the Homathko River/Tatlayoko Protected area. The new protected areas, combined with existing parks, totalled 11.75 percent of the Cariboo Region. As part of the government’s commitment to include 12 percent of the land base of the Cariboo Region in protected areas, the remaining 0.25 percent of the region (22,000 ha) was allocated for future designation as smaller “Goal 2” areas during sustainable resource management planning. The CCLUP (p. 23-24) specifies that sub-regional plans should identify which Goal 2 protected areas should be established. The CCLUP (p. 154) also states that small benchmark ecological reserves should be established as part of the 0.25 percent land target for Goal 2 protected areas, within those eco-sections that are not well represented in the Protected Areas, for the purpose of future research, preserving biodiversity, and preserving portions of rare ecosystems. The overall objectives of Goal 2 protected areas are protection of special natural, cultural heritage, and recreational features, including rare and endangered species and critical habitats, outstanding or unique botanical, zoological, geological, and paleontological features, outstanding or fragile cultural heritage features, and outstanding recreational features. Once established as parks or other protected areas, approved Goal 2 protected areas will be managed by the Ministry of Environment (MOE) under the *Park Act* and other relevant Acts, through park management plans.

The CCLUP, (p. 35 to 39) protected areas management policies state that, except for placer tenures in Churn Creek (Williams Lake SRMP) mining tenures fully within protected areas will be extinguished. However activities such as recreation, cattle grazing, hunting, trapping, and backcountry tourism will continue to be allowed.

The Regional Goal 2 allocation of the Chilcotin SRMP is approximately 4500 ha. The Chilcotin SRMP Interagency Planning Team, in consideration of public input, has identified 7 areas totalling 8766 ha, as summarized in Table 2 and shown on Map 2.

Candidate areas have been forwarded to the Cariboo Managers’ Committee (CMC) and the Regional Resource Committee (RRC) for consideration. The CMC and the RRC will forward to cabinet those Goal 2 proposals with which they agree. Cabinet will then decide whether to approve each proposal with the recommended status. Once the objective of 12 percent protected area has been achieved, the remaining proposed Goal 2 areas will be released for resource development.

Table 2 Candidate Goal 2 Protected Areas Within the Chilcotin SRMP Area

Area	Designation	Approximate Size (ha)
Hanceville Canyon	Class “A” Provincial Park	1928
Chilcotin Lake (deferred for FN)	Class “A” Provincial Park	978
Punti Island	Class “A” Provincial Park	9
Redbrush (deferred for FN)	Class “A” Provincial Park	1093

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Area	Designation	Approximate Size (ha)
Eleven Sisters	Class "A" Provincial Park	3148
Tsylo's Park Extension	Class "A" Provincial Park	355
Patterson Lake	Class "A" Provincial Park	1255
Total		8766

7 RESOURCE MANAGEMENT

7.1 Timber Resource

7.1.1 Timber Access

The *Cariboo-Chilcotin Land-Use Plan* (CCLUP), including the amendment of June 22, 1999, provides long-term timber targets within the Special Resource Development Zone (SRDZ), the Enhanced Resource Development Zone (ERDZ), and the Integrated Resource Management Zone (IRMZ). The targets were expressed (p. 148-149) (a) as a percentage of the productive forest land base falling into conventional, modified and no harvest categories, and (b) as access to specified percentages of the forest land base.

The *Integration Report* (p. 77) expressed these timber targets as *equivalent excluded area* (EEA) targets. The Interagency Management Committee (IAMC), responsible for implementing the CCLUP, further refined the timber targets in 2000 in a regional analysis⁸ at both the CCLUP sub-unit level and the SRMP level. The timber access targets (equivalent excluded area) result from identifying (for each Resource Development or Management Zone) where timber harvesting will *not* be conducted or will be constrained due to other values. When calculating the EEA of modified harvest areas the principle of an extended rotation is used to meet specific non-timber management objectives. See Section 8, Analysis Methods and Results, for additional information on calculating EEA.

7.1.2 Short Term Timber Impacts

The CCLUP (p. 149) directed that, to create certainty, a Timber Availability Plan be developed, to ensure short-term timber availability during the full implementation of the CCLUP. The 1996 20-Year Short Term Timber Availability analysis determined that with the implementation of the CCLUP, the 1996 regional harvest levels could be maintained for at least the next 20 years within the regional context. Regional short-term availability has recently risen due to the extreme mortality caused by mountain pine beetle.

Effective January 2003, the Williams Lake Timber Supply Area rational for the AAC was announced by the Chief Forester. It determined the AAC for the Williams Lake TSA to be 3,768,400 m³ per year with 450,000 m³ per year partitioned to the three western supply blocks.

7.1.3 Woodlot Licences and Community Forests

Woodlots contribute to meeting all CCLUP objectives. However, in recognition that woodlots are small area-based tenures, management for some non-timber resource values is focused outside woodlot boundaries. Permanent Old Growth Management Areas (OGMAs) are not placed within woodlots, although areas constrained for other reasons can contribute to meeting the old seral objectives. Management for mule deer

⁸ Letter from the Cariboo Mid-Coast Inter-Agency Management Committee, dated July 18, 2000 (3 pages).

winter range (MDWR) within woodlots is expected to be consistent with the CCLUP Management Strategy for Mule Deer Winter Ranges in the Cariboo-Chilcotin. Part 1a: Management Plan for Shallow and Moderate Snowpack Zones (2007) and Part 1b: Management Plan for Transition and Deep Snowpack Zones (2005), and individual management plans for each winter range.

Permanent OGMAs can be located in Community Forest Agreement areas.

7.1.4 Silviculture

The CCLUP does not specifically address post-harvest silviculture in most areas, although management for riparian areas, biodiversity, coarse woody debris, and specific wildlife species require consideration when developing site preparation, planting, vegetation management, and stand tending prescriptions. Generally silvicultural treatments would not be applied in no-harvest areas such as wildlife tree patches (WTPs) and OGMAs. Nevertheless, special attention is required to maintain the representative ecological characteristics if any silviculture work is deemed necessary in any of the following areas: OGMAs, riparian management areas, WTPs, wildlife habitat areas, ungulate winter ranges, wildlife features, critical fish habitat, rare ecosystems, and habitat for species at risk. Unless required for ecosystem restoration or protection of the area from severe pest damage, broadcast burning and broadcast application of pesticides should not occur within these areas.

All harvested areas treated for vegetation management should retain a component of non-crop trees and shrubs on the site for nesting and wildlife forage. Addressing First Nations’ ethnobotany concerns should also be considered.

Objective 3 **During vegetation management activities, ensure high and medium value wildlife trees contributing to wildlife tree retention requirements are retained.**

Strategy 3.1 Use the criteria in Table 3, or a qualified wildlife/danger tree assessor to determine which trees are medium or high value. To ensure worker safety, use either no-work zones or assess each tree of concern, using a qualified wildlife tree assessor.

Recommendation Where wildlife trees are identified for retention, free-to-grow requirements around the tree or within the no-work zone should be waived to avoid human activity within the fall zone of potential danger trees.

Table 3 Wildlife Tree Characteristics⁹

Wildlife Tree Value	Characteristics
HIGH	<ul style="list-style-type: none"> • Internal decay (heart rot or natural/excavated cavities present).

⁹ Provincial Wildlife Tree Policy and Management Recommendations, February, 2000 (14 pp.).

Wildlife Tree Value	Characteristics
A high-value wildlife tree has at least two of the characteristics listed in the adjacent column.	<ul style="list-style-type: none"> • Crevices present (loose bark or cracks suitable for bats). • Large brooms present. • Active or recent wildlife use. • Current insect infestation. • Tree structure suitable for wildlife use (e.g., large nest, hunting perch, bear den, etc.). • Largest trees on site (height and/or diameter) and/or veterans. • Locally important wildlife tree species.
MEDIUM	<ul style="list-style-type: none"> • Large, stable trees that will likely develop two or more of the above attributes for High.
LOW	<ul style="list-style-type: none"> • Trees not covered by High or Medium categories.

Objective 4 **In areas of high and moderate grizzly bear habitat capability as shown on Map 3, manage silvicultural activities on cutblocks so as to retain as much existing natural berry production as possible.**

Strategy 4.1 Where broadcast application of herbicides is used, ensure 40 percent or more of the naturally occurring, berry-producing shrubs are retained within areas of high and moderate grizzly bear habitat capability.

7.2 Forest Health

Natural forest disturbance agents such as insect pests, tree diseases, windthrow, and fire have a critical role in forest health and long-term forest productivity; however, they can also contribute to significant economic losses of timber. Forest disturbance agents contribute to diversity in forest structure, tree ages, and species composition. The disturbances create a landscape level mosaic of forest patches of various ages, densities, species composition, and succession stages; at the stand level they create a complex mixture of living, dead, and damaged trees of various species. Ecosystem complexity is in large part created by such disturbances, and a wide range of natural forest resources depends on that complexity for their existence. The planning goal is therefore not the elimination of pests and diseases, but rather their management to prevent major losses of timber.

Objective 5 **Manage infectious outbreaks of forest diseases and pests in accord with objectives for other resource values identified in the SRMP.**

Strategy 5.1 Management should be consistent with approved strategies at regional and provincial levels. For bark beetles, follow the

strategies outlined in approved Biodiversity Conservation Committee (BCC) updates.

7.3 No-Harvest Areas

A number of values have been designated through CCLUP as no-harvest areas. These include: OGMAs, caribou no-harvest areas, riparian reserves, critical fish habitat, and lake management zones for Class A lakes. In these areas, natural successional processes are left to occur without intervention unless large-scale threats from agents such as mountain pine beetle threaten to destroy the no-harvest area or the surrounding forest landscape. Industrial activities such as forest harvesting, including small-scale salvage are therefore precluded from such areas except under very specific circumstances.

Definition	<p>No-harvest area: <i>No-harvest areas are parcels of land other than parks and protected areas, designated to conserve special ecological and cultural values. Protection of those values is paramount and encompasses the maintenance of natural processes such as endemic levels of natural disturbance. Therefore, with the exception of mining, industrial development, including timber harvesting is permitted only under special circumstances as described in Objective 6. No-harvest areas include:</i></p> <ol style="list-style-type: none"><i>1. Old Growth Management Areas,</i><i>2. Caribou No-harvest Areas,</i><i>3. Riparian Reserves,</i><i>4. Critical Fisheries Habitat,</i><i>5. Lake Management Zone, Class A lakes,</i><i>6. "Community Areas of Special Concern" within the Anahim Round Table Interest Area,</i><i>7. and the "CCLUP no harvest areas" within the West Chilcotin Demonstration Project area.</i>
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Objective 6	<p>Maintain No-harvest areas (see definition) by excluding industrial activities within their boundaries, with the following exceptions:</p> <ol style="list-style-type: none">1. Insect control essential to curtail severe damage to the no-harvest area or to other forest values at the landscape level,2. Salvage of dead timber (non-infectious) resulting from severe natural disturbance that has destroyed the ecological or cultural values for the area. Salvage may occur if it can be demonstrated that the salvage will enhance or maintain the values for which the area was established,3. Control of wildfire,4. Seed cone collection, provided trees are not felled,5. Road construction where there is no other practicable location
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available,
6. In riparian reserve zones, creating a corridor for full suspension yarding or guyline tiebacks, where there is no other practicable location available,
7. Thinning to enhance old forest attributes within OGMAs inside Mule Deer Winter Range located within the shallow and moderate snowpack zones in accordance with the direction in “Management Strategy for Mule Deer Winter Ranges in the Cariboo-Chilcotin: Part 1a: Management Plan for Shallow and Moderate Snowpack Zones.”,
8. Ecological restoration activities approved by the ILMB or MOE statutory authorities consistent with the governing legislation, and
9. Exploration and development of minerals¹⁰ and coal; exploration and development of placer mines in designated placer areas.

- Strategy 6.1 Harvesting in no-harvest areas should be in accord with accepted procedures as approved by the CMC. These procedures include but are not limited to: BCC Updates 5, 6, 7b, 8, 9, 10, 11 and 12.
- Strategy 6.2 Harvesting proposals within the Community Areas of Special Concern will be discussed with the Anahim Round Table prior to approval.

7.4 Landscape Level Biodiversity

Biodiversity is the diversity of plants, animals and other living organisms in all their forms and levels of organisation and includes the diversity of genes, species, and ecosystems as well as the evolutionary and functional processes that link them. The CCLUP Biodiversity Conservation Strategy¹¹ of 1996, including its updates, provides the direction for biodiversity conservation in the Cariboo-Chilcotin Land Use Plan area. Additional updates are anticipated in the future to address specific issues. The Biodiversity Conservation Strategy is based on the principles of the Biodiversity Guidebook¹².

7.4.1 Landscape Unit Boundaries

Landscape Units were drafted and included in the Regional Biodiversity Conservation Strategy for the Cariboo Region. The landscape unit boundaries have been further refined through the *Regional Landscape Unit Planning Strategy*¹³ and through subsequent district initiatives.

¹⁰ Mineral as defined in the *Mineral Tenure Act*, RSBC, 1996, Chapter 292, Part 1(1).

¹¹ Biodiversity Conservation Strategy for the Cariboo-Chilcotin Land-Use Plan, July 1996 (183 pages).

¹² Forest Practices Code of British Columbia Biodiversity Guidebook, September 1995 (99 pages).

¹³ Regional Landscape Unit Planning Strategy June 30th 1999.

Objective 7 Manage for biodiversity in accord with the landscape unit boundaries and biodiversity emphasis as shown on Map 4.

7.4.2 Seral Stage Distribution

The CCLUP (p. 153) requires that landscape level biodiversity be maintained by meeting or exceeding mature+old (M+O) and old forest objectives by NDT-BEC sub-units within landscape units. The seral objectives are derived from the Biodiversity Guidebook as modified by the Biodiversity Conservation Strategy¹⁴.

Old forest is being managed as spatially delineated OGMA's, but the mature portion of the M+O forest target is not spatially fixed over time. M+O stands are subject to attrition from natural disturbance over time, so continual recruitment from mid-seral is necessary. Limiting the amount of early seral forest in a landscape is a useful tool in maintaining that mid-seral stand component.

Seral classes are currently defined by age consistent with the Biodiversity Guidebook and the Biodiversity Conservation Strategy. In some landscapes, very little old forest is currently present. As a result, mature forest within OGMA's is deemed to contribute to the old forest target, where that is all that is available. The hierarchy of contributing types is explained in the definition provided for old forest. The old forest requirement is deemed to have been met, consistent with this definition, where OGMA planning has been completed (see following section regarding OGMA's).

There has also been some work done regionally to develop an attribute-based definition for Douglas-fir in the Interior Douglas-fir (IDF) zone. The age-based definition may be replaced by an attribute-based definition of Fir in the IDF at such time as government deems it to be acceptable.

Definition Old Forest: For the purposes of meeting Objective 8, the following stands are deemed to contribute to meeting the old forest target in the order listed:

1. Old forest as described in Table 4, within permanent, rotating and transition old growth management areas, and no harvest areas,
2. Mature forest as described in Table 4 within permanent and rotating old growth management areas, and no harvest areas,
3. Mature forest as described in Table 4 within transition old growth management areas,
4. Stands meeting attribute-based criteria for old forest should those criteria be developed and approved by the ILMB statutory authority for the Cariboo.

Table 4 Seral Stage Definitions Used for Seral Condition Analysis in the Cariboo-Chilcotin Region¹⁵

¹⁴ Biodiversity Guidebook p.9, 25, 35; Biodiversity Conservation Strategy p.40, Update #2.

¹⁵ Biodiversity Conservation Strategy for the Cariboo-Chilcotin Land-Use Plan, July 1996 (183 pages). p. 40

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NDT	Biogeoclimatic Zone	Seral stage		
		Early	Mature	Old
1	MH	<40	>120	>250
2	CWH	<40	>80	>250
2	SBS	<40	>100	>250
1 & 2	ICH	<40	>100	>250
3	ICH	<40	>100	>140
1 & 2	ESSF	<40	>120	>250
3	ESSF	<40	>120	>140
3	MS	<40	>100	>140
3	SBS	<40	>100	>140
3	SBPS	<40	>100	>140
4	BG (pine group)	<40	>100	>140
4	BG (fir group)	<40	>100	>250
4	IDF (pine group)	<40	>100	>140
4	IDF (fir group)	<40	>100	>250
5	ESSFxc	<40	>120	>140

Objective 8 Meet or exceed the targets for old and M+O forest, by biogeoclimatic subunit, as specified in Table 5 including:

1. old growth management areas,
2. replacement areas for severely damaged lodgepole pine stands that are salvage logged as specified in Objective 9.

Table 5 Mature + Old, Old, Interior Old Forest Representation Targets and Early Seral Forest Guidelines (% Biodiversity Forest Landbase*) – Chilcotin SRMP

Alexis Landscape Unit - Intermediate Biodiversity Emphasis						
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest	
3-SBPSxc	25,954	>17	>7	≥1.75	<66	
4-IDFdk4 (fir group)	7,280	>43	>21	≥10.50	<12	
4-IDFdk4 (pine group)	12,880	>23	>11	≥2.75	<54	
4-IDFxm (fir group)	1,344	>43	>21	≥10.50	<12	
4-IDFxm (pine group)	660	>23	>11	≥2.75	<54	
Anaham Landscape Unit - High Biodiversity Emphasis						
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest	
3-SBPSdc	1,451	>17	>7	≥1.75	<50	
3-SBPSxc	42,920	>17	>7	≥1.75	<50	
4-IDFdk4 (fir group)	6,885	>43	>21	≥10.50	<9	
4-IDFdk4 (pine group)	8,650	>23	>11	≥2.75	<40	
4-IDFxm (fir group)	4,122	>43	>21	≥10.50	<9	
4-IDFxm (pine group)	594	>23	>11	≥2.75	<40	

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Beece Creek Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFvx1	2,842	>14	>9	≥0.90	n.a.
2-ESSFvx2	3,342	>14	>9	≥0.90	n.a.
3-MSdv	4,806	>14	>14	≥1.40	n.a.
3-MSxv	1,204	>14	>14	≥1.40	n.a.
3-SBPSxc	2,839	>8	>7	≥0.70	n.a.
Bidwell / Lava Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFvx1	4,121	>28	>9	≥0.90	n.a.
3-MSxv	11,804	>26	>14	≥1.40	n.a.
3-SBPSxc	44,683	>17	>7	≥0.70	n.a.
4-IDFdk4 (fir group)	962	>43	>21	≥5.25	n.a.
4-IDFdk4 (pine group)	3,669	>23	>11	≥1.10	n.a.
4-IDFdw (fir group)	90	>43	>21	≥5.25	n.a.
4-IDFdw (pine group)	734	>23	>11	≥1.10	n.a.
Brittany Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFvx1	873	>14	>9	≥0.90	n.a.
3-MSdc2	88	>14	>14	≥1.40	n.a.
3-MSxv	1,783	>14	>14	≥1.40	n.a.
3-SBPSxc	31,863	>8	>7	≥0.70	n.a.
4-IDFdk4 (fir group)	861	>22	>21	≥5.25	n.a.
4-IDFdk4 (pine group)	1,563	>11	>11	≥1.10	n.a.
4-IDFdw (fir group)	137	>22	>21	≥5.25	n.a.
4-IDFdw (pine group)	637	>11	>11	≥1.10	n.a.
Cheshi Stikelan Landscape Unit - Intermediate Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFvx1	3,760	>14	>9	≥2.25	<36
3-MSdc2	4,613	>14	>14	≥3.50	<46
4-IDFdw (fir group)	3,680	>22	>21	≥10.50	<12
4-IDFdw (pine group)	2,825	>11	>11	≥2.75	<54
Chilanko Landscape Unit - Intermediate Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-MSxv	1,372	>14	>14	≥3.50	<46
3-SBPSxc	45,854	>8	>7	≥1.75	<66
4-IDFdk4 (fir group)	867	>22	>21	≥10.50	<12
4-IDFdk4 (pine group)	2,131	>11	>11	≥2.75	<54
Chilko Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFvx1	4,914	>28	>9	≥0.90	n.a.
3-MSdc2	2,404	>26	>14	≥1.40	n.a.
3-MSxv	38	>26	>14	≥1.40	n.a.
4-IDFdw (fir group)	738	>43	>21	≥5.25	n.a.
4-IDFdw (pine group)	4,878	>23	>11	≥1.10	n.a.
Clisbako Landscape Unit - Intermediate Biodiversity Emphasis					

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Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-MSxv	38,234	>26	>14	≥3.50	<46
3-SBPSdc	8,690	>17	>7	≥1.75	<66
3-SBPSmk	21,668	>17	>7	≥1.75	<66
Clusko Landscape Unit - Intermediate Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-MSxv	40,556	>26	>14	≥3.50	<46
3-SBPSdc	2,156	>17	>7	≥1.75	<66
3-SBPSxc	52,352	>17	>7	≥1.75	<66
Crazy Creek Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-CWHds1	1,170	>17	>9	≥0.90	n.a.
2-ESSFxv1	3,508	>14	>9	≥0.90	n.a.
3-MSdc2	1,136	>14	>14	≥1.40	n.a.
4-IDFdw (fir group)	926	>22	>21	≥5.25	n.a.
4-IDFdw (pine group)	2,088	>11	>11	≥1.10	n.a.
Doran Creek Landscape Unit - Intermediate Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
1-MHm2	1,999	>36	>19	≥9.50	<22
2-CWHds1	2,839	>34	>9	≥2.25	<36
2-ESSFxv1	457	>28	>9	≥2.25	<36
4-IDFdw (fir group)	1,098	>43	>21	≥10.50	<12
4-IDFdw (pine group)	155	>23	>11	≥2.75	<54
Downton Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	5,619	>28	>9	≥0.90	n.a.
3-MSxv	32,942	>26	>14	≥1.40	n.a.
Edmond Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-CWHun	266	>0	>0	≥0.00	n.a.
2-ESSFxv1	3,469	>14	>9	≥0.90	n.a.
Franklyn Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-CWHun	632	>0	>0	≥0.00	n.a.
2-ESSFxv1	4,813	>14	>9	≥0.90	n.a.
4-IDFdw (fir group)	411	>22	>21	≥5.25	n.a.
4-IDFdw (pine group)	1,177	>11	>11	≥1.10	n.a.
Gunn Valley Landscape Unit - Intermediate Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	3,544	>14	>9	≥2.25	<36
3-MSdv	10,967	>14	>14	≥3.50	<46
Haines Landscape Unit - Intermediate Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest

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2-ESSFv2	1,810	>14	>9	≥2.25	<36
3-MSxv	11,437	>14	>14	≥3.50	<46
3-SBPSxc	37,988	>8	>7	≥1.75	<66
4-IDFdk4 (fir group)	8,748	>22	>21	≥10.50	<12
4-IDFdk4 (pine group)	17,725	>11	>11	≥2.75	<54
4-IDFxm (fir group)	3,143	>22	>21	≥10.50	<12
4-IDFxm (pine group)	166	>11	>11	≥2.75	<54
Hickson Landscape Unit - Intermediate Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
1-MHm2	110	>19	>19	≥9.50	<22
2-CWHds1	3,117	>17	>9	≥2.25	<36
2-ESSFv1	288	>14	>9	≥2.25	<36
Lord River Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFv1	2,681	>14	>9	≥2.25	<27
3-MSdv	2,249	>14	>14	≥3.50	<35
Middle Lake Landscape Unit - Intermediate Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFv1	3,491	>14	>9	≥2.25	<36
3-MSdc2	3,513	>14	>14	≥3.50	<46
4-IDFdw (fir group)	2,960	>22	>21	≥10.50	<12
4-IDFdw (pine group)	1,478	>11	>11	≥2.75	<54
Minton Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-SBPSxc	13,393	>25	>10	≥1.00	n.a.
4-BGxw 2 (fir group)	1,089	>65	>32	≥8.00	n.a.
4-BGxw 2 (pine group)	103	>34	>16	≥1.60	n.a.
4-IDFdk4 (fir group)	11,503	>65	>32	≥8.00	n.a.
4-IDFdk4 (pine group)	24,436	>34	>16	≥1.60	n.a.
4-IDFxm (fir group)	8,998	>65	>32	≥8.00	n.a.
4-IDFxm (pine group)	1,638	>34	>16	≥1.60	n.a.
Nazko Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-MSxv	14,094	>14	>14	≥3.50	<35
3-SBPSdc	32,092	>8	>7	≥1.75	<50
3-SBPSmk	2,114	>8	>7	≥1.75	<50
3-SBPSxc	35,090	>8	>7	≥1.75	<50
4-IDFdk4 (fir group)	546	>22	>21	≥10.50	<9
4-IDFdk4 (pine group)	4,101	>11	>11	≥2.75	<40
Nemiah Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFv1	2,101	>42	>13	≥1.30	n.a.
3-MSdc2	4,561	>39	>21	≥2.10	n.a.
3-MSxv	4,331	>39	>21	≥2.10	n.a.
3-SBPSxc	6,228	>25	>10	≥1.00	n.a.
4-IDFdk4 (fir group)	186	>65	>32	≥8.00	n.a.

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4-IDFdk4 (pine group)	4,314	>34	>16	≥1.60	n.a.
4-IDFdw (fir group)	2,232	>65	>32	≥8.00	n.a.
4-IDFdw (pine group)	5,236	>34	>16	≥1.60	n.a.
Nostetuko Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	3,892	>14	>9	≥2.25	<27
4-IDFdw (fir group)	2,669	>22	>21	≥10.50	<9
4-IDFdw (pine group)	1,100	>11	>11	≥2.75	<40
Nude Creek Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
1-MHm2	103	>19	>19	≥4.75	n.a.
2-CWHds1	239	>17	>9	≥0.90	n.a.
2-ESSFxv1	1,846	>14	>9	≥0.90	n.a.
4-IDFdw (fir group)	714	>22	>21	≥5.25	n.a.
4-IDFdw (pine group)	1,523	>11	>11	≥1.10	n.a.
Nuntzi Elkin Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	2,324	>14	>9	≥2.25	<27
3-MSxv	7,837	>14	>14	≥3.50	<35
3-SBPSxc	37,804	>8	>7	≥1.75	<50
4-IDFdk4 (fir group)	3,337	>22	>21	≥10.50	<9
4-IDFdk4 (pine group)	6,246	>11	>11	≥2.75	<40
Ottarasko Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	4,493	>14	>9	≥0.90	n.a.
3-MSdc2	3,612	>14	>14	≥1.40	n.a.
4-IDFdw (fir group)	3,913	>22	>21	≥5.25	n.a.
4-IDFdw (pine group)	2,167	>11	>11	≥1.10	n.a.
Palmer / Jorgenson Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	463	>28	>9	≥2.25	<27
3-MSxv	37,957	>26	>14	≥3.50	<35
3-SBPSxc	44,536	>17	>7	≥1.75	<50
4-IDFdk4 (fir group)	240	>43	>21	≥10.50	<9
4-IDFdk4 (pine group)	498	>23	>11	≥2.75	<40
Punky Moore Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	2,671	>28	>9	≥0.90	n.a.
3-MSxv	60,853	>26	>14	≥1.40	n.a.
3-SBPSxc	4,457	>17	>7	≥0.70	n.a.
Puntzi Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-MSxv	9,564	>14	>14	≥3.50	<35
3-SBPSxc	36,332	>8	>7	≥1.75	<50
4-IDFdk4 (fir group)	3,002	>22	>21	≥10.50	<9

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4-IDFdk4 (pine group)	8,856	>11	>11	≥2.75	<40
Pyper Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-SBPSxc	36,596	>8	>7	≥0.70	n.a.
4-IDFdk4 (fir group)	8,214	>22	>21	≥5.25	n.a.
4-IDFdk4 (pine group)	22,549	>11	>11	≥1.10	n.a.
4-IDFxm (fir group)	1,921	>22	>21	≥5.25	n.a.
4-IDFxm (pine group)	1,871	>11	>11	≥1.10	n.a.
Rainbow Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-CWHun	89	>0	>0	≥0.00	<27
2-ESSFv1	4,716	>28	>9	≥2.25	<27
3-MSdc2	3,693	>26	>14	≥3.50	<35
3-MSdv	2,062	>26	>14	≥3.50	<35
4-IDFdw (fir group)	700	>43	>21	≥10.50	<9
4-IDFdw (pine group)	2,633	>23	>11	≥2.75	<40
Sisters Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-SBPSxc	28,021	>17	>7	≥0.70	n.a.
4-IDFdk4 (fir group)	8,525	>43	>21	≥5.25	n.a.
4-IDFdk4 (pine group)	14,692	>23	>11	≥1.10	n.a.
4-IDFxm (fir group)	1,988	>43	>21	≥5.25	n.a.
4-IDFxm (pine group)	737	>23	>11	≥1.10	n.a.
Siwash Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-SBPSxc	9,281	>17	>7	≥1.75	<50
4-IDFdk4 (fir group)	11,645	>43	>21	≥10.50	<9
4-IDFdk4 (pine group)	17,932	>23	>11	≥2.75	<40
4-IDFxm (fir group)	2,744	>43	>21	≥10.50	<9
4-IDFxm (pine group)	826	>23	>11	≥2.75	<40
Taseko Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFv1	5,617	>14	>9	≥0.90	n.a.
3-MSdv	2,698	>14	>14	≥1.40	n.a.
Tatla / Little Eagle Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFv1	141	>14	>9	≥2.25	<27
3-MSxv	4,394	>14	>14	≥3.50	<35
3-SBPSxc	56,645	>8	>7	≥1.75	<50
4-IDFdk4 (fir group)	860	>22	>21	≥10.50	<9
4-IDFdk4 (pine group)	4,214	>11	>11	≥2.75	<40
Tautri Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-MSxv	1,043	>14	>14	≥1.40	n.a.
3-SBPSdc	41,588	>8	>7	≥0.70	n.a.

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3-SBPSmk	6,479	>8	>7	≥0.70	n.a.
3-SBPSxc	14,240	>8	>7	≥0.70	n.a.
Tchaikazan Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	5,104	>14	>9	≥2.25	<27
3-MSdv	2,974	>14	>14	≥3.50	<35
Tete Angela Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	328	>14	>9	≥0.90	n.a.
3-MSxv	10,861	>14	>14	≥1.40	n.a.
3-SBPSxc	32,901	>8	>7	≥0.70	n.a.
4-IDFdk4 (fir group)	868	>22	>21	≥5.25	n.a.
4-IDFdk4 (pine group)	3,854	>11	>11	≥1.10	n.a.
Tiedemann Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
1-MHm2	1,108	>19	>19	≥9.50	<17
2-CWHds1	7,411	>17	>9	≥2.25	<27
Upper Tatlayoko Landscape Unit - Low Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	4,858	>28	>9	≥0.90	n.a.
3-MSdc2	554	>26	>14	≥1.40	n.a.
3-MSxv	11,892	>26	>14	≥1.40	n.a.
3-SBPSxc	4,437	>17	>7	≥0.70	n.a.
4-IDFdk4 (fir group)	3,185	>43	>21	≥5.25	n.a.
4-IDFdk4 (pine group)	8,855	>23	>11	≥1.10	n.a.
4-IDFdw (fir group)	1,545	>43	>21	≥5.25	n.a.
4-IDFdw (pine group)	1,859	>23	>11	≥1.10	n.a.
Westbranch Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type - Biogeoclimatic Variant	Area (ha)	Mature + Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
2-ESSFxv1	4,601	>42	>13	≥3.25	<27
3-MSdc2	2,758	>39	>21	≥5.25	<35
3-MSxv	2,736	>39	>21	≥5.25	<35
3-SBPSxc	448	>25	>10	≥2.50	<50
4-IDFdk4 (fir group)	1,739	>65	>32	≥16.00	<9
4-IDFdk4 (pine group)	2,895	>34	>16	≥4.00	<40
4-IDFdw (fir group)	1,822	>65	>32	≥16.00	<9
4-IDFdw (pine group)	1,757	>34	>16	≥4.00	<40

*The biodiversity forest land base represents the productive forest land area with the addition of parks and proposed Goal 2 areas.

**Interior old expressed as % of biodiversity forest land base, calculated as the percentage of the Old Forest specified in the Biodiversity Guidebook, September 1995.

*** Figures for area by Landscape and BEC units are based on 2006 analysis. These figures may change over time because of BEC line changes or changes in biodiversity forest land base.

Objective 9 Consistent with Objective 8(2), in areas of *catastrophic mountain pine beetle damage*, during the period of salvage harvesting, manage any draw down of the M+O seral targets, by managing harvest and replacement of damaged stands outside OGMA as follows:

1. Harvest in stands which meet all of the following criteria:
 - Located in natural disturbance types 2,3 or 4,
 - Located within a mountain pine beetle salvage zone,
 - If within TFLs, harvested stands have ≥ 50 percent pine by basal area;
 - If outside TFLs, harvested stands have ≥ 70 percent pine by basal area,
 - Areas having high mortality caused by mountain pine beetle.
2. Replace harvested stands with the oldest available, *least risk* stands in the same landscape unit - biogeoclimatic subunit.

Definition **Catastrophic mountain pine beetle damage:** *regionally significant, severe mortality covering multiple landscape units as the result of mountain pine beetle attack of lodgepole pine.*

Definition **Least risk stands:** *refers to the priorities as listed in Table 6.*

Table 6 Hierarchy of Stand Types Contributing to Recruitment of Mature Forest in LU-BEC Subunits Where Drawdowns Have Occurred

Priority	Stand Types	Age of stand (years) ¹		
		ESSF	CWH	Other BEC zones
1 (mature seral)	>30% non-pine;	>120	>80	>100
2 (mid seral)	>30% non-pine;	101-120	61-80	81-100
3		81-100		
4		61-80		
5 (young seral)	Any stand type	41-60	41-60	41-60
6		21-40	21-40	21-40
7		0-20	0-20	0-20

¹Within age classes recruitment stands near the upper age limit of the class are preferred.

Where forest conditions do not meet the minimum requirements for M+O, the required areas of the oldest available forest within that biogeoclimatic variant, or group of variants will be deemed to be recruitment area.

When assessing the seral condition against the objectives and strategies in Table 5, amalgamate non-valley bottom BEC subunits <5000 ha. with adjacent subunits

consistent with Table 7 and the procedures outlined in BCC Update #2. Definitions of the fir and pine groups are from the BCC Update #3.

Table 7 Amalgamation of Small NDT-BEC Subunits Used for Assessment of Seral Objectives in the Chilcotin SRMP

Landscape Unit	Natural Disturbance Type – Biogeoclimatic Variant Amalgamations
Alexis	IDFxm + IDFdk4
Anaham	SBPSdc + SBPSxc IDFxm + IDFdk4
Beece Creek	ESSFxfv1 + ESSFxfv2 MSdv + MSxv + SBPSxc
Bidwell / Lava	ESSF xv1 + MSxv IDFdw + IDFdk4
Brittany	ESSFxfv1 + MSdc2 + MSxv + SBPSxc + IDFdk4 Fir + IDFdw
Cheshi Stikelan	ESSFxfv1 + MSdc2
Chilanko	MSxv + SBPSxc + IDFdk4
Chilko	ESSFxfv1 + MSdc2 + MSxv
Clusko	SBPSxc + SBPSdc
Crazy Creek	ESSFxfv1 + MSdc2 + IDFdw
Doran Creek	MHmm2 + CWHds1 + ESSFxfv1 + IDFdw
Edmond	ESSFxfv1 + CWHun
Franklyn	ESSFxfv1 + CWHun
Gunn Valley	ESSFxfv1 + MSdv
Haines	ESSFxfv2 + MSxv IDFdk4 + IDFxm
Hickson	MHmm2 + ESSFxfv1
Middle Lake	ESSFxfv1 + MSdc2
Minton	BGxw2 Fir + IDFxm
Nazko	SBPSdc + SBPSmk IDFdk4 + SBPSxc
Nemiah	ESSFxfv1 + MSdc2 + MSxv IDFdk4 Fir + IDFdw
Nude Creek	MHmm2 + CWHds1 + ESSFxfv1
Nuntzi Elkin	ESSFxfv1 + MSxv
Ottarasko	ESSFxfv1 + MSdc2
Palmer / Jorgenson	ESSFxfv1 + MSxv SBPSxc + IDFdk4
Punky Moore	ESSFxfv1 + MSxv + SBPSxc
Pyper	IDFxm + IDFdk4
Rainbow	ESSFxfv1 + MSdc2 + MSdv+ CWHun
Sisters	IDFxm + IDFdk4
Siwash	IDFxm + IDFdk4
Tatla / Little Eagle	ESSFxfv1 + MSxv + SBPSxc IDFdk4 + IDFdw
Tchaikazan	MSdv + ESSFxfv1
Tete Angela	ESSFxfv1 + MSxv
Tiedemann	MHmm2 + CWHds1
Upper Tatlayoko	MSdc2 + MSxv + SBPSxc IDFdk4 IDFdw
Westbranch	MSdc2 + MSxv + SBPSxc + ESSFxfv1 IDFdk4 + IDFdw

7.4.3 Old Growth Management Areas

Old forest objectives are achieved in the short and long term through a combination of permanent OGMAs, rotating OGMAs, transition OGMAs, and no-harvest areas. There is an expected contribution to old forest from extended rotation areas. The proportion of the visual area deemed to contribute to old forest was delineated as old growth management areas inside the polygon to ensure management activities maintain the old growth characteristics. No-harvest areas that contribute to meeting the old forest objectives, but are not designated as OGMAs, include protected areas, caribou no-harvest areas, riparian reserve zones, critical fish habitat areas, Class A lake buffers, and a portion of wildlife tree patches. Permanent OGMAs were first designated in already constrained areas, and then placed in areas unconstrained for timber access using stand age, location, and patch size as primary criteria.

In biogeoclimatic subunits where there is insufficient old forest in the no-harvest areas, including the permanent OGMAs, to meet the short-term old forest objectives, transition OGMAs were designated. Transition OGMAs contain the oldest available forest to immediately meet the objectives. Where old forest is simply unavailable, mature forest was used according to the principles contained in the definition of old forest.

Grouping of biogeoclimatic variants was done according to the principles outlined in Update #2¹⁶. Where possible, OGMAs were placed in each biogeoclimatic variant to meet the old forest objectives for that variant even if that variant comprised a BEC subunit less than 5000 ha.

Objective 10 Maintain the permanent old growth management areas as shown on Map 5, subject to the provisions set out in Objective 6 for no-harvest areas.

Objective 11 Maintain permanent OGMAs by replacing any areas that are removed or harvested with suitable areas of equivalent size in the same landscape unit-biogeoclimatic subunit.

Strategy 11.1 Replacement areas for portions of OGMAs removed or salvage harvested must be approved by the ILMB statutory decision maker.

Objective 12 Maintain the transition old growth management areas as shown on Map 5, subject to the provisions set out in Objective 6 for no-harvest areas, until recruitment areas in the permanent old growth management areas meet old forest condition, or at the end of the first *rotation*, whichever comes first.

Definition **Rotation (age):** *The base rotation ages are 80 years for pine and deciduous stands and 120 years for all other species. The rotation age represents the number of years required to harvest 100 percent of the*

¹⁶ CCLUP Biodiversity Conservation Strategy Update #2.

productive forest in a given CCLUP zone (adapted from: CCLUP Integration Report, 1998).

OGMAs are established to conserve ecological values. Consequently, the permitted activities within an OGMA are very limited, consistent with the activities specified under the no-harvest objectives in Section 7.3. Some sanitation treatments to address forest health are permitted where there are compelling needs to mitigate spread of that pest to the rest of the landscape. Old forest target requirements are deemed to be met in OGMAs according to the definition provided for old forest and in consideration of the specifications in Table 8. Seral targets for M+O must still be met for that LU-NDT/BEC subunit according to the occurrence of mature and old forest within and outside the OGMAs.

Recommendation Retain mature forest adjacent to old forest patches to increase the contribution of those patches to interior old forest targets, especially where interior forest condition is well below the targets listed in Table 5.

Table 8 Interior Forest Specifications

The minimum distance (meters) from the edge of a patch at which Interior Forest conditions occur.

Seral Stage of Forest Patch	Forest Age or Type of Adjacent Patch					
	Mature (> 120 years)	101-120 years	41-100 years	0-40 years	Non-Productive and Non-forested	Lakes and large (“double-line”) rivers and roads
Old	50	50	100	200	100	100
Mature	N/A	50	100	200	100	100

7.4.4 Distribution of Cut and Leave Areas

The CCLUP (p. 153) identifies the need to plan for temporal distribution of cutblocks and a range of cutblock sizes (p. 180). The CCLUP specifies these topics will be addressed in the Biodiversity Conservation Strategy. To address this need, the strategy states that some blocks should be larger than the default 60 ha maximum cutblock size prescribed under the Operational Planning Regulation of the FPC and the Planning and Practices Regulation in FRPA. Furthermore, included in the principles for the establishment of large cutblocks is the retention of leave areas that will result, by the end of a rotation, in the appropriate range of patch sizes in all seral ages.

Temporal distribution of cutblocks is also addressed through seral stage objectives. Early seral objectives are not required to be met under CCLUP, but setting limitations on the amount of early forest in a landscape is important to ensure continuous recruitment of mid-seral forest and mature forest. If early seral forest is not limited at the LU/NDT-BEC subunit level, future deficits in mid-seral and in turn mature forest classes may be created, thereby compromising the temporal distribution objective and the long term integration assumptions of an equilibrium forest condition.

It is critically important that larger patches of older forest be retained through time in each ecosystem. The CCLUP does not specify the number or size of retention patches. Table 9 provides some guidance with respect to size of retention patches. Small retention patches are expected to be plentiful due to harvest history and natural disturbance and are therefore not included as part of the management focus (see also section 7.4.5).

Recommendation	Spatially locate available M+O forest, excluding OGMA, to meet biodiversity distribution according to the following needs in order of priority: <ol style="list-style-type: none"> 1. Rare plant communities as identified by government, 2. M+O forest patches \geq the sizes listed in Table 9, 3. Ecosystem connectivity according to the principles listed in Table 10.
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Table 9 Mature+Old Retention Patch Size Targets for the Chilcotin SRMP

NDT	BEC	Low Emphasis	Moderate Emphasis	High Emphasis
		M+O% >250 ha. target (% of M+O target)	M+O% >250 ha. target (% of M+O target)	M+O% >250 ha. target (% of M+O target)
1	ESSF	25	50	50
1	ICH	25	50	50
1	MH	25	50	50
2	CWH	10	25	25
2	ESSF	10	25	25
2	ICH	10	25	25
2	SBS	10	25	25
3	ESSF	10	25	25
3	MS	10	25	25
3	SBPS	10	25	25
3	SBS	10	25	25
3	ICH	10	25	25
4	IDF-Fir	25	50	50
4	IDF-PI	10	25	25

7.4.5 Landscape Connectivity

The CCLUP (p. 153, 180) also highlights the need to plan for landscape connectivity. “Connectivity” is a qualitative term describing the degree to which late-succession

ecosystems are linked to one another to form an interconnected network¹⁷. Management to reduce fragmentation and maintain connectivity should be guided by the type and degree of connectivity found in each natural disturbance type.

Some connectivity concerns have been addressed through location of OGMAs, riparian zones and other constrained areas. In addition, careful placement of available mature forest can also contribute to connectivity. Where mature and old forest are unavailable for maintaining connectivity, older immature forest will provide some (but not all) of the connectivity characteristics of mature forest. Management consistent with Table 9 will assure some landscape level connectivity is maintained. Where specific wildlife corridors are identified, they should also be managed for according to their identified management principles. Specific Forest Ecosystem Network placement and management strategies were part of the planning recommendations described in the Taseko Management Zone draft report July 4th 2004.

Table 10 shows the relative frequency with which connectivity characteristics of natural mature / old forest ecosystems occur for all biogeoclimatic sub-zones of each NDT.

Table 10 Principles for Landscape Connectivity

NDT	Connectivity Characteristics	Frequency of Occurrence		
1	Upland to upland	High		
	Upland to stream	High		
	Upland to wetland	High		
	Cross-elevational	High		
	Wetland complex	Low to moderate		
	Stream riparian	High		
	Island remnants	Low		
2	Upland to upland	High		
	Upland to stream	Moderate		
	Upland to wetland	Moderate		
	Cross-elevational	High		
	Wetland complex	Low		
	Stream riparian	High		
	Island remnants	Low		
3		SBPS, SBSdk / mk / mc3 / wk1 / dw	MSxv	All other sub-zones
	Upland to upland	Low	Mod to high	Low to mod.
	Upland to stream	Low	Mod to high	Low to mod.
	Upland to wetland	Low	Mod to high	High
	Cross-elevational	Low	Low	Moderate
	Wetland complex	High	High	Moderate
	Stream riparian	Low	Low	High
	Island remnants	High	Moderate	Moderate

¹⁷ Biodiversity Guidebook, p. 4, 19-20, 26-27, 35-36, 46-48, 52, 53-59, 74.

NDT	Connectivity Characteristics	Frequency of Occurrence		
			IDFdk	All other sub-zones
4	Upland to upland Upland to stream Upland to wetland Cross-elevational Wetland complex Stream riparian Island remnants			
			Mod to High	High
			Mod to High	High
			Mod to High	High
			Low	High
			High	Low to Mod
			Low	High
5	All		Moderate	Low
		Contiguous tracts of late seral to climax vegetation, with a few small early seral patches.		

7.5 Stand Level Biodiversity

7.5.1 Rare Ecosystems

The CCLUP identifies the need for protection of rare ecosystems in the SRDZ (p. 180), and the need to maintain ecosystem function (p. 153). An ecosystem is a functional unit consisting of all living organisms in a given area and all the non-living physical and chemical factors of their environment, linked together through energy flow. An ecosystem can vary in size (e.g., a pond, a field, a forest, or the earth’s biosphere). A rare ecosystem is defined as an ecosystem (site series or surrogate) that occupies less than two percent of a biogeoclimatic subzone within a Landscape Unit, is not common in an adjacent Landscape Unit, and is rare within the CCLUP area¹⁸.

Provincially rare ecosystems (provincially red and blue-listed plant communities) also require protection and maintenance. The Conservation Data Centre has identified a number of provincially rare ecosystems and site series, but some may yet be unidentified.

Some rare ecosystems have already been identified in the Biodiversity Conservation Strategy of 1996 (p. 48) and it is recommended that the regional committee act as the body to consolidate the variety of information pertaining to rare ecosystems and sensitive or uncommon plant communities. There is a need for further work to identify rare ecosystems occurring in the Chilcotin SRMP area.

7.5.2 Wildlife and Habitat Features

The CCLUP (p. 153) requires the protection and maintenance of *sensitive species and habitats*. Sensitive habitats include a number of types of habitat features that are used by one or more wildlife species. Specific examples of features are bear den sites, raptor nests, mineral licks, and heron rookeries. Some features are used only for a single year, and other features are less often encountered but used by wildlife for many years. These features require special management to protect and maintain their value

¹⁸ Biodiversity Guidebook, p. 76; CCLUP Biodiversity Conservation Strategy p. 47-48.

to wildlife, because they are relatively persistent over a period of at least several years, the species involved may use a feature repeatedly, and they are commonly affected by forest harvesting. Usually these features are small and can be addressed through overlap with other land use constraints or the placement of wildlife tree patches, where the feature is forested or associated with forest. All CCLUP subunit targets (p. 60 to 133) also recommend the management of species at risk and other sensitive habitats. The list of sensitive species and habitats, including management guidelines will be provided in “Wildlife Habitat Features, Summary of Management Guidelines, Southern Interior Forest Region” by MOE Ecosystems Branch.

Definition Sensitive Species and Habitats: *Sensitive species and habitats* are those species and habitats listed by MOE for the Southern Interior of BC.

In the Chilcotin SRMP area, CCLUP objectives require the maintenance of key leading spruce stands in Chezacut, Eagle and Palmer sub-units (p. 97,101, 119). Also cottonwood stands and birch leading stands are considered sensitive habitats because of their value and rarity. Other sensitive habitats include rare limestone plant associations, critical habitat for red and blue listed species and islands in lakes. Many sensitive habitats are not well known and further inventory is required to identify their locations.

Objective 13 Manage industrial and commercial activities to maintain habitat and minimize disturbance to sensitive species and habitats.

Strategy 13.1 Manage according to the list and guidelines contained in “Wildlife Habitat Features: Summary of Management Guidelines. Southern Interior Region.” prepared by WLAP (2004). Habitat will be maintained within the balance of CCLUP land use constraints.

7.5.3 Grasslands

Management of critical grassland is a requirement of CCLUP (p. 158) as well as the maintenance of suitable seral conditions on grazed areas. A significant proportion of red and blue listed species depend upon grassland habitats. The Grassland Strategy which was approved by IAMC in 2001 also establishes a benchmark area to be managed as permanent grassland.

Grassland communities are ecologically very important and inventory of the Chilcotin SRMP grasslands is limited. Research and inventory is required to identify rare, threatened, and endangered plant and animal species.

Objective 14 Manage as grassland, the benchmark area as defined in the Cariboo Chilcotin Grasslands Strategy, January, 2001.

Objective 15 Maintain or enhance grassland ecosystems, including all native plant communities to sustain all native species and authorized use by domestic livestock.

- Strategy 15.1 Manage grasslands for 12 percent climax and 85 percent in near climax or climax seral stage, by Landscape Unit-BEC sub unit; and have no more than 10 percent in early seral condition.
- Strategy 15.2 Maintain the natural structural complexity of grasslands to ensure that there is litter and residual standing vegetation as habitat for ground nesting birds and small mammals.

Recommendation Where possible, thin dense stands of Douglas-fir adjacent to grasslands to maintain or re-establish a grass understory.

7.5.4 Wildlife Tree Retention

The CCLUP (p. 153) requires stand level biodiversity be addressed through management of stand structure. The primary mechanism of management for stand level biodiversity is through wildlife tree reserves (WTR), which can consist of dispersed single tree retention or WTPs. Some of the important WTR features contributing to wildlife values are:

- standing dead and dying trees,
- coarse woody debris,
- tree species diversity,
- understory vegetation,
- soil organisms,
- refugia for large and small species of plants, animals, bacteria and fungi, and
- representation of rare site series in mature and old seral stage.

Maintenance of stand level biodiversity is a critical component of overall biodiversity management by ensuring retention of some habitat structure associated with each cutblock or cutting permit. Where stands are harvested using partial cut systems, it is important that standing dead trees be maintained through time. The calculation of the long-term and short-term WTR requirements is described in Section 8 with the calculations shown in the Analysis Procedures and Results Document. The short-term WTR requirement is the present objective, which will be revised consistent with the Biodiversity Guidebook, when the relative proportion of the landscape harvested without WTP decreases.

Many individual WTPs can be harvested and replaced over time consistent with the CCLUP Integration direction that 50 percent of the WTR would be available over one rotation. The 50 percent of WTP area contributing to the old seral target are unavailable for harvest. The WTPs unavailable will be identified based partly on overlaps with other values.

Objective 16 Meet or exceed the minimum wildlife tree retention area targets for each harvest area (cutblock or cutting permit), within each biogeoclimatic subzone in each landscape unit as given in Table 11, where harvesting removes >50 percent of the stand basal area or where the harvest is a preparatory cut of a shelterwood silviculture system.

Strategy 16.1 Design wildlife tree reserves according to the management principles in BCC Update #12.

Objective 17 Where feasible, retain high-value, wildlife trees up to the limits in Table 11 in partially cut stands having >50 percent basal area remaining after harvest.

Strategy 17.1 Retain existing wildlife trees (classes 2 through 8 as defined in the Biodiversity Guidebook) over 37.5 cm dbh among target residual species and over 20 cm dbh for deciduous tree species.

Table 11 Wildlife Tree Retention Targets

Landscape Unit – Biogeoclimatic sub unit	Minimum Wildlife Tree Retention Target (% gross harvest area)
Alexis	
3-SBPSxc	9
4-IDFdk4 (fir group)	8
4-IDFdk4 (pine group)	8
4-IDFxm (fir group)	7
4-IDFxm (pine group)	7
Anaham	
3-SBPSdc	5
3-SBPSxc	9
4-IDFdk4 (fir group)	8
4-IDFdk4 (pine group)	8
4-IDFxm (fir group)	6
4-IDFxm (pine group)	8
Beece Creek	
2-ESSFxv1	6
2-ESSFxv2	5
3-MSdv	5
3-MSxv	6
3-SBPSxc	5
Bidwell / Lava	
2-ESSFxv1	7
3-MSxv	6
3-SBPSxc	7
4-IDFdk4 (fir group)	2
4-IDFdk4(pine group)	3
4-IDFdw (fir group)	7
4-IDFdw (pine group)	2
Brittany	
2-ESSFxv1	6
3-MSdc2	0
3-MSxv	7
3-SBPSxc	6
4-IDFdk4 (fir group)	4
4-IDFdk4 (pine group)	6
4-IDFdw (fir group)	0
4-IDFdw (pine group)	0
Cheshi Stikelan	

Chilcotin Sustainable Resource Management Plan

Landscape Unit – Biogeoclimatic sub unit	Minimum Wildlife Tree Retention Target (% gross harvest area)
2-ESSFxv1	3
3-MSdc2	7
4-IDFdw (fir group)	3
4-IDFdw (pine group)	6
Chilanko	
3-MSxv	6
3-SBPSxc	7
4-IDFdk4 (fir group)	5
4-IDFdk4 (pine group)	6
Chilko	
2-ESSFxv1	0
3-MSdc2	0
3-MSxv	0
4-IDFdw (fir group)	0
4-IDFdw (pine group)	0
Clisbako	
3-MSxv	7
3-SBPSdc	7
3-SBPSmk	8
Clusko	
3-MSxv	7
3-SBPSdc	8
3-SBPSxc	8
Crazy Creek	
2-CWHds1	0
2-ESSFxv1	0
3-MSdc2	5
4-IDFdw (fir group)	4
4-IDFdw (pine group)	2
Doran Creek	
1-MHmm2	0
2-CWHds1	0
2-ESSFxv1	0
4-IDFdw (fir group)	0
4-IDFdw (pine group)	0
Downton	
2-ESSFxv1	0
3-MSxv	0
Edmond	
2-CWHun	0
2-ESSFxv1	0
Franklyn	
2-CWHun	0
2-ESSFxv1	0
4-IDFdw (fir group)	0
4-IDFdw (pine group)	0
Gunn Valley	
2-ESSFxv1	0
3-MSdv	3
Haines	

Chilcotin Sustainable Resource Management Plan

Landscape Unit – Biogeoclimatic sub unit	Minimum Wildlife Tree Retention Target (% gross harvest area)
2-ESSFxv2	8
3-MSxv	8
3-SBPSxc	8
4-IDFdk4 (fir group)	7
4-IDFdk4 (pine group)	8
4-IDFdw (fir group)	7
4-IDFdw (pine group)	7
Hickson	
1-MHm2	0
2-CWHds1	0
2-ESSFxv1	0
Lord River	
2-ESSFxv1	1
3-MSdv	5
Middle Lake	
2-ESSFxv1	0
3-MSdc2	5
4-IDFdw (fir group)	7
4-IDFdw (pine group)	7
Minton	
3-SBPSxc	9
4-BGxw2 (fir group)	7
4-BGxw2 (pine group)	7
4-IDFdk4 (fir group)	7
4-IDFdk4 (pine group)	8
4-IDFdw (fir group)	7
4-IDFdw (pine group)	8
Nazko	
3-MSxv	8
3-SBPSdc	7
3-SBPSmk	9
3-SBPSxc	8
4-IDFdk4 (fir group)	6
4-IDFdk4 (pine group)	6
Nemiah	
2-ESSFxv1	6
3-MSdc2	5
3-MSxv	6
3-SBPSxc	7
4-IDFdk4 (fir group)	7
4-IDFdk4 (pine group)	6
4-IDFdw (fir group)	0
4-IDFdw (pine group)	4
Nostetuko	
2-ESSFxv1	7
4-IDFdw (fir group)	7
4-IDFdw (pine group)	8
Nude Creek	
1-MHm2	0
2-CWHds1	0

Chilcotin Sustainable Resource Management Plan

Landscape Unit – Biogeoclimatic sub unit	Minimum Wildlife Tree Retention Target (% gross harvest area)
2-ESSFxv1	0
4-IDFdw (fir group)	0
4-IDFdw (pine group)	0
Nuntzi Elkin	
2-ESSFxv1	6
3-MSxv	6
3-SBPSxc	2
4-IDFdk4 (fir group)	5
4-IDFdk4 (pine group)	4
Ottarasko	
2-ESSFxv1	0
3-MSdc2	0
4-IDFdw (fir group)	0
4-IDFdw (pine group)	0
Palmer / Jorgenson	
2-ESSFxv1	6
3-MSxv	6
3-SBPSxc	6
4-IDFdk4 (fir group)	6
4-IDFdk4 (pine group)	7
Punky Moore	
2-ESSFxv1	1
3-MSxv	4
3-SBPSxc	4
Puntzi	
3-MSxv	6
3-SBPSxc	7
4-IDFdk4 (fir group)	6
4-IDFdk4 (pine group)	7
Pyper	
3-SBPSxc	7
4-IDFdk4 (fir group)	6
4-IDFdk4 (pine group)	7
4-IDFdw (fir group)	6
4-IDFdw (pine group)	6
Rainbow	
2-CWHun	0
2-ESSFxv1	0
3-MSdc2	0
3-MSdv	0
4-IDFdw (fir group)	0
4-IDFdw (pine group)	0
Sisters	
3-SBPSxc	9
4-IDFdk4 (fir group)	8
4-IDFdk4 (pine group)	9
4-IDFdw (fir group)	8
4-IDFdw (pine group)	4
Siwash	
3-SBPSxc	10

Chilcotin Sustainable Resource Management Plan

Landscape Unit – Biogeoclimatic sub unit	Minimum Wildlife Tree Retention Target (% gross harvest area)
4-IDFdk4 (fir group)	8
4-IDFdk4 (pine group)	10
4-IDFdw (fir group)	9
4-IDFdw (pine group)	8
Taseko	
2-ESSFxv1	6
3-MSdv	5
Tatla / Little Eagle	
2-ESSFxv1	7
3-MSxv	6
3-SBPSxc	7
4-IDFdk4 (fir group)	5
4-IDFdk4 (pine group)	6
Tautri	
3-MSxv	7
3-SBPSdc	8
3-SBPSmk	8
3-SBPSxc	8
Tchaikazan	
2-ESSFxv1	1
3-MSdv	5
Tete Angela	
2-ESSFxv1	7
3-MSxv	7
3-SBPSxc	7
4-IDFdk4 (fir group)	6
4-IDFdk4 (pine group)	5
Tiedemann	
1-MHmm2	0
2-CWHds1	0
Upper Tatlayoko	
2-ESSFxv1	4
3-MSdc2	5
3-MSxv	6
3-SBPSxc	6
4-IDFdk4 (fir group)	5
4-IDFdk4 (pine group)	6
4-IDFdw (fir group)	3
4-IDFdw (pine group)	6
Westbranch	
2-ESSFxv1	3
3-MSdc2	3
3-MSxv	5
3-SBPSxc	4
4-IDFdk4 (fir group)	5
4-IDFdk4 (pine group)	3
4-IDFdw (fir group)	4
4-IDFdw (pine group)	5

7.5.5 Species Composition

Maintaining species composition of stands is an important aspect of biodiversity as described in CCLUP (p. 153). Spruce and aspen are specifically identified. Many organisms have life requisites associated with particular plant species. Maintenance of biodiversity requires that tree and other plant species composition be maintained as close to the natural condition as possible, recognizing that some natural variation occurs in plant communities.

Recommendation Maintain or regenerate a significant component of the dominant climax tree species appropriate to the site in all harvest units.

7.5.6 Riparian Habitats

Riparian habitats are a cornerstone for meeting many CCLUP values. Riparian habitats include the area dominated by continuous high moisture content, and may include the associated adjacent upland vegetation. They include both surrounding vegetation (including large woody debris) that influences the watercourse (including fish and fish habitat), and vegetation that is influenced by the watercourse. Riparian ecosystems, and the riparian features they are associated with, contain many of the highest value non-timber resources in the natural forest, as well as many First Nations cultural and heritage features. The CCLUP cites the *Riparian Management Area Guidebook* (FPC) as direction for managing non-timber riparian resources. Consistent with the Riparian Guidebook, shrub-carrs are included with wetlands.

Objective 18 Establish riparian reserve zones and riparian management zones consistent with the specifications in Table 12.

Table 12 Riparian Reserve Zone and Riparian Management Zone Specifications

	Width (m)	Riparian Class	Riparian Reserve Zone Minimum Width* (m)	Riparian Management Zone Minimum Width ** (m)	Riparian Management Area Minimum Width (m)
Streams					
All streams in community watersheds, and all fish streams	> 20	S1	50	20	70
	> 5 ≤ 20	S2	30	20	50
	1.5 ≤ 5	S3	20	20	40
	< 1.5	S4	0	30	30
Streams outside of community watersheds that are not fish streams	> 3	S5	0	30	30
	≤ 3	S6	0	20	20
Wetlands and shrub-carrs					
Any location	Size (ha)				
	> 5 ha	W1	10	40	50
	> 1 ≤ 5	W2 BG, IDFx _m	10	20	30
	> 1 ≤ 5	W3	0	30	30

	> 0.5 ≤ 1	W4 BG, IDFxm	0	30	30
2 or more individual wetlands and/or shrub-carrs with overlapping riparian management zones	Combined size of wetlands ≥ 5	W5	10	40	50
Lakes					
	Size (ha)				
Any location	> 5	L1	10	See Section 7.9 of this Plan	
Any location (applicable only if the lake has not been addressed in Section 7.9 Lakes and referenced in appendix E.)	> 1 ≤ 5	L2 BG, IDFxm	10	20	30
	> 1 ≤ 5	L3	0	30	30
	> 0.5 ≤ 1	L4 BG, IDFxm	0	30	30

***Reserve Zones:**

- The stream riparian reserve zone extends the specified minimum widths from the edge of the stream channel bank. The wetland or shrub-carr riparian reserve zone extends the specified minimum widths from the edge of the wetland or shrub-carr.
- The lake riparian reserve zone extends the specified minimum widths from the edge of (a) the natural boundary of the lake, or (b) the wetland or shrub-carr that is contiguous to the lake if the wetland or shrub-carr is up to 5 ha in size.

****Management Zones:**

- The stream riparian management zone extends from (a) the outer edge of the riparian reserve zone; or (b) if there is no riparian reserve zone, the edge of the stream channel bank. The stream riparian management zone extends to the top of the inner gorge of the stream or to the greater of (a) the specified minimum widths; and (b) the outer edge of any (i) active flood plain or (ii) wetland or shrub-carr that is less than 1 ha in size and is within the width of the specified riparian management area.
- The wetland or shrub-carr riparian management zone extends from (a) the outer edge of the riparian reserve zone; or (b) if there is no riparian reserve zone, the edge of the wetland or shrub-carr.
- The lakeshore management zone or lake riparian management zone extends the specified minimum widths from (a) the outer edge of the riparian reserve zone; or (b) if there is no riparian reserve zone from the edge of (i) the natural boundary of the lake, or (ii) a wetland or shrub-carr that is contiguous to the lake if the wetland or shrub-carr is up to 5 ha in size.

Objective 19 Maintain sufficient forest structure in the riparian management zone of all classified streams, lakes, and wetlands to minimize windthrow in the riparian reserve zone.

Strategy 19.1 Retain deciduous species and follow principles contained in the Windthrow Management Guidebook. Avoid construction of roads in the riparian reserve zones and riparian management zones of streams, and wetlands, except for stream crossings or where there are no other practicable routes.

Objective 20 Except at road crossing sites, retain windfirm trees and other vegetation in riparian management zones on S4 streams and those S5 and S6 streams that contribute directly to fish bearing waters sufficient to:
1) Maintain streambank stability and channel processes, and
2) Minimize changes to stream shade and organic input to the stream

Strategy 20.1 Follow the “best management practices” as outlined in the Riparian Management Area Guidebook (1995).

Objective 21 Manage riparian management zones on W3 and W4 wetlands and L3 and L4 lakes to conserve deciduous patches, high value wildlife trees, major wildlife features, and in ecosystems where wetlands and lakes are not common, moist, understory habitats.

Strategy 21.1 Follow the “best management practices” as outlined in the Riparian Management Area Guidebook (1995).

7.5.7 Coarse Woody Debris

Retention of coarse woody debris is identified in CCLUP (p. 153) as a component of biodiversity conservation. Coarse woody debris fulfills valuable ecological roles by providing habitat for many vertebrates and invertebrates, shade and moisture, carbon storage and additions to the soil of nutrients and organic matter. The quality (length, diameter, decay level, tree species) as well as the quantity of coarse woody debris is important. While retention of coarse woody debris is an important element of managing for biodiversity, CCLUP does not set quantitative objectives by ecosystem. The intent is to retain as much coarse woody debris as possible, consistent with size, types, and distribution present on site at the stand level prior to harvest.

The quantity and quality of coarse woody debris retained on a harvest area can be enhanced by:

- retention of individual stubs or dead or living wildlife trees, especially those over 25 cm diameter of varying tree species,
- retention of wildlife tree patches,
- retention of stub tops or fallen danger trees on site,
- retention of expected cull trees (such as spiral grain) standing on site,
- stump side processing,
- leaving larger debris that is not utilizable out of roadside burn piles,
- focusing pile and burn activities on fines, except where very high coarse woody debris levels exist,
- leaving small patches of natural coarse woody debris accumulations or windthrow undisturbed,
- retaining longer debris that is not utilizable near riparian or understory/stub retention areas,
- keeping longer debris that is not utilizable out of roadside piles,
- retaining small unburned piles and other coarse woody debris adjacent to block boundaries and riparian features, and

- moving longer pieces off skid trails to avoid breakage.

Objective 22	Manage coarse woody debris according to the following principles: <ol style="list-style-type: none">1. Leave as much volume as practicable,2. Emphasize retention of larger pieces (diameter and length) for that stand,3. Leave pieces distributed across the harvested area where possible.
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7.6 Wildlife

Although riparian and biodiversity retention provide habitat for a large number of species, management for individual species' needs is also necessary. This represents the fine filter component of the provincial approach to biodiversity. Selected species are also of particular importance to First Nations, guide-outfitters, trappers, hunters, and non-consumptive wildlife users. A number of legislated Wildlife Habitat Areas (WHA's) exist in the Chilcotin SRMP area.

7.6.1 Mule Deer

The CCLUP (p. 154-155), requires that MDWR be maintained in a condition that will support the regional population during critical winter conditions. The logging method required to maintain mule deer winter habitat is light selective harvesting. Mule deer are regionally important and are to be managed consistent with the CCLUP Management Strategy for Mule Deer Winter Ranges in the Cariboo-Chilcotin. Part 1a: Management Plan for Shallow and Moderate Snowpack Zones (2007) and Part 1b: Management Plan for Transition and Deep Snowpack Zones (2006).

Mule deer occur throughout much of the SRMP area during the summer, but their distribution in winter is limited by snow depth. The winter habitat includes shrub used mostly in the early and late winter, but in typical snow depths litter fall from old Douglas-fir is required for food. Forests within winter range need to be managed using silviculture prescriptions that maintain or promote Douglas-fir and maintain and enhance the number of large old trees that provide the best snow interception and litterfall to maintain winter habitat. Use of silviculture systems such as clear-cut systems and selection systems with heavy, frequent stand entries are not appropriate since they do not provide adequate distribution of good snow interception and litterfall habitat.

Objective 23	Manage Crown land within the boundaries shown on Map 6 as mule deer winter range.
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Objective 24	Manage each mule deer winter range to meet the condition and distribution of habitat in accordance with the following: <ol style="list-style-type: none">1. The approved <i>management plan</i> (see definition),2. Long term objectives map applicable to that mule deer winter
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**range, and
3. The Transition Opportunities Plan for MDWR.**

Definition **MDWR Management Plans:** *These include the Management Strategy for Mule Deer Winter Ranges in the Cariboo-Chilcotin. Part 1a: Management Plan for Shallow and Moderate Snowpack Zones; Part 1b: Management Plan for Transition and Deep Snowpack Zones; Part 2: Long-term Habitat Objectives Map for Individual Winter Ranges; and Part 3: Transition Harvest Opportunities.*

7.6.2 Northern Caribou

The CCLUP (p. 157) and the sub-unit targets (p. 71, 97 and 107) require the management of northern caribou habitat through no harvest and modified harvest areas. Caribou within the Chilcotin SRMP area are to be managed through the CCLUP *Northern Caribou Strategy*, (March, 2002), and by other direction as accepted by the CMC and RRC.

There are an estimated 4,800 blue listed Northern caribou. The caribou described within the CCLUP Northern Caribou strategy refer to three of the five west central meta population herds. These are the Itcha-Ilgachuz, the Rainbow, and the Charlotte Alplands herds. These three herds consist of approximately 2,200 animals in the Cariboo region.

From a conservation perspective, the Itcha-Ilgachuz herd is very significant because it is currently one of the largest and highest density herds in the province. The conservation of the Itcha-Ilgachuz herd will be vital to the overall recovery of caribou in the Southern Mountains National Ecological area.

Objective 25 **Manage Crown land within the caribou no-harvest and caribou modified harvest areas as caribou winter range, as shown on Map 5, in accordance with the Northern Caribou Strategy (March 2002).**

7.6.3 Mountain Goat

Mountain goats are regionally important and are “identified wildlife” under the FPC. The term “species and habitats at risk” was deemed under the CCLUP declaration to be equivalent to the FPC term “identified wildlife”. Critical habitat areas for mountain goat include natal areas, escape terrain, and winter range. Maintaining connectivity of suitable habitat for movement between summer ranges and winter ranges is also important.

Mountain goats are vulnerable to loss of these habitats. They generally avoid snow depths greater than 50 cm, although in deep snow areas they may winter in areas with snow depths of 100 cm or more. High elevation mature and old forests, especially on steep south slopes, have reduced snow depth and are frequently used for winter foraging and thermal cover. In the SRMP area goats also utilize windblown ridge-lines

where snow is shallow. Escape terrain such as steep, rocky slopes and cliffs is an essential habitat, including adjacent forest cover.

Mountain goat may suffer mortality associated with disturbance from motor vehicles, especially aircraft. Direct mortality can result from falls that occur while animals are fleeing from the disturbance. Indirect mortality can occur due to avoidance of key habitats and excessive energy depletion during critical winter months. As a result, avoidance by aircraft and snowmobiles of key mountain goat winter range habitats and natal areas is important to population maintenance. Currently, mapping of natal areas is incomplete.

Objective 26 Manage the Crown land within the boundaries shown on Map 6 as mountain goat winter range.

Objective 27 Mitigate aircraft disturbance to mountain goats occupying winter range or natal areas as shown on Map 6 by following established avoidance procedures.

Strategy 27.1 Ensure aircraft operation is consistent with the "Interim Wildlife Guidelines for Commercial Backcountry Recreation in British Columbia" or its successor documents.

Strategy 27.2 Ensure aircraft operation is consistent with an alternate operational strategy which has the support of the Ministry of Environment, Environmental Stewardship Division and the responsible authority for tenure issuance.

Objective 28 Within mountain goat winter range, as shown on Map 6, provide security and thermal cover within 200 meters of escape terrain.

Strategy 28.1 Ensure no more than 33 percent of the forested habitat within the 200 meter escape terrain buffer is early seral at any time, and at least 50 percent of the basal area consists of mature and old stems at all times.

Objective 29 Prevent disease transmission to mountain goats from domestic sheep used for vegetation management.

Strategy 29.1 Maintain separation of domestic sheep used for vegetation management and areas used by mountain goats in the summer.

7.6.4 California Bighorn Sheep

Although not currently listed as identified wildlife (2004), California bighorn sheep are provincially blue listed, and are regionally important. The CCLUP highlights the need to manage for bighorn sheep habitat in the Taseko and Gaspard sub-units (p. 89 and 131).

Bighorn sheep are vulnerable to loss or degradation of winter habitat. Most herds winter on low elevation, south and west facing slopes with relatively warm temperatures, little snow, and Douglas fir or ponderosa pine forest for shelter. Other herds winter on high, wind-swept ridges with little snow. Escape terrain consists of steep rock bluffs and

canyons with narrow ledges, rocky slopes, talus slopes, and dense timber patches. Some forest consisting of large trees with closed canopy is required for shelter from snow during extreme winter conditions.

Forage availability and quality during winter is a critical factor in the survival of bighorn sheep. Management of cattle grazing during winter on areas identified as high-use for sheep will therefore be done by consultation between MOE and Ministry of Forests and Range range staff.

Objective 30 **Manage the Crown land within the boundaries shown on Map 6 as California bighorn sheep winter range.**

Objective 31 **Limit aircraft disturbance to bighorn sheep occupying winter range or natal areas as shown on Map 6.**

7.6.5 Moose

Management for moose is identified in the CCLUP (p. 155-156), including the sub-unit targets (p. 63, 71, 79, 81, 97, 101, 103, 107, 119, 131). The plan specifies management to maintain moose winter, calving, and summer habitat, and there is emphasis on maintaining forested areas around wetland and riparian areas.

Moose winter and calving habitat should be managed to minimize human disturbance and maximize suitable shrub browse. Some mature forest cover needs to be maintained, for thermal cover, visual cover, and snow interception. At least part of the perimeter of each wetland or shrub-carr should be maintained as advanced immature or mature forest cover, for security and thermal cover. Permanent roads should be built as far as possible from areas of important summer, natal and winter use, such as riparian areas, wet forest types, and areas of high shrub production. In winter and calving areas, densities of actively used roads should be minimized, to minimize disturbance. Some plant species used for moose forage include maple, red-osier dogwood, saskatoon, mountain ash, rose, willow, and hazelnut.

Enhancement for moose should only occur outside areas that the Caribou Strategy Committee have identified as important for caribou management, because the overriding objective is to maintain habitat values for mountain caribou (CCLUP p. 156).

Objective 32 **In areas identified as key wetlands or riparian habitat for moose on Map 7 and in W1, W3, and W5 wetlands (including shrub-carrs), retain sufficient vegetation to provide security and thermal cover for wintering moose.**

Definition **Vegetative Cover Providing Security and Thermal Cover for Moose:**
For the purpose of meeting Objective 32, 'vegetative cover providing security and thermal cover for moose' includes all non-commercial and

non-productive vegetation, early and mid-seral forest and mature+old equivalent to the retention targets for each riparian management zone.

- Strategy 32.1 At least 50 percent of the wetland perimeter for wetlands over 5 ha should be maintained as advanced immature or mature forest cover.
- Strategy 32.2 Avoid broadcast herbicide treatments within the riparian management area of wetlands.
- Strategy 32.3 Where practicable, locate roads at least 500m away from classified (W1-W5) wetlands. It is recommended, where possible, to also render secondary and temporary roads within 500 m of these wetlands impassable to 4-wheel drive vehicles.

7.6.6 Grizzly Bear

Management for grizzly habitat is referenced in several of the CCLUP sub-unit objectives (p. 71, 79, 81, 89, 97, 101, 103, 107 and 119) as well as the general requirement to manage for species at risk (p. 156). Grizzly bear are recognized as a species of special importance in the province of British Columbia. They are blue-listed and are designated as “Vulnerable” by the Committee on the Status of Endangered Wildlife in Canada. They are considered “Identified Wildlife” under the FPC, but have no mandatory management requirements under the *Managing Identified Wildlife Procedures and Measures*. Instead, the grizzly bear is one of three species for which the *Identified Wildlife Management Strategy* provides for wildlife higher level plan objectives to address habitat needs that cannot be completely captured within discrete areas of limiting habitat. See the Identified Wildlife Strategy¹⁹ for further information. The maintenance of grizzly bear populations is dependent both upon the continued availability of suitable habitats for foraging, resting, and denning as well as the avoidance of disturbance from human activities.

Objective 33 Minimize human-grizzly bear conflicts by:
a) Locating commercial and industrial camps away from areas of known high use grizzly habitat,
b) Restriction from use of domestic sheep for vegetation management in locations with high grizzly concentration.

Definition High use grizzly habitat: *Site specific location where grizzly are known to frequent at some period during the year. Locations include but are not limited to salmon and trout spawning shoals and stream reaches, and herb dominated avalanche tracks and run-out zones on southerly and westerly aspects.*

¹⁹ Species and Plant Community Accounts for Identified Wildlife Volume 1, June 1997 (p. 111-115); Managing Identified Wildlife Volume 1: Procedures and Measures, February 1999 (p. 93-102).

Objective 34 Where available, retain security cover adjacent to critical grizzly bear foraging habitats, which may include salmon and trout spawning reaches or shoals identified on Map 8, and herb-dominated avalanche tracks and run-out zones on southerly and westerly aspects, in the areas identified as high and moderate capability grizzly bear habitat on Map 3.

Definition **Grizzly Bear Security Cover:** *For the purpose of meeting Objective 34, grizzly bear security cover is deemed to be a combination of vegetative and topographic features sufficient to minimize sight lines to the foraging areas from adjacent roads. Unless designated as a WHA, timber within the security cover area is managed over a normal rotation.*

Strategy 34.1 Follow the management principles for grizzly bear outlined in the Identified Wildlife Management Strategy (2004).

7.6.7 Fur-bearers

Within the SRMP area fur-bearers are an important resource for both native and non-native trappers, and are an important element of the ecosystem. Management of coarse woody debris, wildlife trees, riparian areas, fish, other wildlife, and biodiversity will address many of the habitat requirements of fur-bearers.

Riparian areas are particularly important habitats for fur bearers. Therefore, within riparian management zones and L1 lakeshore management zones, wildlife trees and large diameter trees should be retained.

7.7 Species and Habitats at Risk

The CCLUP (p. 156) including sub unit targets (p. 60 – 133), states that species and habitats at risk should be protected using wildlife habitat areas, sensitive areas, or other appropriate land designations. The need for inventory and preparation of recovery plans is also noted.

First Nation cultural and environmental values also include concern for species and habitats at risk. Species on the red or blue list in BC or listed as nationally endangered, threatened, or of special concern by the Committee on the Status of Endangered Wildlife in Canada are shown in Appendix C. The Identified Wildlife Management Strategy 2004 addresses only those species specified in the WLAP order under FRPA. The species occurring in the Cariboo, listed under the order, are as follows:

- Great Basin Spadefoot Toad
- Great Basin Gopher Snake
- Flammulated Owl
- Lewis's Woodpecker
- Short-eared Owl
- Yellow-breasted Chat
- Long-billed Curlew

- Wolverine (subspecies)
- Badger
- Fringed Myotis
- Spotted Bat
- Mountain Caribou
- Grizzly Bear

Objective 35 Minimize disturbance and maintain habitat necessary to sustain species at risk as listed in the Identified Wildlife Management Strategy (2004) and its updates.
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Strategy 35.1 In the absence of General Wildlife Measures specified under FRPA, follow procedures outlined in the Identified Wildlife Management Strategy, Volumes I and II for protection of habitat and amelioration of disturbance.

7.8 Aquatic Resources

Under CCLUP, management of aquatic biodiversity and fish habitat is largely addressed through conservation of riparian areas in combination with other specific initiatives discussed in this section. Application of the FPC is recognized as a major tool in addressing water quality concerns (p. 164).

Within the Chilcotin SRMP area, the Chilko, Taseko, Chilcotin, Nazko, and Fraser Rivers are some of the major rivers important for fisheries. The CCLUP sub-unit targets (p. 63, 71, 97 and 107) require the management of these river watersheds for salmon stocks through riparian area protection and controls on the rate of harvest. First Nations have significant concern and interests with both freshwater fish and salmon within the planning area.

7.8.1 Watershed Hydrology

Direction contained under the CCLUP sub-unit description (p. 81) indicates the Cochin Creek watershed is to be managed to address fisheries flows issues and agricultural needs. More generally, the CCLUP (p. 160) recommends that watershed assessments be done when disturbance levels exceed 25 percent, and that they are done in key watersheds to ensure the maintenance of critical fish and wildlife habitat and hydrological stability. The CCLUP assigns particular importance to development within the SRDZ being consistent with watershed assessment prescriptions. The CCLUP (p. 180) requires completion of watershed assessments for all watersheds, commencing with high-priority fisheries watersheds in the SRDZ. Watershed assessments are normally conducted on watersheds of 500 ha to 50,000 ha²⁰; however important watershed tributaries less than 500 ha may also require assessments to ensure that salmon and trout habitat values are maintained. A fisheries target risk assessment²¹ completed in 1996 indicated that the CCLUP fisheries targets were achievable while

²⁰ Interior Watershed Assessment Procedure Guidebook (IWAP) Second Edition, Version 2.1, April 1999: page 2.

²¹ Fisheries Target Risk Assessment Prepared for the CCLUP Integration Process, August 15, 1996 (2 cover letters +19 pages + 1 map).

maintaining watershed hydrology. The CCLUP (p. 164) specifies that key or sensitive watersheds should be selected for intensive research/monitoring to assess hydrologic and water quality impacts of logging.

7.8.2 Fish

The Chilcotin SRMP area has a diversity of fish populations inhabiting the rivers and lakes. Several fish species require specific management objectives, with other species being managed indirectly. A requirement of the CCLUP sub-unit is to manage for Dolly Varden habitat in the Niut SRDZ by applying modified management regimes over additional riparian buffers estimated to be about 1 percent of the forest area.

Specific watersheds have been identified where fish stocks require special attention. Critical fish habitat has been mapped to help meet this CCLUP objective (see Map 8). The Critical Fish Habitat designation applies to riparian areas that require additional habitat protection as compared with the standard requirements of the FPC or FRPA. Agencies contributing to the identification of critical fish habitat include the Department of Fisheries and Oceans Canada and MOE. Salmon, rainbow trout, lake trout, and kokanee were the species considered.

Critical fish habitat is designated as follows:

- Defined lake shore areas where kokanee and lake trout spawn. Protection of these spawning areas by retention of additional lakeshore riparian areas will prevent disturbance to high quality surface and ground water sources necessary for successful spawning.
- Water courses adjacent to main channels within floodplains. These include back channels, oxbows, wetlands, ground water sources, alluvial fans, etc. connected to the main stem stream. These areas provide exceptional habitat for juvenile salmonids. Many of these water courses are beyond the designated riparian reserve/management zones for the respective riparian/stream class on the floodplain. These areas have been identified as critical fish habitat and have been extended to the first elevation contour of the floodplain and upslope interface for selected S1, S2, and S3 streams.
- Selected streams with, rainbow trout and salmon populations that require increased riparian protection to maintain channel morphology and natural temperature regimes critical for spawning and rearing. This may include tributary S5 and S6 streams that require riparian buffers to maintain natural water quality and temperatures for the receiving, fish bearing streams.

Objective 36 Maintain or enhance fish passage, natural channel width, streambed substrate and water quality at all new road crossings of fish streams.

Strategy 36.1 Follow the principles outlined in the stream crossing guidebook in combination with timing and measures outlined by MOE for the local area.

Recommendation Where suitable fish habitat occurs upstream of culverts that currently create barriers to fish passage, replace those culverts with appropriate structures that permit fish passage.

Objective 37 Prevent the cumulative hydrological effects of forestry activities from resulting in a significant adverse impact on fish habitat.

Strategy 37.1 Where disturbance levels exceed 25 percent and in key watersheds perform watershed assessments using accepted procedures and manage roads with erosion control plans.

Objective 38 Manage the areas shown as critical fish habitat on Map 8 as No-harvest Areas.

7.8.2.1 Salmon

The CCLUP specifies that the Chilko, Taseko, and the Chilcotin be managed for salmon stocks through riparian area protection and controls on the rate of harvest (p. 63, 71, 97 and 107). The CCLUP (p. 168-169) includes a list of specific objectives for salmon management.

7.8.2.2 Bull Trout

Bull trout are not currently listed as identified wildlife (2004), but they are a provincially blue-listed species because their regional population is particularly sensitive due to their restricted distribution, susceptibility to habitat degradation, disruption of migration patterns and over fishing. Bull trout are considered to be an indicator of ecosystem health and are extremely sensitive to reduced water quality, increased water temperatures, loss of riparian habitat, and loss of stream channel integrity. The current known distribution of bull trout has been determined through stream inventories, but inventory has not been completed throughout the entire SRMP area. Additional critical fish habitat for bull trout is likely to exist within the plan area.

7.8.3 Water Resources

The CCLUP (p. 164) states that a comprehensive water management strategy is needed for the Cariboo Region, to address the impacts on water resources from agriculture, residential development, roads, industrial activity, and forest harvesting. A water management strategy should provide direction on how to balance various uses of the water resource.

The water management strategy (p. 164) should include allocations of water for conservation purposes, and the Cochin Creek watershed should be managed to address fisheries flow issues and agricultural needs for competing water uses (p. 81). Additional issues may be identified once a comprehensive water management strategy for the Cariboo Region has been completed. No reduction in timber access is expected to result from the water management strategy. Community watershed plans exist for the Nemiah, and Rim Rock.

7.9 Lakes

The CCLUP sub-unit targets (p. 71, 81, 89, 101 and 119) require management of specified *approximate* numbers of lakes as quality lakes for wilderness fisheries, referenced herein as ‘wilderness fisheries lakes’. These lakes are identified in Table 13, with further details in Appendix E. The need for management of scenic landscapes adjacent to fishing lakes is also described (p. 141), and CCLUP sub-unit strategies (p. 78, 88, 96 and 130), require the visual quality around Taseko and Puntzi Lake and other key recreation lakes be maintained. Completion of Lake Management Plans for important lakes is also identified under the CCLUP (p. 160).

Table 13 Wilderness Fisheries Lakes

CCLUP Resource Management Zone Sub-Unit	Approximate Number of Lakes Specified by CCLUP	Lakes Identified (details provided in Appendix E)	Others
Brittany Triangle SRDZ	0	7 designated, Augers (12374), Ducharme (12368), Main Guy Lake (12361), Lake #18 (12362), Unnamed Lake (552) 12365, Lake #20 (550) 12364 and Lake #16 (594) 12401.	None
Itcha-Ilgachuz SRDZ	3*	Punkutlaenkut Lake (11875)	1 (Quesnel)
Niut SRDZ	0	0 designated	None
Potato Range SRDZ	4	4 designated, Kondor (12345), Unnamed (525) 12341, Lincoln Lake (12293), Unnamed (479) 12296	None
Taseko Lake SRDZ	2*	1 designated, Crystal Lake (12453)	1 (WL)
Chezacut IRMZ	0	4 designated, Knoll Lake (11959), Dick Lake (12059), Unnamed (122) 11958 and Unnamed (251) 12079	None
Eagle IRMZ	10**	9 designated, Scum (12209), Nancy (12192) Lac Le Lievre (12185), Ruby (12179), Roxanne (12175), Pamela (12155), Lower Rat cabin (12329), Unnamed (519) 12335, Slim Lake (12357)	None
Grasslands IRMZ	0*	0 designated	1 (WL)
Baezaeko ERDZ	0*	0 designated	1 Quesnel
Palmer ERDZ	3*	2 designated, Mackill (11955), Gruidae Lake (11964).	1(WL)
Gaspard ERDZ	0*	0 designated	None

*This CCLUP subunit is not entirely within the Chilcotin SRMP; additional identified lakes are located outside the Chilcotin SRMP area.

** Concentrate principally in the Seven Sisters Lake chain according to sub-unit targets on p. 101 of the CCLUP.

The CCLUP (p. 156) and the sub-unit targets (p. 97 and 119) require that Puntzi, Chilcotin, Rosita, and Tautri Lakes be managed for key White Pelican habitat.

Lakes important for tourism, recreation, and fish and wildlife purposes have been designated into one of the five management categories based on predominant management goals. Where required, a recommended visual quality objective

associated with the lake's viewshed (Section 7.10.4) is included and the recommendations applicable to the backcountry unit (Section 7.10.2).

The five categories of lakes are as follows.

1. Refugium Lake: These lakes are ecologically unique or important for ecosystem representation and contain rare or endangered species or habitats, have unique ecological or physiographic associations (e.g. karst formations) or maintain ecosystem integrity and representation. Opportunities for access and development must be consistent with ecosystem protection. Critical ecosystem attributes must remain unmodified. Fishing regulations must be consistent with the refugium management intent, recognizing site-specific ecological factors and/or the lake's associated rare or endangered species habitat requirements.

Lake management objectives applying to a refugium lake are summarized as follows:

- General Objective – Maintain or enhance the lake, the riparian reserve zone, and the lakeshore management zone for the sensitive fish, wildlife or habitat value identified in Appendix E.
- Riparian Reserve Zone Objective – 10 meter width, manage as a no new development area (forestry, alienation as private land, recreation, etc.).
- Lakeshore Management Zone Objective – width as specified for each lake in Appendix E.
- Access Objective – variable, as specified for each lake in Appendix E.

2. Wilderness Fisheries Lake: These lakes provide natural features in undisturbed areas generally having non-motorized access. Users must hike, canoe, kayak, or fly in. The setting is primitive with pristine surroundings and unmodified natural environment. There is limited or no commercial land development. Special fishing regulations and restricted guided fisheries use is recommended.

Lake Management objectives applying to a wilderness fisheries lake are summarized as follows:

- General Objective – Maintain or enhance the lake, the riparian reserve zone, the lakeshore management zone, and the surrounding area to provide a quality wilderness fishing experience.
- Riparian Reserve Zone Objective – 10 meter width, manage as a no new development area (forestry, alienation as private land, recreation, etc.).
- Lakeshore Management Zone Objective – width as specified for each lake in Appendix E, manage LMZ as a no new development area (forestry, alienation as private land, recreation, etc.).
- Access Objective – hike or fly-in only, no new motorized access within 2 km unless there is no other practicable option to access other resource values or as specified for each lake in Appendix E.

3. Quality Lake – These lakes provide quality natural features. Access may be limited. There are pristine surroundings and natural appearing environment. Commercial land development is limited or non-existent.

Lake Management objectives applying to a quality lake are as follows:

- General Objective – Maintain or enhance the lake, the riparian reserve zone, the lakeshore management zone, and the surrounding area to provide a quality fishing experience.
 - Riparian Reserve Zone Objective – 10 meter width, manage as a no new development area (forestry, alienation as private land, recreation, etc.).
 - Lakeshore Management Zone Objective – width and objectives as specified for each lake in Appendix E.
 - Access Objective – as specified for each lake in Appendix E.
4. General Lake – These lakes provide public recreation in a predominantly rural or natural setting. Access is generally good (2 wheel drive). Land development is variable and the natural environment may be substantially modified.
Lake Management objectives applying to a general lake:
- General Objective – Maintain or enhance the lake, the riparian reserve zone, the lakeshore management zone, and the surrounding area for the specific lake value(s) identified in Appendix E
 - Riparian Reserve Zone Objective – 10 meter width, no harvest.
 - Lakeshore Management Zone Objective – width and objectives as specified for each lake in Appendix E,
 - Access Objective – as specified for each lake in Appendix E.
5. Key Lake – These lakes have visual objectives and other values important to the tourism industry and related recreation opportunities. They can also be classified as one of the above mentioned Refugium, Wilderness Fisheries, Quality, or General lakes.
- General Objective – Maintain or enhance the visual quality in the viewshed surrounding these lakes.

The CCLUP sub-unit targets (p. 70, 80, 100, and 118) require the management of backcountry units adjacent to key lakes and tourism facilities, and specifically mentions Choelquoit Lake and the Seven Sisters Lakes chain. The CCLUP sub-unit targets (p. 63) also specifically mentions maintaining backcountry condition and the visual quality in the area surrounding Tsuniah Lake.

The following things were considered in the preparation of the lakes management objectives: the CCLUP objectives, the Regional Draft Lakeshore Management Guidebook²², visual landscape inventories, existing recreational use, fisheries values, water quality, biodiversity and wildlife habitat attributes, existing use, and forest development pressures. Also existing lake management direction provided by the District Manager and information supplied by MOE fisheries staff was considered when developing the objectives and strategies for lakes in the Chilcotin SRMP area.

Changes to the management objectives of some lakes may occur as the result of any future lake management planning processes.

²² Lake Classification and Lakeshore Management Guidebook, Draft 5, June 24, 1998 (29 pages).

Objective 39 Maintain lake and lakeshore values by managing forest development activities in accordance with the management direction listed in Appendix E, Table 16.

Strategy 39.1 Within lakeshore management zones, follow the strategies listed in Appendix E, table 16.

7.10 Tourism and Recreation

According to CCLUP (p. 46), tourism and recreation will have full access to the SRDZ. A Tourism Sector Strategy (p. 139-144) also provides direction on access, visual quality, forestry, and other existing uses when integrating them with tourism. The CCLUP sub-unit targets (p. 60 to 133) also provide specific direction for tourism management.

7.10.1 Recreation Corridors and Trails

Scenic landscapes are recognized by CCLUP (p. 141) as a key component of tourism. The plan highlights the need to protect and enhance visual landscapes associated with tourism facilities and access corridors leading to key tourism areas or facilities, and to protected areas. In the SRMP visually important areas have been mapped with emphasis applied to the visual quality around established resorts and destination areas.

The CCLUP (p. 144) also states that plans for river and trail corridors should apply across SRMP boundaries, to maintain consistency of management approach throughout the length of the linear feature. The CCLUP *Recreation Corridor Management Strategy*²³ was developed in 1996, and provides the basis for sustainable resource management planning. The locations of important trails came from agencies, consultants, and public input (refer to Map 9), and have been incorporated into the plan.

Public input into the Chilcotin SRMP includes trail inventories completed for the Ministry of Forests by J.S. Hart and Associates, including the *Inventory of Trails in the Taseko and Groundhog Creek Area* and the *Inventory of the Coast Mountain Trails and Routes in the Chilcotin Forest District*. These two documents provided a record of trails that are intended to be part of the Chilcotin Mountains Trail System proposed by the Niut Conservation Society. A few of the key principles in the Chilcotin Mountains Trail System Proposal include:

- Recognize a system of major trails along the Chilcotin Mountains for protection of wilderness, recreation, and tourism values;
- Plan land use along trail corridors to maintain backcountry conditions, including management of access, viewsapes, and buffers along trails;
- Maintain wilderness conditions along trails promoting 'leave no trace' recreation practices and low impact construction and maintenance practices;
- Avoid summer-fall motorized use except along designated trails; and

²³ Recreation Corridor Management Strategy: Cariboo Chilcotin Land Use Plan, October 1, 1996 (54 pages).

- Work with other long-distance trail system advocates to integrate Chilcotin Mountains trails with provincial and national networks.

Other existing routes and connecting trails to the Chilcotin Mountain Trail System include:

- Extension northward through Tweedsmuir Provincial Park along the Coast range;
- The Alexander Mackenzie Heritage Trail/Nuxalk-Carrier Grease Trail which is to be followed by the National Hiking Trail;
- Trails across the Dean River Valley to Itcha-Ilgachuz Provincial Park;
- The native trail travelled by Lt. H.S. Palmer in his 1862 reconnaissance across the Chilcotin;
- Heritage trails and routes crossing the Coast Range, (down Southgate, Homathko, Klinaklini and Bella Coola Valleys);
- The proposed recreation trail following the Fraser River benchlands;
- The regional trail system being developed in the Cariboo; and
- The Elaho-Meager trail linking upper Lillooet River and the Upper Elaho River Valleys.
- International Historic trading trails, Westbranch Heritage trail to Bute Inlet.

Detailed trail inventory information was also submitted by the Tatla Resource Association for the Tatla Lake Area. Additional trail information was collected at Public workshops and from Agency sources.

Objective 40	Except at sites where roads cross trails, maintain 50 meter management zones on either side of the buffered trails identified on Map 9 with the treed area inside the zones at a combined basal area retention of at least 85 percent.
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Strategy 40.1 Divide the total trail management zone buffer on both sides of the trail in a way that best protects the visual and recreational values of the trail.

7.10.2 Backcountry

Targets were established for the amount of area to be managed in backcountry condition in each sub-unit (CCLUP p. 60 to 133). These areas are a mix of special features (river corridors, key lakes, significant trails, etc) and specific Recreation Opportunity Spectrum classes (semi-primitive motorized, semi-primitive non-motorized and primitive) to provide opportunities for a variety of public and commercial outdoor recreation activities that are dependent on a natural environment. The guide-outfitting industry is especially dependent on backcountry areas. The CCLUP (p. 140) specifies that tranquil settings, with forest operations conducted outside the peak tourism season, are necessary to respect recreation tourism in backcountry areas.

The backcountry units identified by this SRMP for each sub-unit are shown on Map 9. The backcountry areas are focused on relatively undisturbed views, forests, watercourses, lakes, and recreation features. In all backcountry units, the over-riding management consideration is maintenance of the non-timber resource value within the backcountry unit. Some harvesting will occur over time in these areas²⁴, and therefore backcountry characteristics will change over time.

Use of alternative silviculture systems may be necessary to achieve the visual and recreational objectives of backcountry areas. Industrial activities (road construction, harvesting, slash burning, etc.) may need to occur during the off peak periods for backcountry use. Where temporary roads are constructed, access constraints should be implemented for any period the road is not in use to discourage development of access use patterns that conflict with the long-term implementation of this Plan. To avoid direct impact on trails, strategies should be used such as falling away from trails, minimizing or avoiding road crossings, skidding away from trails, and seeding disturbed areas.

Objective 41 Maintain or enhance existing backcountry areas identified on Map 9.

Table 14 Values for Backcountry Units

This table identifies specific recreation features and some activities that are dependent upon those features for a quality experience.

Back-country Unit	Backcountry Values
DCH - 1	Guide outfitter trails, wilderness hiking, horseback riding, wildlife viewing, important wildlife habitat and fishing areas. First Nation food gathering
DCH - 2	Wilderness trails, hiking, wilderness viewing, horseback riding, camping, fishing, canoe/kayaking
DCH - 3	Wilderness trails, hiking, wilderness viewing, horseback riding, camping
DCH - 4 & 5	Guided nature viewing, boating, mountain biking, canoeing, hunting, fishing, camping, hiking
DCH - 6	Commercial River rafting, kayaking, camping, fishing and hunting
DCH - 7	Commercial River rafting, kayaking, camping, fishing, hiking and hunting
DCH - 8	Commercial River Rafting, kayaking, fishing, hiking, and hunting
DCH - 9	Guide outfitter trails, wilderness hiking, horseback riding, wildlife viewing, hunting and camping
DCH - 10, 11 &	Guide outfitter trails, wilderness hiking/Heli Hiking, Heli Skiing, horseback riding, wildlife viewing, camping, hunting and fishing

²⁴ Government Clarification of Key Components of the CCLUP (5 pages), September 27, 1996.

Back-country Unit	Backcountry Values
12	

7.10.3 High Elevation Visuals

High elevation viewpoints in the SRMP are all located above tree line and encompass a panoramic viewing area. Management of high elevation visuals from the viewpoints are an essential component of meeting the recreation objectives. The high elevation viewpoints reflect current use and may be supplemented over time with increased tourism and recreation use, particularly in backcountry areas. Additions to this list will not impact on access to timber, because management for high elevation visuals is simply focused on using design principles to minimize visual impact. Cutblocks should blend into the surrounding landscape rather than showing as geometric patterns with hard, straight edges.

Management for high elevation visuals occurs within a 16 kilometre radius from each viewpoint. Where a more distant disturbance would be visibly dominant, these objectives and strategies should also be applied. Development design considerations from low elevation viewpoints should take precedence over those from high elevation viewpoints, where they overlap. Where a viewshed from a high elevation viewpoint overlaps with an area managed for mountain caribou, management for mountain caribou takes precedence.

7.10.4 Scenic Areas

The management of scenery around lakes and rivers is very important, and forest operations should avoid or minimize impacts on scenic quality (including air visibility quality) in or near important tourism areas. Tranquil settings, scenic quality, and air visibility (smoke) quality, setting diversity and access controls are important factors for meeting tourism objectives. The CCLUP Tourism and Recreation sub-unit targets (p. 60, 66, 68, 72, 76, 102, 104, 120, 122, 124, 126, 128) include direction for visual resource management. Forested and non-forested Crown land including grasslands, alpine areas, and wetlands are included in visual resource management.

Areas of high visual importance are managed as *scenic areas*, which can have *visual quality objectives* legally established. Visual quality areas and objectives may be refined through future planning processes; however the overall effect on timber access will not increase over time. New public and commercial activities and development that are dependent on a managed viewshed should be directed to take advantage of sites that have viewsheds that are part of the visual quality areas defined through this process (CCLUP, p. 140). The viewsheds identified in this plan (Map 10) are generally where people spend periods of time in one place, or where commercial success is dependent on maintained viewshed quality. The viewsheds from existing tourism

facilities and key tourism use areas are included in the visual quality areas, as are areas of high public recreation use and the scenic area travel corridors as listed above.

The definitions used for visual quality objectives in this SRMP are:

- **Preservation:** requires management activities or alterations not be visible. The goal is to conceal all activities, when the forest is seen from the established viewpoint.
- **Retention:** requires that management activities or alterations not be visually apparent. The goal is to repeat the line, form, colour, and texture of the characteristic landscape. Less than 1.5 percent of the forested area can be in a non-visually effective greenup condition from the perspective view of the viewpoints.
- **Partial Retention:** requires that alterations remain visually subordinate to the characteristic landscape. Repetition of the line, form, colour, and texture is important to ensure a blending with the dominant elements. 1.5 percent - 7 percent of the forested area can be in a non-visually effective greenup condition from the perspective view of the viewpoints.
- **Modification:** allows alterations to dominate the original characteristic landscape. However, alterations must borrow from natural line and form to such an extent and on such a scale that they are comparable to natural occurrence. 7.1 percent-18 percent of the forested area can be in a non-visually effective greenup condition from the perspective view of the viewpoints.

<p>Objective 42 Manage the areas shown on Map 10, as scenic areas as viewed from the designated viewpoints.</p>

- | | |
|---------------|--|
| Strategy 42.1 | Maintain the visual quality of the areas shown on Map 10 from the designated viewpoints, consistent with Table 18 in Appendix F. |
| Strategy 42.2 | Design disturbances (roads, cutblocks, landings) to mimic naturally occurring line, form, and texture of the viewshed. Design opening size to reflect the existing scale of natural openings, vegetation patterns, and natural features. |

Refer to Appendix F for additional information on viewpoints, viewlines, and viewsheds.

7.11 Mineral and Aggregate Resources

The CCLUP (p. 9-10, 135-138, 181), including zonal and sub-unit targets (p. 60-134), specifies that mineral exploration and development are appropriate land uses throughout the plan area, excluding parks and protected areas, subject to applicable legislation (e.g., *Mines Act*, *Mineral Tenure Act*, *Mining Right of Way Act*, *Mining Rights Amendment Act*, *Mineral Exploration Code*, *Land Act*, etc.) For the purposes of this plan, the word “mineral” includes those resources defined as such under the *Mineral Tenure Act*, 1996, Part 1.

Mineral resource development presents unique challenges. The resources are mostly hidden, not quantifiable (except at enormous cost) and fixed in place. They must be mined where found. Finding new mines requires knowledge, time, patience, and

considerable investment. Large areas of land and many targets need to be evaluated through repeated exploration campaigns. It can take years or decades, before a commercially viable deposit is delineated. In order to sustain the exploration and development process, the mining sector needs security of tenure, security of access for exploration and development, and certainty with respect to other land uses in order to sustain the exploration and development process.

This plan conforms with the Province's two-zone approach to mineral resource management (see Map 11). Consistent with Section 14 of the *Mineral Tenure Act*, the objectives and strategies in this plan are not intended to unduly delay, restrict, or prohibit responsible mining exploration or development activities.

The CCLUP (p. 181) does specify a number of measures that may be implemented to minimize the adverse impacts of mineral and energy development in identified sensitive areas of the SRDZ.

Recommendation Government should review all no-staking reserves, and amend or rescind those that are obsolete.

7.12 Energy Resources

Energy resources were not addressed by the CCLUP, and hence are not discussed in this SRMP. Exploration and development activities for oil and gas will be reconciled with the CCLUP and SRMPs as required. They include both renewable (hydroelectricity, wind, solar, geothermal and biomass) and non-renewable resources (petroleum, natural gas, coal-bed methane), together with the infrastructure (pipelines, processing and production facilities, transmission lines) to deliver them to end-users.

Exploration and development of energy resources require access to lands where these activities are allowed by law. Access to pipeline and electricity transmission corridors for maintenance and upgrading is also required. Future energy resource developments may require connection to existing infrastructure.

7.13 Range

The Cariboo Region accounts for approximately 20 percent of British Columbia's beef cattle population. The beef industry is the backbone of the agriculture industry, with over 50 percent of the regional agricultural enterprises being beef operations. The Region's extensive rangeland provides a seasonal supply of forage for beef production.

The CCLUP sub-unit targets (p. 60 to 133) require that the current authorized level of grazing, defined in Animal Unit Months, be maintained by sub-unit and by Range Unit (see Table 15). The CCLUP (p. 159) identifies the need for improved cattle management, particularly with respect to riparian and alpine habitats; and both haying and grazing of wetlands are to be managed to maintain environmental values. The Biodiversity Guidebook and Riparian Guidebook are to be used as sources of guidance for protecting environmental and conservation values. The CCLUP (p. 181) requires that proposals for grazing in currently (1994) unused areas be accompanied by a plan that recognizes and addresses other values and uses. The SRMP includes only those range units, or portions of range units, that are within the Chilcotin SRMP boundary.

The CCLUP (p. 159) direction for all fences to be wildlife safe through the use of top rails has been amended to read “all range (and Highways) fences should be wildlife safe including top rails, where there is a recognized need to address wildlife safety concerns, and appropriate wire spacing.”²⁵

Objective 43 Where there is a significant, site-specific hazard to wildlife at fence crossing locations, as determined by the BC Ministry of Environment, ensure range and highways fences at those locations meet regional wildlife safety standards.

Strategy 43.1 Wildlife safe fencing should be no higher than 42 inches with 18 inches below the bottom wire and have either a wooden top rail or visibility marker.

Table 15 CCLUP and Chilcotin SRMP Target Animal Unit Months in 1994 by CCLUP Resource Development Zone

CCLUP Sub Unit	Animal Unit Months
	CCLUP Target (Entire Zones)
Brittany Triangle SRDZ	3,314
Itcha-Ilgachuz SRDZ	4,603
Niut SRDZ	1,407
Potato Range SRDZ	5,395
Taseko Lake SRDZ	2,322
Chezacut IRMZ	19,422
Eagle IRMZ	5,411
Grasslands IRMZ	39,579
Baezaeko ERDZ	524
Palmer ERDZ	7,050
Gaspard ERDZ	25,417
Total	114,444

7.14 Agriculture

While the CCLUP does not establish numerical or percentage access targets for agriculture, it does state (p. 14) that agricultural strategies are to focus on the continued opportunity for expansion onto suitable agricultural lands. The CCLUP (p. 172) specifies that all lands within the plan area can be considered for the expansion of existing agricultural holdings, and includes a CCLUP objective of providing for the future growth and development of the agriculture, food, and fisheries industries. Industry access and use of Crown resources for land, grazing, hay cutting, and water should be maintained or enhanced. The CCLUP (p. 164) specifies that as part of a water management strategy, water availability for current and future users be considered with respect to new agricultural developments. All other resource values should be fully considered when land alienation is proposed for agricultural and other purposes. The

²⁵ Amendment to the Cariboo Chilcotin Land Use Plan, May 31, 1996 (1 page).

needs of industry to enhance their access to Crown land and water in support of agricultural economic opportunities is recognized.

The Crown Agricultural Land Reserve (ALR) in the Cariboo Region represents an area of secure land base for future agricultural production. The CCLUP (p. 172) supports the purpose and intent of the ALR and the development of high capability agricultural land when required for expansion of holding under the existing agricultural lease policy.

Existing agricultural activity occurs primarily on private land, with the exception of hay cutting and grazing, and hence is mostly outside the scope of this plan. A provincial Agriculture Resources Access Strategy is under development.

Recommendation Maintain or enhance soil productivity where agriculture occurs on Crown land.

Recommendation Manage agricultural activities to prevent declines in water quality in streams, lakes, and wetlands adjacent to agricultural areas on Crown land by following the Agricultural Practice for Waste Management and the *Farm Practices Protection (Right to Farm) Act*.

Objective 44 **Manage livestock to prevent damage to riparian vegetation, bank stability, fish habitat, and water quality in streams, lakes, and wetlands.**

7.15 Land Allocation

Government recognizes that communities require access to Crown land (including forest lands) and water resources for community infrastructure, settlement, and economic development and diversification purposes. New business opportunities and a diversified economy also demand greater access to Crown Land and water resources. Commitments have been made to create economic growth in a sustainable manner that reflects sound economic and environmental principles. The intent is to transform British Columbia into a leading provincial economy, attract high levels of private sector investment, increase a private sector economy that creates employment opportunities, and give local First Nations, local communities, and governments greater influence over the uses of undeveloped Crown land. To encourage economic development and meet the challenges of today, the conditions, stipulations, and statutory responsibilities need to be attractive for entrepreneurs to invest in the Cariboo Region.

Where compatible with other CCLUP values, resource management objectives of the HSRMP will not preclude the use of Crown ALR lands for intensive agricultural use unless found to be infeasible in light of provincial level resource management strategies and socio-economic analysis.

With respect to land alienation, the CCLUP (p. 154) requires review where the disposal of Crown land might negatively impact biodiversity conservation values. Furthermore, the plan (p. 159) speaks to restrictions on land alienation in wetland areas, and improved water allocation and management where it affects wetlands.

7.16 Wildcraft (Botanical Forest Products)

The CCLUP (p. 146) requires the maintenance and enhancement of the present (1995) level of use of the wildcraft (botanical forest product) resource, which includes resources such as mushrooms, berries, floral and/or decorative materials, and medicinal plants. It also indicates that key pine mushroom sites be maintained in a condition that promotes mushroom growth. Wildcraft resources should be mapped as they become known.

The CCLUP (p. 146), through sub-unit targets (p. 60 to 133), requires the maintenance of specified levels of roaded access for the purpose of wildcraft harvesting.

7.17 Trapping

The CCLUP (p. 177 and Appendix 1) acknowledges that trapping will proceed in all zones, including the SRDZs. The CCLUP (p. 153) also specifies that all renewable resources will be managed for sustainable use, and that management for appropriate uses of fish and wildlife will be undertaken. The entire SRMP area has trapping tenures. The maintenance of a viable trapping industry is linked to the maintenance of mature and old forest, and is primarily addressed in this SRMP through the objectives and strategies for landscape level biodiversity, stand level biodiversity, riparian habitats, coarse woody debris, and specific wildlife species (especially fur-bearers).

7.18 Access

The CCLUP (p. 159) identifies the need for an access management strategy should be developed, with a further requirement to address specific issues. A Regional Access Management Strategy²⁶ was completed in 1996 to provide direction for sub-regional access planning. According to CCLUP (p. 159-160), access management is necessary to minimize conflicts between industrial, commercial, and recreational user groups, while minimizing the negative impacts of access on fish, wildlife, and the environment. The maintenance or restriction of access is required to address CCLUP resource targets for wildcraft, mining, recreation, timber, fish, and wildlife.

The CCLUP sub-unit targets (p. 88) for the Taseko Lake SRDZ recommends restricting road development in the north eastern portion of the polygon for the promotion of Tourism.

“Access” means the ability to enter Crown land; the mode of travel may be motorized, which may include commercial vehicles, four or two wheel drive vehicles, all terrain vehicles, snowmobiles, aircraft and motorbikes, or may be non-motorized such as travel by foot, horse or mountain bike. The “roaded access” targets of the CCLUP subunits (p.

²⁶ Cariboo Chilcotin Land Use Plan Regional Access Management Strategy, August 9, 1996 (28 pages).

60 to 133) are not intended as precise direction on exactly how much of the unit is to be maintained as roads or to have restrictions on permanent road access. The Regional Access Management Strategy specifies that these targets are designed to give general guidance and the relative importance of access restrictions in each sub-unit, rather than being fixed numbers. A portion of each access target will change its geographic location with time, as new roads are built and other roads are removed. A portion of the landbase will remain permanently without roads. The existing roaded access is shown on Map 12.

Another aspect of access planning pertains to snowmobiles. The *Snowmobile Access Working Group Report*²⁷ was presented to the IAMC by the Snowmobile Access and Caribou Committees in 1999. The *Mountain Caribou – Snowmobile Options Report* was then produced after consultation with snowmobile clubs and with consideration of the *Mountain Caribou Strategy*²⁸. Further discussions are ongoing outside the SRMP process.

The timber, biodiversity, wildlife, mining, energy, and tourism sections of this plan must be referred to for full SRMP direction related to access. See Table 16 in Appendix E for access management strategies in the lakeshore management zone of lakes over five ha.

Recommendation To facilitate enforcement of wildlife regulations new, permanent roads, passable by four wheel drive vehicles, must not create circuits over five kilometres long with separate entry and exit points.

Objective 45 **Locate new roads away from refugia and wilderness fisheries lakes, sufficient to maintain lake management direction (Appendix E) unless no other practicable route exists.**

Strategy 45.1 Locate new, permanent roads >2000m from wilderness fisheries lakes, or consistent with alternative locations agreed to by the MOE, Environmental Stewardship Division

Objective 46 **Minimize adverse impacts of access-related activities on important bighorn sheep habitat on Crown range as shown on Map 6.**

Strategy 46.1 Ensure sheep movement between identified habitat areas remains possible and the migration corridor along Churn Creek is maintained.

Recommendation Where new, permanent roads are proposed within 1 km of an existing park, consultation with MOE Parks should occur.

²⁷ Snowmobile Access Working Group Report, May 18, 1999 (15 pages).

²⁸ Mountain Caribou Strategy, October 2000 (77 pages + 12 maps).

8 Analysis Methods and Results

Spatial requirements for managing non-timber resources were mapped on separate layers during the sustainable resource management planning process. The layers were then overlaid in a Geographic Information System (GIS) to create a database which was then analysed. The analysis was designed to assess the scenario for consistency with the CCLUP numeric targets for timber and biodiversity, as well as to quantify scenario specifications for other CCLUP targets and strategies. A series of SRMP scenarios were developed and analysed in an iterative process during 1998 – 2005, during which the map layers and analysis of non-timber resources were modified to better achieve all CCLUP management objectives. The analysis assumptions for non-timber resources are provided in Table 19 in Appendix G.

ArcInfo GIS version 8.1 was used to perform GIS operations with map layers stored in “Coverage” format. ArcInfo was used to generate a digital overlay from the map layers (coverages) and the results of this overlay were exported into Microsoft Access 2000 for database analysis.

8.1 Timber and Non-Timber Objectives Analysis

The CCLUP contains timber access targets for the SRDZ, IRMZ, and ERDZ that were refined through the CCLUP Integration Report²⁹ and later became higher level plan objectives³⁰. In addition the IAMC has endorsed the prorated portions of the corresponding no-harvest targets, expressed at both the CCLUP sub-unit and SRMP levels³¹. The Chilcotin SRMP’s prorated portion of the no-harvest target is 19 percent.

Timber harvesting access is defined³² as the portion of the “productive forest landbase” (PFLB) that is accessible for timber harvesting within or beyond what are considered normal timber harvesting rotation ages. The timber harvesting rotation age is defined as 80 years for pine or deciduous tree dominated stands, and 120 years for stands dominated by all other conifer species. All productive forest was classified into one of these two forest stand types.

A separate “overlap analysis table” was compiled to analyse the timber and non-timber values in each CCLUP sub-unit within the SRMP area, and another was compiled for the SRMP area as a whole. Using *equivalent excluded area* (EEA) as a common measure (See Appendix G for EEA definition and detailed analysis procedures), the no-harvest and modified harvest constraints were arranged in a ranked order from the most constraining to the least constraining to timber access, and adjusted so that no area was counted twice. The percentage of the PFLB required for each constraint was then summed for the entire sub-unit, and compared to the IAMC-endorsed no-harvest

²⁹ Cariboo-Chilcotin Land Use Plan Integration Report, April 6, 1998 (59 pages).

³⁰ Order Varying the *Cariboo-Chilcotin Land-Use Plan* 90-Day Implementation Process Final Report, February 1995 Resource Management Zone Objectives Pursuant to Section 3(2) of the Forest Practices Code of British Columbia Act, June 22, 1999 (2 pages).

³¹ Letter from the Cariboo Mid-Coast Inter-Agency Management Committee, dated July 18, 2000, that endorses revised no-harvest targets for Sub-Regional Planning processes (3 pages).

³² Cariboo-Chilcotin Land Use Plan Integration Report, April 6, 1998 (pages 11 - 12).

targets. Detailed overlap analysis, analysis assumptions, mule deer adjustments, S4/S6 stream calculations, and relevant background information are contained in a separate document, Analysis Procedures and Results.

8.2 Biodiversity Objectives Analysis

8.2.1 Old Growth Management Areas

The biodiversity targets are based on the minimum old seral forest requirements by biogeoclimatic subzone variant portion of draft Landscape Units (see Table 5). Central to the OGMA planning process is the concept of overlapping old seral requirements where possible with areas that are already constrained by non-timber resource values. This reduces impacts to timber access by minimizing the mapped OGMAs in the “conventional landbase”. The contributions made by the non-timber constraints toward the old seral targets, both over the long term and based on current seral condition of the landscape, are included in the Analysis Procedures and Results Document.

Permanent and rotating OGMAs contribute to the long-term targets. Where they do not currently contain old forest, a transition OGMA requirement was calculated. In calculating the amount of Transition (temporary) OGMA requirements, the Inventory Adjustment Factor (IAF) was *not* applied. This approach is consistent with the CCLUP Biodiversity Committee’s *Update Note #1 – Key Assumptions and Recommendations For the Use of the Inventory Adjustment Factor in the Cariboo Forest Region.* Furthermore, mature forest within OGMAs was deemed to fully contribute to meeting the old forest target.

8.2.2 Wildlife Tree Retention

Wildlife Tree Retention (WTR) analysis was conducted based on the Biodiversity Guidebook Table 20(a) (see the Analysis Procedures and Results Document). In this analysis, WTR percent targets were calculated for both the long term and current condition of the landscape. In the long-term analysis, the proportion of the landscape unit harvested without wildlife tree retention becomes zero, but in the short-term some proportion of each landscape unit has been harvested without FPC wildlife tree retention.

In addition to WTR percentage targets by Landscape Unit/Biogeoclimatic Ecosystem Classification (LU/BEC) unit, total resulting WTR ha were estimated by LU/BEC for both the long term and the current rotation. This calculation involved applying the WTR percentage targets to the portion of the forest harvesting landbase that generates a WTR requirement. WTR requirements are defined as follows:

- all areas with no constraints, plus
- constrained land areas included in the productive forest landbase. These areas include:
 - stream, wetland, and shrub-carr riparian reserve zones
 - trail management zones
 - S1, S2, S3, S4, S5 and S6 (including that transferred from S4s) stream riparian management zones

- wetland and shrub-carr riparian management zones
- riparian reserve and management zones for lakes < 5 ha and > 5 ha

For the long term, the resulting total area was halved to account for overlaps between WTPs and other constraints. For the current rotation, factors were applied to the total WTR ha to estimate a reasonable amount of WTR that can contribute to Transition OGMA requirements, subject to tracking and ecological suitability criteria. The resulting WTR requirements were also calculated by CCLUP sub-unit, using the same steps, and transferred to the EEA overlap tables.

8.3 Analysis Results

8.3.1 Timber/Non-Timber Targets

Results of the analysis show that the HSRMP is consistent with CCLUP long term timber targets in a regional context. The results of the Timber/Non-Timber Targets analysis are summarized in, the Analysis Procedures and Results Document including:

- EEA analysis results
- calculation adjustments for Mule Deer Winter Range
- wildlife tree retention analysis and results; and
- transition OGMA harvest availability schedule.

8.3.2 Biodiversity

The results of the OGMA analysis are available in a 22 inch x 22 inch plot file (see the Analysis Procedures and Results Document) and summarize the achievement of the:

- permanent old growth management area targets
- transition (temporary) old growth management area targets; and
- interior old forest condition objectives.

9 Implementation and Monitoring

9.1 Implementation

The Chilcotin SRMP will be implemented by:

1. Provision of the plan, once approved by the CMC, in consultation with the RRC, to designated decision makers as best management for CCLUP implementation.
2. Establishment of the *Objectives*, where appropriate, as legal requirements to be met by proponents of future development activities.
3. Establishment of the proposed *Goal 2 Protected Areas*, subject to approval by the CMC, the RRC, and Cabinet. This would be followed by the removal of all restrictions on access to the remaining proposed Goal 2 protected areas.
4. Interpretation and application of the plan to operational plans by industry and government.

9.2 Monitoring

A regional monitoring framework is presently under discussion by the CMC. Ultimately the SRMP will need to be monitored, for both compliance with higher level plan objectives and for the achievability and effectiveness of those objectives.

It is recommended that the Chilcotin SRMP be reviewed in detail every five years from the date of the plan approval to ensure all relevant current information is being used for land use planning decisions. The Chilcotin SRMP can also be revisited at any time before that with the approval of the CMC and the RRC.

9.3 Future Inventory

Inventory information is incomplete for many of the resource values that are required to be managed for under the CCLUP. To best manage the resources and to aid in the achievement of the SRMP objectives, the following inventories are recommended to be completed or updated:

1. rare ecosystems and species,
2. additional critical habitat for bull trout,
3. classify all existing road and trail access,
4. wildlife migration corridors and natal areas for mountain goat,
5. fish presence and fish habitat including complete stream classification, and
6. First Nation trails.

This is not meant to be a complete list or to be seen as a commitment for completion of any or all of these inventories by a specific agency or group.

9.4 Future Planning

The following additional planning processes are under consideration subject to available resources:

1. Lake management plans.
2. Completion of access management planning for backcountry units.
3. A water management strategy for the Cariboo Region (CCLUP p. 164), and/or sub-regional water allocation and management plans to address water quality and quantity (CCLUP p. 206).
4. Completion of the Regional snowmobile strategy.
5. Completion of the process to inform the alienation (allocation) of Crown land for settlement, agricultural, and industrial use (CCLUP p. 205).

9.5 Mechanisms for Land Use Changes

The SRMP analysis reflects a balance of all interests under CCLUP based on available information. Priorities and distribution of land uses can change over time. Such changes can happen as a result of new information or administrative changes. When change occurs, consistency with CCLUP objectives, targets and strategies must still be maintained. ILMB will review all land use changes to ensure this balance is achieved through time.

Several mechanisms are available to accommodate land use changes within the overall targets of CCLUP. The land value may be overlapped with a WTP when the area is small and protection of the value requires retention or extended rotation harvesting. No additional EEA would accrue because of the existing modeling assumption that a portion of WTPs are retained for meeting the old forest seral target. This mechanism can apply to new wildlife features and smaller wildlife habitat areas.

Larger areas or areas unsuited to overlap with WTP require a shift of land allocation among values such that overall EEA is maintained. Some flexibility to reallocate land uses is already available as a result of adjustments to MDWR boundaries and loss of some OGMAs to mountain pine beetle. Should a major new land requirement become known, simple transfer of EEA can be used to address the new value where its maintenance is deemed to be greater than an existing one.

Reallocation of land uses can affect short term values as well. This will be considered through normal consultative mechanisms associated with each process.

10 Glossary of Selected Terms

Unless otherwise specified, the meanings of words used in the Chilcotin SRMP are consistent with the definitions provided in the glossary contained in the *Guide to Writing Resource Objectives and Strategies*. B.C. Ministry of Forests. (December 1998).

Catastrophic mountain pine beetle damage: regionally significant, severe mortality covering multiple landscape units as the result of mountain pine beetle attack of lodgepole pine.

Grizzly Bear Security Cover: For the purpose of meeting Objective 34, grizzly bear security cover is deemed to be a combination of vegetative and topographic features sufficient to minimize sight lines to the foraging areas from adjacent roads. Unless designated as a WHA, timber within the security cover area is managed over a normal rotation.

High Use Grizzly Habitat: Site specific locations where grizzly are known to frequent at some period during the year. Locations include but are not limited to salmon and trout spawning shoals and stream reaches, and herb dominated avalanche tracks and run-out zones on southerly and westerly aspects.

Least risk stands: refers to the priorities as listed in Table 6.

Maintain (where applied to ecological values): To prevent decline from current condition, excluding naturally caused perturbations such as wildfire, insect infestations, and extreme weather events.

Maintain Visual Quality: Maintain the vegetative cover of the identified area from specified viewpoints consistent with the Visual Quality Objectives (VQO) listed.

MDWR Management Plans: These include the Management Strategy for Mule Deer Winter Ranges in the Cariboo-Chilcotin. Part 1a: Management Plan for Shallow and Moderate Snowpack Zones; Part 1b: Management Plan for Transition and Deep Snowpack Zones; Part 2: Long-term Habitat Objectives Map for Individual Winter Ranges; and Part 3: Transition Harvest Opportunities.

No-harvest area: No-harvest areas are parcels of land other than parks and protected areas, designated to conserve special ecological and cultural values. Protection of those values is paramount and encompasses the maintenance of natural processes such as endemic levels of natural disturbance. Therefore, with the exception of mining, industrial development, including timber harvesting is permitted only under special circumstances as described in Objective 7. No-harvest areas include:

1. Old Growth Management Areas,
2. Caribou No-harvest Areas,
3. Riparian Reserves,
4. Critical Fisheries Habitat,
5. Lake Management Zone, Class A lakes, and
6. "Community Areas of Special Concern" within the Anahim Round Table Interest Area.

Old Forest: To meet Objective 8, the following stands are deemed to contribute to meeting the old forest target in the order listed:

1. old forest as described in Table 4, within permanent and rotating old growth management areas, and no harvest areas
2. mature forest as described in Table 4 within permanent and rotating old growth management areas, and no harvest areas,
3. mature forest as described in Table 4 within transition old growth management areas,
4. stands meeting attribute-based criteria for old forest should those criteria be developed and approved by the ILMB Statutory Authority, Cariboo Region.

Rotation (Age): The base rotation ages are 80 years for pine and deciduous stands and 120 years for all other species. The rotation age represents the number of years required to harvest 100 percent of the productive forest in a given zone (adapted from: CCLUP Integration Report, 1998).

Sensitive Species and Habitats: Sensitive species and habitats are those species and habitats listed by MOE for the Southern Interior of BC.

Vegetative Cover Providing Security and Thermal Cover for Moose: For the purpose of meeting Objective 32, 'vegetative cover providing security and thermal cover for moose' includes all non-commercial and non-productive vegetation, early and mid-seral forest and mature+old equivalent to the retention targets for each riparian management zone.

11 APPENDICES

Appendix A: Maps

The following maps are provided for this plan:

- Map 1. CCLUP Timber Harvesting Access Levels
- Map 2. Resource Development Zones and Protected Areas
- Map 3. Grizzly Habitat Capability
- Map 4. Landscape Units
- Map 5. Old Growth Management Areas
- Map 6. Ungulate Management Areas
- Map 7. Key Wetlands for Moose
- Map 8. Critical Fish Habitat and Stream Classification
- Map 9. Backcountry
- Map 10. Visual Resource Management Areas and Recommended VQOs
- Map 11. Mineral Access and Tenures
- Map 12. Existing Access

Appendix B: First Nations List

The following First Nations as well as the Cariboo Tribal Council, Carrier-Chilcotin Tribal Council, Kwakiutl District Council, Shuswap Nation Tribal Council, and the Tsilhqot'in Nation were invited to meetings and to provide input to the Chilcotin SRMP:

Tsi Del Del
Tl'etinnqox
Yunesit'in
Xeni Gwet'in
T'exelc
Xats'ull
Kluskus
Nazko
Ulkatcho Band
Red Bluff
Esdilagh
Da'naxda'xw band
Homalco
Nuxalk

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Appendix C: 2005 Cariboo Red & Blue Listed Species Information

Common Name	Prov Status	COSEWIC Status E/T/SC/ NAR/DD	Breeding y/n	Identified Wildlife Volume 1 1999 Version2 2004	Forest Districts				
					100	Chi	Hor	Que	WL
Reptiles									
Gopher Snake - <i>deserticola ssp</i>	b	T	yes	Vol1/Ver2	x				x
Painted Turtle	b		yes		x				x
Racer	b	SC	yes	Vol1	x				x
Rubber Boa	n/a	SC	yes		x	x			x
Amphibians									
Great Basin Spadefoot	b	T	?	Ver2	x				x
Western Toad	n/a	SC	yes		x	x	x	x	x
Fish									
Bull Trout	b		yes	Vol1	?	x	x	x	x
Chiselmouth	b	NAR	yes					x	
Dolly Varden	b		yes						
White Sturgeon	r	E	yes		x			x	x
Coho		E			x	x	x	x	x
Invertebrates									
Familiar Bluet (Damselfly)	r		yes		x				
Hagen's Bluet (Damselfly)	b		yes						x
Birds									
American Avocet	r		yes		x	x			x
American Bittern	b		yes	Vol 1	x	x	x	x	x
American Golden-Plover	b		yes?		x			x	x
American White Pelican	r	NAR	yes	Vol1	x	x		x	x
Barn Owl	b	SC	yes?		x				x
Bobolink	b		yes	Vol 1	x	x	x	x	x
Brewer's Sparrow - <i>breweri ssp</i>	r		no?	Vol1	x				x
California Gull	b		yes-Q		x	x	x	x	x
Caspian Tern	b	NAR	no						
Double-crested Cormorant	r	NAR	yes-Chi			x			x
Flammulated Owl	b	SC	yes	Ver2	x	x			x
Great Blue Heron - <i>herodias</i>	b		yes		x	x	x	x	x
Gyrfalcon	b	NAR	no		x	x	x	x	x
Lark Sparrow	r		Yes WL		x	x		x	x
Lewis's Woodpecker	b	SC	yes	Vol1/Ver2	x	x			x
Long-billed Curlew	b	SC	yes	Vol1/Ver2	x	x		x	x
Long-tailed Duck (Oldsquaw)	b		no		x	x	x	x	x
Peregrine Falcon - <i>anatum ssp</i>	r	T	yes		x	x	x	x	x
Prairie Falcon	r	NAR	yes	Vol1	x	x			x
Red-necked Phalarope	b		no		x	x	x	x	x
Sandhill Crane	b	NAR	yes	Vol1	x	x	x	x	x
Sharp-tailed Grouse	b		yes		x	x	x	x	x

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Common Name	Prov Status	COSEWIC Status E/T/SC/ NAR/DD	Breeding	Identified Wildlife Volume 1 1999 Version2 2004	Forest Districts				
					100	Chi	Hor	Que	WL
Short-billed Dowitcher	b		no		x				x
Short-eared Owl	b	SC	yes-WL	Ver2	x	x	x	x	x
Surf Scoter	b		no		x	x	x	x	x
Swainson's Hawk	r		no		x	x	x	x	x
Upland Sandpiper	r		yes?			x			x
Western Grebe	r		historic	Vol 1	x	x	x	x	x
White-throated Swift	b		yes		x	x			x
Yellow-breasted Chat	r	E	yes	Vol1/Ver2	?				x
Mammals									
Badger	r	E	yes	Ver2	x	x	x	x	x
California Bighorn Sheep	b		yes	Vol1	x	x			x
Common Pika - <i>septentrionalis ssp</i>	r		yes			x			
Fisher	b		yes		x	x	x	x	x
Fringed Myotis	b	DD	yes	Ver2	x	x			x
Grizzly Bear	b	SC	yes	Vol1/Ver2	x	x	x	x	x
Northern Long-eared Myotis	b		yes		x		x	x	
Spotted Bat	b	SC	yes	Ver2	x	x			x
Townsend's Big-eared Bat	b		yes		x	x			x
Western Small-footed Myotis	b		yes		x	x			x
Wolverine - <i>luscus ssp</i>	b	SC	yes	Ver2	x	x	x	x	x
Woodland Caribou - Southern Mountain population	r	T	yes	Ver2	x		x	x	
Woodland Caribou - Northern Mountain population	b	T/SC	yes	Ver2		x		x	
Unconfirmed species									
Burrowing Owl	r	E	?	Ver2	?				?
Pallid Bat	r	T	?	Ver2	?				?

X – species is either known or predicted to occur in the District.

Species - Any indigenous species, subspecies, variety, or geographically or genetically distinct population of wild fauna and flora.

Extinct (X) - A species that no longer exists.

Extirpated (XT) - A species no longer existing in the wild in Canada, but occurring elsewhere.

Endangered (E) - A species facing imminent extirpation or extinction.

Threatened (T) - A species likely to become endangered if limiting factors are not reversed.

Special Concern (SC) - A species that is particularly sensitive to human activities or natural events but is not an endangered or threatened species.

Data Deficient (DD) - A species for which there is inadequate information to make a direct, or indirect, assessment of its risk of extinction.

Not At Risk (NAR) - A species that has been evaluated and found to be not at risk.

Appendix D: Watershed Sensitivity

A sensitive watershed is a watershed having significant fisheries or downstream fisheries values, and in which the quality, flow rates of the water, water temperature, and stream channel complexity is vulnerable to physical changes in the watershed. Such watersheds typically have steep slopes, erodable soils, are prone to landslides, experience higher annual precipitation, or have risks of high water temperatures during late summer low flows.

The Interagency Planning Team recognises that some harvesting will be undertaken *before* appropriate watershed-level planning can be completed, harvesting without requisite watershed-level planning should be minimised in watersheds that are suspected of being “sensitive”.

A qualified registered professional (as defined in the Watershed Assessment Procedure (WAP)) carries out the watershed sensitivity analysis. It is a procedure designed to determine whether, and in what degree, land use or land development will affect the flows of water and/or water quality in a watershed. All features relevant to delineating and determining the sensitivity of a watershed should be identified. These include:

- Fish species and distribution.
- Classification of surface waters.
- Terrain stability mapping that includes the following 4 points:
 - i. Drainage feature mapping can be incorporated into terrain mapping for cost-effectiveness, but should include stream gradient, width, channel pattern, riparian characteristics, floodplain width, type of floodplain, degree of confinement, etc. Information on published topographic maps is not sufficient, and ground checking is important.
 - ii. General terrain maps and other assembled information (e.g., geology, drainage features, soils), showing slope stability classes, erodable materials and poorly drained organic terrain.
 - iii. Detailed terrain stability mapping (classes I–V); especially class V (unstable under natural conditions) and class IV (potentially unstable) (field checked).
 - iv. Erosion potential classes, especially terrain subject to surface erosion by running water under natural conditions.
 - Landslide inventory, all recognisable landslides (symbols for each slide scar, extent of tracks, code for approximate age).
 - Avalanche tracks (for applying avalanche protection zones).
 - Baseline stream channel audits.
 - Stream at risk for water temperature increases that are harmful to fish and fish habitat (may include field sampling program)
 - Existing and proposed roads and road densities (field checked).

Rate-of-harvest Defined:

Rate-of-harvest: the proportion of the watershed area (in ha) allowed to be harvested each year or in a time period. (AAC applies to the entire Williams Lake TSA, and is not relevant at the watershed level)

Selecting a silvicultural system is a separate decision from the rate at which a forest is harvested—the “rate-of-harvest.” The choice of silvicultural system is based on site-specific characteristics and management objectives for a specific area of land. The determination of rate-of-harvest, while considering these factors, employs larger planning units such as a watershed, and is calculated as an area.

The rate-of-harvest is also distinct from Equivalent Clearcut Area (ECA). ECA is the area that has been harvested, cleared, or burned, with consideration given to the silvicultural system, regeneration growth, and location within the watershed. For example, as a watershed is harvested, the ECA increases and as replanted forests grow, ECA decreases.

At present there are no standards to establish a rate-of-harvest to regulate the total area cut in a watershed. The WAP recommends that an assessment of the “cumulative effects” of logging should be carried out on all watersheds larger than 500 ha. that:

- have at least 20 percent of the total watershed area has been logged during the past 25 years; or
- there is evidence of significant stream channel instability; or
- landslides are frequent; or
- over 25 percent of the riparian forest along either bank of the main stream channels has been logged over the past 40 years.

There is however, a risk of disrupting the hydrological stability of a watershed before the WAP is initiated. Also, the WAP does not take into account other potential impacts to the fisheries resource such as increases in water temperature. For these reasons “rate-of-harvest” is described in the CCLUP and the integration report as a management tool for the conservation of salmon.

If a watershed is determined to be potentially sensitive then a qualified registered professional (as defined in the WAP) will be retained to examine this watershed, confirm the sensitivity, and recommend (among other things) controls on the “rate of harvest”, high levels of retention (selective cut), restrictions on the amount of new road development, reserve areas, and prescriptions for riparian management zones.

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Appendix E: Lake Management

Table 16 Lake Management

* Waterbody Identifiers available

**Forest Management Classes in the Lakeshore Management Zone and their objectives (see Table 17 in this appendix for associated strategies):

Regional Lake Number	Forest Cover Map	Lake Name (<i>unofficial names in italics</i>)	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
11958	093C.037		65.0	10	200	A	wilderness fisheries			
12079	093C.017		41.6	10	200	A	wilderness fisheries			
12296	092N.069		9.3	10	200	A	wilderness fisheries			
12335	092O.063		30.4	10	200	A	wilderness fisheries			
12341	092N.069		7.0	10	200	A	wilderness fisheries			
12365	092O.051		13.5	10	200	A	wilderness fisheries			
12374	092O.051	Augers Lake	78.6	10	200	A	wilderness fisheries			
12453	092O.013	Crystal Lake	58.0	10	200	A	wilderness fisheries			
12059	093C.018	Dick Lake	30.0	10	200	A	wilderness fisheries			
12368	092O.051	Ducharme Lake	30.4	10	200	A	wilderness fisheries			
11959	093C.038	Fish Lake (<i>Knoll Lake</i>)	21.4	10	200	A	wilderness fisheries			
11964	093B.033	Gruidae Lake	17.7	10	200	A	wilderness fisheries			
12345	092N.059	Kondor Lake	10.2	10	200	A	wilderness fisheries			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12185	092O.083	Lac LeLievre	100.6	10	200	A	wilderness fisheries			
12401	092N.040	Lake # 16	84.2	10	200	A	wilderness fisheries			
12362	092O.051	Lake # 18	24.5	10	200	A	wilderness fisheries			
12364	092O.051	Lake # 20	17.4	10	200	A	wilderness fisheries			
12293	092N.069	Lincoln Lake <i>(Lake # 27)</i>	16.1	10	200	A	wilderness fisheries			
12329	092O.063	Lower Rat Cabin Lake	28.1	10	200	A	wilderness fisheries			
11955	093B.034	MacKill Lake	52.7	10	200	A	wilderness fisheries			
12361	092O.051	Mainguy Lake	219.0	10	200	A	wilderness fisheries			
12192	092O.083	Nancy Lake	29.8	10	200	A	wilderness fisheries			
12155	092O.083	Pamela Lake	83.4	10	200	A	wilderness fisheries			
11875	093C.056	Punkutlaenkut Lake	153.6	10	200	A	wilderness fisheries			
12175	092O.083	Roxanne Lake	18.2	10	200	A	wilderness fisheries			
12179	092O.083	Ruby Lake	25.9	10	200	A	wilderness fisheries			
12209	092O.072	Scum Lake	67.2	10	200	A	wilderness fisheries			
12357	092O.052	Slim Lake	28.7	10	200	A	wilderness fisheries			
12158	092O.083		5.6	10	200	C	wilderness			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
							fisheries			
11956	093C.036		21.4	10	200	A	refugium			
11960	093B.032	Salt Lake	209.7	10	200	A	refugium			
11846	093B.063		14.1	10	200	A	quality			
11847	093B.062		42.2	10	200	A	quality			
11865	093B.053		5.8	10	200	A	quality			
11995	093B.025	Beaver Lake	232.7	10	200	A	quality			
12120	092N.100	Bidwell Lakes	30.9	10	200	A	quality			
11848	093B.053	Bishop Lake	239.7	10	200	A	quality			
12154	092N.087	Patterson Lake	225.4	10	200	A	quality			
12336	092N.060	Tsuniah Lake	1,024.9	10	200	A	quality			
11854	093B.053		22.0	10	200	B	quality			
11858	093B.053		13.3	10	200	B	quality			
11860	093B.052		5.9	10	200	B	quality			
11867	093B.053		11.0	10	200	B	quality			
11882	093B.044		5.5	10	200	B	quality			
11900	093B.044		5.8	10	200	B	quality			
11947	093B.034		28.4	10	200	B	quality			
11952	093C.036		25.6	10	200	B	quality			
11962	093B.033		8.6	10	200	B	quality			
11968	093B.035		7.5	10	200	B	quality			
11970	093B.034		6.1	10	200	B	quality			
11972	093B.031		26.4	10	200	B	quality			
11998	093B.023		9.6	10	200	B	quality			
12001	093B.023		5.2	10	200	B	quality			
12042	093C.027		11.4	10	200	B	quality			
12075	093B.012		9.7	10	200	B	quality			
12104	093C.007		7.3	10	200	B	quality			
12112	092O.094		55.8	10	200	B	quality			
12123	092O.094		82.8	10	200	B	quality			
12126	092O.093		80.6	10	200	B	quality			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12144	092O.083		101.2	10	200	B	quality			
12147	092O.083		66.5	10	200	B	quality			
12149	092O.083		13.9	10	200	B	quality			
12159	092O.083		68.2	10	200	B	quality			
12189	092O.081		83.9	10	200	B	quality			
12261	092N.079		6.0	10	200	B	quality			
12281	092O.064		25.3	10	200	B	quality			
12282	092O.064		5.7	10	200	B	quality			
12284	092N.069		5.3	10	200	B	quality			
12285	092N.077		12.4	10	200	B	quality			
12290	092N.069		6.1	10	200	B	quality			
12305	092N.068		7.8	10	200	B	quality			
12344	092O.052		43.4	10	200	B	quality			
12360	092O.052		6.6	10	200	B	quality			
12376	092O.052		6.2	10	200	B	quality			
12386	092N.049		7.0	10	200	B	quality			
12392	092O.041		13.7	10	200	B	quality			
12457	092O.003		7.5	10	200	B	quality			
12426	092O.022	<i>(Little Tuzcha Lake) (Upper Fishem Lake)</i>	28.2	10	200	B	quality			
12233	092O.075	Abrams Lake	16.4	10	200	B	quality			
12366	092O.052	Big Lake	99.0	10	200	B	quality			
12393	092O.042	Big Onion Lake	58.5	10	200	B	quality			
12251	092N.077	Bluff Lake	194.6	10	200	B	quality	protected area		
12346	092O.051	Chaunigan Lake	443.7	10	200	B	quality			
12227	092N.078	Cochin Lake	187.6	10	200	B	quality			
12429	092O.022	Fishem Lake	148.0	10	200	B	quality			
12211	092O.075	Fletcher Lake	198.9	10	200	B	quality			
12286	092N.069	Howe Lake	13.2	10	200	B	quality			

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Regional Lake Number	Forest Cover Map	Lake Name (<i>unofficial names in italics</i>)	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12182	092O.084	Kliyul Lake	147.9	10	200	B	quality			
12396	092N.050	Lake # 17	42.3	10	200	B	quality			
12283	092N.069	Lake # 24	68.5	10	200	B	quality			
13288		Lastman	48.9	10	200	B	quality			
11845	093B.063	Little Brown Lake	70.5	10	200	B	quality			
12170	092N.087	Little Sapeye Lake	120.8	10	200	B	quality			
12115	092N.098	Martin Lake	464.7	10	200	B	quality			
11939	093B.034	Palmer Lake	201.5	10	200	B	quality			
12246	092N.080	Rosse Lake	43.3	10	200	B	quality			
12244	092O.075	Rushes Lake	32.6	10	200	B	quality			
12213	092N.077	Sapeye Lake	292.3	10	200	B	quality			
12093	093C.006	Sucker Lake	96.9	10	200	B	quality			
12448	092O.013	Summit Lakes	7.9	10	200	B	quality			
12416	092O.022	Tuzcha Lake	159.6	10	200	B	quality			
9170	092N.056	Twist Lake	132.6	10	200	B	quality			
12454	092O.003		5.9	10	200	C	quality			
12332	092O.064	Kloakut Lake	111.6	10	200	C	quality			
12274	092N.078		5.1	10	200	E	quality			
12276	092N.075		14.6	10	200	E	quality			
12277	092N.078		17.4	10	200	E	quality			
12291	092N.068		11.4	10	200	E	quality			
12295	092N.068		7.2	10	200	E	quality			
12297	092N.068		7.9	10	200	E	quality			
12301	092N.068		14.2	10	200	E	quality			
12302	092N.068		10.9	10	200	E	quality			
12306	092N.068		20.6	10	200	E	quality			
12307	092N.068		5.5	10	200	E	quality			
12309	092N.068		29.4	10	200	E	quality			
12310	092N.068		5.6	10	200	E	quality			
12313	092N.068		21.6	10	200	E	quality			

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Regional Lake Number	Forest Cover Map	Lake Name (<i>unofficial names in italics</i>)	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12314	092N.068		5.9	10	200	E	quality			
12350	092N.058		10.8	10	200	E	quality			
12370	092N.059		8.2	10	200	E	quality			
12372	092N.059		11.3	10	200	E	quality			
12395	092N.046		6.6	10	200	E	quality			
11840	093C.072		9.1	10	200	n/a	quality	protected area		
11841	093C.065		16.2	10	200	n/a	quality	protected area		
11842	093C.065		5.9	10	200	n/a	quality	protected area		
11843	093C.065		15.1	10	200	n/a	quality	protected area		
11857	093B.053		5.8	10	200	n/a	quality	protected area		
11868	093B.053		5.4	10	200	n/a	quality	protected area		
11871	093B.043		10.9	10	200	n/a	quality	protected area		
12221	092O.072		40.9	10	200	n/a	quality	protected area		
12226	092O.071		18.3	10	200	n/a	quality	protected area		
12228	092O.071		6.0	10	200	n/a	quality	protected area		
12231	092O.072		10.8	10	200	n/a	quality	protected area		
12235	092O.072		6.6	10	200	n/a	quality	protected area		
12236	092O.072		7.2	10	200	n/a	quality	protected area		

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Regional Lake Number	Forest Cover Map	Lake Name (<i>unofficial names in italics</i>)	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12241	092O.072		32.5	10	200	n/a	quality	protected area		
12245	092O.072		26.6	10	200	n/a	quality	protected area		
12248	092O.072		13.1	10	200	n/a	quality	protected area		
12250	092O.072		10.4	10	200	n/a	quality	protected area		
12255	092O.072		9.5	10	200	n/a	quality	protected area		
12257	092O.072		20.5	10	200	n/a	quality	protected area		
12258	092O.071		56.1	10	200	n/a	quality	protected area		
12259	092O.071		17.3	10	200	n/a	quality	protected area		
12260	092O.072		7.4	10	200	n/a	quality	protected area		
12264	092O.071		33.1	10	200	n/a	quality	protected area		
12269	092O.072		15.3	10	200	n/a	quality	protected area		
12271	092O.071		20.0	10	200	n/a	quality	protected area		
12272	092O.071		37.4	10	200	n/a	quality	protected area		
12273	092O.071		6.5	10	200	n/a	quality	protected area		
12275	092O.072		22.5	10	200	n/a	quality	protected area		
12287	092O.061		36.3	10	200	n/a	quality	protected		

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								area		
12348	092N.060		12.3	10	200	n/a	quality	protected area		
12363	092N.059		8.9	10	200	n/a	quality			
12367	092N.059		14.1	10	200	n/a	quality			
12399	092O.031		8.4	10	200	n/a	quality	protected area		
12402	092O.031		9.7	10	200	n/a	quality	protected area		
12407	092N.040		5.7	10	200	n/a	quality	protected area		
12419	092N.026		14.8	10	200	n/a	quality	protected area		
12421	092N.026		8.6	10	200	n/a	quality	protected area		
12440	092O.011		6.5	10	200	n/a	quality	protected area		
12444	092O.011		5.2	10	200	n/a	quality	protected area		
12445	092O.011		11.3	10	200	n/a	quality	protected area		
12451	092N.020		7.6	10	200	n/a	quality	protected area		
12462	092N.010		6.5	10	200	n/a	quality	protected area		
12463	092N.010		7.2	10	200	n/a	quality	protected area		
12464	092J.091		5.1	10	200	n/a	quality	protected area		
12466	092J.092		6.9	10	200	n/a	quality	protected area		

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12467	092J.092		7.4	10	200	n/a	quality	protected area		
12380	092N.050	<i>(Lake # 23) (Little Lagoon Lake)</i>	45.2	10	200	n/a	quality	protected area		
12252	092O.072	(Nuntsi Lake) (Nuntsi Lake # 50)	30.8	10	200	n/a	quality	protected area		
12326	092N.040	Chilko Lake (Franklyn Arm)	18,710.5	10	200	n/a	quality	protected area		
12436	092O.021	Dorothy Lake	163.4	10	200	n/a	quality	protected area		
12404	092N.036	Dumbell Lake	165.1	10	200	n/a	quality	protected area		
12414	092N.039	Girdwood Lake	44.8	10	200	n/a	quality	protected area		
12442	092N.020	Glasgow Lakes	45.8	10	200	n/a	quality	protected area		
11872	093B.043	Goering Lake (North)	86.4	10	200	n/a	quality	protected area		
11885	093B.043	Goering Lake (South)	53.1	10	200	n/a	quality	protected area		
12431	092O.022	Joyce Lake	57.8	10	200	n/a	quality	protected area		
12434	092O.021	Lake # 12	14.6	10	200	n/a	quality	protected area		
12433	092O.021	Lake # 14	12.6	10	200	n/a	quality	protected area		
12427	092O.021	Lake # 15	22.9	10	200	n/a	quality	protected area		
12413	092N.036	Lowwa Lake	16.0	10	200	n/a	quality	protected area		

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11890	093B.043	Nastachi Lake	35.0	10	200	n/a	quality	protected area		
11920	093B.033	Nazko Lake	118.3	10	200	n/a	quality	protected area		
12210	092O.072	Nuntsi Chain Lake	56.1	10	200	n/a	quality	protected area		
12247	092O.072	Nuntsi Lake # 49	32.5	10	200	n/a	quality	protected area		
12289	092O.061	Nuntsi Lake # 49A	12.5	10	200	n/a	quality	protected area		
11966	093B.033	Summit Lake	103.6	10	200	n/a	quality	protected area		
11899	093B.043	Tanilkul Lake	120.3	10	200	n/a	quality	protected area		
11864	093B.053	Tchusiniltil Lake	31.0	10	200	n/a	quality	protected area		
11869	093B.043	Tzazati Lake	44.1	10	200	n/a	quality	protected area		
12432	092O.021	Yohetta Lake	128.5	10	200	n/a	quality	protected area		
11887	093B.043		9.4	10	200	n/a	not of interest	protected area		
12452	092O.011		209.9	10	200	n/a	not of interest	protected area		
12459	092O.001		79.4	10	200	n/a	not of interest	protected area		
12461	092O.002		15.3	10	200	n/a	not of interest	protected area		
12465	092J.093		9.7	10	200	n/a	not of interest	protected area		
11855	093B.053		10.8	10	200	no	not of			

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							interest			
11874	093C.056		7.9	10	200	no	not of interest			
11883	093C.056		24.0	10	200	no	not of interest			
11893	093B.041		11.7	10	200	no	not of interest			
11957	093C.039		12.4	10	200	no	not of interest			
11987	093B.023		13.6	10	200	no	not of interest			
12000	093C.028		5.0	10	200	no	not of interest			
12006	093C.028		5.1	10	200	no	not of interest			
12034	093B.013		8.7	10	200	no	not of interest			
12049	093C.018		5.5	10	200	no	not of interest			
12060	093C.018		8.6	10	200	no	not of interest			
12084	093C.020		9.8	10	200	no	not of interest			
12086	093C.020		6.1	10	200	no	not of interest			
12099	093B.003		5.3	10	200	no	not of interest			
12124	092N.097		6.1	10	200	no	not of interest			
12186	092N.089		13.6	10	200	no	not of interest			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12215	092N.087		11.3	10	200	no	not of interest			
12219	092O.073		5.9	10	200	no	not of interest			
12223	092O.074		5.5	10	200	no	not of interest			
12224	092O.074		5.6	10	200	no	not of interest			
12234	092O.073		5.3	10	200	no	not of interest			
12294	092O.061		5.5	10	200	no	not of interest			
12339	092O.053		23.1	10	200	no	not of interest			
12375	092N.057		7.6	10	200	no	not of interest			
12435	092N.028		12.7	10	200	no	not of interest			
12439	092N.028		9.4	10	200	no	not of interest			
12455	092O.002		9.0	10	200	no	not of interest			
11926	093B.033		26.2	10	200	n/a	n/a			
12143	092N.090		5.3	10	200	n/a	n/a			
12085	093C.020		139.4	10	200	A	general			
11916	093B.034	Little Palmer Lake	37.1	10	200	A	general			
11853	093B.053		5.6	10	200	B	general			
11856	093B.052		9.3	10	200	B	general			
11862	093B.053		25.7	10	200	B	general			
11892	093B.042		19.5	10	200	B	general			

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11924	093B.031		22.6	10	200	B	general			
12017	093C.027		56.9	10	200	B	general			
12020	093B.023		16.0	10	200	B	general			
12067	093C.020		7.3	10	200	B	general			
12071	093C.018		8.0	10	200	B	general			
12074	093B.014		10.4	10	200	B	general			
12082	093C.020		8.3	10	200	B	general			
12083	093C.020		9.6	10	200	B	general			
12091	093C.010		6.0	10	200	B	general			
12096	093C.010		5.1	10	200	B	general			
12109	092N.097		5.3	10	200	B	general			
12116	092O.094		6.2	10	200	B	general			
12117	092O.094		6.4	10	200	B	general			
12118	092O.094		32.9	10	200	B	general			
12121	092N.100		10.8	10	200	B	general			
12125	092N.098		6.3	10	200	B	general			
12142	092N.097		6.4	10	200	B	general			
12145	092N.097		5.8	10	200	B	general			
12164	092N.087		11.6	10	200	B	general			
12202	092O.073		8.9	10	200	B	general			
12204	092N.084		13.4	10		B	general			
12212	092N.084		12.9	10		B	general			
12240	092N.077		13.2	10	200	B	general			
12242	092N.080		7.9	10	200	B	general			
12292	092N.068		7.9	10	200	B	general			
12315	092O.061		6.9	10	200	B	general			
12318	092O.061		13.1	10	200	B	general			
12328	092N.066		8.1	10	200	B	general			
12373	092O.051		5.6	10	200	B	general			
12381	092O.042		7.9	10	200	B	general			
12412	092N.036		26.9	10	200	B	general			

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Regional Lake Number	Forest Cover Map	Lake Name (<i>unofficial names in italics</i>)	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12417	092N.036		20.2	10	200	B	general			
12418	092N.036		13.6	10	200	B	general			
12394	092O.043	<i>(Little Fi Lake)</i> <i>(Little Fish Lake)</i>	6.6	10	200	B	general			
12266	092O.073	Atwell Lake	27.0	10	200	B	general			
12078	093C.017	Blue Lake	94.4	10	200	B	general			
12280	092O.061	Brittany Lake	145.4	10	200	B	general			
11944	093C.040	Chilcotin Lake	377.0	10	200	B	general			
12265	092N.079	Choelquoit Lake	1,182.1	10	200	B	general			
12127	092N.099	Eagle Lake	1,162.1	10	200	B	general			
12334	092O.051	Elkin Lake (<i>Twin Lake</i>)	550.5	10	200	B	general			
12389	092O.042	Fish Lake	116.5	10	200	B	general			
12410	092N.036	Ghost Lake	49.6	10	200	B	general			
12203	092N.077	Horn Lake	195.2	10	200	B	general			
12195	092O.075	Hutch Lake	18.1	10	200	B	general			
12385	092O.041	Konni Lake	570.0	10	200	B	general			
12095	093C.010	Le Blanc Lake	30.1	10	200	B	general			
12009	093B.023	Little Alexis Lake	12.6	10	200	B	general			
12108	093C.010	Little Pyper Lake	24.9	10	200	B	general			
13287	092O.013	Lower Taseko	2,143.4	10	200	B	general			
12194	092N.088	Lunch Lake	114.5	10	200	B	general			
12243	092N.080	Marsh Lake	19.0	10	200	B	general			
12298	092N.066	Middle Lake	455.9	10	200	B	general			
12278	092N.070	Murray Taylor Lake	94.1	10	200	B	general			
12390	092O.041	Nemaia Lake	85.9	10	200	B	general			
6683	092N.098	Pinto Lake	3.2	0		B	general			
12129	092N.098	Pollywog Lake	9.1	10	200	B	general			
12030	093B.021	Punti Lake	364.8	10	200	B	general			
12028	093C.020	Puntzi Lake	1,711.6	10	200	B	general			

Chilcotin Sustainable Resource Management Plan

Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12097	093C.010	Pyper Lake	176.4	10	200	B	general			
12415	092O.013	Taseko	1,439.3	10	200	B	general			
12100	092N.098	Tatla Lake	1,775.6	10	200	B	general			
12317	092N.058	Tatlayoko Lake	3,927.9	10	200	B	general			
11983	093B.023	Two Lake	32.7	10	200	B	general			
12200	092N.087	Waterlily Lake	14.6	10	200	B	general			
11849	093B.053		11.2	10	200	C	general			
11873	093C.056		11.6	10	200	C	general			
11880	093B.044		5.4	10	200	C	general			
11881	093B.044		9.8	10	200	C	general			
11891	093B.044		6.0	10	200	C	general			
11894	093B.044		21.2	10	200	C	general			
11897	093B.044		45.6	10	200	C	general			
11898	093B.041		5.0	10	200	C	general			
11906	093B.044		22.6	10	200	C	general			
11907	093B.043		21.9	10	200	C	general			
11914	093B.044		24.8	10	200	C	general			
11923	093B.034		13.1	10	200	C	general			
11928	093B.034		18.0	10	200	C	general			
11936	093B.034		8.8	10	200	C	general			
11937	093B.034		7.6	10	200	C	general			
11941	093B.035		10.4	10	200	C	general			
11948	093B.032		8.9	10	200	C	general			
11949	093B.033		15.9	10	200	C	general			
11951	093B.033		15.5	10	200	C	general			
11953	093B.033		38.5	10	200	C	general			
11961	093C.040		16.1	10	200	C	general			
11965	093B.034		21.8	10	200	C	general			
11979	093B.034		5.3	10	200	C	general			
11981	093B.025		6.5	10	200	C	general			
11986	093C.039		19.9	10	200	C	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
11989	093C.038		8.4	10	200	C	general			
12002	093B.023		8.0	10	200	C	general			
12004	093C.030		8.9	10	200	C	general			
12014	093B.023		6.1	10	200	C	general			
12022	093C.027		38.9	10	200	C	general			
12026	093B.025		19.2	10	200	C	general			
12043	093C.027		6.1	10	200	C	general			
12051	093C.020		8.7	10	200	C	general			
12052	093C.019		9.6	10	200	C	general			
12054	093B.012		5.2	10	200	C	general			
12061	093C.017		16.8	10	200	C	general			
12068	093C.018		66.2	10	200	C	general			
12069	093C.017		23.8	10	200	C	general			
12088	093C.016		5.7	10	200	C	general			
12090	093C.018		8.7	10	200	C	general			
12092	093C.007		5.8	10	200	C	general			
12098	093C.010		5.1	10	200	C	general			
12119	092N.100		26.2	10	200	C	general			
12122	092O.091		10.1	10	200	C	general			
12128	092O.091		32.9	10	200	C	general			
12130	092O.094		5.5	10	200	C	general			
12131	092N.100		8.8	10	200	C	general			
12132	092N.100		9.1	10	200	C	general			
12133	092N.100		5.3	10	200	C	general			
12136	092O.084		15.9	10	200	C	general			
12137	092N.100		8.4	10	200	C	general			
12138	092N.090		7.5	10	200	C	general			
12146	092N.090		15.3	10	200	C	general			
12150	092N.090		12.2	10	200	C	general			
12152	092O.083		16.8	10	200	C	general			
12166	092O.083		13.1	10	200	C	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12168	092O.083		10.2	10	200	C	general			
12172	092O.083		11.7	10	200	C	general			
12176	092N.088		12.2	10	200	C	general			
12181	092O.084		5.5	10	200	C	general			
12184	092N.083		36.8	10		C	general			
12187	092N.083		5.8	10		C	general			
12188	092O.084		14.6	10	200	C	general			
12196	092O.083		30.8	10	200	C	general			
12199	092O.083		13.8	10	200	C	general			
12205	092N.089		5.0	10	200	C	general			
12207	092N.090		6.2	10	200	C	general			
12222	092O.071		19.4	10	200	C	general			
12230	092N.080		6.3	10	200	C	general			
12232	092O.072		17.3	10	200	C	general			
12249	092O.072		30.3	10	200	C	general			
12254	092O.074		5.1	10	200	C	general			
12303	092N.070		5.7	10	200	C	general			
12312	092O.062		7.1	10	200	C	general			
12316	092O.062		14.4	10	200	C	general			
12320	092O.063		5.5	10	200	C	general			
12322	092O.063		5.9	10	200	C	general			
12325	092O.063		20.7	10	200	C	general			
12331	092O.062		5.3	10	200	C	general			
12337	092O.052		11.6	10	200	C	general			
12351	092N.056		13.6	10	200	C	general			
12353	092O.051		5.9	10	200	C	general			
12358	092O.052		7.7	10	200	C	general			
12378	092O.043		9.7	10	200	C	general			
12383	092O.042		5.2	10	200	C	general			
12384	092O.042		5.5	10	200	C	general			
12403	092O.033		6.1	10	200	C	general			

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Regional Lake Number	Forest Cover Map	Lake Name (<i>unofficial names in italics</i>)	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12406	092N.038		5.4	10	200	C	general			
12408	092O.033		5.6	10	200	C	general			
12446	092O.012		6.5	10	200	C	general			
12460	092O.003		5.2	10	200	C	general			
12027	093B.025	Alex Graham Lake	69.5	10	200	C	general			
12066	093B.014	Anah Lake	170.6	10	200	C	general			
11905	093C.049	Arc Lake	29.6	10	200	C	general			
12110	092N.099	Buckhorn Lakes	13.3	10	200	C	general			
12070	093C.018	Chantslar Lake	225.2	10	200	C	general			
12387	092N.049	Cheshi Lake	16.8	10	200	C	general			
12267	092N.079	Duckfoot Lake	38.1	10	200	C	general			
12041	093C.029	Fit Lake (<i>Fitt Lake</i>)	28.7	10	200	C	general			
12113	092O.093	Gay Lake	28.0	10	200	C	general			
12256	092N.080	Goosenob Lake	33.2	10	200	C	general			
12019	093B.026	Gravel Lake (?)	385.6	10	200	C	general			
12036	093B.016	Henri Lake	168.0	10	200	C	general			
12080	093C.020	Hourglass Lake	19.3	10	200	C	general			
12355	092O.051	Lake # 19	21.0	10	200	C	general			
12371	092O.052	Little Big Lake	10.6	10	200	C	general			
12062	093C.016	Long Lake	136.5	10	200	C	general			
12225	092O.073	Ragan Lake	27.1	10	200	C	general			
12174	092N.088	Rant Lake	7.2	10	200	C	general			
12214	092N.079	Skinner Lake	19.0	10	200	C	general			
11917	093B.042	Temapho Lake	173.5	10	200	C	general			
12135	092O.084	Towydkin Lake	164.9	10	200	C	general			
12349	092O.052	Vick Lake	12.2	10	200	C	general			
12177	092N.088	Whitesand Lake	36.4	10	200	C	general			
12447	092O.012	Zero Lake	10.3	10	200	C	general			
11844	093B.061		6.1	10	200	D	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
11850	093B.053		7.8	10	200	D	general			
11852	093B.053		15.3	10	200	D	general			
11861	093B.052		8.9	10	200	D	general			
11866	093B.052		11.3	10	200	D	general			
11876	093B.044		8.2	10	200	D	general			
11877	093B.043		5.7	10	200	D	general			
11878	093B.043		23.8	10	200	D	general			
11884	093C.056		5.8	10	200	D	general			
11886	093B.044		10.4	10	200	D	general			
11888	093B.043		19.9	10	200	D	general			
11889	093B.044		5.3	10	200	D	general			
11896	093B.044		5.6	10	200	D	general			
11901	093C.048		22.6	10	200	D	general			
11902	093B.043		15.1	10	200	D	general			
11908	093B.044		12.1	10	200	D	general			
11910	093B.042		5.6	10	200	D	general			
11913	093B.042		6.9	10	200	D	general			
11915	093B.034		79.8	10	200	D	general			
11918	093B.044		22.2	10	200	D	general			
11922	093B.033		7.9	10	200	D	general			
11925	093C.047		11.8	10	200	D	general			
11927	093B.034		10.5	10	200	D	general			
11929	093B.033		28.1	10	200	D	general			
11930	093B.032		20.3	10	200	D	general			
11931	093B.035		53.6	10	200	D	general			
11933	093B.033		12.2	10	200	D	general			
11938	093B.035		44.6	10	200	D	general			
11940	093C.039		12.1	10	200	D	general			
11942	093B.033		34.5	10	200	D	general			
11945	093B.033		6.1	10	200	D	general			
11946	093B.033		7.0	10	200	D	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
11950	093B.033		15.1	10	200	D	general			
11969	093B.034		11.2	10	200	D	general			
11974	093C.039		7.5	10	200	D	general			
11975	093B.033		5.9	10	200	D	general			
11976	093B.034		10.3	10	200	D	general			
11978	093B.031		77.0	10	200	D	general			
11985	093B.024		5.6	10	200	D	general			
11992	093B.023		19.5	10	200	D	general			
11996	093B.025		54.0	10	200	D	general			
11997	093B.021		7.1	10	200	D	general			
12005	093C.029		24.5	10	200	D	general			
12007	093C.030		5.8	10	200	D	general			
12008	093B.025		5.1	10	200	D	general			
12010	093C.029		7.1	10	200	D	general			
12011	093C.028		37.3	10	200	D	general			
12012	093B.025		21.3	10	200	D	general			
12013	093C.027		12.7	10	200	D	general			
12015	093C.027		19.4	10	200	D	general			
12016	093C.029		13.6	10	200	D	general			
12018	093B.022		15.2	10	200	D	general			
12021	093B.022		11.5	10	200	D	general			
12025	093C.029		5.0	10	200	D	general			
12029	093B.016		59.5	10	200	D	general			
12032	093B.023		5.7	10	200	D	general			
12035	093B.016		6.1	10	200	D	general			
12037	093C.028		6.7	10	200	D	general			
12038	093B.014		24.8	10	200	D	general			
12039	093B.016		12.6	10	200	D	general			
12040	093C.029		43.8	10	200	D	general			
12044	093B.014		7.2	10	200	D	general			
12045	093B.012		8.3	10	200	D	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12046	093C.018		41.1	10	200	D	general			
12047	093C.018		42.2	10	200	D	general			
12050	093C.019		38.2	10	200	D	general			
12053	093C.019		30.3	10	200	D	general			
12055	093C.016		5.1	10	200	D	general			
12056	093C.018		6.2	10	200	D	general			
12057	093B.014		15.0	10	200	D	general			
12058	093B.011		5.2	10	200	D	general			
12063	093B.014		10.9	10	200	D	general			
12064	093C.018		28.9	10	200	D	general			
12072	093B.015		6.3	10	200	D	general			
12073	093B.015		24.7	10	200	D	general			
12076	093C.018		12.4	10	200	D	general			
12077	093C.018		10.2	10	200	D	general			
12081	093C.018		15.2	10	200	D	general			
12087	093C.020		13.5	10	200	D	general			
12089	093B.001		14.7	10	200	D	general			
12094	093C.007		10.0	10	200	D	general			
12102	093C.008		16.9	10	200	D	general			
12103	093B.004		11.4	10	200	D	general			
12105	093B.001		19.0	10	200	D	general			
12106	093C.007		6.2	10	200	D	general			
12107	093C.007		9.6	10	200	D	general			
12134	092O.094		5.5	10	200	D	general			
12139	092O.084		12.4	10	200	D	general			
12140	092O.084		47.7	10	200	D	general			
12141	092N.090		11.3	10	200	D	general			
12165	092N.089		8.1	10	200	D	general			
12169	092O.084		6.8	10	200	D	general			
12171	092O.084		16.1	10	200	D	general			
12173	092O.083		8.1	10	200	D	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12183	092N.090		23.7	10	200	D	general			
12190	092O.085		9.5	10	200	D	general			
12193	092N.090		6.2	10	200	D	general			
12197	092O.075		65.5	10	200	D	general			
12198	092O.075		5.1	10	200	D	general			
12206	092O.074		13.4	10	200	D	general			
12208	092N.080		7.0	10	200	D	general			
12216	092O.073		5.5	10	200	D	general			
12229	092O.074		9.5	10	200	D	general			
12237	092O.074		20.3	10	200	D	general			
12238	092O.074		5.6	10	200	D	general			
12239	092O.071		7.8	10	200	D	general			
12253	092N.080		7.7	10	200	D	general			
12263	092O.074		5.4	10	200	D	general			
12268	092O.074		11.6	10	200	D	general			
12270	092O.074		10.5	10	200	D	general			
12279	092N.079		5.9	10	200	D	general			
12288	092O.064		11.0	10	200	D	general			
12299	092O.062		14.1	10	200	D	general			
12311	092N.070		11.2	10	200	D	general			
12354	092O.052		27.9	10	200	D	general			
12377	092O.053		8.2	10	200	D	general			
12391	092O.042		5.0	10	200	D	general			
12450	092O.013		9.6	10	200	D	general			
11973	093B.034	Bayliff Lake	58.5	10	200	D	general			
11971	093C.039	Billy Lake	45.5	10	200	D	general			
11911	093B.042	Carnation Lake	17.0	10	200	D	general			
12114	092O.094	Haines Lake	32.9	10	200	D	general			
11912	093B.042	Halfbent Lake	8.0	10	200	D	general			
11863	093C.060	Horsehoof Lakes	5.9	10	200	D	general			
12262	092N.079	Lake # 28	5.4	10	200	D	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12191	092N.088	Lake # 33	14.9	10	200	D	general			
12180	092N.089	McGhee Lake	6.2	10	200	D	general			
12148	092O.081	Rawhide Lake	2.6	0		D	general			
12065	093C.018	Sloughgrass Lake	35.8	10	200	D	general			
12398	092O.033	Wasp Lake	67.4	10	200	D	general			
12400	092O.033	Wolf Trap Lake (?)	28.3	10	200	D	general			
11879	093C.049		5.4	10	200	E	general			
11895	093C.050		8.8	10	200	E	general			
11903	093B.044		11.2	10	200	E	general			
11909	093B.044		7.7	10	200	E	general			
11919	093C.050		14.7	10	200	E	general			
11921	093B.034		9.5	10	200	E	general			
11932	093B.033		22.4	10	200	E	general			
11963	093C.039		28.1	10	200	E	general			
11967	093B.032		5.4	10	200	E	general			
11982	093B.031		27.2	10	200	E	general			
11984	093C.040		5.2	10	200	E	general			
11991	093C.030		19.0	10	200	E	general			
11994	093C.029		6.6	10	200	E	general			
11999	093C.030		14.9	10	200	E	general			
12003	093C.029		13.4	10	200	E	general			
12023	093B.025		10.0	10	200	E	general			
12024	093C.029		5.2	10	200	E	general			
12031	093C.029		7.4	10	200	E	general			
12033	093B.014		5.7	10	200	E	general			
12048	093C.016		5.6	10	200	E	general			
12101	093B.003		6.7	10	200	E	general			
12111	092N.099		5.3	10	200	E	general			
12151	092O.085		30.4	10	200	E	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12153	092O.085		8.0	10	200	E	general			
12156	092O.086		9.3	10	200	E	general			
12157	092O.086		8.4	10	200	E	general			
12160	092O.086		9.7	10	200	E	general			
12161	092O.086		5.7	10	200	E	general			
12162	092O.086		13.8	10	200	E	general			
12163	092O.086		44.8	10	200	E	general			
12167	092O.083		7.4	10	200	E	general			
12304	092N.068		9.2	10	200	E	general			
12308	092N.068		5.3	10	200	E	general			
12319	092N.065		6.5	10	200	E	general			
12321	092N.065		5.9	10	200	E	general			
12323	092N.068		11.3	10	200	E	general			
12324	092N.068		5.8	10	200	E	general			
12327	092N.068		7.6	10	200	E	general			
12330	092N.068		5.2	10	200	E	general			
12338	092N.068		9.4	10	200	E	general			
12340	092N.066		9.7	10	200	E	general			
12343	092N.067		6.8	10	200	E	general			
12347	092N.056		9.0	10	200	E	general			
12352	092N.057		19.9	10	200	E	general			
12356	092N.056		33.3	10	200	E	general			
12359	092N.056		5.7	10	200	E	general			
12369	092N.058		6.7	10	200	E	general			
12379	092N.057		21.0	10	200	E	general			
12382	092N.047		8.4	10	200	E	general			
12388	092N.044		18.0	10	200	E	general			
12405	092O.033		6.4	10	200	E	general			
12420	092O.023		10.2	10	200	E	general			
12422	092N.026		13.5	10	200	E	general			
12425	092O.023		5.3	10	200	E	general			

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
12428	092O.023		7.3	10	200	E	general			
12430	092N.028		65.3	10	200	E	general			
12437	092N.028		6.3	10	200	E	general			
12441	092O.014		5.8	10	200	E	general			
12456	092O.003		10.6	10	200	E	general			
12458	092O.003		12.0	10	200	E	general			
12333	092N.067	Belemnite Lake	14.2	10	200	E	general			
12409	092N.035	Ephemeron Lake	25.1	10	200	E	general			
12443	092O.014	Marian Lake	7.9	10	200	E	general			
12438	092N.028	Nostetuko Lake	9.3	10	200	E	general			
12178	092N.087	Suds Lake	14.0	10	200	E	general			
12342	092N.067	Upper Belemnite Lake	7.2	10	200	E	general			
3536	093B.033		16.0	10	200	n/a	general	protected area		
11851	093C.067		6.5	10	200	n/a	general	protected area		
11870	093B.043		13.0	10	200	n/a	general	protected area		
11904	093B.043		5.2	10	200	n/a	general	protected area		
11954	093B.033		29.8	10	200	n/a	general	protected area		
12201	092O.082		21.9	10	200	n/a	general	protected area		
12217	092O.072		6.0	10	200	n/a	general	protected area		
12218	092O.072		14.1	10	200	n/a	general	protected area		
12397	092O.041		16.4	10	200	n/a	general			
12411	092N.036		23.0	10	200	n/a	general	protected		

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Regional Lake Number	Forest Cover Map	Lake Name <i>(unofficial names in italics)</i>	Area (ha)	Riparian Reserve Zone Width (m)	Lake-shore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lakeshore Management Zone Crown Land Development	Lake Management Plan or resource values initiating the need for a Lake Management Plan
								area		
12423	092O.021		7.7	10	200	n/a	general	protected area		
12424	092O.021		7.4	10	200	n/a	general	protected area		
12449	092N.020		8.2	10	200	n/a	general	protected area		
11934	093B.033	Deerpelt Lake	41.3	10	200	n/a	general	protected area		
11935	093B.032	Loomis Lake	121.1	10	200	n/a	general	protected area		
11980	093B.033	Plover Lake	9.0	10	200	n/a	general	protected area		
11943	093B.033	Spain Lake	30.8	10	200	n/a	general	protected area		
11977	093B.025	Stum Lake	824.6	10	200	n/a	general	protected area		
11859	093B.053		5.2	10	200	no	general			
11993	093B.025		13.8	10	200					
11988	093B.023	Alexis Lake	100.8	10	200					
13269	092O.043		9.9	10	200	n/a				
11990	093B.023		29.0	10	200	see				
12300	092N.066		9.3	10	200	see				

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Table 17 Lake Management Strategies

	A Class	B Class	C Class	D Class	E Class
Recommended Visual Quality Class within the LMZ	Preservation	Retention	Partial Retention	Modification	Modification
		Maintain a natural looking landscape incorporating visual landscape design concepts.			
Preferred Forest Management Practices for the Lakeshore Management Zone:	No harvest.	Clearcutting is not permitted in the LMZ unless partial cutting is not feasible.	Partial cutting is encouraged to maintain non-timber values.	Partial cutting is encouraged to maintain non-timber values.	Partial cutting is encouraged to maintain non-timber values.
Uneven-Aged / Selection Silvicultural Systems (partial cut):*	No harvest; this restriction may be waived by government on a site specific basis for the management of fire, windthrow, above endemic levels of pests or disease.	≤20% of the LMZ area per 20 years and ≥50% of the original basal area must be retained.	≤40% of the LMZ area per 20 years and ≥50% of the original basal area must be retained.	≤60% of the LMZ area per 20 years and ≥50% of the original basal area must be retained.	≤100% of the LMZ area per 20 years and ≥50% of the original basal area must be retained.
Even Aged Silvicultural Systems (clearcut):*		≤10% of the LMZ area.	≤20% of the LMZ area.	≤30% of the LMZ area.	≤50% of the LMZ area.
		<5 ha cutblocks.	<10 ha cutblocks.		
		Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 300 metres.	Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 400 metres.	Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 500 metres.	Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 500 metres.
Combined Silvicultural Systems (partial and clearcut):	Incorporate/combine the recommendations as per the even and un-even aged silvicultural system guidelines.				
Roads, Landings and Skid Trails in the Lakeshore Management Zone:	No new roads, borrow pits or landings should be located in the LMZ unless there are no feasible alternatives.	Locate operational/haul roads outside of the LMZ.	Locate operational/haul roads outside of the LMZ.	Locate operational/haul roads >75 metres away from the RRZ.	Locate operational/haul roads >30 metres away from the RRZ.
		Locate spur/block roads and landings >200 metres away from the RRZ.	Locate spur/block roads and landings >100 metres away from the RRZ.	Locate spur/block roads and landings >40 metres away from the RRZ.	Locate spur/block roads and landings >30 metres away from the RRZ.
		Locate skid trails >30 metres away from RRZ.	Locate skid trails >30 metres away from RRZ.	Locate skid trails >30 metres away from RRZ.	Locate skid trails >30 metres away from RRZ.
		Back spar trails are not recommended without an approved rehabilitation plan.	Back spar trails are not recommended without an approved rehabilitation plan.		

* translated to area or basal area retention objectives for each LMZ forest management class (see Table 15).

Appendix F: Viewpoints, Viewlines, Viewscapes, and Visual Quality Objectives

Table 18 Summary of Viewpoints, Viewlines, Viewscapes, and Visual Quality Objectives

Viewpoint Number	Viewline Number	Viewscape Polygon Number	Visual Quality Objective (VQO)	Range of forest landbase (in perspective view) allowed to be in non-VEG state (%)	Comments
091T	86L	25V	R	0.1 - 1.5	Barney's Lakeside Resort
92T	85L	26V	P	0	Jack and Faye's Place
104T	1L	105V	PR	1.6 - 7.0	Chilcotin Hotel
105T	2L	105V	PR	1.6 - 7.0	Cook Shack Motel
112T	7L	109V	R	0.1 - 1.5	Hyak Wilderness Adventures Ltd.
112T	9L	109V	R	0.1 - 1.5	Hyak Wilderness Adventures Ltd.
112T	8L	63L	M	7.1 - 18.0	Hyak Wilderness Adventures Ltd.
119T	3L	154V	M	7.1 - 18.0	Lee's Corner
119T	4L	165V	M	7.1 - 18.0	Lee's Corner (polygon # missing on map)
121T	5L	176V	M	7.1 - 18.0	Hyak Wilderness Adventures Ltd.
125T	6L	220V	R	0.1 - 1.5	Teepee Heart Ranch
131T	104L	188V	M	7.1-18.0	Graham Inn
132T	110L	182V	PR	1.6-7.0	Eagle Lake Resort
132T	111L	182V	PR	1.6-7.0	Eagle Lake Resort
139T	153L	320V	PR	1.6-7.0	Hyak Wilderness Adventures Ltd.
139T	154L	204V	R	0.1 - 1.5	Hyak Wilderness Adventures Ltd.
141T	12L	293V	PR	1.6 - 7.0	Bin-Go-Sha
142T	132L	265V	PR	1.6-7.0	Nuit Trails Outfitting
142T	134L	265V	PR	1.6-7.0	Nuit Trails Outfitting
142T	133L	298V	PR	1.6-7.0	Nuit Trails Outfitting
143T	151L	320V	PR	1.6-7.0	Solaris Guest Ranch
143T	152L	204V	R	0.1 - 1.5	Solaris Guest Ranch
145T	131L	265V	PR	1.6-7.0	Cochin Lake Resort
150T	13L	336V	PR	1.6 - 7.0	Rainbow's End Ranch Log Cabin
151T	187L	309V	PR	1.6-7.0	White Saddle Ranch B&B
151T	196L	381V	PR	1.6-7.0	White Saddle Ranch B&B
152T	188L	332V	PR	1.6-7.0	White Saddle Air Services

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Viewpoint Number	Viewline Number	Viewscape Polygon Number	Visual Quality Objective (VQO)	Range of forest landbase (in perspective view) allowed to be in non-VEG state (%)	Comments
					Ltd.
153T	128L	298V	R	0.1 - 1.5	Niut Mountain Guest Ranch (polygon # missing on map)
153T	129L	298V	PR	1.6-7.0	Nuit Mountain Guest Ranch
154T	125L	326V	PR	1.6-7.0	Nuit Trails Outfitting (polygon # missing on map)
155T	124L	309V	PR	1.6-7.0	White Saddle Air Services Ltd.
156T	126L	328V	PR	1.6-7.0	Nuit Trails Outfitting
157T	127L	298	PR	1.6 - 7.0	Niut Trails Outfitting
158T	149L	357V	PR	1.6-7.0	Chilko River Lodge
158T	150L	320V	PR	1.6-7.0	Chilko River Lodge
159T	141L	364V	PR	1.6-7.0	Bracewell's Alpine Wilderness Adventures
159T	143L	375V	PR	1.6-7.0	Bracewell's Alpine Wilderness Adventures
159T	144L	364V	PR	1.6-7.0	Bracewell's Alpine Wilderness Adventures
160T	155L	392V	PR	1.6-7.0	Chanly's Guest Ranch
160T	156L	392V	PR	1.6-7.0	Chanly's Guest Ranch
161T	157L	435V	PR	1.6-7.0	Chilko River Lodge
161T	158L	461V	PR	1.6-7.0	Chilko River Lodge
165T	182L	350V	PR	1.6-7.0	Waddington Challenge
166T	159L	392V	PR	1.6-7.0	Ts'yl-Os Park Lodge and Adventures
166T	160L	485V	R	0.1 - 1.5	Ts'yl-Os Park Lodge and Adventures
181T	162L	558V	PR	1.6-7.0	Tsuniah Lake Lodge
184T	18L	514V	R	0.1 - 1.5	Chaunigan Lake Lodge
185T	179L	538V	PR	1.6-7.0	Niut Trails Outfitting
166T	161L	468V	PR	1.6-7.0	Ts'yl-Os Park Lodge and Adventures
187T	20L	514V	PR	1.6-7.0	Bear Track Lodge
187T	21L	527V	M	7.1-18.0	Bear Track Lodge
188T	185L	350V	PR	1.6-7.0	Waddington Challenge
189T	164L	558V	PR	1.6-7.0	Tsuniah Lake Lodge
189T	163L	556V	PR	1.6-7.0	Tsuniah Lake Lodge
190T	165L	556V	PR	1.6-7.0	Tsuniah Lake Lodge

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Viewpoint Number	Viewline Number	Viewscape Polygon Number	Visual Quality Objective (VQO)	Range of forest landbase (in perspective view) allowed to be in non-VEG state (%)	Comments
190T	166L	492V	R	0.1 - 1.5	Tsuniah Lake Lodge
193T	167L	492V	R	0.1 - 1.5	Tsuniah Lake Lodge
193T	168L	492V	R	0.1 - 1.5	Tsuniah Lake Lodge
194T	30L	566V	PR	1.6 - 7.0	Elkin Creek Guest Ranch
194T	29L	508V	PR	1.6 - 7.0	Elkin Creek Guest Ranch
195T	31L	566V	PR	1.6 - 7.0	Colgate B&B
195T	32L	587V	PR	1.6 - 7.0	Colgate B&B
196T	38L	634V	R	0.1 - 1.5	Konni Lake Resort
196T	39L	634V	R	0.1 - 1.5	Konni Lake Resort
196T	37L	634V	R	0.1 - 1.5	Konni Lake Resort
197T	33L	567V	R	0.1 - 1.5	Happy Dog Adventures
197T	34L	634V	R	0.1 - 1.5	Happy Dog Adventures
206T	40L	603V	P	0	Snowy Mountain Outfitters B&B
207T	172L	627V	PR	1.6 - 7.0	National Outdoor Leadership School
207T	173L	627V	PR	1.6 - 7.0	National Outdoor Leadership School
207T	174L	627V	PR	1.6 - 7.0	National Outdoor Leadership School
215T	70L	699V	PR	1.6-7.0	Native Trappers School of BC
217T	72L	704V	R	0.1 - 1.5	Yohetta Wilderness
220T	79L	725V	R	0.1 - 1.5	Yohetta Wilderness
220T	80L	725V	R	0.1 - 1.5	
316	41L	557V	M	7.1 - 18.0	Taseko River
316	41L	557V	PR	1.6-7.0	Taseko River UREP
317	26L	508V	PR	1.6 - 7.0	North end of Vedan Lake
318	186L	492V	R	0.1 - 1.5	UREP on Tsuniah Lake
319T	189L	561V	PR	1.6 - 7.0	Big Lake Recreation Site
328	65L	690V	R	0.1 - 1.5	Taseko Lake UREP
328	66L	701V	R	0.1 - 1.5	Taseko Lake UREP
341	109L	182V	PR	1.6-7.0	UREP on Eagle Lake (NE) end
342	112L	182V	PR	1.6-7.0	UREP on Eagle Lake (SW) end
343	119L	240V	PR	1.6-7.0	in Sapeye Lake
344	120L	240V	PR	1.6-7.0	in Sapeye Lake

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Viewpoint Number	Viewline Number	Viewscape Polygon Number	Visual Quality Objective (VQO)	Range of forest landbase (in perspective view) allowed to be in non-VEG state (%)	Comments
345	121L	240V	PR	1.6-7.0	in Sapeye Lake
346	117L	256V	PR	1.6-7.0	in Horn Lake
347	118L	256V	PR	1.6-7.0	in Horn Lake
348	187L	309V	PR	1.6-7.0	in Bluff Lake
349	178L	389V	PR	1.6-7.0	in Tatlayoko Lake
350	177L	389V	PR	1.6-7.0	in Tatlayoko Lake
351	175L	638V	PR	1.6-7.0	in Tatlayoko Lake (polygon # missing on map)
351	176L	389V	PR	1.6-7.0	in Tatlayoko Lake
352	141L	364V	PR	1.6-7.0	
353	145L	305V	PR	1.6-7.0	Access Road?
353	146L	364V	PR	1.6-7.0	Access Road?
354	147L	316V	PR	1.6-7.0	Access Road?
354	148L	364V	PR	1.6-7.0	Access Road?
356	84L	26V	R	0.1 - 1.5	in Puntzi Lake
357	83L	26V	R	0.1 - 1.5	in Puntzi Lake
358	107L	182V	PR	1.6-7.0	in Eagle Lake
358	108L	182V	PR	1.6-7.0	in Eagle Lake
359	105L	184V	PR	1.6-7.0	in Eagle Lake
359	106L	182V	PR	1.6-7.0	in Eagle Lake
360	137L	375V	PR	1.6-7.0	Choelquist Lake
360	138L	364V	PR	1.6-7.0	Choelquist Lake
361	139L	323V	PR	1.6-7.0	In Choelquist Lake
361	140L	364V	PR	1.6-7.0	In Choelquist Lake
362	135L	301V	PR	1.6-7.0	Cochin Lake UREP
362	136L	301V	PR	1.6-7.0	Cochin Lake UREP
364	113L	24V	PR	1.6-7.0	in Little Sapeye Lake
364	114L	219V	PR	1.6-7.0	in Little Sapeye Lake
365	123L	240V	PR	1.6-7.0	in Bluff Lake
366	183L	350V	PR	1.6-7.0	in Twist Lake
366	184L	350V	PR	1.6-7.0	in Twist Lake
367	170L	492V	R	0.1 - 1.5	in Tusniah Lake
367	171L	492V	R	0.1 - 1.5	in Tusniah Lake
368	14L	527V	PR	1.6-7.0	in Chaunigan Lake
368	15L	514V	R	0.1 - 1.5	in Chaunigan Lake

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Viewpoint Number	Viewline Number	Viewscape Polygon Number	Visual Quality Objective (VQO)	Range of forest landbase (in perspective view) allowed to be in non-VEG state (%)	Comments
369	22L	508V	PR	1.6 - 7.0	in Elkin Lake
369	23L	513V	R	0.1 - 1.5	in Elkin Lake
370	24L	508V	PR	1.6 - 7.0	in Elkin Lake
370	25L	513V	R	0.1 - 1.5	in Elkin Lake
371	27L	547V	PR	1.6 - 7.0	in Vedan Lake
371	28L	508V	PR	1.6 - 7.0	in Vedan Lake
372	35L	612V	R	0.1 - 1.5	in Konni Lake
372	36L	634V	R	0.1 - 1.5	in Konni Lake
373	103L	126V	M	7.1-18.0	in Martin Lake
374	102L	126V	M	7.1-18.0	in Martin Lake
375	100L	151V	M	7.1-18.0	in Tatla Lake
375	101L	188V	M	7.1-18.0	in Tatla Lake
376	98L	151V	M	7.1-18.0	in Tatla Lake
376	99L	153V	M	7.1-18.0	in Tatla Lake
377	96L	151V	M	7.1-18.0	in Tatla Lake
377	97L	119V	PR	1.6-7.0	in Tatla Lake
378	94L	151V	M	7.1-18.0	in Tatla Lake
378	95L	153V	M	7.1-18.0	in Tatla Lake
379	9.L	209V	R	0.1 - 1.5	in Tatla Lake
380	91L	209V	R	0.1 - 1.5	in Tatla Lake
380	92L	151V	M	7.1-18.0	in Tatla Lake
381	90L	146V	PR	1.6-7.0	in Tatla Lake
382	88L	112V	M	7.1-18.0	in Tatla Lake
382	89L	107V	PR	1.6-7.0	in Tatla Lake
383	87L	112V	M	7.1-18.0	in Tatla Lake
384	43L	663V	PR	1.6-7.0	in Fish Lake
384	44L	663V	PR	1.6-7.0	in Fish Lake
386	47L	646V	PR	1.6-7.0	Onion Lake
386	48L	655V	R	0.1 - 1.5	Onion Lake
387	49L	656V	PR	1.6-7.0	Onion Lake Camp Site
388	45L	649V	R	0.1 - 1.5	Onion Lake Camp Site
388	46L	646V	PR	1.6-7.0	Onion Lake Camp Site
389	50L	762V	R	0.1 - 1.5	in Taseko Lake
390	51L	756V	R	0.1 - 1.5	in Taseko Lake

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Viewpoint Number	Viewline Number	Viewscape Polygon Number	Visual Quality Objective (VQO)	Range of forest landbase (in perspective view) allowed to be in non-VEG state (%)	Comments
390	52L	753V	P	0	in Taseko Lake
391	53L	743V	PR	1.6-7.0	in Taseko Lake
391	54L	735V	R	0.1 - 1.5	in Taseko Lake
392	55L	716V	R	0.1 - 1.5	in Taseko Lake
392	56L	715V	R	0.1 - 1.5	in Taseko Lake
393	57L	701V	R	0.1 - 1.5	in Taseko Lake
393	58L	697V	PR	1.6-7.0	in Taseko Lake
394	59L	697V	PR	1.6-7.0	in Taseko Lake
394	60L	693V	M	7.1-18.0	in Taseko Lake
395	61L	690V	R	0.1 - 1.5	in Taseko Lake
395	62L	683V	PR	1.6-7.0	in Taseko Lake
396	63L	683V	PR	1.6-7.0	in Taseko Lake
396	64L	681V	R	0.1 - 1.5	in Taseko Lake
397	69L	704V	R	0.1 - 1.5	in Tuzcha Lake
397	71L	724V	R	0.1 - 1.5	in Tuzcha Lake
398	67L	705V	R	0.1 - 1.5	in Tuzcha Lake
398	68L	704V	R	0.1 - 1.5	in Tuzcha Lake
399	73L	705V	R	0.1 - 1.5	in Yohetta Lake
400	74L	705V	R	0.1 - 1.5	In Fishem Lake
400	75L	721V	R	0.1 - 1.5	In Fishem Lake
401	76L	725V	R	0.1 - 1.5	In Fishem Lake
402	77L	737V	PR	1.6-7.0	In Fishem Lake
403	81L	777V	PR	1.6-7.0	Lord River
403	82L	768	PR	1.6-7.0	Lord River
404	181L	421V	PR	1.6-7.0	in Middle Lake
405	180L	421V	PR	1.6-7.0	in Middle Lake

Abbreviations used:

M means "modification"

RP means "partial retention"

R means "retention"

VEG means "visual effective green-up"

VQO means "visual quality objective"

Suffixes:

L for (view)line

T for Tourism Use Area or Resort

U for land set aside for the "use for the recreation and enjoyment of the public" (UREP)

V for viewscape