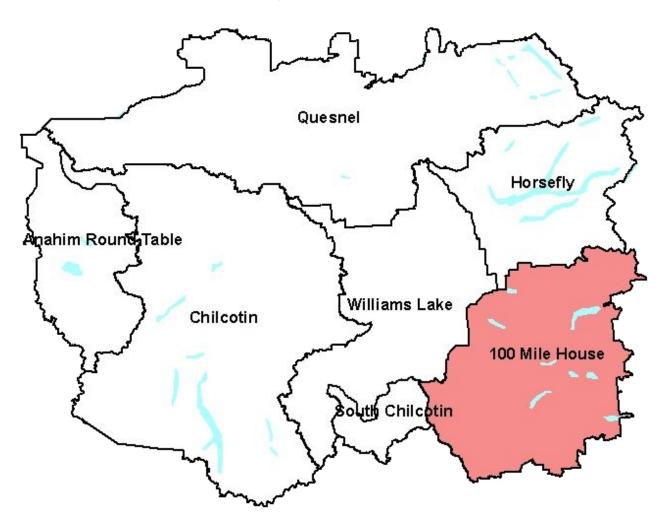
## Cariboo-Chilcotin Land-Use Plan

## 100 Mile House Sustainable Resource Management Plan

August 10, 2005



100 Mile House Sustainable Resource Management Plan

### TABLE OF CONTENTS

1		EXECUTIVE SUMMARY	6
2			7
3		ECONOMIC SECURITY	9
	3.1	Forest Industry	9
	3.2	Mining	
	3.3	TOURISM AND RECREATION.	-
	3.3.1	Recreation Corridors and Trails	
	3.3.2	Gold Rush Snowmobile Trail	
	3.3.3	Fishing	
	3.4	Agriculture	12
4		FIRST NATIONS	
5		GOAL 2 PROTECTED AREAS	16
5			_
6			
	6.1	TIMBER RESOURCE	
	6.1.1	Timber Access	
	6.1.2	Short Term Timber Impacts	
	6.1.3	Woodlot Licences and Community Forests	
	6.1.4	Silviculture	
	6.2		
	6.3	No-Harvest Areas	
	6.4	LANDSCAPE LEVEL BIODIVERSITY	
	6.4.1 6.4.2	Landscape Unit Boundaries	
	6.4.3	Seral Stage Distribution Old Growth Management Areas	
	6.4.4	Distribution of Cut and Leave Areas	
	6.4.5	Landscape Connectivity	
	6.5	Stand Level Biodiversity	
	6.5.1	Rare Ecosystems	
	6.5.2	Wildlife and Habitat Features	
	6.5.3	Grasslands	
	6.5.4	Wildlife Tree Retention	
	6.5.5	Species Composition	40
	6.5.6	Riparian Habitats	41
	6.5.7	Coarse Woody Debris	43
	6.6	WILDLIFE	
	6.6.1	Mule Deer	
	6.6.2	Mountain Caribou	
	6.6.3	Mountain Goat	
	6.6.4	California Bighorn Sheep	
	6.6.5	Moose	
	6.6.6	Grizzly Bear	
	6.6.7	Fur-bearers	
	6.7 6.8	SPECIES AND HABITATS AT RISK	
	6.8	AQUATIC RESOURCES	
	6.8.1 6.8.2	Watershed Hydrology Fish	
	6.8.2.1	FISIT Salmon	-
	6.8.2.2	Bull Trout	-
	6.8.3	Water Resources	

	6.9 6.10	LAKES TOURISM AND RECREATION	
	6.10.1	Recreation Corridors and Trails	
	6.10.2	Backcountry	57
	6.10.3	High Elevation Visuals	
	6.10.4	Scenic Areas	
	6.11 6.12	MINERAL AND AGGREGATE RESOURCES ENERGY RESOURCES	
	6.13	Range	
	6.14	AGRICULTURE	66
	6.15	LAND ALLOCATION	
	6.16	WILDCRAFT (BOTANICAL FOREST PRODUCTS)	
	6.17 6.18	TRAPPING	
7	0.10	ANALYSIS METHODS AND RESULTS	
'			
	7.1 7.2	TIMBER AND NON-TIMBER OBJECTIVES ANALYSIS BIODIVERSITY OBJECTIVES ANALYSIS	
	7.2.1	Old Growth Management Areas	
	7.2.2	Wildlife Tree Retention	
	7.3	ANALYSIS RESULTS	
	7.3.1	Timber/Non-Timber Targets	73
	7.3.2	Biodiversity	73
8			73
8		Biodiversity IMPLEMENTATION AND MONITORING	73 <b>74</b> 74
8	7.3.2 8.1 8.2	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING	73 <b>74</b> 74 74
8	7.3.2 8.1 8.2 8.3	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING FUTURE INVENTORY	73 <b>74</b> 74 74 74
8	7.3.2 8.1 8.2 8.3 8.4	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING FUTURE INVENTORY FUTURE PLANNING	73 <b>74</b> 74 74 74 74
_	7.3.2 8.1 8.2 8.3	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION	73 <b>74</b> 74 74 74 74 75
8	7.3.2 8.1 8.2 8.3 8.4	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING FUTURE INVENTORY FUTURE PLANNING	73 <b>74</b> 74 74 74 74 75
_	7.3.2 8.1 8.2 8.3 8.4 8.5	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION	73 74 74 74 74 75 <b>76</b>
9	7.3.2 8.1 8.2 8.3 8.4 8.5 APPENDIX A:	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING FUTURE INVENTORY FUTURE PLANNING FUTURE PLANNING MECHANISMS FOR LAND USE CHANGES GLOSSARY OF SELECTED TERMS APPENDICES MAPS	73 74 74 74 74 75 76 78 78
9	7.3.2 8.1 8.2 8.3 8.4 8.5 APPENDIX A: APPENDIX B:	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING FUTURE INVENTORY FUTURE PLANNING FUTURE PLANNING MECHANISMS FOR LAND USE CHANGES GLOSSARY OF SELECTED TERMS APPENDICES MAPS FIRST NATIONS LIST	<ul> <li>73</li> <li>74</li> <li>74</li> <li>74</li> <li>74</li> <li>75</li> <li>76</li> <li>78</li> <li>79</li> </ul>
9	7.3.2 8.1 8.2 8.3 8.4 8.5 APPENDIX A: APPENDIX B: APPENDIX C:	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING FUTURE INVENTORY FUTURE PLANNING FUTURE PLANNING GLOSSARY OF SELECTED TERMS	<ul> <li>73</li> <li>74</li> <li>74</li> <li>74</li> <li>74</li> <li>75</li> <li>76</li> <li>78</li> <li>79</li> <li>80</li> </ul>
9	7.3.2 8.1 8.2 8.3 8.4 8.5 APPENDIX A: APPENDIX B: APPENDIX C: APPENDIX D:	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING FUTURE INVENTORY FUTURE PLANNING MECHANISMS FOR LAND USE CHANGES GLOSSARY OF SELECTED TERMS APPENDICES	73 74 74 74 74 75 76 78 78 78 80 87
9	7.3.2 8.1 8.2 8.3 8.4 8.5 APPENDIX A: APPENDIX B: APPENDIX C:	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION MONITORING FUTURE INVENTORY FUTURE PLANNING FUTURE PLANNING GLOSSARY OF SELECTED TERMS	73 74 74 74 74 75 76 78 78 78 78 80 87 89
9	7.3.2 8.1 8.2 8.3 8.4 8.5 APPENDIX A: APPENDIX A: APPENDIX B: APPENDIX C: APPENDIX D: APPENDIX E:	Biodiversity IMPLEMENTATION AND MONITORING IMPLEMENTATION	73 74 74 74 74 75 76 78 78 78 78 89 91 45

### List of Tables

Table 1	Some Examples of First Nations Cultural and Heritage Features	14
Table 2	100 Mile House Candidate Goal 2 Protected Areas	
Table 3	Wildlife Tree Characteristics	
Table 4	Seral Stage Definitions Used for Seral Condition Analysis in the	. 10
	Cariboo-Chilcotin Region	23
Table 5	Mature+Old, Old, Interior Old Forest Representation Targets and	20
	Early Seral Forest Guidelines.	24
Table 6	Hierarchy of Stand Types Contributing to Recruitment of Mature Forest in	
	LU-BEC Subunits Where Drawdowns Have Occurred	29
Table 7	Amalgamation of Small NDT-BEC Subunits Used for Assessment of	
	Seral Objectives in the 100 Mile House SRMP	29
Table 8	Interior Forest Specifications	31
Table 9	Mature+Old Retention Patch Size Targets for the 100 Mile House SRMP	32
Table 10	Principles for Landscape Connectivity	33
Table 11	Wildlife Tree Retention Targets	. 37
Table 12	Riparian Reserve Zone and Riparian Management Zone Specifications	41
Table 13	Wilderness Fisheries Lakes	53
Table 14	Values for Backcountry Units	58
Table 15	CCLUP and 100 Mile House SRMP Target Animal Unit Months in 1994 by	
	CCLUP Resource Development Zone	66
Table 16	Lake Management	. 91
Table 17	Lake Management Strategies	143
Table 18	Summary of Viewpoints, Viewlines, Viewscapes, and Visual Quality Objectives	145
Table 19	Non-Timber Resource Assumptions	159

### **1 EXECUTIVE SUMMARY**

The 100 Mile House Sustainable Resource Management Plan is one of seven plans covering the Cariboo-Chilcotin Region, including the previously endorsed South Chilcotin and Anahim Round Table plans. SRMPs are a spatial application of the Cariboo Chilcotin Land Use Plan direction at the sub regional planning level. The 100 Mile House SRMP covers a gross area of 1,236,245 hectares, with 916,460 hectares being productive forest landbase. This plan area boundary is similar to the 100 Mile House Forest district and the 100 Mile House Timber Supply Area.

The plan area contrasts from dry grasslands in the west, to wet mountains in the east. The area is bounded by the Fraser River and the Cariboo Mountains, surrounding a central elevated interior plateau. The plan area is dotted by numerous lakes, streams and wetlands encompassing eight biogeoclimatic zones and five ecosections.

There are 47 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 100 Mile House Sustainable Resource Management Plan (100 Mile House SRMP) is one of seven SRMPs in the region. These plans are important elements of the Cariboo-Chilcotin Land Use Plan (CCLUP)<sup>1</sup> 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)<sup>2</sup>. It was later amended in 1999<sup>3</sup>. As a higher level plan, the CCLUP guides application of the FPC and other resource management activities. In 1998, the Integration Report<sup>4</sup> 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. In 100 Mile House, information describing the sub regional planning process was advertised and widely distributed throughout the plan area in 1996 through 1998. In order to facilitate the public input process workshops were initiated at various locations in the district and inventory maps were available for review. Members of the public documented their knowledge and/or concerns regarding resource values at either the workshops or by written submission. Additional public workshops were held throughout the plan area to explain the progress of the plan and show the public how their concerns were incorporated.

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 100 Mile House 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

<sup>&</sup>lt;sup>1</sup> 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).

<sup>&</sup>lt;sup>2</sup> 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).

<sup>&</sup>lt;sup>3</sup> 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).

<sup>&</sup>lt;sup>4</sup> Cariboo-Chilcotin Land-Use Plan Integration Report, April 6, 1998 (59 pages).

information. References to other documents are often paraphrased and brief. Readers should consult original documents where more comprehensive understanding is required.

The SRMP does not apply to private land or protected areas and the 100 Mile House 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 a 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 the FRPA.

#### 3.1 Forest Industry

The timber access targets achieved in the 100 Mile House SRMP provide assurance that the forest industry will continue as a major economic driver in the Cariboo Region. The 100 Mile House SRMP boundary coincides with the 100 Mile House Timber Supply Area (TSA). Although about 75 percent of the timber harvested in the SRMP area is processed in the 100 Mile House TSA, 50 percent of their timber supply comes from neighbouring management units.

The allowable cut in the 100 Mile House TSA, is forecasted to generate up to 58.6 million<sup>5</sup> 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

The capital employed in these regional facilities totals 946 million dollars. During 2001, a total of 78 million dollars in capital expenditures was made in maintaining and improving these facilities.

In 2001, 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

<sup>&</sup>lt;sup>5</sup> 100 Mile House TSA Timber Supply Review – (TSA Analysis Report) – September 2001

dollars. The total value of the logs used to create these products totalled 505 million dollars.

For the region as a whole, the forest industry provided 8,470 full time jobs in 2001. While the area covered within the 100 Mile House 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 100 Mile House SRMP area has been 1.3 million cubic meters or approximately 15 percent of the total volume of timber utilized by the regional industry in 2001.

Three lumber mills, one oriented strand board mill, one shake and shingle mill and several log home mills are located within the 100 Mile House SRMP area and the forestry sector represents 31 percent of the labour force in the TSA. The continued viability of small communities like 100 Mile House is closely linked to the 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 100 Mile House 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. This is consistent with government's two–zone approach to mineral exploration and development. The comprehensive nature of the 100 Mile House 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. Within the 100 Mile House area nearly 1,300 persons are employed in the tourism sector, catering to both tourist and business travellers. More than 400

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.<sup>6</sup> Access to crown land for the development of 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.

#### 3.3.1 Recreation Corridors and Trails

The Tourism Opportunity Study for the 100 Mile House area identified the continued development and management of an integrated, year-round, world class, multi-use trail system as the tourism opportunity offering the most potential for the area. The 100 Mile House SRMP addresses this potential by providing a recreation corridor and trails management objective to maintain the viability of key trail corridors and by managing visuals from identified viewpoints.

#### 3.3.2 Gold Rush Snowmobile Trail

At the Premier's Summit in May 1999 and a subsequent conference on economic development organized by the Cariboo Economic Action Forum in October 1999, snowmobiling was realized as a key recreation and tourism priority for the area. Since that time, considerable funding support has been provided through Forest Renewal BC and the Community Enterprise Program which accelerated the expansion of the trail network to approximately 700 kilometres in the Cariboo Region.

In 1999 the 100 Mile District Trails Foundation and the BC Snowmobile Federation (BCSF) requested assistance from the provincial government to develop a 463 km Gold Rush Snowmobile Trail (GRST) linking Clinton, 70 Mile House, 100 Mile House, Likely, and Wells, to promote the Cariboo as a winter destination for snowmobile touring.

Government agreed to pilot a portion of the trail in 2000, and in January 2003, a 170 km long section of trail from 70 Mile House to the outskirts of Horsefly was legally established.

The ILMB and the ministries of Forests and Range and Transportation continue to work together with the 100 Mile and District Snowmobile Club and the BCSF on realizing the full establishment of the GRST. This snowmobile trail, linking rural communities, has the potential to generate significant winter revenues for tourism operations in what has traditionally been their slow season.

#### 3.3.3 Fishing

The recreational fishery is a key tourism development opportunity. The 100 Mile House SRMP supports both existing tourism operators and development opportunities through:

- Protection of habitat adjacent to identified critical fish habitat
- Establishment of Lake Management Objectives

<sup>&</sup>lt;sup>6</sup> 100 Mile House TSA Timber Supply Review – (TSA Analysis Report) – September 2001

- Identification of scenic areas in viewsheds surrounding existing operators
- 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 SRMP recognizes the industry's need to enhance access to Crown land and water in support of agricultural economic development opportunities.

## **4 FIRST NATIONS**

The province is committed to working with First Nations on a government-togovernment 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 100 Mile House SRMP area overlaps with the following bands asserted traditional territories; (i) Alkali Lake, (ii) Bonaparte, (iii) Canim Lake, (iv) Canoe Creek/Dog Creek, (v) High Bar, (vi) North Thompson, (vii) Ts'Kw'aylaxw (Pavilion), (viii) Skeetchesin, (ix) Williams Lake, and (x) Whispering Pines bands.

The Williams Lake, Canoe Creek, and Canim Lake Bands are affiliated with the Northern Secwepemc te Qelmucw (NStQ) (Cariboo Tribal Council). The High Bar and Whispering Pines bands are affiliated with the Shuswap Nation Tribal Council. The Alkali First Nation, North Thompson, Bonaparte, and Skeetchesin bands have no tribal council affiliation. The Ts'Kw'aylaxw (Pavilion) band is a member of the St'at'imc Tribal Council.

The Cultural Heritage Overview of the Cariboo Forest Region (completed by Diana Alexander in 1997), and Archaeological Overview Assessment (AOA) were reviewed. 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.

Through discussion between NStQ and ILMB, NStQ recommended that further investigation and communication be considered for the following initial list of items when any kind of planning is done:

- <u>Tenure review system</u>: The need for protecting First Nations trapping areas and other First Nations interests when tenures are renewed. The suggestion was made for contacting the appropriate First Nations for an understanding of any workable protective measures. Also investigate how the tenure renewal system should address impacts on First Nations access to cultural heritage features and natural resources overall.
- <u>Traditional Use Study (TUS) Information</u>: Encourage transparent communication and development of TUS information to facilitate easy incorporation of existing as well as new TUS information with SRMPs so important First Nation values and interests are appropriately protected and addressed when possible.
- <u>First Nations Traditional Knowledge (TK)</u>: To better understand and be able to incorporate First Nations TK in the management of natural values. An example of First Nations Traditional Knowledge is the use of fire as a management tool.

- <u>Inventories</u>: Allow for better First Nation review, input, and involvement in inventories completed or used by government.
- <u>First Nations Land Use Plans</u>: Make sure government is informed of existing First Nation Land Use Plans and Special Designated Areas such as the NStQ Wilderness Areas and that these areas are considered when Land Use planning. Note: There are six Wilderness Areas in the NStQ land use plan.
- <u>Access Management:</u> First Nations to be involved in access management planning.

First Nations have expressed an interest in maintaining trout and salmon populations, and have indicated that they prefer all cultural and heritage features be pesticide-free.

#### 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 (artifacts, 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		
*The second second second be site as for two second second in O for a shall the set succession of		

\*These are some cultural and heritage features. See Appendix C for additional examples.

# **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 consult First Nations in relation to maintenance of
	physical access to identified cultural heritage sites when awarding
	Crown land tenures.

## 5 GOAL 2 PROTECTED AREAS

Under CCLUP, 17 large new "Goal 1" parks and other protected areas were established. In the100 Mile House SRMP area these include the Marble Range, Moose Valley, and Schoolhouse Provincial Parks. The new protected areas, combined with existing parks, total 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 ecosections 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 100 Mile House SRMP is 2,481 ha. Over 80 areas totalling over 80,000 ha were examined. Some of these areas were submitted by members of the public while others were identified by the Regional Protected Areas Team. The 100 Mile House SRMP has identified nine areas totalling over 3,000 ha, as summarized in Table 2 and shown on Map 2.

Candidate areas have been forwarded to the Cariboo Managers' Committee (CMC) and Regional Resource Committee (RRC) for consideration. The CMC and 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.

Area	Designation	Approximate Size (ha)
Eagle Creek West	Ecological Reserve	580
Deka/Sulphurous Lake	Class "A" Provincial Park	388
Young Lake	Class "C" Provincial Park	314

#### Table 2 100 Mile House Candidate Goal 2 Protected Areas

Area	Designation	Approximate Size (ha)
Donnely Lake	Class "A" Provincial Park	541
Copper Johnny	Class "A" Provincial Park	578
Centennial incl. Bridge Lake Island	Class "A" Provincial Park	337
Crater Lake	Class "A" Provincial Park	94
Moose Valley Park Extensions	Class "A" Provincial Park	146
Flat Lake Park Extension	Class "A" Provincial Park	26
Total		3004

### 6 RESOURCE MANAGEMENT

#### 6.1 Timber Resource

#### 6.1.1 Timber Access

The 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, responsible for implementing the CCLUP, further refined the timber targets in 2000 in a regional analysis<sup>7</sup> 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 7, Analysis Methods, for additional information on calculating equivalent excluded area.

#### 6.1.2 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.

#### 6.1.3 Woodlot Licences and Community Forests

There are presently 33 Woodlot Licenses in the 100 Mile House SRMP area. 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 winter range (MDWR) within woodlots is expected to be consistent with the Mule Deer Winter Range Strategy and its updates.

Permanent OGMAs can be located in Community Forest Agreement areas.

<sup>&</sup>lt;sup>7</sup> Letter from the Cariboo Mid-Coast Inter-Agency Management Committee, dated July 18, 2000 (3 pages).

#### 6.1.4 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 serious 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 3Wildlife Tree Characteristics8

Wildlife Tree Value	Characteristics
HIGH A high-value wildlife tree has at least two of the characteristics listed in the adjacent column.	<ul> <li>Internal decay (heart rot or natural/excavated cavities present).</li> <li>Crevices present (loose bark or cracks suitable for bats).</li> <li>Large brooms present.</li> <li>Active or recent wildlife use.</li> <li>Current insect infestation.</li> <li>Tree structure suitable for wildlife use (e.g., large nest, hunting perch, bear den, etc.).</li> <li>Largest trees on site (height and/or diameter) and/or veterans.</li> </ul>

<sup>&</sup>lt;sup>8</sup> Provincial Wildlife Tree Policy and Management Recommendations, February, 2000 (14 pp.).

Wildlife Tree Value	Characteristics
	<ul> <li>Locally important wildlife tree species.</li> </ul>
MEDIUM	<ul> <li>Large, stable trees that will likely develop two or more of the above attributes for High.</li> </ul>
LOW	<ul> <li>Trees not covered by High or Medium categories.</li> </ul>

Objective 4.	In areas of high and moderate grizzly bear habitat capability as shown on Map 4, 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.

#### 6.2 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.

		nge infectious outbreaks of forest diseases and pests in rd with objectives for other resource values identified in the P.
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.

#### 6.3 No-Harvest Areas

A number of values have been designated through CCLUP as no-harvest areas. In the 100 Mile House area, 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	<b>No-harvest area:</b> 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: 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

**Objective 6.** Maintain No-harvest areas (see definition) by excluding industrial activities within their boundaries, with the following exceptions: 1. Insect control essential to curtail severe damage to the noharvest 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, wildlife, or cultural values for the area, 3. Control of wildfire. 4. Seed cone collection, provided trees are not felled, 5. Road construction where there is no other practicable location 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

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,

	cploration and development of minerals <sup>®</sup> and coal; exploration development of placer mines in designated placer areas.
Strategy 6.1	Harvesting in no-harvest areas must be in accord with accepted procedures as approved by the CMC. These procedures include but are not limited to: BCC Updates 5, 6, 7, 8, 9, 10, and 11.
Strategy 6.2	Harvesting proposals within the Community Areas of Special Concern should be discussed with the Anahim Round Table prior to approval.

#### 6.4 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 Strategy<sup>10</sup> 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 Guidebook<sup>11</sup>.

#### 6.4.1 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*<sup>12</sup> and through subsequent district initiatives.

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

#### 6.4.2 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 subunits within landscape units. These were derived from the Biodiversity Guidebook as modified by the Biodiversity Conservation Strategy<sup>13</sup>.

Old forest is being managed as spatially delineated OGMAs 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.

<sup>&</sup>lt;sup>9</sup> Mineral as defined in the Mineral Tenure Act, RSBC, 1996, Chapter 292, Part 1(1).

<sup>&</sup>lt;sup>10</sup> Biodiversity Conservation Strategy for the Cariboo-Chilcotin Land-Use Plan, July 1996 (183 pages).

<sup>&</sup>lt;sup>11</sup> Forest Practices Code of British Columbia Biodiversity Guidebook, September 1995 (99 pages).

<sup>&</sup>lt;sup>12</sup> Regional Landscape Unit Planning Strategy June 30<sup>th</sup> 1999.

<sup>&</sup>lt;sup>13</sup> Biodiversity Guidebook p.9, 25, 35; Biodiversity Conservation Strategy p.40, Update #2.

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 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 OGMAs).

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 the attribute-based definition of Fir in the IDF at such time as government deems it to be acceptable.

Definition	<b>Old Forest:</b> For the purpose of meeting Objective 8, the following stands are deemed to contribute to meeting the old forest target in the order <i>listed:</i>
	<ol> <li>Old forest as described in Table 4, within permanent and transition old growth management areas, and no harvest areas,</li> <li>Mature forest as described in Table 4, within permanent old growth management areas, and no harvest areas,</li> <li>Mature forest as described in Table 4, within transition old growth management areas, and</li> <li>Stands meeting attribute-based criteria for old forest should those criteria be developed and approved by the ILMB statutory authority for the Cariboo.</li> </ol>

## Table 4Seral Stage Definitions Used for Seral Condition Analysis in the<br/>Cariboo-Chilcotin Region<sup>14</sup>

		Seral stage				
NDT	Biogeoclimatic Zone	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		

<sup>&</sup>lt;sup>14</sup> Biodiversity Conservation Strategy for the Cariboo-Chilcotin Land-Use Plan, July 1996 (183 pages). p. 40

		Seral stage				
NDT	Biogeoclimatic Zone	Early	Mature	Old		
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	ESSFxcp	<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, and

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\*)

108 Mile Lake Landscape Unit – Intermediate Biodiversity Emphasis							
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral		
Biogeoclimatic Variant		Forest		Forest**	Forest		
1-ESSFwk1	421	>36	>19	>9.5	<22		
3-SBPSmk	20560	>17	>7	>1.75	<66		
3-SBSdw1	4324	>23	>11	>2.75	<54		
3-SBSmc1	2608	>23	>11	>2.75	<54		
4-IDFdk3 (fir group)	11773	>43	>21	>10.5	<12		
4-IDFdk3 (pine group)	2947	>23	>11	>5.5	<54		
Big Bar Landscape Unit – High Big	odiversity E	mphasis					
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral		
Biogeoclimatic Variant		Forest		Forest**	Forest		
3-ESSFxc	1002	>34	>21	>5.25	<35		
3-MSxk	5461	>39	>21	>5.25	<35		
4-BG xh 3 (fir group)	15	>65	>32	>16	<9		
4-BG xw 2 (fir group)	540	>65	>32	>16	<9		
4-BG xw 2 (Pine group)	9	>34	>16	>8	<40		
4-IDFdk3 (fir group)	20817	>65	>32	>16	<9		
4-IDFdk3	2	>51	>19	>9.5	<23		
4-IDFdk3 (pine group)	14151	>34	>16	>8	<40		
4-IDFxm (fir group)	4373	>65	>32	>16	<9		
4-IDFxm (pine group)	291	>34	>16	>8	<40		
4-IDFxw (fir group)	884	>65	>32	>16	<9		
4-IDFxw (pine group)	2	>34	>16	>8	<40		
Bonaparte Lake Landscape Unit – Low Biodiversity Emphasis							
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral		
Biogeoclimatic Variant		Forest		Forest**	Forest		
3-ESSFdc2	119	>14	>14	>1.4	n/a		

2 MOst	5040		. 4 4	<b>54</b> 4	
3-MSxk	5243		>14	>1.4	n/a
3-SBPSmk	39963		>7	>0.7	n/a
3-SBSdw1	2553	>11	>11	>1.1	n/a
3-SBSmm	319	>11	>11	>1.1	n/a
3-SBSun	1	>11	>11	>1.1	n/a
4-IDFdk3 (fir group)	4353	>22	>21	>5.25	n/a
4-IDFdk3 (pine group)	3279	>11	>11	>2.75	n/a
Bradley Creek Landscape Unit – L				1	
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral
Biogeoclimatic Variant		Forest		Forest**	Forest
1-ESSFwk1	4869	>19	>19	>4.75	<22
1-ESSFwc3	1679		>19	>4.75	<22
3-ICHdk	16709		>14	>1.4	n/a
3-SBPSmk	4983		>7	>0.7	n/a
3-SBSdw1	22705	>11	>11	>1.1	n/a
3-SBSmc1	1072	>11	>11	>1.1	n/a
4-IDFmw2 (fir group) (valley bottom)	1406	>22	>21	>5.25	n/a
4-IDFmw2 (pine group) (valley	526	>11	>11	>2.75	n/a
bottom)					
Bridge Creek Landscape Unit – Lo	w Biodivers	ity Emphasi	S		
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral
Biogeoclimatic Variant		Forest		Forest**	Forest
3-SBPSmk	5595	>8	>7	>0.7	n/a
4-IDFdk3 (fir group)	17949	>22	>21	>5.25	n/a
4-IDFdk3 (pine group)	23958	>11	>11	>2.75	n/a
4-IDFdk3	2	>17	>13	>3.25	n/a
Bridge Lake Landscape Unit – Inte	ermediate Bi	odiversity E	mphasis		
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral
Biogeoclimatic Variant		Forest		Forest**	Forest
3-ESSFdc2	2107	>23	>14	>3.5	<46
3-SBPSmk	15722	>17	>7	>1.75	<66
3-SBSdw1	14157	>23	>11	>2.75	<54
3-SBSmc1	4691	>23	>11	>2.75	<54
3-SBSmm	1343	>23	>11	>2.75	<54
Canim Landscape Unit (Canim La				ersity Emphasi	S
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral
Biogeoclimatic Variant		Forest		Forest**	Forest
2-ICHmk3	4196		>9	>0.9	n/a
3-ESSFdc2	14601	>14	>14	>1.4	n/a
3-SBSdw1	14090	>11	>11	>1.1	n/a
3-SBSmc1	7828	>11	>11	>1.1	n/a
3-SBSmm	6064	>11	>11	>1.1	n/a
4-IDFmw2 (fir group) (valley	1797	>22	>21	>5.25	n/a
bottom)					
4-IDFmw2 (pine group) (valley	918	>11	>11	>2.75	n/a
bottom)					
Chasm Landscape Unit – Intermed					
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral
Biogeoclimatic Variant		Forest		Forest**	Forest
3-ESSFxc	1442		>14	>3.5	<46
3-MSxk	3394		>14	>3.5	<46
4-IDFdk3 (fir group)	23246	>43	>21	>10.5	<12

4-IDFdk3 (pine group)	32065	>23	>11	>5.5	<54
4-IDFxw (fir group)	6266		>21	>10.5	<12
4-IDFxw (pine group)	1383		>11	>5.5	<54
Clinton Landscape Unit – Interme				- 0.0	
Natural Disturbance Type –		Mature+Old		Interior Old	Early Seral
Biogeoclimatic Variant	/ tica (tia)	Forest		Forest**	Forest
3-ESSFxc	2017	>23	>14	>3.5	<46
3-MSxk	6164	>26	>14	>3.5	<46
4-IDFdk3 (fir group)	9111	>43	>21	>10.5	<12
4-IDFdk3 (pine group)	4175		>11	>5.5	<54
4-IDFxw (fir group)	9567	>43	>21	>10.5	<12
4-IDFxw (pine group)	314	>23	>11	>5.5	<54
Cunningham Lake Landscape Uni		-			+0-
Natural Disturbance Type –		Mature+Old		Interior Old	Early Seral
Biogeoclimatic Variant	Alca (lla)	Forest		Forest**	Forest
4-IDFdk3 (fir group)	11244		>21	>10.5	<12
4-IDFdk3 (pine group)	52765		>11	>5.5	<54
4-IDFdk3	1	>34	>13	>6.5	<34
Deadman Landscape Unit – Intern	ediate Biod			- 0.0	
Natural Disturbance Type –		Mature+Old		Interior Old	Early Seral
Biogeoclimatic Variant		Forest		Forest**	Forest
3-MSxk	3449		>14	>3.5	<46
3-SBPSmk	12418		>7	>1.75	<66
4-IDFdk3 (fir group)	4593		>21	>10.5	<12
4-IDFdk3 (pine group)	5557	>23	>11	>5.5	<54
4-IDFxw (fir group)	29	>43	>21	>10.5	<12
4-IDFxw (pine group)	6	>23	>11	>5.5	<54
Deception Mountain Landscape U	-				
Natural Disturbance Type –				Interior Old	Early Seral
Biogeoclimatic Variant	~ /	Forest		Forest**	Forest
1-ESSFwc3	5059	>19	>19	>4.75	n/a
1-ESSFwk1	6482	>19	>19	>4.75	n/a
3-ICHdk (valley bottom)	2489	>14	>14	>1.4	n/a
2-ICHmk3	2637	>15	>9	>0.9	n/a
	2637	1		>0.9	n/a
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a	2637 mediate Bio nd 100 Mile	diversity Em House SRP a	phasis areas]	L	
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type –	2637 mediate Bio nd 100 Mile	diversity Em House SRP a Mature+Old	phasis areas]	Interior Old	Early Seral
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant	2637 mediate Bio nd 100 Mile Area (ha)	diversity Em House SRP a Mature+Old Forest	phasis areas] Old Forest	Interior Old Forest**	Early Seral Forest
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk	2637 mediate Bio nd 100 Mile Area (ha) 175	diversity Em House SRP a Mature+Old Forest >17	phasis areas] Old Forest >7	Interior Old Forest** >1.75	Early Seral Forest <66
2-ICHmk3 <b>Dog Creek Landscape Unit – Inter</b> <b>[LU split between Williams Lake a</b> Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group)	2637 mediate Bio nd 100 Mile Area (ha) 175 19127	diversity Em House SRP a Mature+Old Forest >17 >43	phasis areas] Old Forest >7 >21	Interior Old Forest** >1.75 >10.5	Early Seral Forest <66 <12
2-ICHmk3 <b>Dog Creek Landscape Unit – Inter</b> <b>[LU split between Williams Lake a</b> Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group)	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685	diversity Em House SRP a Mature+Old Forest >17 >43 >23	phasis areas] Old Forest >7 >21 >11	Interior Old Forest** >1.75 >10.5 >5.5	Early Seral Forest <66 <12 <54
2-ICHmk3 <b>Dog Creek Landscape Unit – Inter</b> <b>[LU split between Williams Lake a</b> Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group)	2637 mediate Bio nd 100 Mile Area (ha) 175 19127	diversity Em House SRP a Mature+Old Forest >17 >43 >23	phasis areas] Old Forest >7 >21	Interior Old Forest** >1.75 >10.5	Early Seral Forest <66 <12
2-ICHmk3 <b>Dog Creek Landscape Unit – Inter</b> <b>[LU split between Williams Lake a</b> Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (fir group) 4-IDFxm (pine group)	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >43 >23	phasis           areas]           Old Forest           >7           >21           >11           >21           >11           >21	Interior Old Forest** >1.75 >10.5 >5.5	Early Seral Forest <66 <12 <54
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (fir group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Lo	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103 w Biodivers	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >43 >23 sity Emphasi	phasis           areas]           Old Forest           >7           >21           >11           >21           >11           \$11           \$11	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5	Early Seral Forest <66 <12 <54 <12 <54 <54
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (fir group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Lo Natural Disturbance Type –	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >23 sity Emphasi Mature+Old	phasis           areas]           Old Forest           >7           >21           >11           >21           >11           \$11           \$11	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5 Interior Old	Early Seral Forest <66 <12 <54 <12 <54 Early Seral
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (fir group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Lo Natural Disturbance Type – Biogeoclimatic Variant	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103 w Biodivers Area (ha)	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >43 >23 sity Emphasi Mature+Old Forest	Did Forest Old Forest >7 >21 >11 >21 >11 S Old Forest	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5 Interior Old Forest**	Early Seral Forest <66 <12 <54 <12 <54 <12 <54 Early Seral Forest
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (pine group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Lo Natural Disturbance Type – Biogeoclimatic Variant 2-ICHmk3	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103 w Biodivers Area (ha)	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >43 >23 sity Emphasi Mature+Old Forest >15	phasis areas] Old Forest >7 >21 >11 >21 >11 s Old Forest >9	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5 Interior Old Forest** >0.9	Early Seral Forest <66 <12 <54 <12 <54 <12 <54 Early Seral Forest n/a
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (pine group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Loc Natural Disturbance Type – Biogeoclimatic Variant 2-ICHmk3 4-IDFmw2 (fir group)	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103 ow Biodivers Area (ha) 52 437	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >43 >23 sity Emphasi Mature+Old Forest >15 >22	phasis           areas]           Old Forest           >77           >211           >111           >211           >111           >211           >111           >211           >111           >211           >111           >212           >111           >21           >111           \$           Old Forest           >9           >21	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5 Interior Old Forest** >0.9 >5.25	Early Seral Forest <66 <12 <54 <12 <54 <54 Early Seral Forest
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (fir group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Loc Natural Disturbance Type – Biogeoclimatic Variant 2-ICHmk3 4-IDFmw2 (fir group) 4-IDFmw2 (pine group)	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103 w Biodivers Area (ha) 52 437 38	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >43 >23 sity Emphasi Mature+Old Forest >15 >22 >11	phasis           areas]           Old Forest           >77           >21           >11           >21           >11           S           Old Forest           >9           >21           >11	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5 >10.5 >5.5 Interior Old Forest** >0.9 >5.25 >2.75	Early Seral Forest <66 <12 <54 <12 <54 Early Seral Forest n/a n/a
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (pine group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Loc Natural Disturbance Type – Biogeoclimatic Variant 2-ICHmk3 4-IDFmw2 (fir group) 3-ESSFdc2	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103 w Biodivers Area (ha) 52 437 38 1054	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >43 >23 ity Emphasi Mature+Old Forest >15 >22 >11 >14	phasis           areas]           Old Forest           >77           >21           >11           >21           >11           S           Old Forest           >9           >21           >11	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5 Interior Old Forest** >0.9 >5.25 >2.75 >1.4	Early Seral Forest <66 <12 <54 <12 <54 Early Seral Forest n/a n/a
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (pine group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Lo Natural Disturbance Type – Biogeoclimatic Variant 2-ICHmk3 4-IDFmw2 (fir group) 4-IDFmw2 (pine group) 3-ESSFdc2 3-SBPSmk	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103 w Biodivers Area (ha) 52 437 38 1054 9014	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >23 >43 >23 ity Emphasi Mature+Old Forest >15 >22 >11 >14 >8	phasis           areas]           Old Forest           >77           >21           >11           >21           >11           S           Old Forest           >9           >21           >11	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5 >10.5 >5.5 Interior Old Forest** >0.9 >5.25 >2.75 >1.4 >0.7	Early Seral Forest <66 <12 <54 <12 <54 Early Seral Forest n/a n/a
2-ICHmk3 Dog Creek Landscape Unit – Inter [LU split between Williams Lake a Natural Disturbance Type – Biogeoclimatic Variant 3-SBPSmk 4-IDFdk3 (fir group) 4-IDFdk3 (pine group) 4-IDFxm (pine group) 4-IDFxm (pine group) Forest Grove Landscape Unit – Loc Natural Disturbance Type – Biogeoclimatic Variant 2-ICHmk3 4-IDFmw2 (fir group) 3-ESSFdc2	2637 mediate Bio nd 100 Mile Area (ha) 175 19127 29685 243 103 w Biodivers Area (ha) 52 437 38 1054	diversity Em House SRP a Mature+Old Forest >17 >43 >23 >43 >23 sity Emphasi Mature+Old Forest >15 >22 >11 >14 >8 >11	phasis           areas]           Old Forest           >77           >21           >11           >21           >11           S           Old Forest           >9           >21           >11	Interior Old Forest** >1.75 >10.5 >5.5 >10.5 >5.5 Interior Old Forest** >0.9 >5.25 >2.75 >1.4	Early Seral Forest <66 <12 <54 <12 <54 Early Seral Forest n/a n/a n/a

4 IDEd/2 (nine group)	1000	> 1 1	<b>_ 1</b> 1	> 0.75	2/2
4-IDFdk3 (pine group)	1228		>11	>2.75	n/a
Green Lake Landscape Unit – Lo					
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral
Biogeoclimatic Variant	0.4040	Forest		Forest**	Forest
3-SBPSmk	34610		>7	>0.7	n/a
3-SBSdw1	277	>11	>11	>1.1	n/a
4-IDFdk3 (fir group)	5201	>22	>21	>5.25	n/a
4-IDFdk3 (pine group)	11177	>11	>11	>2.75	n/a
Helena Lake Landscape Unit – L					
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral
Biogeoclimatic Variant		Forest		Forest**	Forest
3-SBPSmk	8797	>8	>7	>0.7	n/a
4-IDFdk3 (fir group)	29273		>21	>5.25	n/a
4-IDFdk3 (pine group)	9400		>11	>2.75	n/a
Hendrix Lake Landscape Unit – I					
Natural Disturbance Type – Biogeoclimatic Variant	Area (ha)	Mature+Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
1-ESSFwc3	4929	>36	>19	>9.5	<22
1-ESSFwk1	11430	>36	>19	>9.5	<22
3-ICHdk	7419	>23	>14	>3.5	<46
2-ICHmk3	5281	>31	>9	>2.25	<36
4-IDFmw2 (fir group)	283	>43	>21	>10.5	<12
4-IDFmw2 (pine group)	177	>23	>11	>5.5	<54
Kelly Lake Landscape Unit – Inte	rmediate Bio	diversity Em	phasis		
Natural Disturbance Type – Biogeoclimatic Variant	Area (ha)	Mature+Old Forest	Old Forest	Interior Old Forest**	Early Seral Forest
3-ESSFxc	1225		>14	>3.5	<46
3-MSxk	6321	>26	>14	>3.5	<46
4-BGxh3 (fir group)	337	>43	>21	>10.5	<12
4-IDFdk3 (fir group)	4553		>21	>10.5	<12
4-IDFdk3 (pine group)	1478		>11	>5.5	<54
4-IDFdk1 (fir group)	48	>43	>21	>10.5	<12
4-IDFdk1 (pine group)	24		>11	>5.5	<54
4-IDFxw (fir group)	2324		>21	>10.5	<12
4-IDFxw (pine group)	32	>23	>11	>5.5	<54
4-PPxh2 (valley bottom)	1		>13	>6.5	<30
Loon Landscape Unit – Intermed				0.0	
Natural Disturbance Type –	Area (ha)	Mature+Old		Interior Old	Early Seral
Biogeoclimatic Variant	/ «ou (nu)	Forest		Forest**	Forest
3-MSxk	19519		>14	>3.5	<46
4-IDFdk3 (fir group)	18729		>21	>10.5	<12
4-IDFdk3 (pine group)	12295		>11	>5.5	<54
4-IDFdk3	7	>34	>13	>6.5	<30
4-IDFxw (fir group)	2409		>21	>10.5	<12
4-IDFxw (pine, valley bottom)	111	>23	>11	>5.5	<54
McKinley Landscape Unit – High			~11	-5.5	-04
Natural Disturbance Type –	Area (ha)	Mature+Old	Old Forest	Interior Old	Early Seral
Biogeoclimatic Variant		Forest	Old T Ulesi	Forest**	Forest
1-ESSFwk1	4206		>28	>14	Forest <17
1-ESSFwc3	2113		>28	>14	<17
			>28		
2-ICHmk3	4043			>6.5	<27
Meadow Lake Landscape Unit –					East O.
Natural Disturbance Type –	Area (ha)	Mature+Old	∪ia ⊢orest	Interior Old	Early Seral

3-SBPSmk         554         >17         >7         >1.75           4-IDFdk3 (fir group)         26074         >43         >21         >10.5           4-IDFdk3 (pine group)         18181         >23         >11         >5.5           4-BGxw2 (fir group)         341         >43         >21         >10.5           4-BGxw2 (pine group)         8         >23         >11         >5.5           4-IDFxm (fir group)         2863         >43         >21         >10.5           4-IDFxm (fir group)         2863         >43         >21         >10.5           4-IDFxm (pine group)         190         >23         >11         >5.5           4-IDFxm (pine group)         190         >23         >11         >5.5           Murphy Lake Landscape Unit – Low Biodiversity Emphasis         Natural Disturbance Type –         Area (ha)         Mature+Old         Old Forest         Interior Old         Early So           1-ESSFwc3         2636         >19         >19         >4.75            1-ESSFwk1         4697         >19         >19         >4.75            3-SBSmc1         5368         >11         >11         >1.1             3-SBSdw1	t	Forest	Forest**		Forest		Biogeoclimatic Variant
4-IDFdk3 (pine group)       18181       >23       >11       >5.5         4-BGxw2 (fir group)       341       >43       >21       >10.5         4-BGxw2 (pine group)       8       >23       >11       >5.5         4-IDFxm (fir group)       2863       >43       >21       >10.5         4-IDFxm (pine group)       190       >23       >11       >5.5         Murphy Lake Landscape Unit – Low Biodiversity Emphasis       Natural Disturbance Type –       Area (ha)       Mature+Old       Old Forest       Interior Old       Early Set         Natural Disturbance Type –       Area (ha)       Mature+Old       Old Forest       Interior Old       Early Set         1-ESSFwc3       2636       >19       >19       >4.75         3-SBPSmk       10673       >8       >7       >0.7         3-SBSmc1       5368       >11       >11       >1.1         3-SBSdw1       20868       >11       >11       >1.1         Spanish Landscape Unit – High Biodiversity Emphasis       Interior Old Forest       Forest**       Forest         Natural Disturbance Type –       Area (ha)       Mature+Old Old Forest       Interior Old Forest**       Early Set         Biogeoclimatic Variant       8470       >28 </td <td>&lt;66</td> <td></td> <td></td> <td>&gt;7</td> <td></td> <td>554</td> <td></td>	<66			>7		554	
4-IDFdk3 (pine group)       18181       >23       >11       >5.5         4-BGxw2 (fir group)       341       >43       >21       >10.5         4-BGxw2 (pine group)       8       >23       >11       >5.5         4-IDFxm (fir group)       2863       >43       >21       >10.5         4-IDFxm (pine group)       190       >23       >11       >5.5         Murphy Lake Landscape Unit – Low Biodiversity Emphasis       Natural Disturbance Type –       Area (ha)       Mature+Old       Old Forest       Interior Old       Early Set         Natural Disturbance Type –       Area (ha)       Mature+Old       Old Forest       Interior Old       Early Set         1-ESSFwc3       2636       >19       >19       >4.75         3-SBPSmk       10673       >8       >7       >0.7         3-SBSmc1       5368       >11       >11       >1.1         3-SBSdw1       20868       >11       >11       >1.1         Spanish Landscape Unit – High Biodiversity Emphasis       Interior Old Forest       Forest**       Forest         Natural Disturbance Type –       Area (ha)       Mature+Old Old Forest       Interior Old Forest**       Early Set         Biogeoclimatic Variant       8470       >28 </td <td>&lt;12</td> <td></td> <td>&gt;10.5</td> <td>&gt;21</td> <td>&gt;43</td> <td>26074</td> <td>4-IDFdk3 (fir group)</td>	<12		>10.5	>21	>43	26074	4-IDFdk3 (fir group)
4-BGxw2 (fir group)       341       >43       >21       >10.5         4-BGxw2 (pine group)       8       >23       >11       >5.5         4-IDFxm (fir group)       2863       >43       >21       >10.5         4-IDFxm (pine group)       190       >23       >11       >5.5         4-IDFxm (pine group)       190       >23       >11       >5.5         Murphy Lake Landscape Unit – Low Biodiversity Emphasis         Secondary (Pine group)       Early Secondary (Pine group)         Natural Disturbance Type – Biogeoclimatic Variant       Area (ha)       Mature+Old       Old Forest       Interior Old       Early Secondary (Pine group)         1-ESSFwc3       2636       >19       >19       >4.75       Secondary (Pine group)       Secondary (Pine gr	<54		>5.5	>11	>23	18181	
4-BGxw2 (pine group)         8         >23         >11         >5.5           4-IDFxm (fir group)         2863         >43         >21         >10.5           4-IDFxm (pine group)         190         >23         >11         >5.5           Murphy Lake Landscape Unit – Low Biodiversity Emphasis          Natural Disturbance Type – Biogeoclimatic Variant         Area (ha)         Mature+Old Forest         Old Forest         Interior Old Forest**         Early Set Forest           1-ESSFwc3         2636         >19         >19         >4.75         Set           1-ESSFwk1         4697         >19         >19         >4.75         Set           3-SBPSmk         10673         >8         >7         >0.7         Set           3-SBSdw1         20868         >11         >11         >1.1         Set           Natural Disturbance Type – Biogeoclimatic Variant         Area (ha)         Mature+Old         Old Forest         Interior Old         Early Set           Natural Disturbance Type – Biogeoclimatic Variant         Area (ha)         Mature+Old         Old Forest         Interior Old         Early Set           1-ESSFwk1         8470         >54         >28         >14	<12		>10.5	>21	>43	341	
4-IDFxm (pine group)190>23>11>5.5Murphy Lake Landscape Unit – Low Biodiversity EmphasisNatural Disturbance Type – Biogeoclimatic VariantArea (ha) ForestMature+Old ForestOld ForestInterior Old Forest**Early Se Forest1-ESSFwc32636>19>19>4.7511-ESSFwk14697>19>19>4.7513-SBPSmk10673>8>7>0.733-SBSmc15368>11>11>1.113-SBSdw120868>11>11>1.11Spanish Landscape Unit – High Biodiversity EmphasisNatural Disturbance Type – Biogeoclimatic VariantArea (ha) ForestMature+Old ForestOld ForestInterior Old Forest**Early Se Forest**1-ESSFwk18470>54>28>14	<54		>5.5	>11	>23	8	
4-IDFxm (pine group)190>23>11>5.5Murphy Lake Landscape Unit – Low Biodiversity EmphasisNatural Disturbance Type – Biogeoclimatic VariantArea (ha) ForestMature+Old ForestOld ForestInterior Old Forest**Early Se Forest1-ESSFwc32636>19>19>4.7511-ESSFwk14697>19>19>4.7513-SBPSmk10673>8>7>0.733-SBSmc15368>11>11>1.113-SBSdw120868>11>11>1.11Spanish Landscape Unit – High Biodiversity EmphasisNatural Disturbance Type – Biogeoclimatic VariantArea (ha) ForestMature+Old ForestOld ForestInterior Old Forest**Early Se Forest1-ESSFwk18470>54>28>14	<12		>10.5	>21	>43	2863	4-IDFxm (fir group)
Natural Disturbance Type – Biogeoclimatic VariantArea (ha)Mature+Old ForestOld ForestInterior Old ForestEarly Se Forest1-ESSFwc32636>19>19>4.7511-ESSFwk14697>19>19>4.7513-SBPSmk10673>8>7>0.713-SBSdw120868>11>11>1.113-SBSdw120868>11>11>1.113-SBSdw120868>10>10ForestForestNatural Disturbance Type – Biogeoclimatic VariantArea (ha)Mature+Old ForestOld ForestInterior Old ForestEarly Se Forest1-ESSFwk18470>54>28>14	<54		>5.5	>11	>23	190	
Biogeoclimatic Variant         Forest         Forest         Forest**         Forest           1-ESSFwc3         2636         >19         >19         >4.75            1-ESSFwk1         4697         >19         >19         >4.75            3-SBPSmk         10673         >8         >7         >0.7            3-SBSmc1         5368         >11         >11         >1.1           3-SBSdw1         20868         >11         >11         >1.1           Spanish Landscape Unit – High Biodiversity Emphasis         Natural Disturbance Type – Biogeoclimatic Variant         Area (ha)         Mature+Old Forest         Old Forest         Interior Old Forest**         Early Set Forest           1-ESSFwk1         8470         >54         >28         >14				s	ity Emphasi	ow Biodivers	Murphy Lake Landscape Unit – L
1-ESSFwc3         2636         >19         >19         >4.75           1-ESSFwk1         4697         >19         >19         >4.75           3-SBPSmk         10673         >8         >7         >0.7           3-SBSmc1         5368         >11         >11         >1.1           3-SBSdw1         20868         >11         >11         >1.1           3-SBSdw1         20868         >11         >11         >1.1           Spanish Landscape Unit – High Biodiversity Emphasis         Natural Disturbance Type –         Area (ha)         Mature+Old         Old Forest         Interior Old         Early Set	eral	Early Ser	Interior Old	Old Forest	Mature+Old	Area (ha)	Natural Disturbance Type –
1-ESSFwk1         4697         >19         >19         >4.75           3-SBPSmk         10673         >8         >7         >0.7           3-SBSmc1         5368         >11         >11         >1.1           3-SBSdw1         20868         >11         >11         >1.1           3-SBSdw1         20868         >11         >11         >1.1           Spanish Landscape Unit – High Biodiversity Emphasis         Mature+Old         Old Forest         Interior Old         Early Set           Natural Disturbance Type – Biogeoclimatic Variant         Area (ha)         Mature+Old         Old Forest         Forest**         Forest           1-ESSFwk1         8470         >54         >28         >14	t	Forest	Forest**		Forest		Biogeoclimatic Variant
3-SBPSmk         10673         >8         >7         >0.7           3-SBSmc1         5368         >11         >11         >1.1           3-SBSdw1         20868         >11         >11         >1.1           3-SBSdw1         20868         >11         >11         >1.1           Spanish Landscape Unit – High Biodiversity Emphasis         Mature+Old         Old Forest         Interior Old         Early Set           Natural Disturbance Type – Biogeoclimatic Variant         Area (ha)         Mature+Old         Old Forest         Interior Old         Early Set           1-ESSFwk1         8470         >54         >28         >14	n/a		>4.75	>19	>19	2636	1-ESSFwc3
3-SBSmc15368>11>11>1.13-SBSdw120868>11>11>1.1Spanish Landscape Unit – High Biodiversity EmphasisNatural Disturbance Type – Biogeoclimatic VariantArea (ha)Mature+Old ForestOld ForestInterior Old ForestEarly Se Forest1-ESSFwk18470>54>28>14	n/a		>4.75	>19	>19	4697	1-ESSFwk1
3-SBSdw1       20868       >11       >11       >1.1         Spanish Landscape Unit – High Biodiversity Emphasis       Emphasis       Interior Old       Early Set	n/a		>0.7	>7	>8	10673	3-SBPSmk
Spanish Landscape Unit – High Biodiversity EmphasisNatural Disturbance Type – Biogeoclimatic VariantArea (ha) ForestMature+Old ForestOld ForestInterior Old ForestEarly Se Forest1-ESSFwk18470>54>28>14	n/a		>1.1	>11	>11	5368	3-SBSmc1
Natural Disturbance Type – Biogeoclimatic VariantArea (ha)Mature+Old ForestOld ForestInterior Old ForestEarly Se Forest1-ESSFwk18470>54>28>14	n/a		>1.1	>11	>11	20868	3-SBSdw1
Biogeoclimatic VariantForestForest**Forest1-ESSFwk18470>54>28>14							
1-ESSFwk1 8470 >54 >28 >14	eral	Early Ser	Interior Old	Old Forest	Mature+Old	Area (ha)	Natural Disturbance Type –
	t	Forest	Forest**		Forest		Biogeoclimatic Variant
1-ESSFwc3 5092 >54 >28 >14	<17		>14	>28	>54	8470	1-ESSFwk1
	<17		>14	>28	>54	5092	1-ESSFwc3
3-ICHmw3 4123 >34 >21 >5.25	<35		>5.25	>21	>34	4123	3-ICHmw3
3-ICHdk 11840 >34 >21 >5.25	<35		>5.25	>21	>34	11840	3-ICHdk
4-IDFmw2 (fir group) 469 >65 >32 >16	<9		>16	>32	>65	469	4-IDFmw2 (fir group)
4-IDFmw2(pine group) 79 >34 >16 >8	<40		>8	>16	>34	79	

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

\*\* Interior old expressed as % of total forest area, calculated as the percentage of the Old Forest specified in the Biodiversity Guidebook, September 1995.

Objective 9.	Consistent with Objective 8 (2), in areas of <i>catastrophic mountain</i> <i>pine beetle damage</i> , during the period of salvage harvesting, manage any draw down of the M+O seral target by managing harvest and replacement of damaged stands outside OGMAs as follows:
	<ol> <li>Harvest in stands which meet all of the following criteria:         <ul> <li>Located in natural disturbance types 2, 3, or 4,</li> <li>Located within a mountain pine beetle salvage zone,</li> <li>If within TFLs, stands have ≥ 50 percent pine by basal area,</li> <li>If outside TFLs, stand have ≥ 70 percent pine by basal area,</li> <li>Areas having high mortality caused by mountain pine beetle.</li> </ul> </li> </ol>
	2. Replace harvested stands with the oldest available, <i>least risk</i> 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) <sup>1</sup>				
		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		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		

<sup>1</sup>Within 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 condition of seral representation with targets in Table 5, amalgamate non-valley bottom BEC subunits <5000 ha. with adjacent subunits consistent with Table 7 and procedures outlined in the BCC Update #2. Definitions of the fir and pine groups are from the BCC Update # 3.

Landscape Unit	Natural Disturbance Type – Biogeoclimatic Variant Amalgamations
108 Mile Lake	1-ESSFwk 1 + 3-SBS mc 1
Big Bar	4-BG xw-2Group + 4-BG xh 3-FirGroup + 4-IDF xm-FirGroup + 4-IDF xm-PineGroup + 4-IDF xw-FirGroup + 4-IDF xw-PineGroup
Bonaparte Lake	3-ESSFdc 2 + 3-MS xk
Bonaparte Lake	3-SBS dw 1 + 3-SBS mm
Bradley Creek	1-ESSFwc 3 + 1-ESSFwk 1
Bridge Lake	3-ESSFdc 2 + 3-SBS mc 1 + 3-SBS mm
Clinton	3-ESSFxc + 5-ESSFxcp
Forest Grove	3-ESSFdc 2 + 3-SBS dw 1
Green Lake	3-SBPSmk + 3-SBS dw 1
Kelly Lake	3-ESSFxc + 5-ESSFxcp
Kelly Lake	4-BGxh 3-FirGroup + 4-IDF dk 1-FirGroup + 4-IDF dk 1-PineGroup +4-IDF xw-FirGroup + 4-IDF xw-PineGroup
McKinley	1-ESSFwc 3 + 1-ESSFwk 1
Meadow Lake	4-BG xw 2-FirGroup + 4-BG xw 2-PineGroup + 4-IDF xm-FirGroup + 4-IDF xm-PineGroup
Murphy Lake	1-ESSFwc 3 + 1-ESSFwk 1

Table 7Amalgamation of Small NDT-BEC Subunits Used for Assessment of<br/>Seral Objectives in the 100 Mile House SRMP

#### 6.4.3 Old Growth Management Areas

Old forest objectives are achieved in the short and long term through a combination of permanent OGMAs, transition OGMAs, and no-harvest areas. There is an expected contribution to old forest from extended rotation areas such as retention and preservation visual areas managed over an extended rotation. The proportion of the visual area deemed to contribute to old was delineated as OGMAs 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 areas, 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 #2<sup>15</sup>. 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 4, 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 4, subject to the provisions set out in Objective 6 for noharvest 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.

<sup>&</sup>lt;sup>15</sup> CCLUP Biodiversity Conservation Strategy Update #2.

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

Old growth management areas 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 objective in Section 6.3. 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. 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.

		Forest Age or Type of Adjacent Patch				
Seral Stage of Forest Patch	(> 120   120   100   years   Productive and   large ("dou		Lakes and large ("double- line") rivers and roads			
Old	50	50	100	200	100	100
Mature		50	100	200	100	100

#### 6.4.4 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 6.4.5).

Recommendation	Spatially locate M+O forest, excluding OGMAs, to meet biodiversity
	distribution according to the following needs in order of priority:
	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.

# Table 9Mature+Old Retention Patch Size Targets for the 100 Mile House<br/>SRMP

NDT			Madavata	
NDT	BEC	Low Emphasis	Moderate	High Emphasis
			Emphasis	
		M+O%	M+O%	M+0%
		>250 ha. target	>250 ha. target	>250 ha. target
		(% of M+O target)	(% of M+O 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

#### 6.4.5 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 network<sup>16</sup>. 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 10 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.

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.

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

 Table 10
 Principles for Landscape Connectivity

<sup>&</sup>lt;sup>16</sup> Biodiversity Guidebook, p. 4, 19-20, 26-27, 35-36, 46-48, 52, 53-59, 74.

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

#### 6.5 Stand Level Biodiversity

#### 6.5.1 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 Cariboo-Chilcotin Land Use Plan area<sup>17</sup>.

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 inventory rare ecosystems occurring in the 100 Mile House SRMP area.

#### 6.5.2 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 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

<sup>&</sup>lt;sup>17</sup> Biodiversity Guidebook, p. 76; CCLUP Biodiversity Conservation Strategy p. 47-48.

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 is provided in "Wildlife Habitat Features, Summary of Management Guidelines, Southern Interior Forest Region" (WLAP), 2004.

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

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

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.

Ponderosa pine stands, cottonwood stands, and birch leading stands are not listed as sensitive habitats but require special conservation attention because of their ecological value and rarity. Aspen stands are relatively uncommon and large, mature and old aspen trees are highly valuable to wildlife. Limestone plant associations should be protected because of their rarity as well. Many sensitive habitats are not well known and further inventory is required to identify their locations.

#### 6.5.3 Grasslands

Management of critical grassland habitat 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 100 Mile House 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.

#### 6.5.4 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 Wildlife Tree Patches (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. The calculation of the long-term and short-term WTR requirements is described in Section 7 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 wildlife tree patches decreases.

Many individual wildlife tree patches 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 areas 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 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 11Wildlife Tree Retention Targets

Landscape Unit – Biogeoclimatic sub unit Minimum Wildlife Tree Retention Target		
	(% gross harvest area)	
108 Mile Lake		
1-ESSFwk1	11.3	
3-SBPSmk	10.6	
3-SBSdw1	10.2	
3-SBSmc1	9.8	
4-IDFdk3 (fir group)	9.3	
4-IDFdk3 (pine group)	9.8	
Big Bar		
3-ESSFxc	5.1	
3-MSxk	6.6	
4-BGxh3 (fir group)	0.2	
4-BGxw2 (fir group)	6.3	
4-BGxw2 (pine group)	4.0	
4-IDFdk3 (fir group)	7.5	
4-IDFdk3 (pine group)	8.7	
4-IDFxm (fir group)	7.5	
4-IDFxm (pine group)	8.0	
4-IDFxw (fir group)	4.6	
4-IDFxw (pine group)	0.3	
Bonaparte		
3-ESSFdc2	7.5	
3-MSxk	6.9	
3-SBPSmk	7.5	
3-SBSdw1	7.5	
3-SBSmm	7.9	
4-IDFdk3 <sup>18</sup>		
4-IDFdk3 (fir group)	6.2	
4-IDFdk3 (pine group)	7.8	
Bradley Creek		
1-ESSFwk1	7.5	
1-ESSFwc3	7.4	

<sup>18</sup> To be deleted?

Minimum Wildlife Tree Retention Target (% gross harvest area)		
7.8		
8.5		
7.2		
8.5		
8.0		
8.6		
10.8		
9.5		
9.9		
8.0		
8.1		
7.6		
8.1		
8.6		
7.7		
7.2		
7.4		
7.3		
7.2		
7.0		
8.0		
2.2		
3.8		
8.2		
9.2		
5.7		
6.4		
3.2		
6.8		
6.5		
7.4		
7.0		
5.9		
8.4		
7.6		
8.4		
7.3		
8.7		
6.6		

Landscape Unit – Biogeoclimatic sub unit	Minimum Wildlife Tree Retention Target (% gross harvest area)	
4-IDFdk3 (pine group)	8.3	
4-IDFxw (fir group)	1.9	
4-IDFxw (pine group)	0.7	
Deception Mountain		
1-ESSFwc3	0.0	
1-ESSFwk1	5.9	
3-ICHdk (valley bottom)	6.6	
2-ICHmk3	7.1	
Dog Creek		
3-SBPSmk	10.3	
4-IDFdk3 (fir group)	8.9	
4-IDFdk3 (pine group)	9.6	
4-IDFxm (fir group)	7.5	
4-IDFxm (pine group)	9.3	
4-BGxh3 (fir group)	9.8	
4-BGxw2 (fir group)	10.0	
4-BGxw2 (pine group)	10.4	
Forest Grove		
2-ICHmk3	8.4	
4-IDFmw2 (fir group)	5.6	
4-IDFmw2 (pine group)	5.9	
3-ESSFdc2	9.6	
3-SBPSmk	9.7	
3-SBSdw1	9.3	
4-IDFdk3 (fir group)	9.9	
4-IDFdk3 (pine group)	9.9	
Green Lake		
3-SBPSmk	8.1	
3-SBSdw1	8.8	
4-IDFdk3 (fir group)	7.6	
4-IDFdk3 (pine group)	7.6	
Helena Lake		
3-SBPSmk	11.7	
4-IDFdk3 (fir group)	10.5	
4-IDFdk3 (pine group)	10.9	
Hendrix Lake		
1-ESSFwc3	8.1	
1-ESSFwk1	8.0	
3-ICHdk	8.5	
2-ICHmk3	8.9	
4-IDFmw2 (fir group)	7.7	
4-IDFmw2 (pine group)	9.1	
Kelly Lake		
3-ESSFxc	1.7	
3-MSxk	0.2	
4-BGxh3 (fir group)	0.0	

Landscape Unit – Biogeoclimatic sub unit	Minimum Wildlife Tree Retention Target (% gross harvest area)	
4-IDFdk3 (fir group)	2.4	
4-IDFdk3 (pine group)	2.1	
4-IDFdk1 (fir group)	7.8	
4-IDFdk1 (pine group)	7.8	
4-IDFxw (fir group)	0.0	
4-IDFxw (pine group)	0.0	
4-PPxh2 (valley bottom)	7.8	
Loon		
3-MSxk	8.2	
4-IDFdk3 (fir group)	7.7	
4-IDFdk3 (pine group)	8.4	
4-IDFxw (fir group)	5.6	
4-IDFxw (pine, valley bottom)	6.3	
McKinley		
1-ESSFwk1	7.6	
1-ESSFwc3	6.7	
1-ICHwk2	8.5	
2-ICHmk3	8.6	
3-SBSdw1	8.5	
Meadow Lake		
3-SBPSmk	11.3	
4-IDFdk3 (fir group)	10.4	
4-IDFdk3 (pine group)	10.8	
4-BGxw2 (fir group)	8.2	
4-BGxw2 (pine group)	3.8	
4-IDFxm (fir group)	8.7	
4-IDFxm (pine group)	8.2	
Murphy Lake		
1-ESSFwc3	7.9	
1-ESSFwk1	7.7	
3-SBPSmk	8.8	
3-SBSmc1	8.6	
3-SBSdw1	8.3	
Spanish		
1-ESSFwk1	7.1	
1-ESSFwc3	1.0	
3-ICHmw3	5.0	
3-ICHdk	7.7	
4-IDFmw2 (fir group)	8.1	
4-IDFmw2(pine group)	7.6	

#### 6.5.5 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.

#### 6.5.6 Riparian Habitats

The CCLUP (p. 153, 155, 158, 159, 162, 163, 164, 167, 168), including the sub-unit targets (p. 60 to 133) requires management for riparian habitats, in both grassland and forested ecosystems. In addition to the protection of water quality and shorelines, riparian areas are a key CCLUP measure used to maintain many other land 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 also requires the use of the *Riparian Management Area Guidebook* of the Forest Practices Code to manage for 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.

Specifications					
Streams	Width (m)	Riparian Class	Riparian Reserve Zone Minimum Width* (m)	Riparian Management Zone Minimum Width ** (m)	Riparian Management Area Minimum Width (m)
	> 20	S1	50	20	70
All streams in community	> 5 ≤ 20	S2	30	20	50
watersheds, and all fish streams	1.5 ≤ 5	S3	20	20	40
	< 1.5	S4	0	30	30
Streams outside of community watersheds that are not fish	> 3	S5	0	30	30
streams	<=3	S6	0	20	20
Wetlands and shrub-carrs	Size (ha)				
	> 5 ha	W1	10	40	50
Anylogotion	> 1 ≤ 5	W2 BG, IDFxm	10	20	30
Any location	>1≤5	W3	0	30	30
	> 0.5 ≤ 1	W4 BG, IDFxm	0	30	30

### Table 12Riparian Reserve Zone and Riparian Management ZoneSpecifications

Streams		Riparian Class	Minimum Width* (m)	Management Zone	Riparian Management Area Minimum Width (m)
iz or more individual wetlands	Combined size of wetlands ≥ 5		10	40	50
Lakes	Size (ha)				
Any location	> 5	L1	10	See Section 6.9	of this Plan
Any location (applicable only if the	2155	L2 BG, IDFxm	10	20	30
lake has not been addressed in	>1≤5	L3	0	30	30
Section 6.9 Lakes)	ついちくつ	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.	<ul> <li>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:</li> <li>1) maintain streambank stability and channel processes, and</li> <li>2) minimize changes to stream shade and organic input to the stream.</li> </ul>
<u>Ctroto au</u>	20.4 Follow the "heat monoport practices" as sufficient in the
Strategy	20.1 Follow the "best management practices" as outlined in the

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, understorey habitats.

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

#### 6.5.7 Coarse Woody Debris

Retention of coarse woody debris is identified in CCLUP (p. 153) as a component of biodiversity conservation. Coarse woody debris fulfils 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.	<ul> <li>Manage coarse woody debris according to the following principles:</li> <li>1. Leave as much volume as practicable,</li> <li>2. Emphasize retention of larger pieces (diameter and length) for that stand, and</li> </ul>
	3. Leave pieces distributed across the harvested area where possible.

#### 6.6 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 (WHAs) exist in the 100 Mile House SRMP area.

#### 6.6.1 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 Management Strategy for Mule Deer Winter Ranges in the Cariboo-Chilcotin. Part 1a: Management Plan for Shallow and Moderate Snowpack Zones (2002) and Part 1b: Management Plan for Transition and Deep Snowpack Zones (2005). Cariboo Forest Region Extension Note #25A<sup>19</sup> (applicable outside Horsefly in IDFdk3, IDdk4, and IDFxm), and individual management plans for each winter range. There are 26 mule deer winter ranges entirely or partly within the 100 Mile House SRMP area.

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 forage 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 litter fall 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.

<sup>&</sup>lt;sup>19</sup> Structural Definitions for Management of Mule Deer Winter Range Habitat in the Interior Douglas-Fir Zone. Cariboo Forest Region Research Section Extension Note #25A. August 2000 (7 pp.).

Objective 23. Manage Crown land within the boundaries shown on Map 6 as mule deer winter range.

#### Objective 24. Manage each mule deer winter range to meet the condition and distribution of habitat in accordance with the following: 1. The approved *management plan* (see definition),

- 2. Long term objectives map applicable to that mule deer winter 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.

#### 6.6.2 Mountain Caribou

The CCLUP (p. 156) states that the overriding objective is to maintain habitat values for mountain caribou within the Cariboo-Chilcotin Land Use area because of the importance of the eastern caribou to the provincial population of mountain caribou. Mountain caribou occur in the mountainous parts of the eastern Cariboo-Chilcotin Land Use area and are provincially red-listed and federally listed as threatened. There are less than 2000 mountain caribou in the world, almost all of which live in British Columbia.

Suitable winter habitat is fundamental to the maintenance of the mountain caribou population. As snow depths increase, caribou move up into the sub alpine and alpine, where they feed on arboreal lichens. See the Caribou Strategy and its updates for details of the biology of caribou. Mountain caribou are being managed through application of the CCLUP *Mountain Caribou Strategy*, (October, 2000), and by other direction as accepted by the CMC and RRC.

Disturbance as well as habitat loss can affect the viability of caribou populations. Motorized sports such as snowmobiling are discouraged in key caribou habitats because of the stress and energy burden caused by frightening the animals or forcing them to move away from preferred habitats.

Objective 25.	Manage Crown land within the caribou no-harvest and caribou
	modified harvest areas as caribou winter range, as shown on
	Map 6.

## Objective 26. Manage caribou no-harvest and caribou modified harvest areas to meet the condition and distribution of habitat in accordance with the CCLUP Mountain Caribou Strategy (October 2000).

#### 6.6.3 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 wind maintains low snow depths. 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 27. Manage the Crown land within the boundaries shown on Map 6 as mountain goat winter range.

Objective 28.	rang	ate aircraft disturbance to mountain goats occupying winter e or natal areas as shown on Map 6 by following established dance procedures.
Strategy	28.1	Ensure aircraft operation is consistent with the "Interim Wildlife Guidelines for Commercial Backcountry Recreation in British Columbia" or its successor documents.
Strategy	28.2	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 29.		in mountain goat winter range, as shown on Map 6, provide rity and thermal cover within 200 meters of escape terrain.

Strategy 29.1 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 30. Prevent disease transmission to mountain goats from domestic sheep used for vegetation management.

Strategy 30.1 Maintain separation of domestic sheep used for vegetation management and areas used by mountain goats in the summer.

#### 6.6.4 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 Marble Range sub-unit (p. 77).

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 31. Manage the Crown range within the boundaries shown on Map 6 as California bighorn sheep winter range.

Objective 32. Limit aircraft disturbance to bighorn sheep occupying winter range or natal areas as shown on Map 6.

#### 6.6.5 Moose

Management for moose is identified in the CCLUP (p. 155-156), including the sub-unit targets (p. 60 to 133). 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). Specifically, habitat enhancement for moose in Management Unit 5-15 is discouraged because of the risks to mountain caribou from wolves that depend on moose as an alternate prey species.

#### Objective 33. In areas identified as key wetlands or key 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 33, '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 33.1 At least 50 percent of the wetland perimeter for wetlands over five ha should be maintained as advanced immature or mature forest cover.
- Strategy 33.2 Avoid broadcast herbicide treatments within the riparian management area of wetlands.
- Strategy 33.3 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 four-wheel drive vehicles.

#### 6.6.6 Grizzly Bear

Management for grizzly habitat is referenced in several of the CCLUP sub-unit targets (p. 61, 83, 85, 113, 121) 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 limited

habitat. See the Identified Wildlife Strategy<sup>20</sup> 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.

**Recommendation** 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.

Objective 34.	Where available, retain security cover adjacent to critical grizzly bear foraging habitats, which may include the 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 5.

**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).

#### 6.6.7 Fur-bearers

Within the SRMP area, fur-bearers are an important resource for both native and nonnative 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.

<sup>&</sup>lt;sup>20</sup> Accounts and Measures for Managing Identified Wildlife. WLAP. 2004.

#### 6.7 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 D. 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.

Strategy 35.1 In the absence of General Wildlife Measures specified under FRPA, follow procedures outlined in the Identified Wildlife Management Strategy (2004), for protection of habitat and amelioration of disturbance.

#### 6.8 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 100 Mile House SRMP area the Bonaparte River and the Bridge Creek watersheds are particularly important for fisheries. A CCLUP requirement is to manage the Bonaparte watershed for salmon stocks through riparian area protection and controls on the rate of harvest. The Bridge Creek watershed contains an assortment of lakes that contribute to the largest recreational fisheries in the Region.

#### 6.8.1 Watershed Hydrology

Direction contained under the CCLUP sub-unit targets (p. 77, 105, and 127) indicates the Bridge Creek watershed, the Bonaparte River watershed, and the Clinton Creek watershed are to be managed for hydrologic stability through watershed assessment, restoration, and monitoring. 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 (p. 179) 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 ha<sup>21</sup>: 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 assessment<sup>22</sup> completed in 1996 indicated that the CCLUP fisheries targets were achievable while 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.

#### 6.8.2 Fish

The 100 Mile House 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. The fish species of particular concern within the 100 Mile House SRMP are rainbow trout and kokanee throughout the SRMP area, and chinook, coho and pink salmon as well as steelhead trout in the Bonaparte River watershed.

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 to 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 (salmon) and MOE (rainbow trout, lake trout, and kokanee).

Critical fish habitat is designated as follows:

• Defined lake shore areas on Lac La Hache where kokanee spawn and areas on Bridge and Deka Lakes where 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.

<sup>&</sup>lt;sup>21</sup> Interior Watershed Assessment Procedure Guidebook (IWAP) Second Edition, Version 2.1, April 1999: page 2.

<sup>&</sup>lt;sup>22</sup> Fisheries Target Risk Assessment Prepared for the CCLUP Integration Process, August 15, 1996 (2 cover letters +19 pages + 1 map).

- 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.	
Stratogy	27 1	In major sub basing of key watershade (Hereofly D

Strategy 37.1 In major sub-basins of key watersheds (Horsefly R., Cottonwood/Swift R., Bonaparte R., Cariboo R., Bridge Ck.) where timber harvesting exceeds 25 percent, 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 Noharvest Areas.

#### 6.8.2.1 Salmon

The CCLUP specifies that the Bonaparte watershed and the Fraser River mainstream, be managed for salmon stocks through riparian area protection and controls on the rate of harvest (p. 67, 77, 103, 105, 121,125 and 129). The salmon species present are chinook, coho, and pink salmon, and steelhead trout. The CCLUP (p. 168-169) includes a list of specific objectives for salmon management. The lower reaches of tributary streams to the Fraser River also provide habitat to salmon within the SRMP.

#### 6.8.2.2 Bull Trout

Bull trout are not currently (2004) listed as identified wildlife, 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. Bull trout have limited distribution within the 100 Mile House SRMP area. With the installation of the fish ladder in the Bonaparte River, it is expected bull trout could move into this river system. Also bull trout can be found in the mainstream of the Fraser River. Inventory has not been completed throughout the entire SRMP area.

#### 6.8.3 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. 159) should include allocations of water for conservation purposes. The CCLUP (p. 123) also requires water allocation planning in the Rail ERDZ to address the high population and competing water uses in the area. No reduction in timber access would result from the water management strategy. An approved community watershed plan exists for the 6700 ha Clinton Creek watershed<sup>23</sup>.

#### 6.9 Lakes

The CCLUP sub-unit targets (p. 61, 69, 73, and 121) 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 F. The need for management of scenic landscapes adjacent to fishing lakes is also described (p. 141) and CCLUP sub-unit strategies (p. 60, 66, 68, 72, 120, 122, 124, 126, 128) require management of backcountry units adjacent to key lakes. Completion of Lake Management Plans for important lakes is also identified under the CCLUP (p. 160).

		Lakes Identified in SRMP (details provided in Appendix F)	Others
Boss/Deception SRDZ*	7	*5 designated, Katherine Lake (4496), McNeil Lake (4585), Skinny	2 (Horsefly)

#### Table 13 Wilderness Fisheries Lakes

<sup>&</sup>lt;sup>23</sup> Clinton Creek Watershed Management Plan, April 7 1989, (32 Pages)

CCLUP Resource Management Zone Sub-Unit	Approximate Number of Lakes Specified by CCLUP	Lakes Identified in SRMP (details provided in Appendix F)	Others
		Lake (4593), Deception Lake (4417), Goat Lake (4275)	
Interlakes SRDZ	2	4 designated, Apollo (7540), Unamed (9435 and 9462), Tobe Lake (9396)	None
Canim ERDZ*	10	8 designated, Unamed (5259 and 5764), Tommy Archie (5467), Whale Lake (5691), Christopher (5701), Sliver Lake (5513), Cleaver Lake (4782), Broken Hook (7771)	5 (Horsefly)
Lang/School House SRDZ	1	1 designated, unnamed (5347)	None
Rail ERDZ	0	1 designated, unnamed (6383)	None
Bonaparte ERDZ	0	7 designated, Lake in the Gap (10756), East Secret Lake (11228), West Secret Lake (11234), Heller Lake (11429), Island (11312), Bare (11300), Meadow (11325)	None

\*This CCLUP subunit is not entirely within the 100 Mile House SRMP; additional identified lakes are located outside the 100 Mile House SRMP area.

Lakes important for tourism, recreational and/or 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 6.10.4) is included and the recommendations applicable to the backcountry unit (Section 6.10.2).

The five categories of lakes are as follows:

- <u>Refugium Lake</u>: 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 F.
  - 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 F.
- Access Objective variable, as specified for each lake in Appendix F.
- <u>Wilderness Fisheries Lake</u>: 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 F, 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 F.
- 3. <u>Quality Lake</u> 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 F.
- Access Objective as specified for each lake in Appendix F.
- <u>General Lake</u> 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 F.
  - Riparian Reserve Zone Objective 10 meter width, no harvest.
  - Lakeshore Management Zone Objective width and objectives as specified for each lake in Appendix F.

- Access Objective as specified for each lake in Appendix F.
- 5. <u>Key Lake</u> 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 100 Mile House lake classification planning table, comprised of public stakeholder groups, major forest licensees, representatives from local First Nations bands and government agencies was established in 1994. This planning group actively classified lakes greater than three ha to provide recommendations regarding lake management as described in the 100 Mile House Lake Classification Guidelines<sup>24</sup>. The lake classification planning group classified approximately 1021 of the1558 lakes applicable to the district lake classification system. The remaining 'unclassified' lakes were assigned classifications and then all classified lakes were assigned management categories through the SRMP planning process.

The following inputs were considered in the preparation of the lakes management objectives: the CCLUP objectives, the Regional Draft Lakeshore Management Guidebook<sup>25</sup>, 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 100 Mile House SRMP area.

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

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

Strategy 39.1 Within lakeshore management zones, follow the strategies listed in Appendix F, Table 17.

#### 6.10 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

<sup>&</sup>lt;sup>24</sup> 100 Mile House Lake Classification Guidelines, April 14, 1999.

<sup>&</sup>lt;sup>25</sup> Lake Classification and Lakeshore Management Guidebook, Draft 5, June 24, 1998 (29 pages).

CCLUP sub-unit targets (p. 60 to 133) also provide specific direction for tourism management.

#### 6.10.1 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*<sup>26</sup> was developed in 1996, and provides the basis for sustainable resource management planning. The locations of important trails came from public input (refer to Map 9), and have been incorporated into the plan.

#### Except at sites where roads cross trails, maintain 50 meter **Objective 40.** 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.

Divide the total trail management zone buffer on both sides of Strategy 40.1 the trail in a way that best protects the visual and recreational values of the trail.

#### 6.10.2 Backcountry

Targets were established for the amount of area to be managed in backcountry condition in each sub-unit (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 tranguil 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 viewscapes, 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 areas<sup>27</sup>, and therefore backcountry characteristics will change over time.

<sup>&</sup>lt;sup>26</sup> Recreation Corridor Management Strategy: Cariboo Chilcotin Land Use Plan, October 1, 1996 (54 pages). <sup>27</sup> Government Clarification of Key Components of the CCLUP (5 pages), September 27, 1996.

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 will 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 trail, and seeding disturbed areas.

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

#### Table 14Values 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
3	Big Timothy Mountain - snowmobiling, alpine hiking.
4,5	Wetlands, meadows, snowmobile trails, Cleaver Lake (unit 5)
6	Creeks and wetlands, fishing in Gilligan Lake and Hendrix Creek.
7	High elevation viewpoints, alpine hiking, snowmobiling trails, guide/outfitter trails.
8	Snowmobile staging area, alpine hiking.
9,10	Snowmobile trails (9 only), non-motorized recreation, alpine and subalpine outdoor recreation.
11	Deception Creek and No Name Lakes, corridor into Wells Grey Provincial Park, snowmobile trail corridor (proposed) in Sliver Lake area.
12	Lakes, trails, wildlife emphasis.
13	Lang Lake (key lake)
14	Primitive camping on lakeshore, fishing, Lang Lake (key lake).
16	Wildlife management emphasis adjacent to provincial park.
17,18, 19	Multi-use existing trail/old road network for riding activities connecting lakes with existing or potential fishing opportunities, motor and non-motorized activities (i.e. mountain bikes, ATV's etc.).
20,22, 23	Potential walking/hiking motorized trails, Canim Lake.
21	Fishing lakes (non-motorized access), potential snowmobile touring route.

Back- country Unit	Backcountry Values
24	Hawkins Lake, adjacent to Provincial Park, motorized trails.
25	Greenlee Lake (destination), motorized main corridors (proposed), hiking and horseback riding trails, Bobbs Lake, quality lake with rough 4 wheel drive access from Canim-Hendrix road.
26	Views of Canim Lake from dispersed use trails, (motorized and non- motorized) and associated views.
27	Lakes, fishing on Howard Lake and small lakes, existing horseback riding, mountain biking, and ATV trail loops with views of Canim, Howard, and Potlicker lakes, recreation site (Howard Lake).
28	Hiking, viewpoints, horseback riding, ATV, snowmobiling trails, Canim Lake.
29	Lakes, adjacent to Provincial Park.
30,32	Natural setting for hiking, horseback riding, mountain biking, and cross- country skiing, Drewry Lake.
31	Viewpoints, non-motorized and motorized trails, access road to Wells Grey Provincial Park, lakes.
33	Deka and Needa Lakes, trails around lakes, recreation site, motorized and mountain biking, old Windy mountain trail (natural setting).
35	Snowmobiling, horseback riding and cross-country skiing trails, Earl, Horse, and Drewry Lakes
36	Horseback riding trails, Cariboo Chilcotin Coast Tourism Association (CCCTA) trail, Horse Lake public road visuals.
37	Horseback riding trails, Cariboo Chilcotin Coast Tourism Association trails, Huckleberry Butte viewpoint.
38,39, 40,41, 42,91, 92,93	Lakeshore activities, views of lake, motorized through routes, non- motorized trails, dispersed public recreation.
43	Trails/roads for horseback riding, hiking, ATVing, mountain biking, snowmobiling.
44	High value lakes, driving routes (5200 Road), multi use trails, significant viewpoints.
45	Lac des Roches, Montana, Eugene, Crystal, Raspberry, Chain, Burn, Webb lakes.
47	Commercial recreation trails, horseback riding trails (public and commercial).

Back- country Unit	Backcountry Values
48,50	Horseback riding trails (public and commercial), Little Horse Lake.
49	Olsens Butte, motorized and non-motorized trails, automobile touring routes, lakeshore management areas (Green & Watch lakes), viewpoints including from lakes, trails, roads, and Olsens Butte.
51,55, 56,57, 58	Non-motorized trails, potential forest ecosystem networks, wildlife habitat.
52	Dispersed foot traffic, lakes, viewpoints, non-motorized trails.
53	Trails, lakes, including Nolan and Jim Lakes, and the remaining undeveloped shoreline of Green Lake, viewpoints (Mt. Jack), fishing, north/south public road (Prydatok Road), east/west forest service road.
54	Motorized trails, North Bonaparte Road.
59,60,	Non-motorized trails, potential forest ecosystem networks, wildlife viewing,
61	adjacent to Crater Lake Goal II Protected Area.
62	Motorized trails, Loon Lake.
63	Non-motorized recreation activities, Loon Lake.
65	Natural features, dispersed rangeland hiking, access route to Churn Creek Park.
66, 72	Fraser River vistas.
67,168, 169	Fraser River vistas.
68	Horseback riding trails, Jesmond road lookout and access route.
69	Views from trails, 57 Mile Creek, trails, horseback riding and hiking, commercial and public use, access to park.
70	Horseback riding and hiking trails, views, possible wildlife viewing.
71	Horseback riding and hiking trails, views.
73	Views of Fraser River, access to/from Fraser River, natural grasslands.
74	Horseback riding trails, Tim's cabin trail.
75	Lime viewpoint, rough 4-wheel drive, 4 wheel drive and ATV recreation opportunities.
77	Riparian and wetland recreation (primitive, non-motorized).
78	Mountain biking and snowmobiling trails.

Back- country Unit	Backcountry Values
79	Timothy Lake, horseback riding.
80	Pendleton Lake, MOF recreation site, primitive camping location on Pendleton, Little Pendleton and Tommie Archie Lakes, quality wilderness lakes north of Pendleton Lake.
81	High elevation recreation with non-motorized summer use, Mt. Hendrix.
82	Young Lake, water based activities, adjacent to Young Lake Goal 2 Area.
83	Eagan Lake, existing hiking and horseback riding trail south of lake linking to Machete lake.
84	Existing motorized use trails, Machete Lake.
85	Snowmobile corridor route, trails linking angling lakes, views around angling lakes, numerous recreation sites.
99	Key lakes and associated wild fly-in fisheries, primitive recreation activities, (walk-in), no land based motorized activities.
100	Bonaparte Lake, potential for future snowmobile trail at west end of lake.
137	Proposed Goal II Protected Area between Sulphurous and Deka lakes.
147	Lakeshore activities, views of lake and from lake.
152	Hihium Lake, non-motorized future recreation focus.
153	Wildlife emphasis, Boas Creek.
154,155, 156	Riparian and wetland recreation (primitive, non-motorized), wildlife emphasis.
157	Guide/outfitting trails, trails connecting key lakes, visuals.
158,159	Wildlife emphasis, guide/outfitting trails, trails connecting key lakes, key lakes.
160	Non-motorized trails, key lakes, wetland/ creek systems, guide/outfitter trails.

#### 6.10.3 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.

	•• •• • • • • • • • • •
Objective 42.	Manage high elevation viewscapes by designing harvest
	openings to reflect existing natural openings, vegetation patterns,
	and natural features when viewed from the following high
	elevation viewpoints as identified on Map 10:
	Redfern Ridge
	Olsons Butte
	Lime Lookout
	Mt. Kirr
	Mt. Bowman
	Jesmond Lookout
	<ul> <li>Sulphurous Lake</li> </ul>
	Timothy Mountain
	Begbie Lookout

Deception Mountain

#### 6.10.4 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.

Highways 97 and 24 (inventoried roads) were identified in the CCLUP as scenic corridors. In addition, the public input process identified selected highway roads and access roads to parks, commercial facilities, and residential developments as areas of Scenic Value. These roads were classified into three groups as follows, and each had a scenic area placed on both sides of the road over Crown land.

#### 200m Scenic Corridors

- 1. Highway roads,
- 2. Within an SRDZ,
- 3. With more than one tourism opportunity,
- 4. Residential (colonies); subdivisions with over 50 properties,

- 5. Access routes to parks,
- 6. Highway 97, Highway 24 and Kelly Lake Road,
- 7. Railway Line.

#### **100m Scenic Corridors**

- 1. Highway roads,
- 2. Outside an SRDZ,
- 3. More than one tourism operation,
- 4. Residential (colonies); subdivisions with over 50 properties.

#### **50m Scenic Corridors**

- 1. Highway roads,
- 2. Outside an SRDZ,
- 3. One tourism operation or Access route to parks,
- 4. Residential subdivision (Less than 50 properties more than 10 properties).

### Recommendation: Manage forest harvesting within scenic corridors to mimic the form, shape and size of natural openings.

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.

### Objective 43. Manage the areas shown on Map 10, as scenic areas as viewed from the designated viewpoints.

- Strategy 43.1 Maintain the visual quality of the areas shown on Map 10 from the designated viewpoints, consistent with Table 18 in Appendix G.
- Strategy 43.2 Design disturbances (roads, cutblocks, landings) to mimic naturally occurring line, form, colour, and texture of the viewshed, and design opening size to reflect the existing scale of natural openings, vegetation patterns, and natural features.

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

#### 6.11 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.

#### 6.12 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.

#### 6.13 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 100 Mile House Forest District administers a range district that extends beyond its boundary, in particular the Maiden Creek Range Unit of the Clinton and District Stock Range. The Kamloops Forest District encompasses portions of the Scotty Creek Unit of the Ashcroft Stock Range within the 100 Mile House Forest District as well as Upper Deadman and Vidette Range Units of the Deadman Stock Range and portions of the Darfield-Mt Olie Stock Range. The SRMP includes only those range units, or portions of range units, that are within the 100 Mile House 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."<sup>28</sup>

<sup>&</sup>lt;sup>28</sup> Amendment to the Cariboo Chilcotin Land Use Plan, May 31, 1996 (1 page).

## Objective 44. 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 44.1 Regional wildlife safety standards state that 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 15CCLUP and 100 Mile House SRMP Target Animal Unit Months in 1994by CCLUP Resource Development Zone

	Animal Unit Months
CCLUP Sub Unit	CCLUP Target (Entire Zones)
Bonaparte ERDZ	15,900
Canim ERDZ	3,055
Gustafson ERDZ	37,538
Loon ERDZ	9,636
Rail ERDZ	6,629
Clinton IRDZ	5,890
Grasslands IRDZ	39,579
Marble Range SRDZ	4,363
Boss/Deception SRDZ	150
Flat Lake SRDZ	1,866
Interlakes SRDZ	17,559
Lang/Schoolhouse SRDZ	265
Total	142,430

#### 6.14 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 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 Code of Agricultural Practice for Waste
	Management and the Farm Practices Protection (Right to Farm)
	Act.

## Objective 45. Manage livestock to prevent damage to riparian vegetation, bank stability, fish habitat, and water quality in streams, lakes, and wetlands.

#### 6.15 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 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 100 Mile House SRMP 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.

#### 6.16 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, but there are no such sites known in the SRMP area at this time. 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.

#### 6.17 Trapping

The CCLUP (p. 177and Appendix 1) acknowledges that trapping will proceed in all zones, including 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).

#### 6.18 Access

The CCLUP (p. 159) recognized the need for an access management strategy, with a further requirement to address specific issues. A Regional Access Management Strategy<sup>29</sup> 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 general public identified a variety of access concerns pertaining both to expansion and reduction within the 100 Mile House SRMP. Some specific issues regarding reduced access include: i) preventing increased road access in backcountry, wildlife habitat, fisheries, and sensitive alpine areas; ii) prevention of continued public access by deactivation or rehabilitation of existing or traditional access structures; iii) restriction of new permanent access structures; iv) location of access structures related to viewscapes and viewpoints; v) restriction of access beyond an access management point or as a result of road deactivation activities. Access restrictions can occur through various levels of deactivation, as well as physical and regulatory methods.

The public process also identified four different access zones that could be used in the development of a comprehensive access management plan. These include: the wildlife

<sup>&</sup>lt;sup>29</sup> Cariboo Chilcotin Land Use Plan Regional Access Management Strategy, August 9, 1996 (28 pages).

access zone, the recreation access zone, the SRDZ access zone, and the full access management zone.

"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. 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 Report30 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 Strategy31. 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 F 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 points to an
	existing road.

Objective 46.	Locate new roads away from refugia and wilderness fisheries lakes, sufficient to maintain lake management direction
	(Appendix F) unless no other practicable route exists.

Strategy 46.1 Locate new, permanent roads >2000m from wilderness fisheries lakes, or consistent with alternative locations agreed to by MOE, Environmental Stewardship Division

Objective 47.	Minimize adverse impacts of access-related activities on
	important bighorn sheep habitat on Crown range as shown on
	Map 6.

<sup>&</sup>lt;sup>30</sup> Snowmobile Access Working Group Report, May 18, 1999 (15 pages).

<sup>&</sup>lt;sup>31</sup> Mountain Caribou Strategy, October 2000 (77 pages + 12 maps).

Ensure sheep movement between identified habitat areas remains possible.

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

#### 7 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 H.

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.

#### 7.1 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 Report<sup>32</sup> and later became higher level plan objectives<sup>33</sup>. In addition the IAMC has endorsed the prorated portions of the corresponding no-harvest targets, expressed at both the CCLUP sub-unit and SRMP levels<sup>34</sup>. The 100 Mile House SRMP's prorated portion of the no-harvest target is 20 percent.

Timber harvesting access is defined<sup>35</sup> 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 H for EEA definition), 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

<sup>&</sup>lt;sup>32</sup> Cariboo-Chilcotin Land Use Plan Integration Report, April 6, 1998 (59 pages).

<sup>&</sup>lt;sup>33</sup> 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).

<sup>&</sup>lt;sup>34</sup> 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).

<sup>&</sup>lt;sup>35</sup> Cariboo-Chilcotin Land Use Plan Integration Report, April 6, 1998 (pages 11 - 12).

sub-unit, and compared to the IAMC-endorsed no-harvest targets. Detailed overlap analysis, analysis assumptions, mule deer adjustements, S4/S6 stream calculations, and relevant background information are contained in a separate document, Analysis Procedures and Results.

#### 7.2 Biodiversity Objectives Analysis

#### 7.2.1 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 Old Growth Management Areas 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 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 <u>not</u> applied. This approach is consistent with the CCLUP Biodiversity Committee's <u>Update Note #1 – Key Assumptions and Recommendations For the Use of the Inventory Adjustment Factor in the Cariboo Forest Region</u>. Furthermore, where required, mature forest within OGMAs was deemed to fully contribute to meeting the old forest target.

#### 7.2.2 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 Forest Practices Code 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:
  - $\circ$  stream, wetland, and shrub-carr riparian reserve zones
  - o trail management zones

- S1, S2, S3, S4, S5 and S6 (including that transferred from S4s) stream riparian management zones
- o wetland and shrub-carr riparian management zones
- $\circ$  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 wildlife tree patches 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 wildlife tree retention requirements were also calculated by CCLUP subunit, using the same steps, and transferred to the EEA overlap tables.

#### 7.3 Analysis Results

#### 7.3.1 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.

#### 7.3.2 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.

# 8 Implementation and Monitoring

#### 8.1 Implementation

The 100 Mile House SRMP will be implemented by:

- 1. Provision of the plan, once approved by 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.

#### 8.2 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 recommend that the 100 Mile House 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 100 Mile House SRMP can also be revisited at any time before that with the approval of the CMC and the RRC.

#### 8.3 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,
- 6. First Nations' 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.

#### 8.4 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 subregional 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 allocation of Crown land for settlement, agricultural, and industrial use (CCLUP p. 205).

#### 8.5 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.

## 9 Glossary of Selected Terms

Unless otherwise specified, the meanings of words used in the 100 Mile House 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.

**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 runout zones on southerly and westerly aspects.

**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 6. 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,
- 2. mature forest as described in Table 4 within permanent 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 once those criteria are developed and approved by the ILMB statutory authority for 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 33, 'vegetative cover providing security and thermal cover for moose' includes all non-commercial and non-productive vegetation, early and midseral forest and mature+old equivalent to the retention targets for each riparian management zone.

# **10 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 Northern Secwepemc te Qelmucw, St'at'imc, and Shuswap Nation Tribal Councils were invited to meetings and to provide input to the 100 Mile House SRMP:

Alkali Lake Bonaparte Canim Lake Canoe Creek/Dog Creek High Bar North Thompson Ts'Kw'aylaxw (Pavilion) Skeetchesin Williams Lake Whispering Pines

#### Appendix C: First Nations Interests

#### Northern Secwepemc te Qelmucw

Government has collaborated with the Northern Secwepemc te Qelmucw (NStQ) communities in a project that facilitated NStQ's involvement in sustainable resource management planning. This work is being completed through a Treaty Related Measure. NStQ values identified from their Land Use Plan were overlaid with other values in the HSRMP. Where values overlapped, efforts were made to integrate and consider NStQ's interests. Where they did not, ILMB made adjustments to the plan, where possible. Where this was not possible, NStQ will seek other venues to have their interests addressed. NStQ's participation does not mean there is agreement with all aspects of the plan, specific areas of concern to the NStQ are: the amount of logging, mining, agriculture, and development and their effects on NStQ cultural heritage areas and red & blue listed species. The NStQ are in the final stages of completing their comprehensive Land Use Plan. Through this process, NStQ interest in cultural tourism led to a three year Economic Measures Fund project related to tourism opportunities and economic development for NStQ.

The following was provided by the NStQ for inclusion in the HSRMP. It is included in its entirety and does not necessarily represent the position of the Provincial Government.

"Northern Secwepemc te Qelmucw (NStQ) historical & contemporary use of the Horsefly Sustainable Resource Management Planning area.

The Northern Secwepemc te Qelmucw (NStQ) have been living in the Cariboo Region since time immemorial; according to archaeologists, NStQ specific culture has been recognizable on the landscape for at least 4,000 years, as evidenced by pithouse villages and other cultural markers. There is further evidence that our ancestors were here for at least 6,000 years before that. Our language connects us to the land through place names (sk<sup>w</sup>estúlec<sup>w</sup>) that describe our long-standing relationship with the land and its resources. For example, we have a term referring to the NStQ's territory "Secwepemcul'ecw" which means the land, animals, and people are one.

The NStQ has used and continues to use the Beaver Valley area for hunting, fishing, camping, plant gathering, berry picking, food gathering, trapping, and for spiritual uses. Semi-permanent villages were located around Quesnel Lake, McKinley Lake and Horsefly Lake. The NStQ has used and continues to use many of the areas within the Horsefly planning area such as Beaver Valley, Quesnel Lake, Moffat Lakes, Horsefly Lake, as well as throughout the planning area as evidenced archaeologically, through oral history, through archival information, and through continued NStQ use.

Our name for Quesnel Lake is Ti'weltk (means "to the mountains") and the mountainous region around Quesnel Lake is called Skwelkweit (means "the snow mountains"). Ti'weltk (Quesnel Lake-the area between the north & east arm) is designated as a Wilderness Area in the NStQ Land Use Plan. The Ti'weltk Wilderness Area is considered sacred by the NStQ, special protocol are to be followed before entering the area. The Wilderness Area also has important fish and wildlife habitat. The NStQ are concerned that the habitat needs of the red and blue listed species (Mountain Caribou, Grizzly Bears, Fishers, Northern Long-Eared Myotis) dependent on undisturbed Old Growth forests is not being adequately met. There are also red and blue listed species dependent on undisturbed, mature forests: Great Blue Heron and Wolverines. Because of the sacredness of the Ti'weltk Wilderness Area to the NStQ and the concerns regarding endangered and threatened species, the NStQ does not want to see logging, snowmobiling, or heliskiing (some red and blue listed species are negatively affected by these activities) within the area.

The Quesnel Lake area has always been used for NStQ's traditional activities:

- camping and recreational uses
- hunting and trapping
- gathering medicinal plants
- picking berries and food plant gathering
- fishing salmon and trout
- spiritual uses

The Quesnel Lake area has always been used in the past and will continue to be used by the NStQ for all of the above listed activities as evidenced archaeologically, through oral history, through archival information and through continued NStQ use. Continued NStQ use is not just limited to traditional use it also includes modern use. Modern use includes the Community Forest Licence held by Soda Creek/Deep creek First Nations within the Horsefly planning area. There is work started on NStQ joint ventures related to tourism within the Horsefly planning area. The NStQ also use the Horsefly planning area for recreational activities such as hiking and camping. NStQ have participated in fish restoration projects, AIA's, a moose habitat research project, and traditional use studies within the planning area. NStQ ethnobotany work has been completed in the Horsefly planning area in cooperation with Ministry representatives and the Canadian Forest Service.

NStQ followed a permanent seasonal round of resource procurement with recognized family and shared resource areas that were regularly returned to and managed over thousands of years. For warmth, during the winter people lived in semi-subterranean "pit homes" (sc7istktn) and subsisted mainly on stored salmon (sqlélten) and root (stek'lép) foods. This was a time for ceremonial activities. (In some cases First Nation people lived in the villages year-round). A number of Interior Plateau village sites were occupied for over 7,000 years. During the spring (sqepts), people moved out onto the Territory gathering plants, including the cambium layer of pine trees for vitamins. During the summer, salmon fishing and berry picking were the main sources of food (stsíllen). This was also a time for inter and intra-tribal gatherings and trade. Most hunting was done in the fall. The extensive network of trails, place names (sk<sup>w</sup>estúlec<sup>w</sup>), archaeological and traditional use evidence demonstrates that people utilized huge areas of territory, including much of the Horsefly Sustainable Resource Management Planning area. This seasonal round and pattern of use and resource management continues to be followed today, with many community members providing

much of their families' food from the land (tmic<sup>w</sup>) and enjoying social, ceremonial, and recreational activities within Secwepemcul'ecw.

The NStQ's understanding of the interconnectedness of the land, people, and resources has guided and continues to guide our management decisions. Each decision must consider the cultural ecosystem as a whole and the potential impacts over the next seven generations. The NStQ continue to assert rights and title within Secwepemcul'ecw that includes the whole of the Horsefly Sustainable Resource Management Plan area.

The types of heritage resources requiring protection are predicted (at this point) to include fishing sites, occupation sites, cache pits, burial sites, archaeological sites, spiritual sites, hunting cabins and trap lines, sweat lodges, camp sites, trails, locally rare or infrequent medicinal plants, including secwsqéqxe7ten (Ledum groenlandicum), commonly known as Swamp Tea or Indian Tea, Culturally Modified Trees (CMTs) and cache pits or other cultural depressions (including pit homes). Other plants identified in the area (to date) as being culturally important are listed in table 2

Secwepemc (Shuswap) Name*	Scientific Name	Common Name	Uses		
secwsqéqxe7ten	Ledum groenlandicum	Labrador Tea	Medicinal, Ceremonial, Food		
k'etse7éllp	Oplopanux horridus	Devil's Club	Medicinal		
qwllin	Betula papyrifera	Paper Birch	Technological, Ceremonial, Medicinal		
estqw	Thuja plicata	Cedar roots	Technological, Medicinal, Spiritual		
melénellp	Abies lasiocarpa	Balsam Fir	Technological, Medicinal, Food, Ceremonial		
t'sellp	Picea engelmannii x glauca Picea engelmannii Picea glauca	Hybrid White Spruce Engelmann Spruce White Spruce	Technological, Medicinal		
ts'e7éllp	Sorbus sitchensis	Sitka Mountain Ash	Technological		
qé7p'cw	Corylus cornuta	Beaked Hazelnut	Food, Medicinal, Technological		
qw'lséllp	Salix scouleriana	Scouler's Willow	Technological, Ritual		
pek'lén	Prunus pensylvanica	Pin Cherry	Food, Technological		
tkwlose7éllp	Prunus virginiana	Choke Cherry	Medicinal, Food, Technological		
s7éytsqwem	Rubus idaeus	Red Raspberry	Food, Medicinal		
sesepéllp	Vaccinium caepitosum	Dwarf Blueberry	Food		
set'éqe7	Vaccinium ovalifolium	Oval leaf blueberry	Food, Medicinal		
wenexéllp	Vaccinium membranaceum	Black Huckleberry	Food, Ceremonial		
tcwelcwle'7llp	Ribes lacustre	Swamp Gooseberry	Food, Medicinal, Technological		

Table 2 Some traditional use plants used in the HSRMP area

Secwepemc (Shuswap) Name*	Scientific Name	Common Name	Uses
sxuseméllp	Shepherdia canadensis	Soopalallie	Food, Medicinal
skwenkwinem	Claytonia lanceolata	Indian potato	Food
textsin	Lilium columbianum	Tiger Lily	Food
qweqwile	Lomatium dissectum	Chocolate Tips	Food
t'nesellp	Viburnum edule	Highbush Cranberry	Food
qunllp	Nuphar polysepalum	Water Lily	Medicinal
kwtellp	Scirpus lacustris	Bulrush	Technological
cwecw7ú7cw	Mentha arvensis	Field Mint	Medicinal

\*Some plants have slight differences in Secwepemc spelling due to differences in dialects.

Swamp tea has been noted to be less and less available in the NStQ Territory; it is considered to be a threatened species by the Secwepemc. There is a general concern about continued access to all traditional use plants in the area due to the extensive logging that has occurred in the last few decades."

#### Additional First Nations Cultural Heritage Interest and Areas

Note: This may not be a complete list

- 1. Hunting:
- Traditional hunting
- Community hunting area
- Chief's hunting area
- Major hunting area
- Fall hunting
- Drying racks
- Hunting blinds/jumps

#### Big game

Moose Black bear Caribou Grizzly bear Bobcat	Elk Mule Deer White Tail Deer Wolf Fox	Mountain goat Bighorn Sheep Cougar Lynx Coyote
<b>Small game</b> Beaver	Muskrat	Groundhog
Rabbit	Geese	Crane
Hare	Ptarmigan	Bird eggs
Shot beaver	Porcupine	Marmot
Ducks	Swan	Grouse
Weasel	Other bird	Red squirrel
Wolverine	Fisher	Marten
Mink	Eagles	Badger

Partridge Skunk Otter

Raccoon

- 2. Fishing:
- Contemporary fishing camp
- Fishing station
- Fishing site
- Major fishing site
- Winter fishing
- Drying racks
- Processing camps

#### Fish

Kokanee	Dolly varden	Whitefish
Other fish	Steelhead	Trout
Sturgeon	Suckers	Salmon

- 3. Occupancy sites and areas:
  - Including cabin, tent-cabin, company building, guiding camp, lean-to, tent, shelter under tree, bark hut, underground fish drying racks, contemporary cabin use, contemporary campsites, camping, winter camping, long term camping, drying racks
  - Archaeological site, cultural depressions, archaeological site of extreme antiquity, significant archaeological site, unrecorded archaeological site, cache pits, cooking pits, artifacts, lithic scatter, chert gathering, petroglyph, pictograph, CMT's, temporary seasonal permanent camps, underground house
  - Ancestral village sites, continuous occupation site, old original village, village site, village site original location, prehistoric occupation site, village site summer, rock shelters, major summer occupation site, occupation site, traditional campsites, camping, winter camping, long term camping, pithouses
  - Gathering place, meeting area, major gathering area, trading area
  - Social celebration site
  - Historic marker posts (for old Indian reserves), Former Indian Reserve, Federal Indian Reserve, Ancestral band, monuments
  - Historic occupation site, historic village site, historical buildings, historic business (saloon, horse trading, hotel), Chief's house, historic cabin, transitional homes, traditional hay meadows, square pithouses, barn, corral
  - Cairn marker, territorial marker, signal place, coyote rocks marker rocks, CMT's
- 4. Spiritual/Sacred/Ceremonial sites and areas:
  - Ceremony site
  - Burial or cremation site
  - Birth or death
  - Sacred site

- Non-human being
- Landmark with legend
- Rock painting or carving
- Health site
- Isolation areas
- Teaching sites
- Sweatlodges
- Healing rock, sweatlodge, puberty rights, right of passage, vision quest, healing journeys, prayer site, warm springs
- Marked grave sites, grave sites, grave sites smallpox, burial sites, unmarked grave sites, possible burial sites
- Creation story area, teaching area for youth, stories, legends, elders teachings about how to behave on the land, teaching area (signs, stories), protocols, ceremonial hunting
- Spiritual site, sacred area, spiritual area, unique spiritual area, spiritual renewal area, supernatural
- Coyote rocks other, entrance to the Bear World, Entrance to Spirit World, Sacred site

#### 5. Plant resources:

Special plants	Medicinal plant	Berries
Other Food plants	Dye plants	Wild tobacco
Special wood	Large Trees for dugout canoes	
For crafts, including bark stripping	Roots	CMT's

#### 6. Travel Routes & Trails

- Trail
- Trail pre WWI
- Trail mountain pass
- Trail network
- Trail trade route
- Trail war path
- Travel corridors
- Wagon trails
- 6. Trapping/traplines
  - Trap lines, trapline area, snares,

#### 7. Quarry/mineral

- Gravel, rocks, minerals
- 8. <u>Lookout</u>
  - Lookout site, lookout

#### 9. Battle areas

• Battleground, battlefields, battle site, suicide rock, fortress/battle blinds, cultural depressions

#### 10. Recreation

Recreational sites

#### 11. Miscellaneous:

- Wild hay
- Drinking water
- Wild horse range
- Stock range
- Feral horse corral
- Fish weir or trap

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

### Appendix D: 2005 Cariboo Red & Blue Listed Species Information

Common Name	Prov Status	COSEWIC Status	Breeding	Identified Wildilfe		Forest Districts			
	r/b	E/T/SC/ NAR/DD	y/n	Volume 1 1999 Version2 2004	100	Chi	Hor	Que	WL
Sharp-tailed Grouse	b		yes	2004	x	X	X	X	X
Short-billed Dowitcher	b		no		x	~	X	~	x
Short-eared Owl	b	SC	yes-WL	Ver2	X	х	х	х	x
Surf Scoter	b		no	1012	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	Х	х	х	х	х
White-throated Swift	b		yes		Х	Х			Х
Yellow-breasted Chat	r	E	yes	Vol1/Ver2	?				х
Mammals									
Badger	r	E	yes	Ver2	Х	Х	Х	х	Х
California Bighorn Sheep	b		yes	Vol1	Х	Х			Х
Common Pika - septentrionalis ssp	r		yes			Х			
Fisher	b		yes		Х	Х	Х	х	Х
Fringed Myotis	b	DD	yes	Ver2	Х	Х			Х
Grizzly Bear	b	SC	yes	Vol1/Ver2	Х	Х	Х	х	Х
Northern Long-eared Myotis	b		yes		Х		х	х	
Spotted Bat	b	SC	yes	Ver2	Х	Х			Х
Townsend's Big-eared Bat	b		yes		Х	Х			Х
Western Small-footed Myotis	b		yes		Х	х			х
Wolverine - <i>luscus ssp</i>	b	SC	yes	Ver2	Х	х	х	х	х
Woodland Caribou - Southern Mountain population	r	Т	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	Т	?	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 E: 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 recognizes that some harvesting will be undertaken *before* appropriate watershed-level planning can be completed, harvesting without requisite watershed-level planning should be minimized 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 <u>will</u> 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 costeffectiveness, 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 <u>potentially</u> 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.

#### Appendix F: 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		Lake Name		Riparian Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
7540	092P.066	Apollo Lake	46.9	10	200	A	wilderness fisheries	W	
11300	092P.018	Bare Lake	230.8	10	200	A	wilderness fisheries	W	
7771	092P.068	Broken Hook Lake	11.7	10	200	A	wilderness fisheries	W	
5701	092P.097	Christopher Lake	34.5	10	200	A	wilderness fisheries	W	
4782	093A.006	Cleaver Lake	26.3	10	200	A	wilderness fisheries	W	
4417	093A.017	Deception Lake	14.7	10	200	A	wilderness fisheries	W	
4275	093A.018	Goat Lake	33.7	10	200	A	wilderness fisheries	W	
11429	092P.018	Heller Lake	89.2	10	200	A	wilderness fisheries	W	
11312	092P.018	Island Lake	50.4	10	200	A	wilderness fisheries	W	
4496	093A.017	Katherine Lake	45.5	10	200	A	wilderness fisheries	W	
10756	092P.026	Lake in the Gap	10.6	10	200	A	wilderness fisheries	TR	
4585	093A.007	McNeil Lake	248.5	10	200	A	wilderness fisheries	W	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
11325	092P.018	Meadow Lake	15.4	10	200	A	wilderness fisheries	W	
11228	092P.028	Secret Lake	28.8	10	200	A	wilderness fisheries	W	
4593	093A.007	Skinny Lake	23.6	10	200	A	wilderness fisheries	W	
5513	092P.097	Sliver Lake	2.1	10	200	A	wilderness fisheries	W	
9396	092P.048	Tobe Lake	79.3	10	200	A	wilderness fisheries	W	
5467	092P.098	Tommy Archie Lake	2.0	10	200	A	wilderness fisheries	W	
11234	092P.028	West Secret Lake	39.3	10	200	A	wilderness fisheries	W	
5691	092P.098	Whale Lake	28.2	10	200	A	wilderness fisheries	W	
9462	092P.047		8.4	10	200	A	wilderness fisheries		
9435	092P.047		15.4	10	200	A	wilderness fisheries	TR	
6383	092P.085		0.6	10	200	A	wilderness fisheries	W	
5764	092P.087		1.3	10	200	A	wilderness fisheries	W	
5347	092P.095		36.6	10	200	A	wilderness fisheries	W	
5259	092P.099		88.4	10	200	A	wilderness fisheries	W	
10471	092P.032	Alberta Lake	106.3	10	200	A	refugium	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
11556	092P.015	Big White Lake	2.2	10	200	A	refugium	TR	
10256	092P.034	Boyd Lake	58.1	10	200	A	refugium	TR	
7623	092P.066	Dombey Lake	36.1	10	200	A	refugium		
7781	092P.064	Exeter Lake	53.9	10	200	A	refugium		
7659	092P.067	Grizzly Lake	22.8	10	200	A	refugium	TR	
10739	092P.032	Last Chance Lake	12.6	10	200	А	refugium	TR	
10163	092P.034	Lesser Green Lake	69.8	10	200	A	refugium	TR	
9445	092P.045	Little Horse Lake	55.7	10	200	A	refugium	TR	
11077	092P.022	Little White Lake	243.9	10	200	A	refugium	TR	
10350	092P.033	McKinley Lake	47.4	10	200	А	refugium		
10337	092P.032	Meadow Lake	470.5	10	200	А	refugium	TR	
10468	092P.034	Mid Oriole Pond	13.9	10	200	A	refugium	TR	
10423	092P.031	Pigeon Lake	3.2	10	200	A	refugium	TR	
10449	092P.031	Pigeon Lake	4.2	10	200	А	refugium	TR	
10424	092P.031	Pigeon Lake	8.2	10	200	A	refugium	TR	
10593	092P.032	Pollard Lake	9.2	10	200	А	refugium	TR	
10799	092P.033	River Lakes	4.9	10	200	А	refugium	TR	
10777	092P.033	River Lakes	5.2	10	200	A	refugium	TR	
10811	092P.033	River Lakes	19.2	10	200	А	refugium	TR	
10554	092P.034	Upper Oriole Pond	0.6	10	200	А	refugium	TR	
10979	092P.023		2.6	10	200	А	refugium	TR	
11064	092P.023		8.1	10	200	А	refugium	TR	
10975	092P.023		10.6	10	200	А	refugium	TR	
11067	092P.023		23.8	10	200	A	refugium	TR	
10407	092P.032		3.1	10	200	A	refugium		
10453	092P.032		3.9	10	200	А	refugium	TR	
10530	092P.032		4.7	10	200	А	refugium		
10559	092P.032		5.3	10	200	А	refugium	TR	
10521	092P.032		5.7	10	200	А	refugium	TR	
10435	092P.032		7.7	10	200	A	refugium	TR	
10617	092P.032		7.8	10	200	А	refugium	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
10903	092P.032		8.6	10	200	A	refugium	TR	
10474	092P.032		22.7	10	200	A	refugium	TR	
10654	092P.033		4.6	10	200	A	refugium		
10612	092P.033		11.4	10	200	A	refugium	TR	
10510	092P.034		8.4	10	200	A	refugium	TR	
10571	092P.034		13.3	10	200	A	refugium	TR	
4841	093A.008		3.7	10	200	A	refugium	W	
4512	093A.008		6.2	10	200	A	refugium	W	
4420	093A.018		3.2	10	200	A	refugium	W	
4427	093A.018		4.1	10	200	A	refugium	W	
10326	092P.035	Crater Lake	5.4	10	200	А	quality	NSR	
11363	092P.018	Elbow Lake	85.7	10	200	А	quality	W	
4639	093A.008		10.6	10	200	A	quality	W	
4246	093A.017		5.1	10	200	A	quality	W	
8276	092P.058	Arrowhead Lake	14.9	10	200	В	quality	W	
7642	092P.063	Big Lake	116.7	10	200	В	quality	TR	
8869	092P.052	Boar Lake	29.7	10	200	В	quality	TR	
6618	092P.086	Bobbs Lake	106.6	10	200	В	quality	TR	
11223	092P.026	Bog Lake	35.3	10	200	В	quality	TR	
6473	092P.085	Boulder Lake	16.2	10	200	В	quality		
11388	092P.016	Boyer Lake	7.4	10	200	В	quality	W	
11217	092P.026	Burn Lake	31.1	10	200	В	quality	W	
7628	092P.068	Cutoff Lake	5.1	10	200	В	quality	W	
9325	092P.043	Davis Lake	11.1	10	200	В	quality	W	
11288	092P.027	Deecee Lake	11.7	10	200	В	quality	W	
7852	092P.065	Earle Lake	59.7	10	200	В	quality	W	
8175	092P.057	East King Lake	37.3	10	200	В	quality		
8171	092P.053	Edmund Lake	103.3	10	200	В	quality	TR	
7983	092P.057	English Lake	208.4	10	200	В	quality	TR	
8451	092P.057	Faulkner Lake	19.3	10	200	В	quality	MR	
8035	092P.057	French Lake	6.4	10	200	В	quality	NSR/TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
8019	092P.058	Friendly Lake	42.8	10	200	В	quality	TR	
10858	092P.027	Frosty Lake	8.5	10	200	В	quality	W	
8164	092P.058	Gold Lake	4.7	10	200	В	quality	W	
4382	093A.017	Gotchen Lake	128.3	10	200	В	quality	MR	
8243	092P.058	Gourd Lake	4.9	10	200	В	quality	W	
8227	092P.057	Grassy Lake	58.6	10	200	В	quality		
6329	092P.086	Greenlee Lake	26.5	10	200	В	quality	TR	
8784	092P.052	Gustafsen Lake	159.5	10	200	В	quality	MR	
5618	092P.094	Heart Lake	8.4	10	200	В	quality		
6910	092P.072	Helena Lake	245.5	10	200	В	quality	MR	
4947	093A.008	Hidden Lake	27.6	10	200	В	quality	W	
8309	092P.057	High Lake	21.9	10	200	В	quality		
8045	092P.063	Holden Lake	96.4	10	200	В	quality	TR	
6506	092P.087	Howard Lake	17.0	10	200	В	quality	MR	
11634	092P.015	Hudson Bay Lake	34.9	10	200	В	quality	TR	
7664	092P.068	Hunka Lake	5.7	10	200	В	quality	W	
9841	092P.045	Jim Lake	125.8	10	200	В	quality	TR	
5297	092P.095	Lang Lake	672.3	10	200	В	quality		
11237	092P.027	Lastcourse Lake	1.7	10	200	В	quality	W	
11270	092P.027	Little Spectacle Lake	16.3	10	200	В	quality	W	
8779	092P.048	Long Island Lake	147.3	10	200	В	quality		
8285	092P.058	Long Lake	1.1	10	200	В	quality	W	
6939	092P.077	Lorin Lake	225.1	10	200	В	quality	TR	
6790	092P.076	Lost Rod Lake	39.5	10	200	В	quality	W	
6059	092P.093	MacDougall lake	23.2	10	200	В	quality	W	
7953	092P.058	Meridian Lake	22.1	10	200	В	quality	W	
11269	092P.026	Moosehorn Lake	17.8	10	200	В	quality	W	
9724	092P.045	Nolan Lake	8.3	10	200	В	quality	W	
11280	092P.027	North Koens Lake	5.4	10	200	В	quality	W	
7698	092P.068	Parkland Lake	4.4	10	200	В	quality	TR	
5362	092P.098	Pendleton Lakes	0.4	10	200	В	quality	W	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
5255	092P.098	Pendleton Lakes	298.3	10	200	В	quality	TR	
6641	092P.082	Phililloo Lake	148.7	10	200	В	quality	TR	
9004	092P.051	Pigeon Lake	1.1	10	200	В	quality	TR	
7391	092P.067	Preacher Lake	41.2	10	200	В	quality	W	
11380	092P.017	Renee Lake	17.3	10	200	В	quality	W	
7992	092P.057	Rick Lake	0.6	10	200	В	quality	TR	
6875	092P.075	Ron Lake	7.4	10	200	В	quality		
6528	092P.084	Sherman Lake	7.7	10	200	В	quality		
8281	092P.058	Short Lake	7.2	10	200	В	quality	W	
8168	092P.058	Silver Lake	30.2	10	200	В	quality	MR	
6342	092P.085	Sinkhole Lake	4.6	10	200	В	quality	MR	
8344	092P.057	Snag Lake	12.4	10	200	В	quality	MRC	
6318	092P.084	Sneezie Lake	42.3	10	200	В	quality	MR	
8236	092P.057	Summit Lake	21.2	10	200	В	quality		
7767	092P.066	Sutherland Lake	12.1	10	200	В	quality	W	
8040	092P.058	Ta Hoola Lake	3.9	10	200	В	quality	TR	
6901	092P.075	Ted Lake	9.8	10	200	В	quality		
6788	092P.075	Terry Lake	12.7	10	200	В	quality		
6469	092P.086	Thomson Lake	13.2	10	200	В	quality	TR	
6507	092P.085	Twin Lake	7.7	10	200	В	quality		
8298	092P.053	Valentine Lake	67.9	10	200	В	quality	TR	
7687	092P.068	Wally Lake	5.2	10	200	В	quality	W	
8307	092P.058	Wavey Lake	88.3	10	200	В	quality	MR	
6825	092P.078	Wolf Lake	14.6	10	200	В	quality	W	
11586	092P.015		17.8	10	200	В	quality	TR	
11320	092P.017		6.1	10	200	В	quality	W	
11256	092P.026		3.7	10	200	В	quality	W	
11279	092P.026		4.3	10	200	В	quality	W	
10721	092P.027		3.3	10	200	В	quality	W	
10650	092P.027		3.3	10	200	В	quality	W	
10764	092P.027		10.5	10	200	В	quality	W	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
11192	092P.028		3.6	10	200	В	quality	W	
10064	092P.034		13.8	10	200	В	quality	W	
9411	092P.043		4.6	10	200	В	quality	TR	
9177	092P.047		9.7	10	200	В	quality		
9006	092P.048		0.3	10	200	В	quality	W	
8899	092P.051		24.6	10	200	В	quality	TR	
8710	092P.052		22.6	10	200	В	quality	TR	
8338	092P.058		3.7	10	200	В	quality	MR/TR	
7634	092P.066		4.9	10	200	В	quality	MR	
6839	092P.077		3.3	10	200	В	quality	MR	
6874	092P.077		13.3	10	200	В	quality	W	
6180	092P.085		2.0	10	200	В	quality		
6153	092P.086		2.1	10	200	В	quality	W	
5520	092P.095		0.7	10	200	В	quality	W	
5597	092P.095		3.4	10	200	В	quality	W	
5570	092P.095		4.1	10	200	В	quality	W	
5370	092P.095		4.5	10	200	В	quality	W	
5252	092P.095		6.4	10	200	В	quality	MR	
5257	092P.095		13.9	10	200	В	quality	MR	
5261	092P.095		19.4	10	200	В	quality	MR	
5538	092P.096		4.4	10	200	В	quality		
5213	092P.096		10.2	10	200	В	quality	MR	
5204	092P.096		26.7	10	200	В	quality	MR	
5194	092P.096		30.6	10	200	В	quality	MR	
5230	092P.096		35.6	10	200	В	quality	MR	
5155	092P.096		42.7	10	200	В	quality	MR	
5683	092P.097		19.9	10	200	В	quality		
5280	092P.098		7.6	10	200	В	quality	W	
5304	092P.098		8.2	10	200	В	quality	NSR	
5566	092P.098		9.8	10	200	В	quality	W	
4994	092P.099		3.4	10	200	В	quality		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
5010	092P.099		6.1	10	200	В	quality		
4925	093A.008		3.7	10	200	В	quality	W	
4450	093A.017		3.7	10	200	В	quality		
5212	093A.004	Bluff Lake	33.1	10	200	С	quality	TR	
7774	092P.068	Four Pound Lake	4.2	10	200	С	quality	TR	
4677	093A.007	Gilligan Lake	5.2	10	200	С	quality	W	
10057	092P.032	Goose Lake	19.8	10	200	С	quality	TR	
9384	092P.048	Little Tobe Lake	0.8	10	200	С	quality	TR	
5009	093A.008	No Name Lake	24.2	10	200	С	quality	MR	
5335	092P.094	Peach Lake	44.8	10	200	С	quality	W	
5884	092P.086	Roger Lake	76.3	10	200	С	quality	MR	
5225	092P.093	Spout Lake	68.6	10	200	С	quality	MRC	
5852	092P.087	Squirrel Lake	43.1	10	200	С	quality	W	
7937	092P.058		3.4	10	200	С	quality	W	
5045	093A.007		1.4	10	200	С	quality	W	
9305	092P.043	Davis Lake	9.6	10	200	A	protected area		
9176	092P.043	Davis Lake	94.3	10	200	A	protected area		
6848	092P.077	Donnely Lake	99.4	10	200	A	protected area	W	
9244	092P.043	Flat Lake	293.4	10	200	A	protected area		
8002	092P.062	Long Lake	38.1	10	200	A	protected area		
9838	092P.041	Ridge Lake	14.5	10	200	A	protected area		
10848	092P.031		7.3	10	200	A	protected area		
9338	092P.043		5.7	10	200	A	protected area		
9172	092P.053		62.1	10	200	A	protected area		
9181	092P.053		62.1	10	200	A	protected area		
6262	092P.085		6.6	10	200	A	protected area		
5914	092P.086	Aggie Lake	64.6	10	200	n/a	protected area		
7972	092P.062	Beaverlodge Lakes	3.7	0		n/a	protected area		
6270	092P.086	Chautemps Lake	5.1	10	200	n/a	protected area		
7881	092P.062	Crane Lakes	3.5	0		n/a	protected area		
7898	092P.062	Crane Lakes	4.6	0		n/a	protected area		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9295	092P.043	Davis Lake	5.9	10	200	n/a	protected area		
9281	092P.043	Davis Lake	6.9	10	200	n/a	protected area		
9319	092P.043	Davis Lake	7.6	10	200	n/a	protected area		
7896	092P.063	Deer Lake	16.9	10	200	n/a	protected area		
6164	092P.085	D'Or Lake	29.4	10	200	n/a	protected area		
7730	092P.062	Fish Lake	13.1	10	200	n/a	protected area		
8020	092P.063	Grebe Lake	9.9	10	200	n/a	protected area		
7740	092P.062	Hummer Lake	4.2	0		n/a	protected area		
11758	092P.002	Kelly Lake	44.2	10	200	n/a	protected area		
7877	092P.062	Kirkland Lake	37.6	10	200	n/a	protected area		
7757	092P.062	Maitland Lake	89.4	10	200	n/a	protected area		
7834	092P.062	Marks Lake	47.3	10	200	n/a	protected area		
7980	092P.063	Moose Lake	28.1	10	200	n/a	protected area		
6149	092P.086	Schoolhouse Lake	89.2	10	200	n/a	protected area		
6283	092P.082	Woodfrog Lake	4.6	0		n/a	protected area		
9511	092P.043		4.4	0		n/a	protected area		
9279	092P.043		5.5	10	200	n/a	protected area		
9219	092P.043		9.5	10	200	n/a	protected area		
9360	092P.043		56.4	10	200	n/a	protected area		
9250	092P.043		57.5	10	200	n/a	protected area		
9187	092P.043		65.1	10	200	n/a	protected area		
9217	092P.043		96.9	10	200	n/a	protected area		
9222	092P.052		3.9	0		n/a	protected area		
9156	092P.053		3.7	0		n/a	protected area		
9091	092P.053		4.1	0		n/a	protected area		
9143	092P.053		5.3	10	200	n/a	protected area		
9077	092P.053		5.7	10	200	n/a	protected area		
9045	092P.053		9.8	10	200	n/a	protected area		
9145	092P.053		12.5	10	200	n/a	protected area		
8976	092P.053		29.9	10	200	n/a	protected area		
9055	092P.053		39.7	10	200	n/a	protected area		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9060	092P.053		41.1	10	200	n/a	protected area		
9102	092P.053		42.1	10	200	n/a	protected area		
9108	092P.053		78.2	10	200	n/a	protected area		
7733	092P.062		0.6	10	200	n/a	protected area		
7832	092P.062		3.4	0		n/a	protected area		
7816	092P.062		3.6	0		n/a	protected area		
7859	092P.062		5.5	10	200	n/a	protected area		
7825	092P.062		6.8	10	200	n/a	protected area		
7686	092P.062		11.1	10	200	n/a	protected area		
7809	092P.062		12.4	10	200	n/a	protected area		
7853	092P.062		12.8	10	200	n/a	protected area		
7862	092P.062		18.6	10	200	n/a	protected area		
7708	092P.062		21.2	10	200	n/a	protected area		
7890	092P.063		3.7	0		n/a	protected area		
7921	092P.063		12.7	10	200	n/a	protected area		
5983	092P.085		1.7	10	200	n/a	protected area		
6081	092P.085		3.1	0		n/a	protected area		
6112	092P.085		3.2	10	200	n/a	protected area		
6075	092P.085		3.6	0		n/a	protected area		
6217	092P.085		4.6	0		n/a	protected area		
6108	092P.085		5.2	10	200	n/a	protected area		
5934	092P.085		6.7	10	200	n/a	protected area		
5995	092P.085		7.8	10	200	n/a	protected area		
6126	092P.085		8.5	10	200	n/a	protected area		
6107	092P.085		20.3	10	200	n/a	protected area		
6048	092P.085		20.9	10	200	n/a	protected area		
6062	092P.086		0.7	10	200	n/a	protected area		
5907	092P.086		1.8	10	200	n/a	protected area		
6084	092P.086		3.5	0		n/a	protected area		
6032	092P.086		3.8	0		n/a	protected area		
6082	092P.086		5.5	10	200	n/a	protected area		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
6011	092P.086		7.7	10	200	n/a	protected area		
6019	092P.086		12.3	10	200	n/a	protected area		
6090	092P.086		12.6	10	200	n/a	protected area		
5920	092P.095		5.4	10	200	n/a	protected area		
5849	092P.095		10.5	10	200	n/a	protected area		
5903	092P.095		30.6	10	200	n/a	protected area		
5870	092P.096		3.1	0		n/a	protected area		
5814	092P.096		4.6	0		n/a	protected area		
5844	092P.096		7.4	10	200	n/a	protected area		
4547	093A.009		13.3	10	200	n/a	protected area		
9577	092P.044	Green Lake	2886.6	10	200	A	general	TR	
11044	092P.027	Babe Lake	9.7	10	200	В	general	TR	
6290	092P.083	Bearpaw Lake	53.7	10	200	В	general	TR	
5355	092P.097	Beartrack Lake	9.8	10	200	В	general	MR	
10893	092P.032	Big Bar Lake	227.7	10	200	В	general	MRH	
9150	092P.048	Birch Lake	234.9	10	200	В	general	TR	
10781	092P.028	Bonaparte Lake	3356.4	10	200	В	general	TR	
8639	092P.047	Bridge Lake	1364.4	10	200	В	general		
7374	092P.075	Buffalo Lake	284.8	10	200	В	general		
5900	092P.087	Canim Lake	5641.4	10	200	В	general	TR	
5030	093A.005	Coffee Lake	58.2	10	200	В	general	TR	
9316	092P.043	Davis Lake	6.9	10	200	В	general		
11559	092P.016	Deadman Lake	4.7	10	200	В	general	TR	
7355	092P.067	Deka Lake	1154.8	10	200	В	general	MRH/TR	
7072	092P.076	Drewry Lake	575.8	10	200	В	general	MR	
9849	092P.037	Eagan Lake	409.9	10	200	В	general	MRH/MRC	
4837	093A.004	Eagle (Murphy) Lake	1106.9	10	200	В	general	MRH	
7295	092P.075	Edwards Lake	17.5	10	200	В	general		
8446	092P.056	Fawn Lake	53.9	10	200	В	general	MRH/TR	
11393	092P.016	Frogpond Lake	3.6	10	200	В	general	W	
9721	092P.045	Green Lake	17.4	10	200	В	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
6424	092P.084	Greeny Lake	78.2	10	200	В	general	TR	
11086	092P.027	Hammer Lake	65.1	10	200	В	general	MR	
7532	092P.066	Hathaway Lake	153.9	10	200	В	general	MRH/TR	
6269	092P.086	Hawkins Lake	178.6	10	200	В	general	TR	
7803	092P.066	Higgins Lake	23.2	10	200	В	general	MRH/TR	
11697	092P.005	Hihium Lake	352.8	10	200	В	general	MR	
8010	092P.055	Horse Lake	1232.2	10	200	В	general	MR	
8649	092P.055	Irish Lake	5.9	10	200	В	general	MRH	
8565	092P.055	Irish Lake	35.4	10	200	В	general	MRH	
9293	092P.047	Knight Lake	14.4	10	200	В	general		
8793	092P.048	Lac Des Roches	700.6	10	200	В	general	MRH/MRC	
6375	092P.083	Lac La Hache	1852.9	10	200	В	general	MRH	
6552	092P.085	Lake of the Trees	90.2	10	200	В	general	TR	
9682	092P.045	Lake of the Woods	11.9	10	200	В	general	W	
9630	092P.045	Lake of the Woods	23.2	10	200	В	general	W	
10574	092P.031	Little Big Bar Lake	58.8	10	200	В	general	MR	
9562	092P.045	Little Green Lake	149.1	10	200	В	general	TR	
11587	092P.014	Loon Lake	697.1	10	200	В	general	MRH	
9733	092P.038	Machete Lake	482.8	10	200	В	general	MRH/MRC	
7794	092P.067	Needa Lake	197.4	10	200	В	general	MR	
8542	092P.057	Otter Lake	55.8	10	200	В	general		
9026	092P.048	Phinetta Lake	2.8	10	200	В	general	MR	
6374	092P.085	Ruth Lake	327.9	10	200	В	general	TR	
10976	092P.027	Sandy Lake	5.8	10	200	В	general	NSR	
11089	092P.027	Scot Lake	29.6	10	200	В	general	TR	
8519	092P.056	Sheridan Lake	1651.9	10	200	В	general		
11616	092P.016	Skookum Lake	16.2	10	200	В	general	TR	
7711	092P.062	Snag Lake	100.7	10	200	В	general	TR	
8708	092P.057	Stack Lakes	55.1	10	200	В	general		
7671	092P.066	Sulphurous Lake	385.6	10	200	В	general	MRH/TR	
13285		Timothy				В	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
6356	092P.084	Timothy Lake	536.7	10	200	В	general	TR	
4891	093A.004	Two Mile Lake	133.7	10	200	В	general	TR	
10508	092P.038	Upper Brown Lake	9.4	10	200	В	general		
11463	092P.016	Uren Lake	4.0	10	200	В	general	TR	
9350	092P.045	Watch Lake	241.4	10	200	В	general	TR	
11303	092P.026	Wilderness Lake	44.9	10	200	В	general	TR	
10203	092P.034		3.9	10	200	В	general	TR	
9364	092P.043		1.1	10	200	В	general		
9670	092P.046		5.7	10	200	В	general	W	
9619	092P.046		12.5	10	200	В	general	W	
9625	092P.046		19.9	10	200	В	general	W	
8724	092P.048		35.3	10	200	В	general	MR	
8971	092P.051		31.2	10	200	В	general		
8720	092P.057		20.6	10	200	В	general		
8494	092P.057		60.7	10	200	В	general	MR	
7025	092P.075		0.6	10	200	В	general		
6844	092P.075		9.3	10	200	В	general		
7052	092P.077		1.3	10	200	В	general		
5652	092P.095		6.8	10	200	В	general		
5929	092P.095		13.4	10	200	В	general	TR	
6072	092P.092	130 Mile Lake	57.5	10	200	С	general	MRH	
7448	092P.073	Abel Lake	30.4	10	200	С	general	TR	
7388	092P.066	Balfour Lake	16.6	10	200	С	general	MR	
8384	092P.058	Beartrap Lake	7.1	10	200	С	general	MR	
6169	092P.087	Beaver Lake	13.1	10	200	С	general	MR	
11102	092P.022	Beaverdam Lake	155.2	10	200	С	general	TR	
5926	092P.095	Bedingfield Lake	57.8	10	200	С	general	TR	
6170	092P.082	Bobtail Lake	45.9	10	200	С	general	MRC	
5469	092P.096	Boomerang Lake	64.7	10	200	С	general	TR	
7133	092P.067	Bowers Lake	612.9	10	200	С	general	MRC	
11643	092P.006	Brigade Lake	50.4	10	200	С	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
7209	092P.073	Brushy Lake	23.3	10	200	С	general		
9267	092P.047	Burn Lake	3.8	10	200	С	general	TR	
9197	092P.047	Burn Lake	26.6	10	200	С	general	MRH	
7044	092P.072	Camacho Lake	25.7	10	200	С	general		
11083	092P.025	Campeau Lake	11.5	10	200	С	general	MRH/TR	
9510	092P.041	Canoe Lake	38.5	10	200	С	general	TR	
7106	092P.075	Chicken Lake	7.8	10	200	С	general	TR	
4949	093A.007	Chicken Lake	0.5	10	200	С	general	TR	
7053	092P.076	Chris Lake	61.6	10	200	С	general	TR	
5800	092P.097	Christmas Lake	36.9	10	200	С	general	MR	
6748	092P.084	Chub Lake	151.6	10	200	С	general	MR	
6692	092P.084	Club Lake	7.2	10	200	С	general	MR	
11277	092P.026	Coal Lake	20.2	10	200	С	general	W	
7195	092P.077	Cougar Lake	12.4	10	200	С	general	MR	
10725	092P.034	Crane Pond	14.9	10	200	С	general	TR	
9367	092P.047	Crescent Lake	21.7	10	200	С	general	W	
9288	092P.047	Crystal Lake	157.6	10	200	С	general	TR	
7828	092P.065	Disputed Lakes	0.9	10	200	С	general		
7429	092P.066	Dragonfly Lake	39.4	10	200	С	general	MR	
7299	092P.077	Duck Lake	23.5	10	200	С	general	TR	
9158	092P.047	East Twin Lake	23.6	10	200	С	general		
11496	092P.015	Elk Lake	39.8	10	200	С	general	TR	
10838	092P.034	Esker Lake	4.3	10	200	С	general	MRH	
9342	092P.047	Eugene Lake	126.9	10	200	С	general	TR	
5998	092P.094	Fly Lake	9.5	10	200	С	general	MR	
6982	092P.073	Goose Lake	21.4	10	200	С	general	TR	
7043	092P.073	Goose Lake	26.6	10	200	С	general	TR	
4550	093A.017	Hendrix Lake	91.2	10	200	С	general	MR/TR	
10649	092P.034	Heron Pond	14.5	10	200	С	general	TR	
5314	092P.097	Hotfish Lake	73.6	10	200	С	general	TR	
10735	092P.034	Hutchison Lake	29.7	10	200	С	general	MR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
6256	092P.081	Island Lake	50.1	10	200	С	general	TR	
8912	092P.055	Jack Frost Lake	36.9	10	200	С	general		
10689	092P.035	Jeep Lake	18.2	10	200	С	general	TR	
5688	092P.096	Judy Lake	8.4	10	200	С	general	MR	
5578	092P.097	Kellington Lake	57.8	10	200	С	general	MR	
8881	092P.053	Kelsey Lake	22.5	10	200	С	general		
10273	092P.035	Komori Lake	18.9	10	200	С	general	MRH	
6769	092P.084	Larsen Lake	16.6	10	200	С	general	MR	
7240	092P.073	Lily Pad Lake	110.3	10	200	С	general	TR	
7144	092P.075	Lilyleaf Lake	13.4	10	200	С	general	TR	
11036	092P.027	Little Scot Lake	9.8	10	200	С	general	TR	
10138	092P.031	Long Lake	4.1	10	200	С	general	TR	
8975	092P.052	Long Lake	15.8	10	200	С	general		
7630	092P.065	Longbow Lake	51.9	10	200	С	general	MR	
7057	092P.075	Lower Lake	20.3	10	200	С	general	TR	
7994	092P.067	Manning Lake	9.3	10	200	С	general	TR	
10829	092P.024	Marsden Lake	33.9	10	200	С	general	TR	
5746	092P.092	Maze Lake	64.9	10	200	С	general	MR	
6805	092P.077	McNeil Lake	86.8	10	200	С	general	MR	
7368	092P.073	Mirage Lake	59.8	10	200	С	general	TR	
9388	092P.047	Montana Lake	111.6	10	200	С	general	TR	
8178	092P.058	Monticola Lake	70.6	10	200	С	general	TR	
7840	092P.067	Moon Lake	3.5	10	200	С	general	TR	
10674	092P.036	Moose Lake	20.1	10	200	С	general	TR	
10511	092P.031	Mule Lake	15.6	10	200	С	general	TR	
9012	092P.052	Neilson Lake	52.8	10	200	С	general	TR	
5172	093A.005	Oie Lake	54.7	10	200	С	general	TR	
7476	092P.066	Parks Lake	14.7	10	200	С	general	TR	
10054	092P.034	Pigeon Lake	3.5	10	200	С	general	TR	
6380	092P.087	Pot Liquor Lake	2.2	10	200	С	general	TR	
10008	092P.035	Pressy Lake	43.8	10	200	С	general	MR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
5643	092P.093	Rail Lake	229.9	10	200	С	general	MRH	
9363	092P.047	Raspberry Lake	20.2	10	200	С	general	W	
8929	092P.055	Red Willow Lake	4.5	10	200	С	general		
11069	092P.027	Ronald Lake	7.7	10	200	С	general	W	
6320	092P.087	Roserim Lake	46.1	10	200	С	general	MR	
6827	092P.074	Rudy Lake	22.7	10	200	С	general	TR	
9164	092P.047	Rutherford Lake	79.1	10	200	С	general		
10467	092P.036	Sharpe Lake	64.3	10	200	С	general	TR	
4595	093A.009	Spanish Lake	36.9	10	200	С	general	TR	
6689	092P.084	Spring Lake	152.9	10	200	С	general	TR	
4952	093A.007	Spud Lake	28.9	10	200	С	general	W	
6652	092P.083	Stack Lake	0.4	10	200	С	general		
8598	092P.056	Staley Lake	14.2	10	200	С	general		
4740	093A.007	Stinson Lake	20.3	10	200	С	general	W	
5759	092P.096	Succour Lake	96.4	10	200	С	general	MR	
5614	092P.096	Susan Lake	16.7	10	200	С	general	MR	
11717	092P.003	Three Mile Lake	12.6	10	200	С	general	TR	
10248	092P.035	Tin Cup Lake	72.8	10	200	С	general	MRH	
11123	092P.027	Tingley Lake	8.7	10	200	С	general	TR	
11329	092P.023	Trurans Lake	54.3	10	200	С	general	W	
11413	092P.015	Upper Loon Lake	145.2	10	200	С	general	TR	
11452	092P.017	Uren Lake	19.8	10	200	С	general	TR	
10028	092P.042	Valenzuela Lake	15.3	10	200	С	general	TR	
8487	092P.058	Wand Lake	7.4	10	200	С	general	MR/TR	
9221	092P.047	Webb Lake	3.8	10	200	С	general		
7065	092P.076	Webb Lake	10.3	10	200	С	general	TR	
9090	092P.047	Webb Lakes	43.9	10	200	С	general	MR	
9068	092P.047	Webb Lakes	93.8	10	200	С	general	MR	
9169	092P.047	West Twin Lake	19.3	10	200	С	general	TR	
10115	092P.031	White Lake	125.4	10	200	С	general	TR	
6574	092P.083	Whitehorse Lake	43.2	10	200	С	general	MR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9185	092P.047	Whitley Lake	34.4	10	200	С	general	TR	
6632	092P.085	Wilcox Lake	39.5	10	200	С	general	TR	
8538	092P.058	Willow Lake	50.1	10	200	С	general	MR/TR	
11034	092P.026	Young Lake	356.3	10	200	С	general	MRH	
10472	0920.040		12.1	10	200	С	general	TR	
11397	092P.015		12.6	10	200	С	general	TR	
11474	092P.017		3.7	10	200	С	general		
11220	092P.023		0.7	10	200	С	general	TR	
11343	092P.023		4.9	10	200	С	general	TR	
10846	092P.024		10.1	10	200	С	general	MR	
11367	092P.025		0.4	10	200	С	general	TR	
11292	092P.025		1.4	10	200	С	general		
11194	092P.025		4.5	10	200	С	general	TR	
11298	092P.025		12.4	10	200	С	general	TR	
11005	092P.026		0.7	10	200	С	general		
11017	092P.026		5.5	10	200	С	general		
11326	092P.026		7.5	10	200	С	general	W	
10971	092P.027		3.1	10	200	С	general		
10863	092P.027		3.6	10	200	С	general	TR	
10827	092P.031		0.4	10	200	С	general	MR	
10776	092P.031		0.4	10	200	С	general	TR/W	
10648	092P.031		0.5	10	200	С	general	TR	
10178	092P.031		3.6	10	200	С	general	TR	
10361	092P.031		3.9	10	200	С	general	TR	
10663	092P.031		5.6	10	200	С	general	TR/W	
10155	092P.031		6.3	10	200	С	general	TR	
10490	092P.031		7.1	10	200	С	general	TR	
10791	092P.031		7.5	10	200	С	general	TR/W	
10728	092P.031		8.3	10	200	С	general	TR/W	
10553	092P.031		10.5	10	200	С	general	TR	
10755	092P.031		19.1	10	200	С	general	TR/W	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
10580	092P.032		3.2	10	200	С	general	TR	
10570	092P.032		7.6	10	200	С	general	TR	
10402	092P.032		35.5	10	200	С	general	TR	
10611	092P.033		0.4	10	200	С	general	TR	
10628	092P.033		0.6	10	200	С	general	TR	
10283	092P.033		3.4	10	200	С	general	TR	
10673	092P.033		3.8	10	200	С	general	TR	
10678	092P.033		9.8	10	200	С	general	TR	
10659	092P.033		9.9	10	200	С	general	TR	
10255	092P.033		12.5	10	200	С	general	TR	
10677	092P.033		20.7	10	200	С	general	TR	
9944	092P.033		28.1	10	200	С	general		
10616	092P.033		37.1	10	200	С	general	TR	
10332	092P.033		48.4	10	200	С	general	TR	
10832	092P.034		3.5	10	200	С	general	MR	
9974	092P.034		3.5	10	200	С	general	TR	
10737	092P.034		4.1	10	200	С	general	MR	
10833	092P.034		9.2	10	200	С	general	TR	
9982	092P.034		9.9	10	200	С	general	TR	
10772	092P.034		10.9	10	200	С	general	MRH	
10328	092P.034		11.8	10	200	С	general	MR	
10051	092P.034		11.8	10	200	С	general	TR	
10831	092P.034		12.4	10	200	С	general	MR	
10445	092P.034		12.9	10	200	С	general		
10647	092P.034		16.2	10	200	С	general	TR	
10065	092P.034		16.3	10	200	С	general	TR	
10751	092P.034		18.1	10	200	С	general	MR	
10714	092P.035		5.5	10	200	С	general	TR	
10630	092P.035		6.9	10	200	С	general	TR	
10633	092P.035		25.8	10	200	С	general	TR	
10597	092P.036		1.8	10	200	С	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9259	092P.043		0.4	10	200	С	general	TR	
9620	092P.043		4.2	10	200	С	general	TR	
9657	092P.043		4.5	10	200	С	general	TR	
9528	092P.043		4.6	10	200	С	general		
9252	092P.043		7.3	10	200	С	general	TR	
9642	092P.043		18.5	10	200	С	general	TR	
9447	092P.043		20.8	10	200	С	general	TR	
9696	092P.044		7.3	10	200	С	general		
9759	092P.045		2.0	10	200	С	general	TR	
9504	092P.045		6.9	10	200	С	general		
9807	092P.045		10.7	10	200	С	general	TR	
9051	092P.046		3.4	10	200	С	general		
9556	092P.046		4.9	10	200	С	general		
9488	092P.046		6.1	10	200	С	general		
9508	092P.046		9.1	10	200	С	general	W	
9482	092P.047		0.8	10	200	С	general		
9525	092P.047		3.7	10	200	С	general		
9386	092P.047		4.7	10	200	С	general	W	
9214	092P.047		4.7	10	200	С	general		
8927	092P.048		0.4	10	200	С	general	W	
8920	092P.052		4.5	10	200	С	general		
8852	092P.052		7.7	10	200	С	general		
9073	092P.052		19.5	10	200	С	general		
8633	092P.052		24.2	10	200	С	general		
8778	092P.052		36.4	10	200	С	general		
9071	092P.053		0.3	10	200	С	general		
8813	092P.053		18.6	10	200	С	general		
8585	092P.054		3.3	10	200	С	general		
9124	092P.054		12.2	10	200	С	general	TR	
8604	092P.054		15.4	10	200	С	general		
9081	092P.054		22.8	10	200	С	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
7963	092P.058		3.9	10	200	С	general	MR/TR	
8433	092P.058		5.4	10	200	С	general		
8453	092P.058		6.2	10	200	С	general	MR/TR	
7990	092P.062		3.4	10	200	С	general		
7821	092P.062		3.6	10	200	С	general	TR	
7820	092P.062		4.6	10	200	С	general	TR	
8124	092P.063		3.8	10	200	С	general		
7572	092P.063		9.4	10	200	С	general	TR	
7619	092P.065		12.3	10	200	С	general		
7410	092P.066		3.1	10	200	С	general		
8015	092P.066		7.4	10	200	С	general	TR	
7134	092P.073		4.2	10	200	С	general	TR	
7490	092P.073		10.3	10	200	С	general		
7196	092P.074		0.4	10	200	С	general		
7060	092P.075		4.7	10	200	С	general		
7063	092P.076		8.4	10	200	С	general	TR	
7168	092P.076		9.3	10	200	С	general	MR	
7104	092P.078		3.8	10	200	С	general	W	
6279	092P.081		4.1	10	200	С	general	MRC	
6297	092P.081		4.5	10	200	С	general	MRC	
6389	092P.081		4.7	10	200	С	general	TR	
6419	092P.081		6.4	10	200	С	general	TR	
6423	092P.081		9.4	10	200	С	general	TR	
6265	092P.082		0.5	10	200	С	general	TR	
6831	092P.082		6.7	10	200	С	general	MRC	
6325	092P.082		6.8	10	200	С	general	TR	
6362	092P.082		15.5	10	200	С	general		
6868	092P.082		15.6	10	200	С	general	W	
6148	092P.083		16.8	10	200	С	general	TR	
6681	092P.084		0.5	10	200	С	general	MR	
6479	092P.084		5.9	10	200	С	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
6722	092P.084		8.9	10	200	С	general	MR	
6559	092P.084		15.5	10	200	С	general	MR	
6518	092P.085		0.4	10	200	С	general		
6049	092P.085		0.9	10	200	С	general	TR	
6691	092P.085		3.3	10	200	С	general		
6545	092P.085		3.3	10	200	С	general		
6330	092P.085		3.4	10	200	С	general		
6321	092P.085		14.1	10	200	С	general		
6123	092P.086		0.4	10	200	С	general		
6561	092P.086		4.1	10	200	С	general		
6173	092P.086		5.4	10	200	С	general	TR	
6210	092P.086		5.8	10	200	С	general		
5838	092P.087		4.1	10	200	С	general		
6111	092P.091		4.2	10	200	С	general	TR	
6137	092P.091		5.1	10	200	С	general	TR	
5859	092P.092		0.3	10	200	С	general	TR	
5700	092P.092		0.6	10	200	С	general		
5648	092P.092		0.9	10	200	С	general		
5725	092P.092		2.8	10	200	С	general	MR	
5833	092P.092		3.2	10	200	С	general		
5888	092P.092		3.5	10	200	С	general	MR	
5625	092P.092		4.5	10	200	С	general		
5752	092P.092		5.3	10	200	С	general	TR	
5997	092P.092		5.6	10	200	С	general	MR	
5708	092P.092		6.3	10	200	С	general		
5808	092P.092		6.5	10	200	С	general		
5966	092P.092		10.3	10	200	С	general	MR	
5851	092P.092		14.7	10	200	С	general	MR	
5773	092P.092		24.7	10	200	С	general	MR	
5743	092P.092		27.2	10	200	С	general	TR	
6042	092P.093		6.6	10	200	С	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
5792	092P.094		3.6	10	200	С	general	TR	
5848	092P.095		1.1	10	200	С	general	TR	
5744	092P.095		1.2	10	200	С	general	TR	
5820	092P.095		11.5	10	200	С	general	TR	
5273	092P.095		20.1	10	200	С	general		
5619	092P.096		3.2	10	200	С	general		
5626	092P.096		12.2	10	200	С	general	TR	
5612	092P.096		13.9	10	200	С	general	MR	
5532	092P.097		0.6	10	200	С	general	TR	
5515	092P.097		3.3	10	200	С	general	TR	
5509	092P.097		4.7	10	200	С	general	TR	
5066	092P.098		3.3	10	200	С	general		
5444	092P.098		3.7	10	200	С	general	TR	
5607	092P.098		10.2	10	200	С	general	W	
5176	092P.098		13.2	10	200	С	general	NSR	
4674	093A.006		5.4	10	200	С	general		
12718	093A.014		15.8	10	200	С	general		
4239	093A.018		11.1	10	200	С	general	W	
8495	092P.054	Abbs Lake	3.6	10	200	D	general		
7268	092P.075	Alans Lake	25.7	10	200	D	general	TR	
11729	092P.003	Alkali Lakes	3.9	10	200	D	general	MRH	
11745	092P.003	Alkali Lakes	10.8	10	200	D	general	MR	
6000	092P.086	Baldwin Lake	5.3	10	200	D	general	TR	
10281	092P.036	Bandello Lake	6.6	10	200	D	general	MR	
9640	092P.043	Bishop Lake	39.6	10	200	D	general	TR	
10408	092P.037	Brown Lake	9.4	10	200	D	general		
9589	092P.043	Bullock Lake	75.5	10	200	D	general	TR	
7307	092P.067	Caddis Lake	11.1	10	200	D	general	TR	
9558	092P.044	Calf Corral Lake	5.6	10	200	D	general	TR	
7059	092P.073	Cambacres Lake	1.2	10	200	D	general		
7071	092P.073	Cambacres Lake	1.6	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
7290	092P.073	Cambyses Lake	4.3	10	200	D	general		
7314	092P.073	Camden Lake	9.9	10	200	D	general	TR	
10865	092P.026	Campeau Lake	12.5	10	200	D	general	MR	
7526	092P.066	Carton Lake	6.4	10	200	D	general		
11678	092P.006	Chartrand Lake	54.6	10	200	D	general	MR	
7127	092P.075	Chicken Lake	6.9	10	200	D	general		
9700	092P.041	Clink Lake	23.4	10	200	D	general	TR	
9718	092P.041	Clink Lake	42.7	10	200	D	general	TR	
10367	092P.033	Cunningham Lake	7.8	10	200	D	general	TR	
9341	092P.043	Davis Lake	5.9	10	200	D	general	TR	
6529	092P.082	Dingwall Lakes	1.4	10	200	D	general	TR	
6598	092P.082	Dingwall Lakes	41.1	10	200	D	general	TR	
7837	092P.065	Disputed Lakes	0.5	10	200	D	general		
7787	092P.065	Disputed Lakes	4.6	10	200	D	general		
6915	092P.073	Dixon Lake	25.7	10	200	D	general	TR	
9257	092P.047	Dogskin Lake	14.1	10	200	D	general	TR	
11580	092P.014	Dougherty Lake	7.5	10	200	D	general	MR/TR	
7570	092P.066	Duckling Lake	13.4	10	200	D	general		
9452	092P.044	Dundon Lakes	5.7	10	200	D	general	TR	
9440	092P.044	Dundon Lakes	8.4	10	200	D	general	TR	
9493	092P.044	Dundon Lakes	9.2	10	200	D	general	TR	
11460	092P.014	East Camp Lake	9.3	10	200	D	general	TR	
9614	092P.043	Eightythree Lake	112.4	10	200	D	general	TR	
11417	092P.016	Enright Lake	27.1	10	200	D	general	TR	
7343	092P.073	Enterprise Lake	6.6	10	200	D	general	TR	
10208	092P.034	Flat Lake	8.2	10	200	D	general		
6556	092P.087	Fowlow Lake	7.8	10	200	D	general	MR	
10695	092P.032	Goodenough Lake	19.4	10	200	D	general	TR	
9377	092P.044	Gracy Lake	2.2	10	200	D	general	TR	
9850	092P.044	Graham Lake	23.9	10	200	D	general	TR	
8782	092P.055	Guessagain Lake	33.3	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9031	092P.055	Gwenie Lake	3.8	10	200	D	general		
7089	092P.072	Hale Lake	12.3	10	200	D	general		
8948	092P.047	Hansen Lake	28.1	10	200	D	general		
9131	092P.047	Henley Lake	32.8	10	200	D	general		
9464	092P.047	High Lake	27.8	10	200	D	general	W	
10359	092P.035	Home Lake	18.2	10	200	D	general	TR	
6335	092P.083	Itautso Lake	31.7	10	200	D	general	TR	
8757	092P.054	Keith Lake	38.6	10	200	D	general		
8834	092P.053	Kelsey Lake	14.6	10	200	D	general		
5706	092P.097	Kingfisher Lake	59.4	10	200	D	general	MR	
11653	092P.014	Knife Lakes	4.7	10	200	D	general	TR	
11578	092P.015	Letous Lake	4.2	10	200	D	general	TR	
11216	092P.022	Little Green Lake	24.6	10	200	D	general	TR	
5686	092P.093	Little Rail Lake	5.9	10	200	D	general	TR	
10421	092P.034	Loch Lomond	71.4	10	200	D	general	TR	
8405	092P.056	Lonely Lake	22.5	10	200	D	general	MR	
6510	092P.082	Long Johnny Lake	22.7	10	200	D	general	TR	
5298	092P.094	Lower Peach Lake	18.7	10	200	D	general	TR	
11315	092P.023	Magnesia Lake	29.8	10	200	D	general	TR	
7660	092P.066	Marais Lake	16.1	10	200	D	general	MR	
6392	092P.083	Marling Lake	20.1	10	200	D	general	TR	
7297	092P.073	McKinlay Lake	20.7	10	200	D	general	TR	
10391	092P.034	McMahon Lake	34.7	10	200	D	general	TR	
11158	092P.023	Mole Lake	16.6	10	200	D	general	TR	
7160	092P.072	Muench Lake	4.5	10	200	D	general	TR	
7172	092P.072	Muench Lake	6.7	10	200	D	general	TR	
9120	092P.046	No. 1 Lake	5.1	10	200	D	general		
9017	092P.046	No. 2 Lake	40.2	10	200	D	general	MR	
9770	0920.050	Onion Lake	0.6	10	200	D	general	TR	
8910	092P.054	Parting Lakes	2.7	10	200	D	general	TR	
8907	092P.054	Parting Lakes	35.9	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
11769	0921.091	Pear Lake	3.9	10	200	D	general		
9870	092P.036	Peel Lake	21.7	10	200	D	general		
8696	092P.056	Peters Lake	8.6	10	200	D	general	TR	
11109	0920.030	Poison Lake	10.9	10	200	D	general	TR	
7058	092P.077	Rat Lake	29.1	10	200	D	general	MR	
11641	092P.006	Rimrock Lake	34.1	10	200	D	general	TR	
6823	092P.075	Ross Lake	0.5	10	200	D	general		
9622	092P.044	Round Lake	52.4	10	200	D	general	TR	
6234	092P.083	Saddle Lake	4.7	10	200	D	general	TR	
7578	092P.064	Savon Lake	11.3	10	200	D	general	TR	
9178	092P.045	Si Lake	6.2	10	200	D	general	TR	
10802	092P.025	Siwash Lake	19.1	10	200	D	general	TR	
5736	092P.097	Sliver Lake	10.2	10	200	D	general		
10855	092P.034	Sodium Lake	9.8	10	200	D	general	TR	
10778	092P.026	Spectacle Lake	1.6	10	200	D	general	MR	
6575	092P.081	Steamboat Lake	10.5	10	200	D	general	TR	
6460	092P.087	Streak Lake	28.3	10	200	D	general	TR	
9162	092P.044	Taylor Lake	78.2	10	200	D	general	TR	
6275	092P.083	Thirsty Lake	26.1	10	200	D	general	TR	
5585	092P.097	Tiny Tim Lake	1.1	10	200	D	general	MR	
9069	092P.054	Trapping Lake	55.9	10	200	D	general		
6948	092P.074	Tubbs Lake	103.5	10	200	D	general	MR	
6971	092P.075	Upper Lake	14.2	10	200	D	general	TR	
11230	092P.027	Venos Lake	8.5	10	200	D	general	TR	
5385	092P.093	Walmith Lake	4.6	10	200	D	general	TR	
5413	092P.097	Weller Lake	17.4	10	200	D	general	MR/TR	
5895	092P.086	Wieduwelt Lake	9.6	10	200	D	general	TR	
9860	092P.041	Wild Goose Lakes	1.5	10	200	D	general	TR	
9840	092P.041	Wildgoose Lake	3.5	10	200	D	general	TR	
11129	092P.026	Wildhorse Lake	34.8	10	200	D	general	TR	
9677	092P.044	Wilkinson Lake	11.8	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
11283	092P.026	Yard Lake	4.9	10	200	D	general	TR	
10750	0920.040		3.7	10	200	D	general	TR	
10933	0920.040		13.8	10	200	D	general		
11684	092P.006		5.2	10	200	D	general	TR	
11515	092P.013		0.6	10	200	D	general		
11565	092P.013		3.3	10	200	D	general		
11550	092P.014		3.2	10	200	D	general		
11459	092P.014		5.4	10	200	D	general		
11581	092P.014		9.7	10	200	D	general		
11411	092P.015		3.4	10	200	D	general		
11439	092P.015		3.4	10	200	D	general		
11517	092P.015		3.5	10	200	D	general	MR/TR	
11619	092P.015		3.9	10	200	D	general		
11545	092P.015		4.4	10	200	D	general		
11626	092P.015		5.2	10	200	D	general		
11605	092P.015		5.8	10	200	D	general		
11540	092P.015		6.7	10	200	D	general	TR	
11577	092P.015		7.3	10	200	D	general		
11475	092P.015		8.1	10	200	D	general		
11480	092P.016		3.2	10	200	D	general		
11346	092P.016		3.3	10	200	D	general	MRC	
11479	092P.016		5.8	10	200	D	general	TR	
11561	092P.016		6.8	10	200	D	general	TR	
11507	092P.016		9.4	10	200	D	general	TR	
11575	092P.016		28.7	10	200	D	general	TR	
11407	092P.017		6.8	10	200	D	general		
11030	092P.021		3.7	10	200	D	general	TR	
11080	092P.021		5.1	10	200	D	general	MR	
11310	092P.022		0.6	10	200	D	general	TR	
11255	092P.022		3.1	10	200	D	general		
11245	092P.022		3.3	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
11142	092P.022		3.4	10	200	D	general	TR	
11293	092P.022		3.5	10	200	D	general		
11148	092P.022		3.6	10	200	D	general		
11309	092P.022		4.8	10	200	D	general		
11136	092P.022		6.3	10	200	D	general	TR	
11155	092P.022		7.1	10	200	D	general		
11276	092P.022		7.8	10	200	D	general	TR	
11134	092P.022		9.3	10	200	D	general	TR	
11321	092P.022		9.7	10	200	D	general	TR	
11133	092P.022		13.5	10	200	D	general		
11063	092P.022		14.8	10	200	D	general	TR	
11272	092P.022		24.8	10	200	D	general	TR	
11331	092P.023		0.3	10	200	D	general		
11304	092P.023		3.3	10	200	D	general		
11351	092P.023		3.5	10	200	D	general		
10993	092P.023		3.7	10	200	D	general	TR	
11009	092P.023		4.3	10	200	D	general	TR	
11361	092P.023		4.4	10	200	D	general	TR	
11027	092P.023		4.4	10	200	D	general	TR	
11294	092P.023		4.5	10	200	D	general		
11206	092P.023		4.7	10	200	D	general		
11185	092P.023		5.4	10	200	D	general	TR	
11239	092P.023		5.7	10	200	D	general	TR	
11177	092P.023		6.3	10	200	D	general	TR	
10951	092P.023		6.3	10	200	D	general	TR	
11263	092P.023		6.5	10	200	D	general	TR	
11198	092P.023		6.5	10	200	D	general	TR	
10956	092P.023		6.9	10	200	D	general	TR	
11401	092P.023		7.4	10	200	D	general		
11062	092P.023		7.5	10	200	D	general	TR	
11271	092P.023		11.7	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
11370	092P.023		15.3	10	200	D	general	TR	
11215	092P.023		18.4	10	200	D	general	TR	
11060	092P.024		0.3	10	200	D	general	TR	
11113	092P.024		0.6	10	200	D	general	TR	
11227	092P.024		1.4	10	200	D	general	TR	
11224	092P.024		3.1	10	200	D	general	TR	
10983	092P.024		4.2	10	200	D	general		
11354	092P.024		4.3	10	200	D	general	TR	
11191	092P.024		4.3	10	200	D	general	TR	
11047	092P.024		4.3	10	200	D	general	TR	
11001	092P.024		4.4	10	200	D	general	TR	
10959	092P.024		4.5	10	200	D	general	TR	
11048	092P.024		6.6	10	200	D	general	TR	
10982	092P.024		9.7	10	200	D	general	TR	
10968	092P.024		10.2	10	200	D	general	TR	
11138	092P.024		10.3	10	200	D	general	TR	
11078	092P.024		10.9	10	200	D	general	TR	
10999	092P.024		14.9	10	200	D	general	TR	
11135	092P.024		23.5	10	200	D	general	TR	
10880	092P.024		40.4	10	200	D	general	TR	
11275	092P.025		5.3	10	200	D	general	TR	
10897	092P.025		5.4	10	200	D	general	TR	
11200	092P.025		6.2	10	200	D	general		
10967	092P.025		6.9	10	200	D	general	TR	
10945	092P.025		8.1	10	200	D	general	TR	
10800	092P.025		9.3	10	200	D	general	TR	
10867	092P.026		3.1	10	200	D	general	TR	
10989	092P.026		3.5	10	200	D	general		
11175	092P.026		3.6	10	200	D	general	TR	
11278	092P.026		3.7	10	200	D	general	TR	
10856	092P.026		4.1	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
11165	092P.026		9.8	10	200	D	general	TR	
10151	092P.032		0.8	10	200	D	general		
10284	092P.032		3.2	10	200	D	general		
10160	092P.032		3.3	10	200	D	general		
10727	092P.032		3.4	10	200	D	general		
10513	092P.032		3.4	10	200	D	general		
10334	092P.032		5.5	10	200	D	general	TR	
10939	092P.032		5.9	10	200	D	general	TR	
10955	092P.032		8.1	10	200	D	general	MRH	
10061	092P.032		13.1	10	200	D	general	TR	
9946	092P.033		0.3	10	200	D	general		
9961	092P.033		0.3	10	200	D	general		
10479	092P.033		3.2	10	200	D	general		
10330	092P.033		3.2	10	200	D	general	TR	
10498	092P.033		3.5	10	200	D	general		
10017	092P.033		3.5	10	200	D	general		
10907	092P.033		3.6	10	200	D	general	TR	
10708	092P.033		3.6	10	200	D	general		
10481	092P.033		3.6	10	200	D	general		
10252	092P.033		3.6	10	200	D	general	TR	
10390	092P.033		3.7	10	200	D	general		
10866	092P.033		3.8	10	200	D	general		
10347	092P.033		3.8	10	200	D	general	TR	
10303	092P.033		4.1	10	200	D	general		
10810	092P.033		4.2	10	200	D	general		
10671	092P.033		4.3	10	200	D	general		
10634	092P.033		4.3	10	200	D	general		
10868	092P.033		4.6	10	200	D	general		
10196	092P.033		4.8	10	200	D	general	TR	
10375	092P.033		4.9	10	200	D	general	TR	
10948	092P.033		5.2	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
10588	092P.033		5.2	10	200	D	general	TR	
10128	092P.033		5.2	10	200	D	general		
10126	092P.033		5.3	10	200	D	general	TR	
10431	092P.033		5.6	10	200	D	general		
10232	092P.033		5.6	10	200	D	general	TR	
10797	092P.033		5.9	10	200	D	general	TR	
10482	092P.033		5.9	10	200	D	general		
10129	092P.033		5.9	10	200	D	general		
10267	092P.033		6.2	10	200	D	general	TR	
10931	092P.033		6.4	10	200	D	general	TR	
10491	092P.033		6.7	10	200	D	general	TR	
10606	092P.033		6.9	10	200	D	general	TR	
10562	092P.033		7.1	10	200	D	general	TR	
10400	092P.033		7.2	10	200	D	general		
10837	092P.033		8.1	10	200	D	general	TR	
10610	092P.033		8.1	10	200	D	general	TR	
10103	092P.033		8.5	10	200	D	general		
10265	092P.033		8.9	10	200	D	general		
10603	092P.033		12.1	10	200	D	general	TR	
10244	092P.033		14.6	10	200	D	general		
10052	092P.033		15.4	10	200	D	general	TR	
10780	092P.033		34.1	10	200	D	general	TR	
10276	092P.033		44.5	10	200	D	general	TR	
10684	092P.034		0.3	10	200	D	general		
10573	092P.034		0.4	10	200	D	general		
10087	092P.034		0.4	10	200	D	general	TR	
10339	092P.034		1.0	10	200	D	general	MRH	
10702	092P.034		1.1	10	200	D	general	TR	
10732	092P.034		3.1	10	200	D	general		
10381	092P.034		3.1	10	200	D	general	TR	
10722	092P.034		3.2	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
10266	092P.034		3.2	10	200	D	general		
9947	092P.034		3.3	10	200	D	general		
10566	092P.034		3.4	10	200	D	general	TR	
10672	092P.034		3.6	10	200	D	general	TR	
10921	092P.034		3.7	10	200	D	general		
10312	092P.034		3.7	10	200	D	general	TR	
10113	092P.034		3.7	10	200	D	general		
10376	092P.034		4.2	10	200	D	general		
10030	092P.034		4.4	10	200	D	general	W	
9932	092P.034		4.4	10	200	D	general		
10812	092P.034		4.5	10	200	D	general		
10047	092P.034		4.7	10	200	D	general	TR	
10489	092P.034		4.8	10	200	D	general	TR	
10782	092P.034		4.9	10	200	D	general	TR	
10036	092P.034		5.3	10	200	D	general	TR	
10005	092P.034		5.5	10	200	D	general	TR	
9935	092P.034		5.5	10	200	D	general	TR	
9957	092P.034		5.6	10	200	D	general	TR	
9960	092P.034		5.6	10	200	D	general	TR	
9986	092P.034		5.7	10	200	D	general	TR	
10272	092P.034		5.8	10	200	D	general	TR	
10135	092P.034		5.8	10	200	D	general	TR	
10384	092P.034		5.9	10	200	D	general	TR	
10021	092P.034		5.9	10	200	D	general	TR	
10499	092P.034		6.3	10	200	D	general	TR	
10042	092P.034		6.6	10	200	D	general	TR	
10127	092P.034		6.9	10	200	D	general	TR	
10352	092P.034		7.2	10	200	D	general	TR	
10294	092P.034		7.2	10	200	D	general	TR	
9969	092P.034		7.2	10	200	D	general	TR	
9994	092P.034		7.7	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
10037	092P.034		7.9	10	200	D	general	TR	
10029	092P.034		8.1	10	200	D	general	TR	
10669	092P.034		8.4	10	200	D	general	TR	
10187	092P.034		8.6	10	200	D	general	TR	
10373	092P.034		8.7	10	200	D	general	TR	
10219	092P.034		8.9	10	200	D	general	TR	
10314	092P.034		10.5	10	200	D	general	TR	
10718	092P.034		10.8	10	200	D	general	MR/TR	
9904	092P.034		11.1	10	200	D	general	TR	
10414	092P.034		11.4	10	200	D	general	TR	
10436	092P.034		14.9	10	200	D	general	TR	
10198	092P.034		17.5	10	200	D	general	TR	
10399	092P.035		0.7	10	200	D	general	MR	
10070	092P.035		1.1	10	200	D	general	TR	
10749	092P.035		3.3	10	200	D	general		
10253	092P.035		3.5	10	200	D	general		
10507	092P.035		3.6	10	200	D	general		
10446	092P.035		3.8	10	200	D	general	TR	
10643	092P.035		3.9	10	200	D	general	TR	
10558	092P.035		5.4	10	200	D	general	TR	
10454	092P.035		6.3	10	200	D	general	TR	
10096	092P.035		6.7	10	200	D	general	TR	
10000	092P.035		8.3	10	200	D	general		
10710	092P.035		9.6	10	200	D	general	TR	
10623	092P.035		10.3	10	200	D	general	TR	
10626	092P.035		11.2	10	200	D	general	MR	
9921	092P.035		11.5	10	200	D	general	TR	
10492	092P.035		25.3	10	200	D	general	MR	
10706	092P.036		0.3	10	200	D	general		
9952	092P.036		0.6	10	200	D	general		
9831	092P.036		0.7	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9892	092P.036		3.8	10	200	D	general		
10602	092P.036		11.2	10	200	D	general	TR	
10595	092P.036		14.6	10	200	D	general		
9927	092P.037		3.1	10	200	D	general		
9758	092P.037		4.7	10	200	D	general		
10072	092P.038		4.1	10	200	D	general	MRC	
9811	092P.042		3.6	10	200	D	general		
9710	092P.042		3.6	10	200	D	general	TR	
9437	092P.042		3.6	10	200	D	general		
9318	092P.042		3.7	10	200	D	general	TR	
9852	092P.042		3.9	10	200	D	general	TR	
9699	092P.042		3.9	10	200	D	general	TR	
9846	092P.042		4.6	10	200	D	general		
9676	092P.042		5.9	10	200	D	general		
9636	092P.042		6.7	10	200	D	general	TR	
9905	092P.042		7.7	10	200	D	general	TR	
10014	092P.042		8.5	10	200	D	general		
9590	092P.042		8.6	10	200	D	general	TR	
9810	092P.042		11.6	10	200	D	general	TR	
9474	092P.042		11.6	10	200	D	general	TR	
9499	092P.042		12.1	10	200	D	general	TR	
9691	092P.042		12.2	10	200	D	general	TR	
9379	092P.042		27.4	10	200	D	general	TR	
9401	092P.042		30.6	10	200	D	general	TR	
9351	092P.042		55.6	10	200	D	general	TR	
9747	092P.043		0.4	10	200	D	general	TR	
9425	092P.043		0.4	10	200	D	general		
9889	092P.043		3.2	10	200	D	general		
9792	092P.043		3.2	10	200	D	general	TR	
9618	092P.043		3.2	10	200	D	general		
9983	092P.043		3.3	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9845	092P.043		3.3	10	200	D	general		
9637	092P.043		3.5	10	200	D	general		
9415	092P.043		3.7	10	200	D	general	TR	
9740	092P.043		3.8	10	200	D	general	TR	
9867	092P.043		4.7	10	200	D	general		
9571	092P.043		4.7	10	200	D	general	TR	
9711	092P.043		5.3	10	200	D	general		
9570	092P.043		5.8	10	200	D	general	TR	
9494	092P.043		5.9	10	200	D	general	TR	
9736	092P.043		7.2	10	200	D	general	TR	
9877	092P.043		7.5	10	200	D	general		
9301	092P.043		10.9	10	200	D	general		
9744	092P.043		11.9	10	200	D	general	TR	
9694	092P.043		14.5	10	200	D	general	TR	
9847	092P.043		19.8	10	200	D	general	TR	
9757	092P.043		21.5	10	200	D	general	TR	
9446	092P.043		24.1	10	200	D	general	TR	
9818	092P.043		25.3	10	200	D	general	TR	
9679	092P.044		0.3	10	200	D	general	TR	
9304	092P.044		1.3	10	200	D	general	TR	
9258	092P.044		3.1	10	200	D	general		
9743	092P.044		3.2	10	200	D	general		
9859	092P.044		3.5	10	200	D	general	TR	
9529	092P.044		3.6	10	200	D	general	TR	
9391	092P.044		3.7	10	200	D	general	TR	
9423	092P.044		3.9	10	200	D	general		
9814	092P.044		4.2	10	200	D	general		
9436	092P.044		4.2	10	200	D	general		
9312	092P.044		4.2	10	200	D	general		
9789	092P.044		4.4	10	200	D	general	TR	
9702	092P.044		4.4	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9719	092P.044		4.6	10	200	D	general	TR	
9564	092P.044		4.7	10	200	D	general		
9667	092P.044		5.2	10	200	D	general	TR	
9179	092P.044		5.5	10	200	D	general		
9173	092P.044		6.1	10	200	D	general		
9773	092P.044		6.2	10	200	D	general	TR	
9761	092P.044		6.4	10	200	D	general	TR	
9203	092P.044		6.5	10	200	D	general	TR	
9652	092P.044		6.8	10	200	D	general	TR	
9898	092P.044		7.1	10	200	D	general	TR	
9872	092P.044		7.2	10	200	D	general	TR	
9629	092P.044		7.4	10	200	D	general	TR	
9734	092P.044		7.5	10	200	D	general	TR	
9434	092P.044		8.1	10	200	D	general	TR	
9612	092P.044		8.5	10	200	D	general	TR	
9605	092P.044		8.8	10	200	D	general	TR	
9762	092P.044		9.8	10	200	D	general	TR	
9599	092P.044		10.2	10	200	D	general	TR	
9651	092P.044		10.5	10	200	D	general	TR	
9880	092P.044		11.3	10	200	D	general	TR	
9579	092P.044		15.2	10	200	D	general	TR	
9238	092P.044		16.2	10	200	D	general		
9392	092P.044		17.2	10	200	D	general	TR	
9771	092P.044		21.9	10	200	D	general	TR	
9822	092P.044		22.7	10	200	D	general	TR	
9291	092P.044		27.2	10	200	D	general	TR	
9767	092P.044		34.1	10	200	D	general	TR	
9665	092P.044		38.6	10	200	D	general	TR	
9664	092P.045		0.4	10	200	D	general	MR	
9688	092P.045		5.2	10	200	D	general	TR	
9609	092P.045		5.9	10	200	D	general	MR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9559	092P.045		8.3	10	200	D	general		
9086	092P.046		0.4	10	200	D	general	MR	
9638	092P.046		3.4	10	200	D	general		
8978	092P.046		4.4	10	200	D	general		
9204	092P.046		4.8	10	200	D	general		
9431	092P.046		5.8	10	200	D	general	TR	
9503	092P.046		6.8	10	200	D	general		
9339	092P.046		6.8	10	200	D	general		
9064	092P.046		7.1	10	200	D	general		
9241	092P.046		7.3	10	200	D	general		
9658	092P.046		7.8	10	200	D	general	TR	
9046	092P.046		16.9	10	200	D	general		
8988	092P.046		43.2	10	200	D	general		
9714	092P.047		3.4	10	200	D	general		
9674	092P.047		4.2	10	200	D	general	TR	
9576	092P.047		4.4	10	200	D	general	TR	
8895	092P.047		7.8	10	200	D	general	TR	
9686	092P.047		10.4	10	200	D	general	TR	
9635	092P.047		22.8	10	200	D	general	TR	
8854	092P.048		6.5	10	200	D	general	TR	
9112	092P.051		0.5	10	200	D	general		
8759	092P.051		5.5	10	200	D	general		
8715	092P.051		6.4	10	200	D	general		
8838	092P.051		7.4	10	200	D	general		
9070	092P.051		9.1	10	200	D	general		
8737	092P.051		10.6	10	200	D	general		
8558	092P.051		11.7	10	200	D	general	TR	
8654	092P.051		13.7	10	200	D	general	TR	
8367	092P.052		0.3	10	200	D	general	TR	
8945	092P.052		0.8	10	200	D	general	TR	
8482	092P.052		0.8	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9028	092P.052		3.1	10	200	D	general		
8954	092P.052		3.1	10	200	D	general		
8816	092P.052		3.1	10	200	D	general		
8721	092P.052		3.1	10	200	D	general		
9093	092P.052		3.2	10	200	D	general		
8348	092P.052		3.3	10	200	D	general		
8984	092P.052		3.5	10	200	D	general		
8803	092P.052		3.5	10	200	D	general	TR	
8471	092P.052		3.6	10	200	D	general		
8574	092P.052		4.1	10	200	D	general		
8689	092P.052		4.5	10	200	D	general		
8760	092P.052		4.8	10	200	D	general		
8719	092P.052		4.8	10	200	D	general		
8765	092P.052		4.9	10	200	D	general	TR	
8864	092P.052		5.4	10	200	D	general		
8311	092P.052		5.8	10	200	D	general		
8540	092P.052		5.9	10	200	D	general		
8802	092P.052		6.3	10	200	D	general	TR	
9038	092P.052		6.4	10	200	D	general	TR	
9027	092P.052		6.6	10	200	D	general	TR	
8885	092P.052		7.8	10	200	D	general		
8687	092P.052		7.8	10	200	D	general		
8686	092P.052		8.2	10	200	D	general		
8638	092P.052		8.5	10	200	D	general		
8733	092P.052		9.9	10	200	D	general	TR	
8347	092P.052		9.9	10	200	D	general		
8764	092P.052		11.2	10	200	D	general	TR	
8994	092P.052		11.4	10	200	D	general		
8607	092P.052		11.4	10	200	D	general		
8871	092P.052		11.9	10	200	D	general		
8827	092P.052		14.8	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
8472	092P.052		15.1	10	200	D	general		
8819	092P.052		16.3	10	200	D	general	TR	
8839	092P.052		22.7	10	200	D	general	TR	
8484	092P.052		25.7	10	200	D	general		
8391	092P.052		32.5	10	200	D	general		
8935	092P.053		0.3	10	200	D	general	TR	
8488	092P.053		0.3	10	200	D	general		
8662	092P.053		0.4	10	200	D	general	TR	
8609	092P.053		0.5	10	200	D	general	TR	
8743	092P.053		3.1	10	200	D	general		
8569	092P.053		3.1	10	200	D	general		
8408	092P.053		3.1	10	200	D	general		
8438	092P.053		3.1	10	200	D	general		
8550	092P.053		3.2	10	200	D	general		
8274	092P.053		3.2	10	200	D	general		
8725	092P.053		3.3	10	200	D	general		
8224	092P.053		3.3	10	200	D	general		
8848	092P.053		3.4	10	200	D	general	TR	
9063	092P.053		3.5	10	200	D	general		
8619	092P.053		3.7	10	200	D	general		
8266	092P.053		3.7	10	200	D	general	TR	
8407	092P.053		3.8	10	200	D	general	TR	
8872	092P.053		4.1	10	200	D	general		
8761	092P.053		4.2	10	200	D	general		
8428	092P.053		4.2	10	200	D	general		
8402	092P.053		4.3	10	200	D	general	TR	
9117	092P.053		4.5	10	200	D	general		
8640	092P.053		4.5	10	200	D	general		
9080	092P.053		4.7	10	200	D	general		
8744	092P.053		4.8	10	200	D	general	TR	
8551	092P.053		4.8	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
8525	092P.053		5.1	10	200	D	general	TR	
8462	092P.053		5.1	10	200	D	general		
8763	092P.053		5.2	10	200	D	general		
8581	092P.053		5.2	10	200	D	general	TR	
8468	092P.053		5.4	10	200	D	general	TR	
8476	092P.053		5.9	10	200	D	general	TR	
8238	092P.053		6.1	10	200	D	general	TR	
8535	092P.053		6.4	10	200	D	general	TR	
8914	092P.053		6.5	10	200	D	general	TR	
9106	092P.053		6.8	10	200	D	general		
8995	092P.053		7.5	10	200	D	general		
8512	092P.053		7.7	10	200	D	general	TR	
8223	092P.053		7.7	10	200	D	general	TR	
8600	092P.053		7.8	10	200	D	general	TR	
8353	092P.053		7.9	10	200	D	general		
8789	092P.053		8.7	10	200	D	general	TR	
8387	092P.053		8.7	10	200	D	general		
8401	092P.053		8.8	10	200	D	general	TR	
8426	092P.053		9.7	10	200	D	general		
8315	092P.053		9.9	10	200	D	general	TR	
8894	092P.053		12.4	10	200	D	general	TR	
8645	092P.053		13.2	10	200	D	general		
8432	092P.053		13.3	10	200	D	general		
8588	092P.053		13.4	10	200	D	general	TR	
8938	092P.053		14.8	10	200	D	general		
8393	092P.053		15.4	10	200	D	general	TR	
8528	092P.053		16.1	10	200	D	general	TR	
8812	092P.053		17.1	10	200	D	general	TR	
8742	092P.053		20.5	10	200	D	general	TR	
8952	092P.053		21.3	10	200	D	general	TR	
8439	092P.053		21.4	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
8900	092P.053		21.6	10	200	D	general	TR	
8956	092P.053		45.2	10	200	D	general	TR	
8430	092P.053		55.1	10	200	D	general	TR	
8636	092P.054		0.3	10	200	D	general		
9144	092P.054		0.5	10	200	D	general		
8896	092P.054		0.7	10	200	D	general	TR	
9033	092P.054		0.8	10	200	D	general		
8280	092P.054		1.0	10	200	D	general	TR	
8928	092P.054		1.2	10	200	D	general	TR	
8610	092P.054		3.1	10	200	D	general		
8421	092P.054		3.1	10	200	D	general		
8627	092P.054		3.2	10	200	D	general		
9137	092P.054		3.4	10	200	D	general	MRH	
9127	092P.054		3.4	10	200	D	general		
8591	092P.054		4.6	10	200	D	general	TR	
8325	092P.054		4.6	10	200	D	general	TR	
9097	092P.054		4.7	10	200	D	general		
9098	092P.054		5.3	10	200	D	general	MRH	
8629	092P.054		5.4	10	200	D	general		
8473	092P.054		6.1	10	200	D	general		
8950	092P.054		6.2	10	200	D	general		
8713	092P.054		6.3	10	200	D	general		
8187	092P.054		6.4	10	200	D	general		
8946	092P.054		7.3	10	200	D	general	TR	
8833	092P.054		7.5	10	200	D	general	TR	
9018	092P.054		10.5	10	200	D	general	TR	
8875	092P.054		14.9	10	200	D	general	TR	
8350	092P.054		20.6	10	200	D	general	MR	
8250	092P.054		22.1	10	200	D	general	MR	
8317	092P.054		25.8	10	200	D	general	TR	
8815	092P.055		3.9	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
8925	092P.055		5.1	10	200	D	general		
8915	092P.055		9.5	10	200	D	general		
8982	092P.055		9.8	10	200	D	general		
9041	092P.055		13.7	10	200	D	general	TR	
8515	092P.056		5.2	10	200	D	general		
8221	092P.056		6.8	10	200	D	general		
8560	092P.057		0.5	10	200	D	general		
8664	092P.057		4.7	10	200	D	general		
8193	092P.057		7.7	10	200	D	general		
8354	092P.057		7.9	10	200	D	general		
8663	092P.058		3.6	10	200	D	general	TR	
8283	092P.058		4.2	10	200	D	general	MR	
7606	092P.061		3.4	10	200	D	general		
8135	092P.061		4.1	10	200	D	general		
8155	092P.061		11.8	10	200	D	general	TR	
8075	092P.062		0.3	10	200	D	general		
7759	092P.062		3.3	10	200	D	general		
7674	092P.062		3.4	10	200	D	general	TR	
7675	092P.062		3.4	10	200	D	general		
7609	092P.062		3.7	10	200	D	general		
7997	092P.062		4.2	10	200	D	general		
7871	092P.062		4.2	10	200	D	general		
7778	092P.062		4.5	10	200	D	general	TR	
7739	092P.062		4.7	10	200	D	general		
7798	092P.062		5.1	10	200	D	general		
7604	092P.062		6.2	10	200	D	general	TR	
7943	092P.062		8.5	10	200	D	general		
7709	092P.063		0.4	10	200	D	general	TR	
8068	092P.063		3.7	10	200	D	general		
8204	092P.063		3.9	10	200	D	general		
8196	092P.063		6.6	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
7800	092P.063		7.7	10	200	D	general	TR	
8057	092P.063		8.4	10	200	D	general		
7995	092P.063		9.9	10	200	D	general	TR	
7887	092P.064		3.1	10	200	D	general		
8066	092P.064		8.6	10	200	D	general	TR	
7755	092P.065		0.3	10	200	D	general		
8027	092P.065		3.1	10	200	D	general		
7489	092P.065		3.2	10	200	D	general		
7493	092P.065		5.4	10	200	D	general		
7567	092P.066		3.7	10	200	D	general		
7553	092P.066		5.2	10	200	D	general		
7942	092P.066		5.3	10	200	D	general		
7544	092P.066		5.9	10	200	D	general	W	
7663	092P.066		6.1	10	200	D	general		
7883	092P.066		7.4	10	200	D	general		
7861	092P.067		3.7	10	200	D	general		
7927	092P.067		3.8	10	200	D	general	TR	
7324	092P.067		3.9	10	200	D	general		
7349	092P.068		4.2	10	200	D	general		
7308	092P.071		13.5	10	200	D	general	MR	
7070	092P.072		3.1	10	200	D	general		
7030	092P.072		3.1	10	200	D	general		
6949	092P.072		3.4	10	200	D	general		
7193	092P.072		4.2	10	200	D	general	TR	
7266	092P.072		5.1	10	200	D	general	TR	
7140	092P.072		6.4	10	200	D	general	TR	
6926	092P.072		8.3	10	200	D	general	TR	
7305	092P.072		13.3	10	200	D	general	TR	
6966	092P.072		38.9	10	200	D	general	MRC	
6962	092P.073		2.4	10	200	D	general	MRC	
7300	092P.073		3.1	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
7318	092P.073		3.2	10	200	D	general	TR	
7235	092P.073		3.2	10	200	D	general		
7143	092P.073		3.3	10	200	D	general		
7248	092P.073		3.6	10	200	D	general	TR	
7096	092P.073		5.2	10	200	D	general		
7100	092P.073		7.7	10	200	D	general		
7128	092P.073		8.2	10	200	D	general		
7260	092P.073		8.5	10	200	D	general		
7012	092P.073		8.6	10	200	D	general		
7367	092P.073		8.9	10	200	D	general	TR	
7066	092P.073		9.1	10	200	D	general		
7218	092P.073		11.3	10	200	D	general		
7177	092P.073		14.1	10	200	D	general		
7292	092P.073		17.9	10	200	D	general		
7275	092P.073		21.5	10	200	D	general		
7356	092P.073		52.2	10	200	D	general		
7031	092P.074		1.8	10	200	D	general		
6858	092P.075		3.3	10	200	D	general		
7387	092P.075		3.8	10	200	D	general		
6797	092P.075		5.6	10	200	D	general	TR	
7232	092P.076		4.3	10	200	D	general	TR	
6764	092P.076		5.8	10	200	D	general	MR	
7208	092P.076		15.9	10	200	D	general	TR	
6678	092P.077		0.7	10	200	D	general	TR	
6711	092P.077		5.5	10	200	D	general	TR	
6687	092P.077		5.7	10	200	D	general	TR	
6999	092P.078		4.1	10	200	D	general		
7042	092P.078		9.5	10	200	D	general		
6542	092P.081		0.4	10	200	D	general		
6695	092P.081		3.5	10	200	D	general	TR	
6835	092P.081		4.7	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
6796	092P.081		7.7	10	200	D	general	TR	
6590	092P.081		9.4	10	200	D	general	TR	
6207	092P.082		0.4	10	200	D	general		
6293	092P.082		3.1	10	200	D	general		
6304	092P.082		3.1	10	200	D	general	TR	
6171	092P.082		3.1	10	200	D	general		
6684	092P.082		3.8	10	200	D	general		
6829	092P.082		4.1	10	200	D	general	MRC	
6878	092P.082		4.6	10	200	D	general	MR	
6792	092P.082		4.6	10	200	D	general		
6889	092P.082		5.1	10	200	D	general	TR	
6812	092P.082		6.5	10	200	D	general	TR	
6195	092P.082		6.5	10	200	D	general		
6640	092P.082		7.6	10	200	D	general		
6434	092P.082		8.9	10	200	D	general		
6216	092P.082		10.5	10	200	D	general		
6276	092P.082		10.9	10	200	D	general	TR	
6522	092P.082		11.3	10	200	D	general		
6765	092P.082		13.3	10	200	D	general	W	
6639	092P.082		22.3	10	200	D	general	TR	
6156	092P.083		1.2	10	200	D	general	TR	
6192	092P.083		4.3	10	200	D	general	TR	
6565	092P.083		4.6	10	200	D	general	TR	
6834	092P.083		7.4	10	200	D	general	TR	
6648	092P.083		10.4	10	200	D	general	TR	
6177	092P.083		16.4	10	200	D	general	TR	
6257	092P.083		24.4	10	200	D	general	MR	
6245	092P.084		1.1	10	200	D	general	TR	
6289	092P.084		1.7	10	200	D	general	TR	
6656	092P.084		8.7	10	200	D	general	MR	
6535	092P.085		0.4	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
6568	092P.085		0.4	10	200	D	general		
6701	092P.085		3.5	10	200	D	general	TR	
6044	092P.085		3.5	10	200	D	general	TR	
6239	092P.085		3.7	10	200	D	general		
6482	092P.085		3.8	10	200	D	general		
6316	092P.085		3.8	10	200	D	general		
6456	092P.085		5.2	10	200	D	general	TR	
6369	092P.085		5.2	10	200	D	general		
6549	092P.085		5.6	10	200	D	general		
5982	092P.085		6.1	10	200	D	general		
6726	092P.085		6.6	10	200	D	general	TR	
6405	092P.085		6.7	10	200	D	general		
6387	092P.085		6.8	10	200	D	general		
6649	092P.085		8.4	10	200	D	general		
6382	092P.085		9.7	10	200	D	general		
6771	092P.085		10.5	10	200	D	general	TR	
6057	092P.086		3.5	10	200	D	general		
6429	092P.087		0.4	10	200	D	general		
6379	092P.087		4.1	10	200	D	general		
5540	092P.093		3.1	10	200	D	general		
5805	092P.093		3.3	10	200	D	general		
5351	092P.093		3.3	10	200	D	general		
5313	092P.093		3.4	10	200	D	general		
6003	092P.093		5.3	10	200	D	general		
5748	092P.094		5.4	10	200	D	general	TR	
5673	092P.094		5.5	10	200	D	general	TR	
5766	092P.094		6.4	10	200	D	general	TR	
5734	092P.095		3.1	10	200	D	general	TR	
5390	092P.095		3.5	10	200	D	general	MRH	
5315	092P.095		4.3	10	200	D	general		
5496	092P.096		0.5	10	200	D	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
5678	092P.096		1.1	10	200	D	general	TR	
5446	092P.096		2.5	10	200	D	general	TR	
5846	092P.096		3.1	10	200	D	general	MR	
5417	092P.096		3.2	10	200	D	general	TR	
5256	092P.096		3.2	10	200	D	general		
5243	092P.096		3.8	10	200	D	general	MR	
5439	092P.096		4.3	10	200	D	general		
5609	092P.096		5.7	10	200	D	general	TR	
5581	092P.096		6.4	10	200	D	general	TR	
5266	092P.096		7.8	10	200	D	general	MR	
5714	092P.096		8.7	10	200	D	general	TR	
5606	092P.096		10.2	10	200	D	general	TR	
5608	092P.096		11.2	10	200	D	general	TR	
5244	092P.096		12.9	10	200	D	general	MR	
5582	092P.096		16.6	10	200	D	general	TR	
5154	092P.096		24.9	10	200	D	general	MR	
5448	092P.097		0.5	10	200	D	general	TR	
5542	092P.097		3.2	10	200	D	general		
5644	092P.097		4.1	10	200	D	general	MR	
5567	092P.097		4.1	10	200	D	general		
5174	092P.097		4.3	10	200	D	general	TR	
5503	092P.097		5.2	10	200	D	general	MR	
5440	092P.097		5.2	10	200	D	general	MR	
5407	092P.097		7.5	10	200	D	general	MR	
5602	092P.097		13.1	10	200	D	general	MR	
4829	093A.004		5.7	10	200	D	general		
4821	093A.004		7.5	10	200	D	general		
4987	093A.004		9.2	10	200	D	general		
4985	093A.004		9.8	10	200	D	general		
4975	093A.005		2.4	10	200	D	general	MR	
5173	093A.005		4.3	10	200	D	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
5160	093A.005		6.7	10	200	D	general		
4964	093A.005		7.5	10	200	D	general	MR	
4982	093A.005		11.7	10	200	D	general	MR	
4703	093A.005		12.3	10	200	D	general	MR	
4710	093A.005		37.2	10	200	D	general	MR	
4921	093A.006		3.8	10	200	D	general	MR	
4915	093A.007		3.2	10	200	D	general	W	
4972	093A.007		3.3	10	200	D	general	TR	
4956	093A.007		5.5	10	200	D	general	TR	
7640	092P.064	101 Mile Lake	5.7	10	200	n/a	general		
7549	092P.064	103 Mile Lake	46.4	10	200	n/a	general		
7390	092P.074	105 Mile Lake	46.1	10	200	n/a	general		
13286		108 Mile Lake	0.0			n/a	general		
6672	092P.085	Becker Lake	32.4	10	200	n/a	general		
7611	092P.064	Camel Lake	3.6	10	200	n/a	general		
7311	092P.074	Carment Lakes	10.1	10	200	n/a	general		
7332	092P.074	Carment Lakes	12.1	10	200	n/a	general		
7111	092P.076	Dorritt Lake	6.5	10	200	n/a	general		
11700	092P.003	Duck Lakes	10.1	10	200	n/a	general		
8887	092P.056	Eastwood Lake	4.3	10	200	n/a	general		
7443	092P.074	Elliot Lake	9.7	10	200	n/a	general		
11741	092P.002	Leighwood Lake	24.2	10	200	n/a	general		
8555	092P.057	Lesser Fish Lake	79.3	10	200	n/a	general		
8089	092P.063	Little Holden Lake	24.4	10	200	n/a	general		
6603	092P.085	Lucile Lakes	0.5	10	200	n/a	general		
7261	092P.074	Milch Lakes	4.9	10	200	n/a	general		
8734	092P.057	Muddy Lake	28.5	10	200	n/a	general		
9256	092P.047	Muskrat Lake	51.5	10	200	n/a	general		
6810	092P.083	Pete Kitchen Lake	7.1	10	200	n/a	general		
8621	092P.057	Reichmuth Lake	0.8	10	200	n/a	general		
8634	092P.056	Roe Lake	59.3	10	200	n/a	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
7315	092P.074	Roundup Lake	12.9	10	200	n/a	general		
11706	092P.003	Salt Lake	10.4	10	200	n/a	general		
7156	092P.074	Sepa Lake	17.0	10	200	n/a	general		
7271	092P.074	Simon Lake	81.6	10	200	n/a	general		
6950	092P.074	Soda Lake	61.9	10	200	n/a	general		
7681	092P.064	Stephenson Lake	18.8	10	200	n/a	general		
7338	092P.074	Straight Lake	4.1	10	200	n/a	general		
7075	092P.074	Sucker Lake	46.6	10	200	n/a	general		
7461	092P.073	Tad Lake	33.7	10	200	n/a	general	TR	
7309	092P.074	Tatton Lake	44.8	10	200	n/a	general		
10462	092P.034	Verner Meadow Lake	3.5	10	200	n/a	general		
7420	092P.074	Watson Lake	11.8	10	200	n/a	general		
6607	092P.087	WILMB Lake	9.5	10	200	n/a	general		
8626	092P.057	Wilson Lake	4.9	10	200	n/a	general		
11392	092P.023		3.4	10	200	n/a	general		
11366	092P.023		5.9	10	200	n/a	general		
11307	092P.023		6.2	10	200	n/a	general		
10874	092P.024		3.5	10	200	n/a	general		
11094	092P.025		3.3	10	200	n/a	general		
10899	092P.031		5.6	10	200	n/a	general		
10456	092P.032		3.6	10	200	n/a	general		
10525	092P.033		0.4	10	200	n/a	general		
10458	092P.033		5.4	10	200	n/a	general		
10767	092P.034		5.5	10	200	n/a	general		
9993	092P.035		3.1	10	200	n/a	general		
9959	092P.035		5.8	10	200	n/a	general		
9826	092P.036		3.2	10	200	n/a	general		
9950	092P.036		4.8	10	200	n/a	general		
10055	092P.036		5.4	10	200	n/a	general		
10035	092P.037		14.6	10	200	n/a	general		
9690	092P.043		3.7	10	200	n/a	general		

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
9897	092P.044		3.2	10	200	n/a	general		
9750	092P.044		4.1	10	200	n/a	general		
9730	092P.044		14.9	10	200	n/a	general		
9460	092P.045		3.2	10	200	n/a	general		
9003	092P.045		9.7	10	200	n/a	general		
9545	092P.046		3.7	10	200	n/a	general		
9472	092P.046		5.2	10	200	n/a	general		
9019	092P.046		5.2	10	200	n/a	general		
9593	092P.047		4.4	10	200	n/a	general		
9549	092P.047		5.7	10	200	n/a	general		
9314	092P.047		8.7	10	200	n/a	general		
8879	092P.052		3.2	10	200	n/a	general		
8811	092P.054		3.7	10	200	n/a	general	TR	
8549	092P.054		13.6	10	200	n/a	general	TR	
8822	092P.055		3.5	10	200	n/a	general		
9032	092P.055		6.3	10	200	n/a	general		
8911	092P.056		3.1	10	200	n/a	general		
8796	092P.056		3.1	10	200	n/a	general		
8493	092P.056		3.8	10	200	n/a	general		
8795	092P.056		4.4	10	200	n/a	general		
8586	092P.056		9.8	10	200	n/a	general		
8454	092P.056		11.9	10	200	n/a	general		
8650	092P.057		10.9	10	200	n/a	general		
7826	092P.064		0.8	10	200	n/a	general		
7635	092P.064		3.1	10	200	n/a	general		
7552	092P.064		3.1	10	200	n/a	general		
7817	092P.064		3.7	10	200	n/a	general		
7521	092P.064		4.7	10	200	n/a	general		
7948	092P.065		0.5	10	200	n/a	general		
7486	092P.065		3.7	10	200	n/a	general		
6892	092P.073		5.3	10	200	n/a	general	TR	

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve Zone	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
7079	092P.073		7.3	10	200	n/a	general		
7008	092P.073		18.3	10	200	n/a	general		
7422	092P.074		3.1	10	200	n/a	general		
7287	092P.074		3.2	10	200	n/a	general		
7068	092P.074		3.5	10	200	n/a	general		
7095	092P.074		4.7	10	200	n/a	general		
6935	092P.074		6.8	10	200	n/a	general		
7306	092P.074		7.9	10	200	n/a	general		
6998	092P.074		11.2	10	200	n/a	general		
7204	092P.075		8.2	10	200	n/a	general		
7129	092P.076		3.9	10	200	n/a	general		
6920	092P.076		4.7	10	200	n/a	general		
6471	092P.082		3.9	10	200	n/a	general		
6774	092P.083		3.2	10	200	n/a	general		
5587	092P.092		3.5	10	200	n/a	general		
6128	092P.092		4.5	10	200	n/a	general		
5561	092P.092		6.8	10	200	n/a	general		
11598	092P.016	Duck Lake	4.7	0					
7626	092P.065	Fiset Lake	25.2	10	200				
8642	092P.055	Hartwig Lake	17.8	10	200				
11420	092P.015	Mokian Lake	6.4	10	200				
6232	092P.082	Parker Lake	39.3	10	200				
7653	092P.065	Quinn Lake	10.4	10	200				
10477	0920.040	Separating Lake	3.4	0					
8908	092P.054	Wildhorse Lake	11.4	10	200				
11527	092P.015		5.4	10	200				
11541	092P.015		6.1	10	200				
11618	092P.016		3.4	0					
11597	092P.016		3.4	0					
11600	092P.016		3.6	0					
11590	092P.016		12.6	10	200				

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Riparian Reserve Zone Width (m)	Lakeshore Management Zone Width (m)	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
10938	092P.024		4.5	0					
11056	092P.024		8.5	10	200				
11282	092P.025		4.8	0					
11007	092P.025		5.6	10	200				
10486	092P.031		3.1	0					
10116	092P.033		7.9	10	200				
9988	092P.034		4.5	0					
10107	092P.037		3.5	0					
9660	092P.041		3.9	0					
9615	092P.041		7.6	10	200				
9354	092P.042		3.1	0					
9390	092P.042		3.5	0					
9941	092P.042		6.5	10	200				
9380	092P.042		10.1	10	200				
9583	092P.042		13.1	10	200				
9689	092P.043		3.9	0					
9453	092P.043		4.6	0					
9913	092P.043		5.2	10	200				
9538	092P.043		5.8	10	200				
9910	092P.043		11.5	10	200				
8722	092P.051		3.7	0					
7680	092P.062		4.7	0					
7736	092P.062		5.8	10	200				
7754	092P.065		4.1	0					
6976	092P.072		6.5	10	200				
7002	092P.072		6.7	10	200				
7038	092P.073		3.2	0					
7460	092P.073		3.4	0					
7522	092P.073		13.3	10	200				
6927	092P.076		0.4	0					
6336	092P.082		0.5	10	200				

## 100 Mile House Sustainable Resource Management Plan

Regional Lake Number	Forest Cover Map	Lake Name	Area (ha)	Reserve	Zone Width	Forest Management Class in the Lakeshore Management Zone	Lake Management Category	Access Management	Lake Management Plan or resources values initiating the need for a Lake Management Plan
6685	092P.082		3.2	0					
6373	092P.083		4.8	0					
6143	092P.083		7.8	10	200				
5862	092P.092		3.5	0					

## 100 Mile House Sustainable Resource Management Plan Lake Management Strategies

Table 17 Lak	A Class	B Class	C Class	D Class	E Class
Recommended			Partial		
Visual Quality	Preservation	Retention	Retention	Modification	Modification
Class within the LMZ	Treservation	Maintain a natura design concepts.	I looking landscape	e incorporating visu	ual landscape
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	≤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.
	on a site specific basis for the	≤10% of the LMZ area.	≤20% of the LMZ area.	≤30% of the LMZ area.	≤50% of the LMZ area.
Even Aged Silvicultural Systems (clearcut):*	management of fire, windthrow, above endemic levels of pests or disease.	<5 ha cutblocks. Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 300 metres.	<10 ha cutblocks. 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):		nbine the recommeter guidelines.	endations as per th	e even and un-eve	en aged
<b>,</b>		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.
Roads, Landings and Skid Trails	No new roads, borrow pits or landings should be	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.
in the Lakeshore Management Zone:	located in the LMZ unless there are no feasible	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.
	alternatives.	Back spar trails are not recommended without an approved rehabilitation plan.	Back spar trails are not recommended without an approved rehabilitation plan.		

Table 17

\* translated to area or basal area retention objectives for each LMZ forest management class (see Table 19).

### Appendix G: 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
361	001L	70V	R	0.1 - 1.5	Hotfish Lake
361	002L	70V	R	0.1 - 1.5	Hotfish Lake
362	003L	70V	R	0.1 - 1.5	Hotfish Lake
362	004L	72V	PR	1.6 - 7.0	Hotfish Lake
418	005L	3V	PR	1.6 - 7.0	viewline originating in Horsefly
419	006L	12V	PR	1.6 - 7.0	viewline originating in Horsefly
2	007L	20V	PR	1.6 - 7.0	
341	008L	20V	PR	1.6 - 7.0	
2	009L	24V	PR	1.6 - 7.0	
342	010L	15V	R	0.1 - 1.5	
343	011L	15V	R	0.1 - 1.5	
343	012L	24V	PR	1.6 - 7.0	
388	015L	3V	PR	1.6 – 7.0	viewline originating in Horsefly
3	016L	11V	R	0.1 - 1.5	11V is not coloured
3	017L	19V	R	0.1 - 1.5	19V is only partially coloured
344	018L	13V	М	7.1 - 18.0	
7	019L	24V	PR	1.6 - 7.0	
363	020L	28V	PR	1.6 - 7.0	McNeil Lake
364	021L	28V	PR	1.6 - 7.0	McNeil Lake
365	022L	30V	R	0.1 - 1.5	McNeil Lake
365	023L	24V	PR	1.6 - 7.0	McNeil Lake
8	024L	25V	М	7.1 - 18.0	25V is only partially coloured
366	025L	34V	R	0.1 - 1.5	Eagle Lake
366	026L	53V	R	0.1 - 1.5	Eagle Lake
367	027L	53V	R	0.1 - 1.5	Eagle Lake
367	028L	34V	R	0.1 - 1.5	Eagle Lake
368	029L	53V	R	0.1 - 1.5	Eagle Lake
368	030L	34V	R	0.1 - 1.5	Eagle Lake
369	031L	38V	R	0.1 - 1.5	Eagle Lake
370	032L	38V	R	0.1 - 1.5	Eagle Lake

				Range of forest	
			Visual	landbase (in	
Viewpoint	Viewline	Viewscape	Quality	perspective	
Number	Number	Polygon Number	Objective	view) allowed	comments
		Number	(VQO)	to be in non-	
				VEG state (%)	
370	033L	34V	R	0.1 - 1.5	Eagle Lake
371	034L	34V	R	0.1 - 1.5	Eagle Lake
371	035L	34V	R	0.1 - 1.5	Eagle Lake
345	036L	48V	PR	1.6 - 7.0	
345	037L	46V	PR	1.6 - 7.0	
372	038L	69V	PR	1.6 - 7.0	Lang Lake
372	039L	69V	PR	1.6 - 7.0	Lang Lake
373	040L	69V	PR	1.6 - 7.0	Lang Lake
373	041L	69V	PR	1.6 - 7.0	Lang Lake
374	042L	69V	PR	1.6 - 7.0	Lang Lake
374	043L	69V	PR	1.6 - 7.0	Lang Lake
375	044L	69V	PR	1.6 - 7.0	Lang Lake
375	045L	69V	PR	1.6 - 7.0	Lang Lake
376	046L	69V	PR	1.6 - 7.0	Lang Lake
376	047L	69V	PR	1.6 - 7.0	Lang Lake
11	048L	69V	PR	1.6 - 7.0	
11	049L	69V	PR	1.6 - 7.0	
11	050L	69V	PR	1.6 - 7.0	
11	051L	69V	PR	1.6 - 7.0	
346	052L	39V	PR	1.6 - 7.0	
346	053L	39V	PR	1.6 - 7.0	
377	054L	39V	PR	1.6 - 7.0	Hidden Lake
377	055L	39V	PR	1.6 - 7.0	Hidden Lake
378	056L	39V	PR	1.6 - 7.0	Hidden Lake
378	057L	39V	PR	1.6 - 7.0	Hidden Lake
347	058L	102V	R	0.1 - 1.5	
347	059L	102V	R	0.1 - 1.5	
347	060L	99V	PR	1.6 - 7.0	
348	061L	86V	PR	1.6 - 7.0	
379	062L	79V	PR	1.6 - 7.0	Pendleton Lakes
379	063L	59V	PR	1.6 - 7.0	Pendleton Lakes
380	064L	79V	PR	1.6 - 7.0	Pendleton Lakes
380	065L	59V	PR	1.6 - 7.0	Pendleton Lakes
381	066L	79V	PR	1.6 - 7.0	Pendleton Lakes
381	067L	59V	PR	1.6 - 7.0	Pendleton Lakes

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
382	068L	59V	PR	1.6 - 7.0	Pendleton Lakes
383	069L	79V	PR	1.6 - 7.0	Pendleton Lakes
384	070L	58V	М	7.1 - 18.0	Pendleton Lakes
384	071L	63V	R	0.1 - 1.5	Pendleton Lakes
349	072L	63V	R	0.1 - 1.5	
20	073L	178V	R	0.1 - 1.5	
385	074L	191V	PR	1.6 - 7.0	Lake of the Trees
36	075L	209V	PR	1.6 - 7.0	
389	076L	167V	R	0.1 - 1.5	Ruth Lake
389	077L	167V	R	0.1 - 1.5	Ruth Lake
390	078L	167V	R	0.1 - 1.5	Ruth Lake
390	079L	167V	R	0.1 - 1.5	Ruth Lake
391	080L	184V	R	0.1 - 1.5	Ruth Lake
391	081L	167V	R	0.1 - 1.5	Ruth Lake
392	082L	184V	R	0.1 - 1.5	Ruth Lake
392	083L	167V	R	0.1 - 1.5	Ruth Lake
393	084L	184V	R	0.1 - 1.5	Ruth Lake
393	085L	184V	R	0.1 - 1.5	Ruth Lake
394	086L	185V	R	0.1 - 1.5	Ruth Lake
395	087L	199V	М	7.1 - 18.0	Ruth Lake
396	089L	185V	R	0.1 - 1.5	Ruth Lake
397	090L	145V	PR	1.6 - 7.0	Sneezie Lake
386	091L	191V	PR	1.6 - 7.0	Lake of the Trees
398	092L	158V	R	0.1 - 1.5	Hawkins Lake
399	093L	170V	R	0.1 - 1.5	Hawkins Lake
399	094L	158V	R	0.1 - 1.5	Hawkins Lake
400	095L	152V	R	0.1 - 1.5	Hawkins Lake
401	096L	108V	PR	1.6 - 7.0	Bobbs Lake
401	097L	108V	PR	1.6 - 7.0	Bobbs Lake
41	098L	153V	PR	1.6 - 7.0	
402	099L	153V	PR	1.6 - 7.0	Canim Lake
403	100L	153V	PR	1.6 - 7.0	Canim Lake
40	101L	153V	PR	1.6 - 7.0	
404	102L	210V	М	7.1 - 18.0	Canim Lake
404	103L	153V	PR	1.6 - 7.0	Canim Lake

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
405	104L	153V	PR	1.6 - 7.0	Canim Lake
405	105L	210V	М	7.1 - 18.0	Canim Lake
35	106L	153V	PR	1.6 - 7.0	
406	107L	153V	PR	1.6 - 7.0	Canim Lake
406	108L	108V	PR	1.6 - 7.0	Canim Lake
407	109L	153V	PR	1.6 - 7.0	Canim Lake
407	110L	108V	PR	1.6 - 7.0	Canim Lake
408	111L	153V	PR	1.6 - 7.0	Canim Lake
408	112L	108V	PR	1.6 - 7.0	Canim Lake
409	113L	153V	PR	1.6 - 7.0	Canim Lake
409	114L	108V	PR	1.6 - 7.0	Canim Lake
410	115L	153V	PR	1.6 - 7.0	Canim Lake
410	116L	108V	PR	1.6 - 7.0	Canim Lake
411	117L	153V	PR	1.6 - 7.0	Canim Lake
411	118L	146V	М	7.1 - 18.0	Canim Lake
412	119L	177V	R	0.1 - 1.5	Canim Lake
412	120L	108V	PR	1.6 - 7.0	Canim Lake
413	121L	153V	PR	1.6 - 7.0	Canim Lake
413	122L	108V	PR	1.6 - 7.0	Canim Lake
414	123L	153V	PR	1.6 - 7.0	Canim Lake
414	124L	108V	PR	1.6 - 7.0	Canim Lake
415	125L	153V	PR	1.6 - 7.0	Canim Lake
415	126L	126V	М	7.1 - 18.0	Canim Lake
416	127L	153V	PR	1.6 - 7.0	Canim Lake
416	128L	108V	PR	1.6 - 7.0	Canim Lake
417	129L	181V	PR	1.6 - 7.0	Canim Lake
417	130L	108V	PR	1.6 - 7.0	Canim Lake
418	131L	108V	PR	1.6 - 7.0	Canim Lake
419	132L	131V	PR	1.6 - 7.0	Canim Lake
419	133L	108V	PR	1.6 - 7.0	Canim Lake
420	134L	108V	PR	1.6 - 7.0	Canim Lake
421	135L	131V	PR	1.6 - 7.0	Canim Lake
421	136L	108V	PR	1.6 - 7.0	Canim Lake
422	137L	96V	М	7.1 - 18.0	Canim Lake
423	138L	177V	R	0.1 - 1.5	Howard Lake

		Viewscape	Visual	Range of forest landbase (in	
Viewpoint Number	Viewline Number	Polygon	Quality	perspective	comments
Inumber	Number	Number	Objective (VQO)	view) allowed to be in non-	
			(120)	VEG state (%)	
423	139L	177V	R	0.1 - 1.5	Howard Lake
424	140L	177V	R	0.1 - 1.5	Howard Lake
425	142L	177V	R	0.1 - 1.5	Howard Lake
425	143L	177V	R	0.1 - 1.5	Howard Lake
350	144L	223V	PR	1.6 - 7.0	
350	145L	223V	PR	1.6 - 7.0	
351	146L	223V	PR	1.6 - 7.0	
352	147L	235V	R	0.1 - 1.5	
352	148L	223V	PR	1.6 - 7.0	
352	149L	253V	R	0.1 - 1.5	
352	150L	283V	R	0.1 - 1.5	
426	151L	249V	R	0.1 - 1.5	Lorin Lake
426	152L	249V	R	0.1 - 1.5	Lorin Lake
427	153L	249V	R	0.1 - 1.5	Lorin Lake
78	154L	349V	PR	1.6 - 7.0	
428	155L	347V	R	0.1 - 1.5	Horse Lake
429	156L	347V	R	0.1 - 1.5	Horse Lake
430	157L	347V	R	0.1 - 1.5	Horse Lake
431	158L	347V	R	0.1 - 1.5	Horse Lake
432	159L	347V	R	0.1 - 1.5	Horse Lake
433	160L	387V	PR	1.6 - 7.0	Horse Lake
433	161L	347V	R	0.1 - 1.5	Horse Lake
434	163L	347V	R	0.1 - 1.5	Horse Lake
435	164L	347V	R	0.1 - 1.5	Horse Lake
436	165L	347V	R	0.1 - 1.5	Horse Lake
437	166L	347V	R	0.1 - 1.5	Horse Lake
438	167L	289V	PR	1.6 - 7.0	Drewry Lake
438	168L	266V	PR	1.6 - 7.0	Drewry Lake
439	169L	289V	PR	1.6 - 7.0	Drewry Lake
439	170L	266V	PR	1.6 - 7.0	Drewry Lake
440	171L	289V	PR	1.6 - 7.0	Drewry Lake
440	172L	266V	PR	1.6 - 7.0	Drewry Lake
441	173L	289V	PR	1.6 - 7.0	Drewry Lake
441	174L	266V	PR	1.6 - 7.0	Drewry Lake
442	175L	266V	PR	1.6 - 7.0	Drewry Lake

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
442	176L	250V	R	0.1 - 1.5	Drewry Lake
443	177L	250V	R	0.1 - 1.5	Drewry Lake
443	178L	250V	R	0.1 - 1.5	Drewry Lake
444	179L	283V	R	0.1 - 1.5	Drewry Lake
444	180L	250V	R	0.1 - 1.5	Drewry Lake
445	181L	257V	М	7.1 - 18.0	Drewry Lake
445	182L	250V	R	0.1 - 1.5	Drewry Lake
446	183L	277V	PR	1.6 - 7.0	Hathaway Lake
447	184L	277V	PR	1.6 - 7.0	Hathaway Lake
447	185L	277V	PR	1.6 - 7.0	Hathaway Lake
448	186L	277V	PR	1.6 - 7.0	Hathaway Lake
448	187L	313V	R	0.1 - 1.5	Hathaway Lake
449	188L	277V	PR	1.6 - 7.0	Apollo Lake
450	189L	277V	PR	1.6 - 7.0	Apollo Lake
57	190L	277V	PR	1.6 - 7.0	
60	191L	331V	R	0.1 - 1.5	
451	192L	323V	R	0.1 - 1.5	
451	193L	331V	PR	1.6 - 7.0	Sulphurous Lake
452	194L	332V	R	0.1 - 1.5	Sulphurous Lake
452	195L	331V	R	0.1 - 1.5	
453	196L	277V	PR	1.6 - 7.0	Sulphurous Lake
453	197L	326V	М	7.1 - 18.0	Sulphurous Lake
454	198L	277V	PR	1.6 - 7.0	Sulphurous Lake
454	199L	277V	PR	1.6 - 7.0	Sulphurous Lake
455	200L	326V	М	7.1 - 18.0	
455	201L	326V	М	7.1 - 18.0	Deka Lake
456	202L	326V	М	7.1 - 18.0	Deka Lake
456	203L	326V	М	7.1 - 18.0	Deka Lake
457	204L	277V	PR	1.6 - 7.0	Deka Lake
458	205L	277V	PR	1.6 - 7.0	Deka Lake
458	206L	326V	М	7.1 - 18.0	Deka Lake
459	207L	277V	PR	1.6 - 7.0	Deka Lake
459	208L	292V	R	0.1 - 1.5	Deka Lake
460	209L	277V	PR	1.6 - 7.0	Deka Lake
461	210L	277V	PR	1.6 - 7.0	Deka Lake

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
462	211L	292V	R	0.1 - 1.5	Deka Lake
463	212L	355V	М	7.1 - 18.0	Needa Lake
463	213L	320V	PR	1.6 - 7.0	Needa Lake
464	214L	351V	М	7.1 - 18.0	Needa Lake
464	215L	320V	PR	1.6 - 7.0	Needa Lake
465	216L	282V	М	7.1 - 18.0	Needa Lake
465	217L	320V	PR	1.6 - 7.0	Needa Lake
466	218L	273V	PR	1.6 - 7.0	Bowers Lake
466	219L	269V	М	7.1 - 18.0	Bowers Lake
467	221L	269V	М	7.1 - 18.0	Bowers Lake
468	222L	282V	М	7.1 - 18.0	Bowers Lake
468	223L	272V	PR	1.6 - 7.0	Bowers Lake
469	224L	272V	PR	1.6 - 7.0	Bowers Lake
470	225L	282V	М	7.1 - 18.0	Bowers Lake
471	226L	272V	PR	1.6 - 7.0	Bowers Lake
471	227L	282V	М	7.1 - 18.0	Bowers Lake
472	228L	272V	PR	1.6 - 7.0	Bowers Lake
472	229L	282V	М	7.1 - 18.0	Bowers Lake
472	230L	311V	PR	1.6 - 7.0	Bowers Lake
473	231L	293V	PR	1.6 - 7.0	Preacher Lake
56	232L	339V	PR	1.6 - 7.0	
56	233L	339V	PR	1.6 - 7.0	
474	234L	361V	R	0.1 - 1.5	English Lake
474	235L	339V	PR	1.6 - 7.0	English Lake
86	236L	339V	PR	1.6 - 7.0	English Lake
86	237L	370V	М	7.1 - 18.0	English Lake
88	238L	370V	М	7.1 - 18.0	
475	239L	339V	PR	1.6 - 7.0	English Lake
475	240L	370V	М	7.1 - 18.0	English Lake
83	241L	362V	PR	1.6 - 7.0	
94	242L	383V	R	0.1 - 1.5	
95	243L	383V	R	0.1 - 1.5	
105	244L	398V	PR	1.6 - 7.0	
105	245L	398V	PR	1.6 - 7.0	
100	246L	404V	PR	1.6 - 7.0	

Viewpoint Number	Viewline Number	Viewscape Polygon Number	Visual Quality Objective	Range of forest landbase (in perspective view) allowed	comments
			(VQO)	to be in non- VEG state (%)	
107	247L	425V	R	0.1 - 1.5	
322	248L	538V	R	0.1 - 1.5	
476	249L	511V	PR	1.6 - 7.0	Green Lake
477	250L	511V	PR	1.6 - 7.0	Green Lake
478	251L	511V	PR	1.6 - 7.0	Green Lake
143	252L	547V	PR	1.6 - 7.0	
479	253L	608V	PR	1.6 - 7.0	Young Lake
479	254L	617V	R	0.1 - 1.5	Young Lake
480	255L	608V	R	0.1 - 1.5	Young Lake
353	256L	615V	R	0.1 - 1.5	Young Lake
353	257L	608V	R	0.1 - 1.5	Young Lake
481	258L	608V	R	0.1 - 1.5	Young Lake
482	259L	615V	R	0.1 - 1.5	Young Lake
483	260L	615V	R	0.1 - 1.5	Young Lake
483	261L	615V	R	0.1 - 1.5	Young Lake
330	262L	615V	R	0.1 - 1.5	
484	264L	464V	R	0.1 - 1.5	Bridge Lake
485	265L	462V	R	0.1 - 1.5	Bridge Lake
486	266L	477V	PR	1.6 - 7.0	Montana Lake
118	267L	434V	М	7.1 - 18.0	
118	268L	434V	М	7.1 - 18.0	
487	269L	456V	PR	1.6 - 7.0	Lac des Roches
488	270L	456V	PR	1.6 - 7.0	Lac des Roches
489	271L	456V	PR	1.6 - 7.0	Lac des Roches
490	272L	448V	R	0.1 - 1.5	Lac des Roches
491	273L	440V	М	7.1 - 18.0	Lac des Roches
491	274L	448V	R	0.1 - 1.5	Lac des Roches
315	275L	440V	М	7.1 - 18.0	
492	276L	473V	М	7.1 - 18.0	Lac des Roches
492	277L	440V	М	7.1 - 18.0	Lac des Roches
493	278L	473V	М	7.1 - 18.0	Lac des Roches
493	279L	440V	М	7.1 - 18.0	Lac des Roches
142	280L	551V	PR	1.6 - 7.0	
494	281L	509V	R	0.1 - 1.5	Eagan Lake
323	283L	509V	R	0.1 - 1.5	

				Dance of forest	
			Visual	Range of forest landbase (in	
Viewpoint	Viewline	Viewscape	Quality	perspective	
Number	Number	Polygon	Objective	view) allowed	comments
		Number	(VQO)	to be in non-	
				VEG state (%)	
138	284L	495V	R	0.1 - 1.5	
138	285L	506V	PR	1.6 - 7.0	
138	286L	506V	PR	1.6 - 7.0	
138	287L	506V	PR	1.6 - 7.0	
138	288L	506V	PR	1.6 - 7.0	
321	289L	506V	PR	1.6 - 7.0	
495	290L	619V	R	0.1 - 1.5	Scot Lake
496	291L	620V	PR	1.6 - 7.0	Hammer Lake
335	292L	620V	PR	1.6 - 7.0	on Hammer Lake
334	293L	620V	PR	1.6 - 7.0	on Hammer Lake
497	294L	588V	PR	1.6 - 7.0	Bonaparte Lake
497	295L	581V	PR	1.6 - 7.0	Bonaparte Lake
498	296L	581V	PR	1.6 - 7.0	Bonaparte Lake
498	297L	581V	PR	1.6 - 7.0	Bonaparte Lake
499	298L	581V	PR	1.6 - 7.0	Bonaparte Lake
499	299L	581V	PR	1.6 - 7.0	Bonaparte Lake
500	300L	581V	PR	1.6 - 7.0	Bonaparte Lake
500	301L	581V	PR	1.6 - 7.0	Bonaparte Lake
148	302L	581V	PR	1.6 - 7.0	
148	303L	581V	PR	1.6 - 7.0	
329	304L	581V	PR	1.6 - 7.0	
150	305L	581V	PR	1.6 - 7.0	
311	306L	581V	PR	1.6 - 7.0	
332	307L	581V	PR	1.6 - 7.0	
327	308L	581V	PR	1.6 - 7.0	
501	309L	581V	PR	1.6 - 7.0	Bonaparte Lake
501	310L	581V	PR	1.6 - 7.0	Bonaparte Lake
325	311L	581V	PR	1.6 - 7.0	
324	312L	581V	PR	1.6 - 7.0	
502	313L	581V	PR	1.6 - 7.0	Bonaparte Lake
502	314L	581V	PR	1.6 - 7.0	Bonaparte Lake
503	325L	682V	R	0.1 - 1.5	Loon Lake
503	326L	747V	R	0.1 - 1.5	Loon Lake
503	327L	698V	R	0.1 - 1.5	Loon Lake
504	328L	682V	R	0.1 - 1.5	Loon Lake

				Range of forest	
		Viewseene	Visual	landbase (in	
Viewpoint	Viewline	Viewscape Polygon	Quality	perspective	comments
Number	Number	Number	Objective	view) allowed	connicitts
			(VQO)	to be in non- VEG state (%)	
				. ,	
190	329L	698V	R	0.1 - 1.5	
192	330L	698V	R	0.1 - 1.5	
505	331L	682V	R	0.1 - 1.5	Loon Lake
505	332L	698V	R	0.1 - 1.5	Loon Lake
506	333L	698V	R	0.1 - 1.5	Loon Lake
506	334L	682V	R	0.1 - 1.5	Loon Lake
507	335L	698V	R	0.1 - 1.5	Loon Lake
507	336L	682V	R	0.1 - 1.5	Loon Lake
170	337L	698V	R	0.1 - 1.5	
172	338L	698V	R	0.1 - 1.5	
508	339L	698V	R	0.1 - 1.5	Loon Lake
508	340L	682V	R	0.1 - 1.5	Loon Lake
509	341L	682V	R	0.1 - 1.5	Loon Lake
509	342L	698V	R	0.1 - 1.5	Loon Lake
168	343L	698V	R	0.1 - 1.5	
167	344L	698V	R	0.1 - 1.5	
510	345L	698V	R	0.1 - 1.5	Loon Lake
510	346L	682V	R	0.1 - 1.5	Loon Lake
340	347L	682V	R	0.1 - 1.5	
339	348L	682V	R	0.1 - 1.5	
511	349L	682V	R	0.1 - 1.5	Loon Lake
511	350L	698V	R	0.1 - 1.5	Loon Lake
512	351L	698V	R	0.1 - 1.5	Loon Lake
512	352L	682V	R	0.1 - 1.5	Loon Lake
512	353L	682V	R	0.1 - 1.5	Loon Lake
194	354L	750V	PR	1.6 - 7.0	
196	355L	735V	PR	1.6 - 7.0	
196	356L	735V	PR	1.6 - 7.0	
191	357L	750V	PR	1.6 - 7.0	
193	358L	750V	PR	1.6 - 7.0	
193	359L	750V	PR	1.6 - 7.0	
197	360L	735V	PR	1.6 - 7.0	
198	361L	735V	PR	1.6 - 7.0	
195	362L	735V	PR	1.6 - 7.0	
159	363L	659V	PR	1.6 - 7.0	

				Denses	
			Visual	Range of forest landbase (in	
Viewpoint	Viewline	Viewscape	Quality	perspective	
Number	Number	Polygon	Objective	view) allowed	comments
		Number	(VQO)	to be in non-	
				VEG state (%)	
159	364L	659V	PR	1.6 - 7.0	
159	365L	659V	PR	1.6 - 7.0	
336	366L	659V	PR	1.6 - 7.0	
354	367L	673V	PR	1.6 - 7.0	
354	368L	673V	PR	1.6 - 7.0	
354	369L	673V	PR	1.6 - 7.0	
355	370L	673V	PR	1.6 - 7.0	
355	371L	673V	PR	1.6 - 7.0	
355	372L	673V	PR	1.6 - 7.0	
101	373L	384V	PR	1.6 - 7.0	
513	374L	38V	R	0.1 - 1.5	Eagle Lake
513	375L	34V	R	0.1 - 1.5	Eagle Lake
514	376L	38V	R	0.1 - 1.5	Eagle Lake
515	378L	34V	R	0.1 - 1.5	Eagle Lake
515	379L	38V	R	0.1 - 1.5	Eagle Lake
516	380L	41V	PR	1.6 - 7.0	Two Mile Lake
516	381L	41V	PR	1.6 - 7.0	Two Mile Lake
517	382L	41V	PR	1.6 - 7.0	Two Mile Lake
517	383L	41V	PR	1.6 - 7.0	Two Mile Lake
518	384L	47V	PR	1.6 - 7.0	Spout Lake
519	385L	47V	PR	1.6 - 7.0	Spout Lake
520	386L	47V	PR	1.6 - 7.0	Spout Lake
521	387L	47V	PR	1.6 - 7.0	Spout Lake
522	388L	61V	R	0.1 - 1.5	Spout Lake
522	389L	47V	PR	1.6 - 7.0	Spout Lake
523	390L	61V	R	0.1 - 1.5	Spout Lake
523	391L	61V	R	0.1 - 1.5	Spout Lake
10	392L	47V	PR	1.6 - 7.0	
22	393L	171V	PR	1.6 - 7.0	
22	394L	200V	R	0.1 - 1.5	
26	395L	200V	R	0.1 - 1.5	
28	396L	200V	R	0.1 - 1.5	
27	397L	200V	R	0.1 - 1.5	Hathaway Lake
25	398L	200V	R	0.1 - 1.5	
23	399L	200V	R	0.1 - 1.5	

			Visual	Range of forest landbase (in	
Viewpoint	Viewline	Viewscape	Quality	perspective	comments
Number	Number	Polygon Number	Objective	view) allowed	comments
		i vanio ei	(VQO)	to be in non-	
				VEG state (%)	
30	400L	200V	R	0.1 - 1.5	
34	401L	229V	R	0.1 - 1.5	
16	402L	178V	R	0.1 - 1.5	
18	403L	145V	PR	1.6 - 7.0	
18	404L	145V	PR	1.6 - 7.0	
18	405L	178V	R	0.1 - 1.5	
19	406L	178V	R	0.1 - 1.5	
524	407L	224V	R	0.1 - 1.5	Chub Lake
525	408L	232V	PR	1.6 - 7.0	Chub Lake
526	409L	232V	PR	1.6 - 7.0	Chub Lake
42	410L	231V	М	7.1 - 18.0	
47	411L	258V	PR	1.6 - 7.0	
53	412L	268V	PR	1.6 - 7.0	
356	413L	381V	PR	1.6 - 7.0	
357	414L	381V	PR	1.6 - 7.0	
358	415L	406V	R	0.1 - 1.5	
106	416L	422V	PR	1.6 - 7.0	
140	417L	502V	PR	1.6 - 7.0	
140	418L	502V	PR	1.6 - 7.0	
140	419L	502V	PR	1.6 - 7.0	
320	420L	491V	М	7.1 - 18.0	
320	421L	491V	М	7.1 - 18.0	
320	422L	491V	М	7.1 - 18.0	
152	423L	578V	PR	1.6 - 7.0	
152	424L	578V	PR	1.6 - 7.0	
527	425L	578V	PR	1.6 - 7.0	Big Bar Lake
527	426L	578V	PR	1.6 - 7.0	Big Bar Lake
528	427L	591V	R	0.1 - 1.5	Big Bar Lake
528	428L	578V	PR	1.6 - 7.0	Big Bar Lake
529	429L	591V	R	0.1 - 1.5	Big Bar Lake
529	430L	578V	PR	1.6 - 7.0	Big Bar Lake
155	431L	628V	PR	1.6 - 7.0	-
155	432L	578V	PR	1.6 - 7.0	
155	433L	578V	PR	1.6 - 7.0	
155	434L	578V	PR	1.6 - 7.0	

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
337	435L	650V	М	7.1 - 18.0	337 in UREP outside our area
337	436L	578V	PR	1.6 - 7.0	<pre>337 in UREP outside our area: # of viewscape?</pre>
337	437L	650V	М	7.1 - 18.0	337 in UREP outside our area
175	438L	578V	PR	1.6 - 7.0	
175	439L	578V	PR	1.6 - 7.0	
175	440L	578V	PR	1.6 - 7.0	
158	441L	578V	PR	1.6 - 7.0	
158	442L	664V	М	7.1 - 18.0	
158	443L	675V	М	7.1 - 18.0	
166	444L	675V	М	7.1 - 18.0	
177	445L	715V	R	0.1 - 1.5	
177	446L	669V	М	7.1 - 18.0	
186	447L	762V	М	7.1 - 18.0	
189	448L	728V	PR	1.6 - 7.0	
189	449L	749V	PR	1.6 - 7.0	
338	450L	669V	М	7.1 - 18.0	
338	451L	669V	М	7.1 - 18.0	
359	452L	669V	М	7.1 - 18.0	
359	453L	669V	М	7.1 - 18.0	
201	454L	770V	R	0.1 - 1.5	
201	455L	762V	М	7.1 - 18.0	
306	456L	34V	R	0.1 - 1.5	
307	457L	131V	PR	1.6 - 7.0	
308	458L	126V	М	7.1 - 18.0	
534	459L	153V	PR	1.6 - 7.0	
309	460L	108V	PR	1.6 - 7.0	
310	461L	108V	PR	1.6 - 7.0	
311	462L	289V	PR	1.6 - 7.0	
312	463L	277V	PR	1.6 - 7.0	
313	464L	292V	R	0.1 - 1.5	
313	465L	292V	R	0.1 - 1.5	
314	466L	312V	PR	1.6 - 7.0	
326	467L	581V	PR	1.6 - 7.0	
333	468L	608V	R	0.1 - 1.5	

			Visual	Range of forest landbase (in	
Viewpoint Number	Viewline Number	Viewscape Polygon Number	Visual Quality Objective (VQO)	view) allowed to be in non- VEG state (%)	comments
142	469L	509V	R	0.1 - 1.5	
142	470L	531V	R	0.1 - 1.5	
369	471L	34V	R	0.1 - 1.5	Eagle Lake
530	472L	509V	R	0.1 - 1.5	Eagan Lake
531	473L	509V	R	0.1 - 1.5	Eagan Lake
494	474L	531V	R	0.1 - 1.5	Eagan Lake
531	475L	531V	R	0.1 - 1.5	Eagan Lake
530	476L	531V	R	0.1 - 1.5	Eagan Lake
504	477L	698V	R	0.1 - 1.5	Loon Lake
532	478L	153V	PR	1.6 - 7.0	Canim Lake
532	479L	210V	М	7.1 - 18.0	Canim Lake
403	480L	210V	М	7.1 - 18.0	Canim Lake
43	481L	210V	М	7.1 - 18.0	
21	482L	153V	PR	1.6 - 7.0	Chub Lake
15	483L	153V	PR	1.6 - 7.0	Spout Lake
533	484L	108V	PR	1.6 - 7.0	Canim Lake
7	485L	24V	PR	1.6 - 7.0	
360	486L	24V	PR	1.6 - 7.0	
364	487L	24V	PR	1.6 - 7.0	McNeil Lake
363	488L	24V	PR	1.6 - 7.0	McNeil Lake
462	489L	277V	PR	1.6 - 7.0	Deka Lake
461	490L	292V	R	0.1 - 1.5	Deka Lake
460	491L	292V	R	0.1 - 1.5	Deka Lake
79	492L	326V	М	7.1 - 18.0	
457	493L	326V	М	7.1 - 18.0	Deka Lake
305	494L	245V	М	7.1 - 18.0	
304	495L	12V	PR	1.6 - 7.0	304 in Horsefly

<u>Abbreviations used</u>: 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 V for viewscape

# Appendix H: Analysis Assumptions for Non Timber Resources and EEA Description

Non-timber	Strategy EEA factor			Accumptions	Contribution	Commonto
non-timber resource	rotation			Assumptions Contribution for definition to old seral		Comments
	(years)	Pine, decid.	Other conifer			
No Harvest						
Parks	removed from forest landbase for EEA calculations			LUCO Protected Areas	100%	<ul> <li>Coverage updated August 2000 via data from LUCO</li> <li>Some boundary issues to the NE of</li> </ul>
Goal 2 Areas	removed from forest landbase for EEA calculations			BC Parks source	100%	Caribou Mtns. PA <ul> <li>Information digitized from 1:50,000</li> <li>photocopies with line created by 1/8</li> <li>inch felt marker (!); effective resolution</li> <li>likely around 1:100,000</li> <li>Last edits made Mar. 29, 2000</li> </ul>
Riparian Reserves 20m & 30m	n/a	.9	.9	S1: 50m buffer S2: 30m buffer S3: 20m buffer	100%	<ul> <li>Forest Cover (FC1) linework used for streams (supplied by Inland Timber)</li> <li>classified streams supplied by Inland Timber and compiled from information supplied by Forest licensees</li> <li>major edits based on MOE, DFO recommendations April 2000</li> <li>streams not classified default to original modelled buffers</li> </ul>
Riparian Reserves Wetlands and shrub-carrs – 10m	n/a	.9	.9	W1 & W5 wetlands and shrub-carrs >5ha: 10m buffer	None	<ul> <li>FC1 base modelled by Paragon</li> <li>addressed the issue of island polygons within large swamps</li> </ul>
Critical Fish Habitat	n/a	.9	.9	Critical habitat for salmon and bull trout	100%	<ul> <li>DFO submission, jointly refined by DFO and MOE using 1:50,000 topographic maps to delineate critical floodplain salmon habitat and several critical bull trout streams</li> <li>last edits January 2002</li> </ul>
Class A Lakes 200 m buffer	n/a	.9	.9	From Horsefly Forest District Draft Lakes Classification	100%	
Caribou No Harvest	n/a	.9	.9	From updated Caribou East Strategy	100%	New coverage last received from MELP October 12, 2000
OGMA's	n/a	.9	.9		100% to	Coverage in current analysis dated Jan. 19/02; coverage currently being revised to address seral target shortfalls and overages, revisions will be reviewed with stakeholders prior to analysis
Modified Harvest						
Trail reserve zone 50m buffer	n/a	.85	.85	Document source/ process	None	<ul> <li>buffers of 100m, 75m, 50m and 25m width</li> <li>Last update April 2000</li> </ul>
Visual Preservation		.85	.85			•
Visual - Retention VQO	400	.80	.70	Document source/proces s	Rotation age difference contributes to	<ul> <li>Assume overall long term average across sustainable resource management plan of 5% non-VEG in</li> </ul>

## Table 19 Non-Timber Resource Assumptions

Non-timber resource	Strategy rotation	EEA fa	ctor	Assumptions for definition	Contribution to old seral	Comments
	(years)	Pine, decid.	Other conifer			
					long term old	<ul> <li>planimetric view will meet max 1.5% non-VEG in perspective view</li> <li>5%/pass + re-entry every 20 yrs = 400 yr. strategy rotation</li> </ul>
Rip. Mgmt. Zones Stream Class S4 (30m buffer)	n/a	.50	.50		None	<ul> <li>30m buffers on S4 streams to be average 50% retention level</li> <li>portions of modelled S4 stream RMZ estimated to be S6 transferred to S6 RMZ, portions estimated by % for 5 quadrants across sustainable resource management plan, overall 34% S4 transferred to S6 after conversion to S6 RMZ width</li> </ul>
Caribou East	240	.67	.50	From updated Caribou East Strategy	where overlapped with mapped OGMA	New coverage last received from MELP October 12, 2000
Class B lakes 200m buffer	200	.60	.40	From Horsefly Forest District Draft Lakes Classification	where overlapped with mapped OGMA	From Horsefly Forest District Draft Lakes Classification for Class B lakes: 10% removal/pass + re-entry every 20 yrs = 200 yr. strategy rotation
Rip. Mgmt. Zones Stream Class S1, S2, S3	n/a	.50	.50	S1: 20m S2: 20m S3: 20m	none	<ul> <li>FC1 linework used for streams (supplied by Inland Timber)</li> <li>classified streams supplied by Inland Timber and compiled from information supplied by Forest licensees</li> <li>major edits based on MOE, DFO recommendations April 2000</li> <li>streams not classified default to original modelled buffers</li> </ul>
Visual - Partial Retention	120	.33	0	Document source/proces s	none	<ul> <li>Assume overall long term average across sustainable resource management plan of 17% non-VEG in planimetric view will meet max 7% non- VEG in perspective view</li> <li>17%/pass + re-entry every 20yrs = 120 yr. strategy rotation</li> </ul>
MDWRs Deep Snow Transition Moderate Shallow Snow	Fir Fir Fir Fir		.35 .26 .18 .13		Where overlapped with mapped OGMA; in excess of 25% of fir area overlapped with mapped OGMA	<ul> <li>Revised MDWR boundaries will be incorporated when completed for Williams Lake TSA and approved by IAMC</li> </ul>
Rip. Mgmt. Zones Stream Class S5	n/a	.25	.25	S5: 30m	None	<ul> <li>FC1 linework used for streams (supplied by Inland Timber)</li> <li>classified streams supplied by Inland Timber and compiled from information supplied by Forest licensees</li> <li>major edits based on MOE, DFO recommendations April 2000</li> <li>streams not classified default to original modelled buffers</li> </ul>
RMZ wetlands and	n/a	.25	.25	>5 ha = 30m RMZ	None	<ul><li>FC1 base modelled by Paragon</li><li>addressed the issue of island polygons</li></ul>

Non-timber resource	Strategy rotation	EEA fa	ctor	Assumptions for definition	Contribution to old seral	Comments
	(years)	Pine, decid.	Other conifer			
shrub-carrs				(incorrect, should have been 40m) 1 – 5 ha = 30m RMZ		within large swamps
Class C Lakes 200m buffer	100	.20	0	From Horsefly Forest District Draft Lakes Classification	None	From Horsefly Forest District Draft Lakes Classification for Class B lakes: 20% removal/pass + re-entry every 20 yrs = 100 yr. strategy rotation
Rip. Mgmt. Zones Stream Class S6 (spatial)	n/a	.05	.05	S6: 20m	none	<ul> <li>FC1 linework used for streams (supplied by Inland Timber)</li> <li>classified streams supplied by Inland Timber and compiled from information supplied by Forest licensees</li> <li>major edits based on MOE, DFO recommendations April 2000</li> <li>streams not classified default to original modelled buffers</li> </ul>
Rip. Mgmt. Zones Stream Class S6 (non-spatial: % of S4 by sustainable resource management plan quadrant)	n/a	.05	.05	S6: 20m	none	<ul> <li>portions of modelled S4 streams estimated to be S6 transferred to S6 RMZ, portions estimated by % for 5 quadrants, overall 34% S4 transferred to S6</li> </ul>
WTP (non- spatial)	n/a	.50	.50	See Tables 27 & 28 for calculation procedures for estimating long term and current WTP requirements		

#### Equivalent Excluded Area (EEA)

Equivalent Excluded Area (EEA) is used as a common measure to determine the impact of non-timber strategies (or constraints) on the productive forest land base. The EEA is based on the difference between a strategy rotation age (SRA) and the minimum rotation age (MRA), with the "EEA factor" calculated as follows:

EEA factor = (SRA – MRA) / SRA Where: EEA factor is expressed as a decimal or percentage SRA is the strategy rotation age (years) MRA is the minimum rotation age (years)

Example: a non-timber value requires the rotation period for a pine stand to be increased from the MRA of 80 years to an SRA of 200 years:

EEA factor = (200 - 80) / 200 = 0.6 or 60 %

In other words, 60 percent of the area is unavailable for harvest within the minimum rotation for the pine stand of 80 years.

For some of the non-timber values, a required overall level of retention is used instead of an extended rotation. For example for riparian management zones, 50 percent retention is required for S1, S2 and S3 streams, which equates to an EEA factor of 50 percent.

The EEA factor for each non-timber value is multiplied by the area the non-timber constraint occupies, to reflect the impact on the timber harvesting landbase.

#### **Overlap Analysis**

The Overlap Analysis methodology is used to assess the level of timber access and constraint associated with the non-timber resource values. A separate overlap analysis table was completed for each CCLUP sub-unit within the HSRMP area as well as for the SRMP area as a whole. The steps followed were as follows:

- 1. EEA factors as defined above were calculated or assigned to each non-timber value or constraint to timber based on:
  - the portion of timber allowed by the non-timber strategy to be accessed within the minimum rotation age, resulting in a calculated EEA factor, or
  - a level of retention required for the non-timber value, resulting in an assigned EEA factor.
- 2. Non-timber values were arranged in a ranked order from the most constraining to the least constraining to timber access: the EEA of areas overlapped by two or more constraints defaults to the highest EEA of the overlaps.
- 3. Through GIS and resultant database analysis, the net area of productive forest that is required for each non-timber constraint is calculated; after each constraint is measured in order of descending EEA, the areas are removed from subsequent measurements thus, no double counting of overlapped constraints occurs.
- 4. The area and percentage of productive forest required for the non-timber constraints, tallied as EEA, is then summed for the CCLUP sub-unit and the SRMP as a whole: the sub-unit and SRMP EEA is then compared to the July 2000 EEA targets to determine if the sub-unit and SRMP is over or under the targets for constrained area.