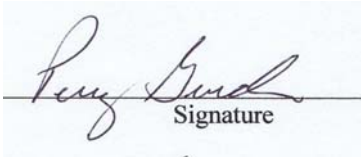
Forest Stewardship Plan

Approved – December 10th, 2010.
Amendment # 1 – LUO 2011 – June 21, 2012.
Determination Version

Holder, Authorized Signature	Holder, Authorized Signature
Chief Percy Guichon  Signature June 21, 2012 Date	David King  Signature June 21, 2012 Date

Plan reviewer
Steve Capling, RPF    Signature June 21, 2012 Date

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Eniyud Community Forest

Forest Stewardship Plan

1 Introduction

This Forest Stewardship Plan (FSP) has been prepared for the Eniyud Community Forest Ltd. (ECFL) Community Forest Licence K2Z, which is located in the central and western portion of the Chilcotin Forest District of the Williams lake TSA approximately 150 kms west of Williams Lake.

The Forest Stewardship Plan identifies government set objectives and provides a landscape-level view of how the ECF intends to use strategies, expected results, Stocking Standards and Measures that are consistent with the objectives set by government. This Amendment incorporates direction from Government provided in the CCLUP LUO of May 2011.

The community took guidance from SRPs and other plans. The West Chilcotin Demonstration Project is also one of the foundation documents directing this FSP.

The policy of Eniyud Community Forest Ltd. will be to enhance timber and other values such as range, tourism, cultural and other non timber values where appropriate, using the government set objectives as a minimum base line.

The Forest Stewardship Plan is comprised of one Forest Development Unit, the ECF operating area, located in portions of the Tatla and Chezacut Supply Blocks.

2 Definitions and Acronyms

AAC - Annual Allowable Cut.
AUM - Animal Unit Month, unit of measure for range use.
Backcountry - Backcountry is defined as a combination of the following Opportunity Spectrum (ROS) experiences: Semi-Primitive Motorized, Semi-Primitive Non-Motorized, and Primitive. CCLUP 90 day report p. 144.
CCLUP – Cariboo Chilcotin Land-Use Plan, declared a Higher Level Plan on Jan 23, 1996, and includes documents pertinent to that plan and list in the declaration order.
ECA - Equivalent Clearcut Area
ECF – Eniyud Community Forest
ECFL – Eniyud Community Forest Ltd.
EMS - Environmental Management System
FDU – Forest Development Unit as detailed in this Forest Stewardship Plan.
FPPR – *Forest Planning and Practices Regulation*. B.C. Reg. 14/2004 effective January 31, 2004. Consolidated to March 18, 2005. Includes B.C. Reg. 102/2005 amendments and any changes made from time to time.
FRPA – *Forest and Range Practices Act*.

FSP – Forest Stewardship Plan.
GAR - Government Actions Regulation.
GWM - General Wildlife Measure.
High Value or Significant Wildlife Tree - means a tree over 37.5 cm dbh among the target residual conifer species or over 20 cm dbh for deciduous species, and that falls within one of the wildlife tree classes of 2 through 8.
ILMB - Integrated Land Management Bureau of the Ministry of Agriculture and Lands.
LUO – Ministry of Agriculture and Lands, Integrated Land Management Bureau, Ministerial Order, April 18, 2011, Land Use Objectives for the Cariboo-Chilcotin Land Use Plan (CCLUP) Area.
MAL - Ministry of Agriculture and Lands.
MoFR - Ministry of Forests, Lands and Natural Resources.
MoE - Ministry of Environment.
NRFL – Non-Replaceable Forest License.
Primary Forest Activity - means timber harvesting, road construction, road maintenance, road deactivation and silviculture treatments carried out by FSP holder.
Scenic area - means an area of land established as a scenic area under the *Forest Practices Code of British Columbia Act* on or before October 24, 2002 and continued as a scenic area under section 180 (c) of the Act.
SRMP - Sustainable Resource Management Plans
SRP - Sub-Regional Plans
Visual sensitivity class - means a visual sensitivity class established on or before October 24, 2002, particulars of which are publicly available in the Land and Resource Data Warehouse maintained by the minister responsible for the *Land Use*.

3 Administration

3.1 Plan Dates

3.1.1 Commencement date.

This plan commences on the date on which written approval by the minister or his delegate is made.

3.1.2 Term of Plan.

The term of the plan is five (5) years from the commencement date.

3.2 Application

3.2.1 Tenures

This Forest stewardship plan applies to Community Forest Tenure K2Z, which has an AAC of 40,000 metres and a tenure period of 25 years. It should be noted, however, that this AAC may be reduced in the short to medium term as a result of Mountain Pine Beetle attack and subsequent mortality of mature trees.

3.2.2 Forest Development Units (FDU)

There are no new Forest Development Units proposed under this FSP Amendment. The outer boundary of this area is shown on the map in Appendix 1. This is the operating area of the Eniyud Community Forest (ECF) which is located in the Chilcotin Forest District and covers portions of the Tatla and Chezacut Supply Blocks.

The ECF Forest Development Unit covers the ECF community Forest License area and excludes all private land, federal land, woodlot licences, the Nemiah Trapline (TR0504T003), parks, ecological reserves and all other areas where harvesting under the authority of the tenure list in 3.2.1 is forbidden, whether or not these areas are indicated on maps included with this FSP.

The following table identifies the CCLUP zones which are overlapped by the ECF Forest Development Unit under this FSP.

ECF Area

IRMZ	SRDZ
Eagle	Niut
Chezacut	Potato Range

Note: A small portion of the Kleena Kleene Landscape Unit is covered by the Community Forest License. The proposed Forest Development Unit excludes the Kleena Kleene Landscape Unit.

See Appendix 1.

3.2.3 Transition

There are no previous FSP applications

3.2.3.1 Forest Development Plans.

There are no previous Forest Development Plans in place.

4 Objectives Prescribed by Government in the *FPPR*, results and strategies.

This Forest Stewardship Plan (FSP) utilizes prescribed default results and strategies. The Plan has been amended to incorporate direction from the Land Use Order, CCLUP, April 2011.

Eniyud Community Forest Ltd. considers the Strategies and Results presented in this FSP to be consistent with meeting the intent of the License requirements, and in general, the default legislated values have been used.

The harvesting proposed under this FSP will be conducted across the Eniyud Community Forest area, paying particular attention to forest health issues for both pine and fir.

The drawdown of Mature+Old Old Forest Representation areas is consistent with current Ministry of Forests and Range objectives and is consistent with the Strategies outlined in Regional Biodiversity Conservation Strategy Update Notes # 7b, 8, 10 and 11.

4.1 Soils

Objective 1	Source of Objective
The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and the hydrologic function of soils.	*FPPR* Sec 5.

Applicable area

FDU 1

Strategy

1. The FSP holder adopts as a result or strategy, *FPPR* Sections 35 and 36 (1), 36(2), 36(3) and 36(4) as those sections were on the date of FSP submission during the term of the FSP.

Section 35 - Soil Disturbance Limits.

Soil disturbance limits

35 (1) In this section:

"roadside work area" means the area adjacent to a road where one or both of the following are carried out:

(a) decking, processing or loading timber;

(b) piling or disposing of logging debris;

"sensitive soils" means soils that, because of their slope gradient, texture class, moisture regime, or organic matter content have the following risk of displacement, surface erosion or compaction:

(a) for the Interior, a very high hazard;

(b) for the Coast, a high or very high hazard.

(3) An agreement holder other than a holder of a minor tenure who is carrying out timber harvesting must not cause the amount of soil disturbance on the net area to be reforested to exceed the following limits:

(a) if the standards unit is predominantly comprised of sensitive soils, 5% of the area covered by the standards unit, excluding any area covered by a roadside work area;

(b) if the standards unit is not predominantly comprised of sensitive soils, 10% of the area covered by the standards unit, excluding any area covered by a roadside work area;

(c) 25% of the area covered by a roadside work area.

(4) An agreement holder may cause soil disturbance that exceeds the limits specified in subsection (3) if the holder

(a) is removing infected stumps or salvaging windthrow and the additional disturbance is the minimum necessary, or

(b) is constructing a temporary access structure and both of the following apply:

(i) the limit set out in subsection (3) (a) or (b), as applicable, is not exceeded by more than 5% of the area covered by the standards unit, excluding the area covered by a roadside work area;

(ii) before the regeneration date, a sufficient amount of the area within the standards unit is rehabilitated such that the agreement holder is in compliance with the limits set out in subsection (3).

(5) The minister may require an agreement holder to rehabilitate an area of compacted soil if all of the following apply:

(a) the area of compacted soil

(i) was created by activities of the holder,

(ii) is within the net area to be reforested, and

(iii) is a minimum of 1 ha in size;

(b) the holder has not exceeded the limits described in subsection (3);

(c) rehabilitation would, in the opinion of the minister,

(i) materially improve the productivity and the hydrologic function of the soil within the area, and

(ii) not create an unacceptable risk of further damage or harm to, or impairment of, forest resource values related to one or more of the subjects listed in section 149 (1) of the Act.

(6) An agreement holder who rehabilitates an area under subsection (4) or (5) must

(a) remove or redistribute woody materials that are exposed on the surface of the area and are concentrating subsurface moisture, to the extent necessary to limit the concentration of subsurface moisture on the area,

(b) de-compact compacted soils, and

(c) return displaced surface soils, retrievable side-cast and berm materials.

(7) If an agreement holder rehabilitates an area under subsection (4) or (5) and erosion of exposed soil from the area would cause sediment to enter a stream, wetland or lake, or a material adverse effect in relation to one or more of the subjects listed in section 149 (1) of the Act, the agreement holder, unless placing debris or revegetation would not materially reduce the likelihood of erosion, must

(a) place woody debris on the exposed soils, or

(b) revegetate the exposed mineral soils.

Permanent access structure limits

36 (1) An agreement holder must ensure that that the area in a cutblock that is occupied by permanent access structures built by the holder or used by the holder does not exceed 7% of the cutblock, unless

(a) there is no other practicable option on that cutblock, having regard to

(i) the size, topography and engineering constraints of the cutblock,

(ii) in the case of a road, the safety of road users, or

(iii) the requirement in selection harvesting systems for excavated or bladed trails or other logging trails, or

(b) additional permanent access structures are necessary to provide access beyond the cutblock.

(2) If an agreement holder exceeds the limit for permanent access structures described in
36 subsection (1) for either of the reasons set out in that subsection, the holder must ensure that the limit is exceeded as little as practicable.

(3) An agreement holder may rehabilitate an area occupied by permanent access structures in accordance with the results or strategies specified in the forest stewardship plan or by

(a) removing or redistributing woody materials that are exposed on the surface of the area and are concentrating subsurface moisture, as necessary to limit the concentration of subsurface moisture on the area,

(b) de-compacting compacted soils, and

(c) returning displaced surface soils, retrievable side-cast and berm materials.

(4) If an agreement holder rehabilitates an area under subsection (3) (a) and erosion of exposed soil from the area would cause sediment to enter a stream, wetland or lake, or a material adverse effect in relation to one or more of the subjects listed in section 149 (1) of the Act, the agreement holder, unless placing debris or revegetation would not materially reduce the likelihood of erosion, must

(a) place woody debris on the exposed soils, or (b) revegetate the exposed mineral soils.
2. The FSP holder adopts as a result or strategy, as written on the date of FSP approval, for the purposes of calculating permanent access the proportion shall be of the gross cutblock area which will include the Net area to be reforested, naturally occurring Non productive area, Unnatural non-productive areas, immature and all retention and reserve areas associated with the block.

4.2 Wildlife

Objective 2	**Source of Objective**
The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for (a) the survival of species at risk, (b) the survival of regionally important wildlife, and (c) the winter survival of specified ungulate species. LUO – June 2010 – Objectives 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 32, 33 and 34.	*FPPR* Sec 7. CCLUP Land Use Order, April 2011.
Applicable area	
Description of applicable area is as specified for each individual species.	
Result or Strategy	
The FSP holder adopts as written on the date of FSP approval the strategies presented in the species specific sections of this FSP in Sections 5.7 to 5.13.	

4.3 Water, fish, wildlife and biodiversity within riparian areas.

Objective 3	**Source of Objective**
The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas. LUO – June 2010 – Objectives 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 32, 33 and 34.	*FPPR* Sec 8. CCLUP Land Use Order, April 2011.
Applicable area	
FDU 1	
Result or Strategy	
The FSP holder adopts as written on the date of FSP approval the strategies and/or results presented in Sections 5.5.3 of this FSP.	

4.4 Fish habitat in fisheries sensitive watersheds.

Objective 4	Source of Objective
1. Until December 31, 2005 the objective set by government for fish habitat in fisheries sensitive watersheds is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities in the fisheries sensitive watershed from resulting in a material adverse impact on the habitat of the fish species for which the fisheries sensitive watershed was established. 2. The fisheries sensitive watersheds within the area applicable to this FSP are: none.	*FPPR* Sec 8.1.
Result or Strategy	
The Objective set by government has expired. Designated Fisheries Sensitive Watersheds are discussed in Sections 5.5.1, 5.5.2 and 5.5.3 of this FSP.	

4.5 Water in Community Watersheds.

Objective 5	Source of Objective
1. In this section **"community watershed"** means a community watershed a. that is continued under section 180 (e) of the Act, and b. for which a water quality objective has not been i. continued under section 181 of the Act, or ii. established under the Government Actions Regulation. 2. The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities within the community watershed from resulting in: a. a material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks, or b. the water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under iii. an enactment, or iv. the licence pertaining to the waterworks 3. The objective set by government under subsection (2) applies only to the extent that it does not unduly reduce the supply of timber from British Columbia's forests.	*FPPR* Sec 8.2.
Applicable area	
Areas managed as community watersheds have been excluded from the ECF Area applicable to this FSP.	
Result or Strategy	
No Strategy or Result is presented as the ECF Area excludes areas designated as Community Watersheds.	

4.6 Wildlife and Biodiversity at the Landscape and Stand Levels.

Objective 6	**Source of Objective**
The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape. LUO - Landscape Units for Biodiversity Management 5. Maintain biodiversity in accordance with the landscape units and biodiversity emphasis shown on map 2 and defined by the spatial dataset, Cariboo-Chilcotin Landscape Units.	*FPPR* Sec 9.0 CCLUP Land Use Order, April 2011.
Applicable area	
FDU 1 - applicable CCLUP Zones.	
Result or strategy	
The FSP holder adopts as written on the date of FSP approval the strategies and/or results presented in Sections 5.5.5 and 5.5.6 of this FSP.	

Objective 7	**Source of Objective**
The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees. LUO - Wildlife Tree Retention 6. Where harvesting removes >50 percent of the pre-harvest stand basal area or where the harvest is part of a shelterwood silvicultural system, meet or exceed the minimum areas for wildlife tree retention for each harvest area (cutblock or cutting permit) as set out in schedule 1. 7 Where practicable, in partially cut stands, where harvesting removes <50 percent of the pre-harvest basal area, retain high-value, wildlife trees up to the limits in schedule 1.	*FPPR* Sec 9.1. CCLUP Land Use Order, April 2011.
Conserve biological diversity through retention of coarse woody debris and retention of wildlife trees.	CCLUP 90 day Report. P 153.
Applicable area	
ECF Area	
Result or Strategy	
1. The FSP holder adopts as written on the date of FSP approval the WT Retention Targets (LUO Schedule 1) as set out in Section 5.5.6 and Appendix 9.4.	

4.7 Visual Quality

Objective 8	Source of Objective
"Scenic area" means an area of land established as a scenic area under the *Forest Practices Code of British Columbia Act* on or before October 24, 2002 and continued as a scenic area under section 180 (c) of the Act; **"Visual sensitivity class"** means a visual sensitivity class established on or before October 24, 2002, particulars of which are publicly available in the Land and Resource Data Warehouse maintained by the minister responsible for the *Land Use*. The objective set by government in relation to visual quality for a scenic area, that (a) was established on or before October 24, 2002, and (b) for which there is no visual quality objective is to ensure that the altered forest landscape for the scenic area (c) in visual sensitivity class 1 is in either the preservation or retention category, (d) in visual sensitivity class 2 is in either the retention or partial retention category, (e) in visual sensitivity class 3 is in either the partial retention or modification category, (f) in visual sensitivity class 4 is in either the partial retention or modification category, and (g) in visual sensitivity class 5 is in either the modification or maximum modification category.	*FPPR* Sec 9.2.
LUO - Scenic Areas **26** Maintain the visual quality objectives for scenic areas as shown on *map 9a* and defined by the spatial dataset, *Cariboo-Chilcotin Scenic Areas.* **27** Despite objective 26, harvesting is permitted where it is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest. **28** Along the scenic corridors shown on *map 9b* and defined by the spatial dataset, *Cariboo-Chilcotin Scenic Corridors,* design harvest areas to mimic existing natural openings, vegetation patterns and natural features. **29** Design harvest areas to mimic existing natural openings, vegetation patterns, and natural features when viewed from the high elevation viewpoints shown on *map* 9c and defined by the spatial dataset, *Cariboo-Chilcotin High Elevation Viewpoints.*	CCLUP Land Use Order, April 2011.
Applicable area	
FDU 1	
Result or Strategy	
The FSP holder adopts as written on the date of FSP approval the strategy presented in Section 5.3.2 of this FSP and the spatial data in Appendix 9.1.	

4.8 Cultural Heritage Resources.

Objective 9	Source of Objective
The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are (a) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and (b) not regulated under the *Heritage Conservation Act*.	*FPPR* Sec 10.
Applicable area	
FDU 1	
Result or Strategy	

1. ECFL will:
    a. Attempt to develop relationships and protocols with First Nations that have declared Traditional Territory that the ECF Area overlaps; using the TNG portal as the contact point and other means as appropriate.
    b. Determine potential impacts of actions carried out by the Licensee under this plan, in the context of traditional and contemporary use by First Nations people, through;
        i. Comments made by affected First Nations in accordance with Section 21 of the *FPPR* and, subsequently confirmed by government in consultation with the First Nation; or
        ii. Comments made by affected First Nations during information meetings with the Licensee that may occur from time to time during the term of this plan, or
        iii. Results produced through Archaeological surveys developed by field analysis and assistance.
    c. Conserve or, if necessary, protect cultural heritage resources that are:
        i. Referred to in Section 10 of the *FPPR*, as of the date of submission of this plan or as designated to be resource features;
        ii. Not conserved or protected by other arrangements;
        iii. Likely to be adversely impacted by actions of the Licensee carried out under this plan;
        iv. Capable of being addressed in the context of normal CP applications and primary forest activity; and
        v. Considered to be important, valuable, scarce and of continued importance.
    d. Conduct operations consistent with the timber harvesting rights in the agreements to which this plan applies.
2. ECFL will abide by agreements recognized by the TNG with First Nations whose Traditional Territory is overlapped by the Eniyud Community Forest operating area.
3. Using the TNG portal, and other means, ECFL will notify affected First Nations of Eniyud's proposed harvesting and road building activities within their asserted Traditional Territory within the ECF area during the initial planning stages of a Cutting Permit area. (Cut block/Road level review).
    a. To reduce re-referral of proposals, CP Referral Notices will request that adjacent areas or points of critical or sensitive Traditional Use be included. This will be done to accommodate potential block amendments identified during the planning phase where field work has indicated minor changes would be appropriate from a forest development perspective. Where an increase in block size does not materially affect the result of the Traditional Use information overlap, proposed additions to block shapes will be noted on CP maps sent to the First Nation

4. Where comments are received by the ECFL as a result of notification of proposed forest management activity, ECFL will:
    a. Keep a written record of such correspondence;
    b. Evaluate the direct impact of the proposed action on the cultural heritage resource; and,
    c. Communicate the proposed actions resulting from the evaluation to the person(s) that provided the comment.

5 Objectives Specified in the Cariboo-Chilcotin Land Use Plan, Results and Strategies as brought forward by ILMB, Chair of Cariboo Manager's Committee, June 2005, and incorporating the Land Use Order of April 2011.

5.1 Grazing

Objective 10	**Source of Objective**
1. To maintain the current authorized level of (see below) AUMs in the polygon. Polygon — Current Authorized AUMs 1. Chezacut — 19,422 2. Eagle — 5,411 3. Niut — 1,407 4. Potato Range — 5,395 2. To maintain the existing proportion of AUMs by Range Unit. 3. Plan and manage forest development to minimize or mitigate the impacts to other values, including ….range….	CCLUP 90-Day Report Pg. 78, 80, 96, 100.
Applicable area	
FDU 1	
Result or Strategy	
1. ECFL will notify affected grazing tenure holders of the general location of proposed cutblocks and roads during initial block planning stages. 2. Where evidence is provided by government or the grazing tenure holder that either the designated AUM level (as at February 15, 1995) for the polygon is not sustainable or achievable as a direct result of harvesting or silviculture practices conducted by ECFL or the existing proportion of AUMs by range unit (as at February 15, 1995) has been or will be decreased below these levels by specific harvesting and/or silviculture activities, ECFL will discuss measures with the grazing tenure holder and/or government with the intent of modifying harvesting and silviculture activities to, at minimum, maintain the levels of AUM and proportion of AUM by range unit as at February 15, 1995.	

5.2 Wildcraft

5.2.1 Maintain Roaded Access/Coordinate Access with Mineral Exploration.

Objective 11	Source of Objective
1. Chezacut IRMZ: To maintain roaded access to 70% of the polygon. Access to the rest of the polygon will be walk-in off permanent main roads, or temporary in conjunction with any forest industry development or mineral exploration. 2. Eagle IRMZ: To maintain roaded access to 70% of the polygon. Access to the rest of the polygon will be walk-in off permanent main roads, or temporary in conjunction with any forest industry development or mineral exploration. 3. Niut SRDZ: To maintain roaded access to 10% of the polygon. Access to the majority of the polygon will be walk-in off some permanent main roads. Coordinate use of any temporary access from forest industry development or mineral exploration. 4. Potato Range SRDZ: To maintain roaded access to 20% of the polygon. Access to the majority of the polygon will be walk-in off some permanent main roads. Coordinate use of any temporary access from forest industry development or mineral exploration.	CCLUP 90-Day Report Pg. 78, 80, 96, 100.
Applicable area	
FDU 1	
Result or Strategy 1. Where ECFL constructs primary access to approved harvesting locations with an expected use of more than five years, the roads may remain open until the cutblocks accessed by the roads are considered satisfactorily restocked or required for other primary forest activities. 2. Where requested by mineral exploration companies, ECFL will make efforts to meet with staff and discuss forest management access development coordination with mineral interests. 3. ECFL will undertake to comply with any Cariboo Manager's Committee or Regional Resource Board endorsed recommendations of Regional or Local Access Management Plans in regards to road location, density and use. See also Section 5.3.1.	

5.3 Recreation

5.3.1 Backcountry, Access and Trails

Objective 12	Source of Objective
1. Chezacut IRMZ: To maintain 10% of the polygon in a backcountry condition. In order to be compatible with the timber targets, this includes areas along the Chilcotin River. 2. Eagle IRMZ: To maintain 10% of the polygon in a backcountry condition. In order to be compatible with the timber targets, this includes the areas adjacent to the Chilko and Taseko Rivers and the area surrounding the Seven Sisters (Scum Lake) lakes chain. 3. Niut SRDZ: To maintain 85% of the polygon in a backcountry condition. In order to be compatible with the timber targets, this includes all of the area above 5000 feet, the area adjacent to the Homathko Protected Area, and portions of the West Branch Valley. 4. Potato Range SRDZ: To maintain 70% of the polygon in a backcountry condition. In order to be compatible with the timber targets, this includes all of the area above 5000 feet, the Chilko River Corridor, the areas adjacent to the Protected Areas, and the area between Choelquoit Lake and the Potato Range.	CCLUP 90 day Report Pg. 78, 80, 96, 100.
5. To apply an access management strategy aimed at restricting the development of permanent road access over approximately x% of the polygon, in addition to the area to be managed for backcountry experience. a. Niut - 10%; Potato Range - 75%; Chezacut - 30%; Eagle - 20%.	CCLUP 90 day Report Pg. 79, 81, 97, 101.
LUO - Trails **30** For the buffered trails shown on *map 10,* maintain 50 meter management zones on either side, with the treed area inside the management zones managed to the combined minimum basal area retention of 85 percent, except where roads cross trails. **31** Despite objective 30, primary forest activities that remove more than 15 percent of the basal area within the management zones are permitted for any of the following reasons: (a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, (b) Where harvesting is necessary to manage for blowdown where that helps to maintain the recreational value of the trail.	CCLUP Land Use Order, April 2011.
Applicable area	
FDU 1 area within Back-country polygons.	
Result or Strategy	
1. ECFL will adopt as written on the date of FSP approval any Cariboo Manager's Committee or Regional Resource Board endorsed recommendations of Regional or Local Access Management Plans in regards to road location, density and use.	

2. Where no endorsed plan exists, ECFL will:
   a. Assign a qualified professional to consider the impact that timing of road building, harvesting or hauling may have on back-country users, probable backcountry use and tourism operations; and
   b. Implement methods to manage impacts on and/or conflicts with back country use including the use of modified harvest systems, road deactivation, buffers and alternate access control measures.

Objective 12 continued.

Applicable area

FDU 1 per LUO April 2011 *map 10, as defined in the spatial dataset Buffered Trails.*

Result or Strategy

1. In the event that ECFL proposes to operate within a recreation site or trail, MoFR staff will be contacted to determine what if any, impact Section 16 of the Forest Recreation Regulation may have.
2. Buffered Trails: ECFL will use designated crossings to cross Buffered trails and will incorporate a timbered buffer with an average width of 50 m on each side except where harvesting is necessary to manage for blowdown where that helps to maintain the recreational value of the trail. Harvesting would be done with the proviso that the buffer can be accumulated on either side as appropriate, except where natural disturbance has severely compromised the wilderness character and visual buffering effect of the management zone and the FSP holder has been requested to remove dead or damaged stems within the 50 m buffer. See also Section 6.1.
3. Regionally Significant and Buffered trail locations must be visible in the field and will be verified on the ground before buffering actions are implemented. Buffering actions may be modified where a trail is verified as being a road or is no longer in use as a regionally significant trail.
4. These strategies will not apply where:
   c. a trail crosses an existing road;
   d. a trail overlaps an existing road including but not limited to non-status roads, MoFR/BCTS Roads and roads under permit to industry;
   e. roads are required to cross the trail buffer.
5. Buffer width will be measured from the center of the actual trail location.

5.3.2 Visual Quality

Objective 13	Source of Objective
1. Chezacut IRMZ: To maintain visual quality in backcountry zones. 2. Eagle IRMZ: To maintain the visual quality in the viewshed surrounding the backcountry areas adjacent to the Chilko and Taseko Rivers and the area surrounding the Seven Sisters (Scum Lake) lakes chain and other key lakes 3. Niut SRDZ: To maintain the visual quality in the viewshed surrounding the key recreational lakes in the West Branch Valley. 4. Potato Range SRDZ: To maintain the visual quality along the Upper Homathko Valley. **"Scenic Area"** means an area of land established as a scenic area under the *Forest Practices Code of British Columbia Act* on or before October 24, 2002 and continued as a scenic area under section 180 (c) of the Act; **"Visual sensitivity class"** means a visual sensitivity class established on or before October 24, 2002, particulars of which are publicly available in the Land and Resource Data Warehouse maintained by the minister responsible for the *Land Use*. The objective set by government in relation to visual quality for a scenic area, that (a) was established on or before October 24, 2002, and (b) for which there is no visual quality objective is to ensure that the altered forest landscape for the scenic area (c) in visual sensitivity class 1 is in either the preservation or retention category, (d) in visual sensitivity class 2 is in either the retention or partial retention category, (e) in visual sensitivity class 3 is in either the partial retention or modification category, (f) in visual sensitivity class 4 is in either the partial retention or modification category, and (g) in visual sensitivity class 5 is in either the modification or maximum modification category. **FPPR Section 1.1** **Categories of visually altered forest landscape** **1.1** For the purposes of paragraph (c) of the definition of "altered forest landscape" in section 1, the following categories are prescribed, each according to the extent of alteration resulting from the size, shape and location of cutblocks and roads: (a) *preservation*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is (i) very small in scale, and	CCLUP 90-Day Report Pg. 78, 80, 96, 100.

(ii) not easily distinguishable from the pre-harvest landscape; (b) *retention*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is (i) difficult to see, (ii) small in scale, and (iii) natural in appearance; (c) *partial retention*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is (i) easy to see, (ii) small to medium in scale, and (iii) natural and not rectilinear or geometric in shape; (d) *modification*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, (i) is very easy to see, and (ii) is (A) large in scale and natural in its appearance, or (B) small to medium in scale but with some angular characteristics; (e) *maximum modification*: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, (i) is very easy to see, and (ii) is (A) very large in scale, (B) rectilinear and geometric in shape, or (C) both. [en. B.C. Reg. 580/2004, s. 2.]	
LUO - Scenic Areas **26** Maintain the visual quality objectives for scenic areas as shown on *map 9a* and defined by the spatial dataset, *Cariboo-Chilcotin Scenic Areas.* **27** Despite objective 26, harvesting is permitted where it is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest. **28** Along the scenic corridors shown on *map 9b* and defined by the spatial dataset, *Cariboo-Chilcotin Scenic Corridors,* design harvest areas to mimic existing natural openings, vegetation patterns and natural features. **29** Design harvest areas to mimic existing natural openings, vegetation patterns, and natural features when viewed from the high elevation viewpoints shown on *map* 9c and defined by the spatial dataset, *Cariboo-Chilcotin High Elevation Viewpoints.*	CCLUP Land Use Order, April 2011.
Applicable area	
FDU 1	
Result or Strategy	
1. ECFL commits to meet the VQOs for Designated Scenic Areas as in place on the date of FSP approval when proposing or harvesting block shapes, road locations and retention within and adjacent to proposed harvesting unless varied per CCLUP Land Use Order, April 2011, Section 18 below.	

2. ECFL will design harvest areas to mimic existing natural openings, vegetation patterns, and natural features when viewed from the high elevation viewpoints shown on the map in Appendix 9.1 and defined by the spatial dataset, Cariboo-Chilcotin High Elevation Viewpoints map 9c, as noted in the Land Use Order – April 2011.
3. LUO April 2011 Designated Scenic Areas and associated VQOs are those noted on the map in Appendix 9.1 as per LUO 2011 maps 9 a, b and c.

Variances from CCLUP Land Use Order, April 2011:

18 Despite objectives 16 and 17, variance from the VQOs and the maximum disturbance limits in schedule 2 and the lake management intent in schedule 3 is permitted in lakeshore management zones for any of the following reasons:

(a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest,

(b) Road and fence construction in Class A lakeshore management classes where there is no other practicable location available,

(c) Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics.

Applicable area

FDU 1

Result or Strategy

1. For harvesting proposed adjacent to Highway 20, ECFL will retain advanced regeneration and poles as practicable to provide visual screening as needed up to 200 m from the right of way fence or ditch center if no fence is present. These stems may be infested with mistletoe and other Forest Health Agents but will not be considered deleterious to growth for purposes of determining regeneration or Free Growing. See also Section 8.2.2 and 8.2.4.

5.4 Tourism

Objective 14	Source of Objective
1. Eagle IRMZ: To maintain the visual quality in the viewshed surrounding existing tourism operations. To promote tourism development in this polygon, and focus tourism use and development on the backcountry areas identified in the Recreation targets.* 2. Niut SRDZ: To maintain the visual quality in the viewshed surrounding existing tourism operations. To promote tourism development in this polygon, and focus tourism use and development on the backcountry areas identified in the Recreation targets.* 3. Potato Range SRDZ: To maintain the visual quality in the viewshed surrounding existing tourism operations. To promote tourism development in this polygon, and focus tourism use and development on the backcountry areas identified in the Recreation targets. To develop trail networks linking tourism development with backcountry areas, principally alpine.* 4. Chezacut IRMZ: To maintain the visual quality in the viewshed surrounding existing tourism operations, including the operations on Puntzi Lake. To promote tourism development in this polygon, and focus tourism use and development on the backcountry areas identified in the Recreation targets.* * - Underlined text identifies sections considered to be outside the business realm of ECFL and therefore no Results or Strategies are specified.	CCLUP 90-Day Report Pg. 78, 80, 96, 100.
Applicable area	
FDU 1	
Result or Strategy	
1. ECFL commits to meet the VQOs for Designated Scenic Areas as in place on the FSP approval date when proposing or harvesting block shapes, road locations and retention within and adjacent to proposed harvesting.	

5.5 Fish and Wildlife

5.5.1 Salmon

Objective 15	Source of Objective
1. Chezacut ERDZ: To manage the Chilcotin River watershed for salmon stocks (approximately 80 % of the polygon), through riparian area protection and controls on the rate of harvest. 2. Eagle IRMZ: To manage the Chilko River watershed for salmon stocks through application of the Forest Practices Code. 3. Avoid irreversible man made changes to fish producing habitats. 4. Maintain the physical and biological diversity of fish habitats. 5. Maintain watershed and stream channel integrity and stability. 6. Maintain and/or enhance water quality and water quantity for in-stream uses.	CCLUP 90-Day Report Pg. 97, 101 & 168.
LUO - Critical Habitat for Fish **12** Maintain critical habitat for fish shown on *map* 4 and defined by the spatial dataset, *Cariboo-Chilcotin Critical Habitat for Fish* as no-harvest areas. **13** Despite objective 12, primary forest activities are permitted in areas classified as critical habitat for fish for the following reasons: (a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, (b) Road and fence construction where there is no other practicable location available.	CCLUP Land Use Order, April 2011.
Applicable area	
FDU 1	
Result or Strategy	
1. ECFL will not conduct harvesting within No-Harvest areas identified as Critical Fish Habitat shown on *map* 4 and defined by the spatial dataset, *Cariboo-Chilcotin Critical Habitat for Fish* except for roads where there is no other practicable location or harvesting is essential for insect control to curtail severe damage to forest values at the landscape level. ECFL will professionally consider the impact of insects and prepare a rationale for proposing harvesting in no-harvest zones and make the rationale available to MoFLNRO Staff upon request. The rationale would provide support indicating that the salvage harvesting would be essential to protect values at the landscape level. 2. ECFL will protect streamside and riparian areas in accordance with the riparian habitat management strategies presented in Section 5.5.4 of this FSP. 3. Regarding rate of harvest controls, ECFL will manage for biodiversity targets using the biodiversity targets as presented in Sections 5.5.4, 5.5.5 and 5.5.6 of this plan. Further contributions to controls on the rate of harvest are considered to be the inclusion of visual area harvest modification, buffers around quality, refugia and wilderness lakes, MDWR, and the increased retention incorporated through the Chief Forester Guidance.	
4.	

5.5.2 Watershed Hydrology Stability

Objective 16	Source of Objective
1. No objectives regarding Watershed Hydrology were noted for the ECF area in this FSP.	N/A
Applicable area	
No areas specified within the ECF area.	
Strategy	
1. N/A.	

5.5.3 Critical Fish Habitat

Objective 17	Source of Objective
1. To manage for grizzly bear, moose, furbearer, species at risk **and other sensitive habitats** within the areas identified as riparian buffers, recreation areas and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. **LUO - Critical Habitat for Fish** **12** Maintain critical habitat for fish shown on *map* 4 and defined by the spatial dataset, *Cariboo-Chilcotin Critical Habitat for Fish* as no-harvest areas. **13** Despite objective 12, primary forest activities are permitted in areas classified as critical habitat for fish for the following reasons: (a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, (b) Road and fence construction where there is no other practicable location available.	CCLUP 90 day Report Pg. 79, 81, 97, 101. CCLUP Land Use Order, April 2011.
Applicable area	
Areas specified within FDU 1 per Appendix 1.	
Strategy	
1. ECFL commits to maintain critical habitat for fish shown on *map* 4 and defined by the spatial dataset, *Cariboo-Chilcotin Critical Habitat for Fish* as no-harvest areas. 2. ECFL commits to not harvest or construct roads in critical fish habitats except for roads where there is no other practicable location or harvesting is essential for insect control to curtail severe damage to forest values at the landscape level. ECFL will professionally consider the impact of insects and prepare a rationale for proposing harvesting in no-harvest zones and make the rationale available to MoFLNRO Staff upon request. The rationale would provide support indicating that the salvage harvesting would be essential to protect values at the landscape level.	

5.5.4 Maintain Riparian Habitats

Objective 18	Source of Objective
1. Niut and Potato Range SRDZ; Chezacut and Eagle IRMZ: To maintain riparian habitats through the establishment of riparian management zones on all streams, lakes and wetlands as specified under the Forest Practices Code and Riparian Guidelines. 2. *Biodiversity Conservation (including Riparian Areas):* Development of a biodiversity conservation strategy for the region is required. This strategy will be consistent with the Land Use Plan and the resource targets. In this context it will include the following components: a. conserve biological diversity through the establishment of Landscape Units and objectives for retention of old growth, seral stage distribution, landscape connectivity, stand structure, species composition, temporal distribution of cutblock, retention of coarse woody debris, and retention of wildlife trees. These targets will be applied at the Landscape Unit level; Landscape Units will be defined across the region. Targets for other important values specified above will be established within these Landscape Units and will be based on the Wildlife Habitat, Biodiversity Conservation, and Riparian Guidelines. Application of these guidelines in all zones and polygons is required. b. seral stage (including old growth) targets are specified for each polygon and should provide a guide to detailed planning at the Landscape Unit level. Targets for the conservation of riparian habitats and sensitive species and habitats are also specified for each polygon. Riparian habitats are extremely important in the Cariboo Region and require special attention. Consistent with the targets, maintenance of deciduous (aspen) and spruce components are important considerations on the Chilcotin Plateau. c. over time develop Long term plans (at least 20 years) for all areas in order to ensure that the biodiversity conservation objectives and all other objectives of the plan are met. These plans will address all resources on a watershed basis. Cut distribution over time (existing and future), access development and other related resource development issues will be addressed. The plans will ensure that the objectives for each zone will be met over the long term. Where required roads will be planned to limit impacts on environmental values and road closure and deactivation and rehabilitation requirements for existing and future roads will be specified. d. review the alienation of crown land where this will negatively impact biodiversity conservation values. e. establish small benchmark ecological reserves, within the 0.25% land target for Goal 2 protected areas, within those Eco-sections which are not well represented in the Protected Areas. These areas will be valuable for future research and preserving biodiversity	CCLUP 90-Day Report Pg. 79, 81, 97, 101, 153, 158.

elsewhere on the landscape and preserving small areas of rare ecosystems.

3. Grasslands

Many of the species at risk in the region are found on the grasslands of the region. Research and inventory has begun on these species and additional management requirements will be developed in the future. To date seven red listed species and thirty-two blue listed species have been recorded. In the interim the following is required:

- Continuation of present research and inventory programs to further identify species and habitats of concern. Management of these habitats should consider all resource values.
- Management of critical habitat through the FPC and Riparian and Biodiversity Guidelines including the designation of Sensitive Areas or Wildlife Habitat areas. Safeguarding riparian habitats is of particular importance.
- Maintenance of climax seral communities targets as defined by the Biodiversity Guidelines specific targets (by landscape unit) are: 12% climax seral state, 85% near climax.
- Establish planning and monitoring processes to ensure that the utilization levels and recovery (targets specified above) are achieved in a timely manner.

4. **Zonal Management Strategies**

1. Special Resource Development Zone

Within the context of the Land Use Plan and the resource targets the following is of particular importance in this zone:

- sustain sensitive natural values that require special management considerations; additional identification of Sensitive Areas,
- management to sustain representational and environmental values in conjunction with adjacent Protected Areas,
- assess current alpine grazing for impacts on vegetation and sustainability, manage access through a Backcountry Access Management strategy (see Regional description). This will apply throughout much of the zone, however, additional stratification is required; in the more developed portions of this zone the standard Regional Access Management strategy should apply.

2. Enhanced Development Zone

Within the context of the Land Use Plan and the resource targets the following is of particular importance in this zone:

- it is extremely important for moose, furbearers, waterfowl and many other wetland and forest dependent species; application of FPC guidelines is required to conserve these values,
- limit disturbance to White Pelicans on feeding lakes,

• apply the Regional Access Management strategy to manage access. The Backcountry Access Management strategy will not apply in this zone, however, certain portions of it will receive a higher degree of access control under the regional strategy. *3. Integrated Resource Management Zone* Within the context of the Land Use Plan and the resource targets the following is of particular importance in this zone: ▪ good opportunities for fish and wildlife enhancement, ▪ grasslands within this zone are extremely important and require careful management ▪ application of the FPC and relevant guidelines including Biodiversity, Riparian, and Wildlife habitat, ▪ it is a very important area for furbearers, moose, waterfowl, species at risk and many other wetland, grassland and forest dependent species; application of FPC guidelines is required to sustain these values, ▪ limit disturbance to White Pelicans on feeding lakes, ▪ apply the Regional Access Management strategy to manage access. The Backcountry Access Management strategy will not apply in this zone, however certain portions of it will receive a higher degree of access control under the regional strategy. **LUO - Lakes Management** **16** For the lakeshore management zones shown on *map 6a* and defined by the spatial dataset, *Cariboo-Chilcotin Lakeshore Classes,* maintain the lakeshore management zones in accordance with schedule 2. **17** For the lakes shown on *map 6b* and defined by the spatial dataset, *Cariboo-Chilcotin Lake Management Classes,* manage the lakes in accordance with schedule 3. **18** Despite objectives 16 and 17, variance from the VQOs and the maximum disturbance limits in schedule 2 and the lake management intent in schedule 3 is permitted in lakeshore management zones for any of the following reasons: (a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, (b) Road and fence construction in Class A lakeshore management classes where there is no other practicable location available, (c) Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics. **19** For refugia and wilderness fisheries lakes, locate new roads away from the lakeshore, sufficient to protect the existing character of the	CCLUP Land Use Order, April 2011.

lake, unless no other practicable route exists.

LUO - Stream, Wetland and Lake Riparian Areas

20 (a) Maintain riparian reserve zones as no harvest areas.

(b) Despite objective 20(a), primary forest activities may be carried out in riparian reserve zones for the following purposes:

I. where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest,

II. felling or modifying a tree that is a safety hazard, if there is no other practicable option for addressing the safety hazard

III. constructing a stream crossing

IV. creating a corridor for full suspension yarding

V. creating guyline tiebacks

VI. felling or modifying a tree under an occupant license to cut, master license to cut or free use permit issued in respect of an area that is subject to a license permit, or other form of tenure issued under the Land Act, Geothermal Resources Act, Mines Act, Mineral Tenure Act, Mining Right of Way Act, Ministry of Lands, Parks and Housing Act or Petroleum and Natural Gas Act, if the felling or modification is for a purpose expressly authorized under that license, permit or tenure,

VII. felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail.

21 Except at road crossings, retain windfirm trees and other vegetation in riparian management zones on all S4 streams, sufficient to:

(a) maintain streambank stability and channel processes, and

(b) minimize adverse changes to stream shade and organic input to the stream.

22 In riparian management zones on W3 and W4 wetlands and L3 and L4 lakes retain deciduous patches, significant wildlife trees and major wildlife features.

23 For L3 lakes and selected L1 lakes shown in *map* 6c and defined by the spatial dataset, *Cariboo-Chilcotin L3/LI Lakes,* maintain a 10 meter riparian reserve zone.

Applicable area

FDU 1

Strategy

1. ECFL will, as per Section 12.1(2) of the *FPPR*, adopt as a Result or Strategy, Sections 47 to 51, 52(2), 53 and 55 to 57 of the *FPPR* as those sections were on the date of FSP approval.
2. ECFL adopts as a strategy the Retention Strategy - Minimum Retention within the RMA as shown in Table 5.5.4. Results will be calculated on all features as an average over a cutblock or Cutting Permit.

Result

1. There are no Key Wetlands for Moose so no Result or Strategy is proposed.

Section 47 - Stream and Riparian Classes.

47 (1) In this section, **"active flood plain"** means the level area with alluvial soils, adjacent to streams, that is flooded by stream water on a periodic basis and is at the same elevation as areas showing evidence of

(a) flood channels free of terrestrial vegetation,

(b) rafted debris or fluvial sediments, recently deposited on the surface of the forest floor or suspended on trees or vegetation, or

(c) recent scarring of trees by material moved by flood waters.

(2) A stream that is a fish stream or is located in a community watershed has the following riparian class:

(a) S1A, if the stream averages, over a one km length, either a stream width or an active flood plain width of 100 m or greater;

(b) S1B, if the stream width is greater than 20 m but the stream does not have a riparian class of S1A;

(c) S2, if the stream width is not less than 5 m but not more than 20 m;

(d) S3, if the stream width is not less than 1.5 m but is less than 5 m;

(e) S4, if the stream width is less than 1.5 m.

(3) A stream that is not a fish stream and is located outside of a community watershed has the following riparian class:

(a) S5, if the stream width is greater than 3 m;

(b) S6, if the stream width is 3 m or less.

(4) Subject to subsections (5) or (6), for each riparian class of stream, the minimum riparian management area width, riparian reserve zone width and riparian management zone width, on each side of the stream, are as follows:

Riparian Class	Riparian Management Area (metres)	Riparian Reserve Zone (metres)	Riparian Management Zone (metres)
S1-A	100	0	100
S1-B	70	50	20
S2	50	30	20
S3	40	20	20
S4	30	0	30
S5	30	0	30
S6	20	0	20

(5) If the width of the active flood plain of a stream exceeds the specified width for the riparian management zone, the width of the riparian management zone is the outer edge of the active flood plain.

(6) The minister may specify a riparian reserve zone for a stream with a riparian class of S1-A if the minister considers that a riparian reserve zone is required.

(7) The riparian reserve zone for a stream begins at the edge of the stream channel bank and extends to the width described in subsection (4) or (6).

(8) The riparian management zone for a stream begins at

(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,

and extends to the width described in subsection (4) or (5).

Section 48 - Wetland Riparian Classes.

48 (1) Wetlands have the following riparian classes:

(a) W1, if the wetland is greater than 5 ha in size;

(b) W2, if the wetland is not less than 1 ha and not more than 5 ha in size and is in one of the following biogeoclimatic zones or subzones:

(ii) Bunch Grass;

(iii) Interior Douglas-fir, very dry hot, very dry warm or very dry mild;

(c) W3, if the wetland is not less than 1 ha and not more than 5 ha in size and is in a biogeoclimatic zone or subzone other than one referred to in paragraph (b);

(d) W4, if the wetland is

(i) not less than 0.25 ha and less than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (b) (i), (ii) or (iii), or

(ii) not less than 0.5 ha and less than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (b) (iv) or (v).

(2) Despite subsection (1), an area is to be treated as a single wetland with a riparian class of W5 if

(a) the area contains

(i) two or more W1 wetlands located within 100 m of each other,

(ii) a W1 wetland and one or more non-W1 wetlands, all of which are within 80 m of each other, or

(iii) two or more non-W1 wetlands located within 60 m of each other, and

(b) the combined size of the wetlands, excluding the upland areas, is 5 ha or larger.

(3) Subject to subsections (4) and (5), for each riparian class of wetland, the minimum riparian management area width, riparian reserve zone width and riparian management zone width for the wetland are as follows:

Riparian Class	Riparian Management Area (metres)	Riparian Reserve Zone (metres)	Riparian Management Zone (metres)
W1	50	10	40
W2	30	10	20
W3	30	0	30
W4	30	0	30
W5	50	10	40

(4) No riparian reserve zone or riparian management zone extends onto any enclosed upland areas in a W1 wetland if the wetland is

(a) located in a boreal, subboreal or hyper-maritime climate, and

(b) greater than 1 000 ha in size.

(5) If the minister considers it necessary for a riparian reserve zone or riparian management zone to extend onto an enclosed upland area, the minister may require either or both of the following:

(a) a riparian reserve zone of a width of 10 m or less;

(b) a riparian management zone of a width of 40 m or less.

(6) The riparian reserve zone for a wetland begins at the edge of the wetland and extends to the width described in subsection (3) or (5).

(7) The riparian management zone for a wetland begins at

(a) the outer edge of the riparian reserve zone, or

(b) if there is no riparian reserve zone, the edge of the wetland,

and extends to the width described in subsection (3) or (5).

Section 49 - Lake Riparian Classes.

49 (1) Lakes have the following riparian classes:

(a) L1-A, if the lake is 1 000 ha or greater in size;

(b) L1-B, if

(i) the lake is greater than 5 ha but less than 1 000 ha in size, or

(ii) the minister designates the lake as L1-B;

(c) L2, if the lake is not less than 1 ha and not more than 5 ha in size and is located in a biogeoclimatic zones or subzone that is

(ii) Bunch Grass,

(iii) Interior Douglas-fir, very dry hot, very dry warm or very dry mild,

(d) L3, if the lake is not less than 1 ha and not more than 5 ha in size and is in a biogeoclimatic zone or subzone other than one referred to in paragraph (c);

(e) L4, if the lake is

(i) not less than 0.25 ha and not more than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (c) (i), (ii) or (iii), or

(ii) not less than 0.5 ha and not more than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (c) (iv) or (v).

(2) Subject to subsection (3), for each riparian class of lake, the minimum riparian management area width, riparian reserve zone width and riparian management zone width are as follows:

Riparian Class	Riparian Management Area (metres)	Riparian Reserve Zone (metres)	Riparian Management Zone (metres)
L1-A	0	0	0
L1-B	10	10	0
L2	30	10	20
L3	30	0	30
L4	30	0	30

(3) If the minister considers it necessary, the minister may specify a riparian management area and a riparian reserve zone for a lake with a riparian class of L1-A.

(4) The riparian reserve zone for a lake begins at the edge of the lake and extends to the width described in subsection (2) or (3).

(5) The riparian management zone for a lake begins at

(a) the outer edge of the riparian reserve zone, or

(b) if there is no riparian reserve zone, the edge of the lake,

and extends to the width described in subsection (2) or (3).

S. 50 - Restrictions in a riparian management area

50 **Restrictions in a riparian management area**

(1) A person must not construct a road in a riparian management area, unless one of the following applies: (a) locating the road outside the riparian management area would create a higher risk of sediment delivery to the stream, wetland or lake to which the riparian management area applies; (b) there is no other practicable option for locating the road; (c) the road is required as part of a stream crossing.

(2) If a road is constructed within a riparian management area, a person must not carry out road maintenance activities beyond the clearing width of the road, except as necessary to maintain a stream crossing.

(3) A person who is authorized in respect of a road must not remove gravel or other fill from within a

riparian management area in the process of constructing, maintaining or deactivating a road, unless
(a) the gravel or fill is within a road prism,
(b) the gravel or fill is at a stream crossing, or
(c) there is no other practicable option.

51 **Restrictions in a riparian reserve zone**

(1) An agreement holder must not cut, modify or remove trees in a riparian reserve zone, except for the following purposes:
(a) felling or modifying a tree that is a safety hazard, if there is no other practicable option for addressing the safety hazard;
(b) topping or pruning a tree that is not wind firm;
(c) constructing a stream crossing;
(d) creating a corridor for full suspension yarding;
(e) creating guyline tiebacks;
(f) carrying out a sanitation treatment;
(g) felling or modifying a tree that has been windthrown or has been damaged by fire, insects, disease or other causes, if the felling or modifying will not have a material adverse impact on the riparian reserve zone;
(h) felling or modifying a tree under an occupant license to cut, master license to cut or free use permit issued in respect of an area that is subject to a license, permit, or other form of tenure issued under the *Land Use, Coal Act, Geothermal Resources Act, Mines Act, Mineral Tenure Act, Mining Right of Way Act, Ministry of Lands, Parks and Housing Act, Petroleum and Natural Gas Act* or *Pipeline Act*, if the felling or modification is for a purpose expressly authorized under that license, permit or tenure;
(i) felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail.

(2) An agreement holder who fells, tops, prunes or modifies a tree under subsection (1) may remove the tree only if the removal will not have a material adverse effect on the riparian reserve zone.

(3) An agreement holder must not carry out the following silviculture treatments in a riparian reserve zone:
(a) grazing or broadcast herbicide applications for the purpose of brushing;
(b) mechanized site preparation or broadcast burning for the purpose of site preparation;
(c) spacing or thinning.

52 **Restrictions in a riparian management zone**

(2) An authorized person who cuts, modifies or removes trees in a riparian management zone for an S4, S5 or S6 stream that has trees that contribute significantly to the maintenance of stream bank or channel stability must retain enough trees adjacent to the stream to maintain the stream bank or channel stability, if the stream
(a) is a direct tributary to an S1, S2 or S3 stream,
(b) flows directly into the ocean, at a point near to or where one or more of the following is located:
(i) a herring spawning area;
(ii) a shellfish bed;
(iii) a saltwater marsh area;
(iv) an aquaculture site;
(v) a juvenile salmonid rearing area or an adult salmon holding area, or
(c) flows directly into the ocean at a point near to the location of an area referred to in paragraph (b) and failure to maintain stream bank or channel stability will have a material adverse impact on that area.

Section 53 - Temperature Sensitive Streams.

53 An authorized person who fells, modifies or removes trees in a riparian management area adjacent to a temperature sensitive stream, or a stream that is a direct tributary to a temperature sensitive stream, must retain either or both of the following in an amount sufficient to prevent the temperature of the temperature sensitive stream from increasing to an extent that would have a material adverse impact on fish:

(a) streamside trees whose crowns provide shade to the stream;

(b) understory vegetation that provides shade to the stream.

S. 55 - Stream Crossings

55 (1) An authorized person who builds a stream crossing as part of a road, a temporary access structure or permanent access structure must locate, build and use the crossing in a manner that (a) protects the stream channel and stream bank immediately above and below the stream crossing, and (b) mitigates disturbance to the stream channel and stream bank at the crossing.
(2) An authorized person who builds a stream crossing as part of a temporary access structure must remove the crossing when it is no longer required by the person.

S. 56 - Fish Passage

56 (1) An authorized person who carries out a primary forest activity must ensure that the primary forest activity does not have a material adverse effect on fish passage in a fish stream.
(2) An authorized person who maintains a fish stream crossing built after June 15, 1995, must ensure that the crossing does not have a material adverse effect on fish passage.
(3) Despite subsections (1) and (2), an authorized person may temporarily allow a material adverse effect on fish passage to construct, maintain or deactivate a road, including a stream crossing, if
(a) fish are not migrating or spawning, and
(b) the source of the material adverse effect is removed immediately on completion of the construction, maintenance or deactivation.

S. 57 - Protection of fish and fish habitat

57 An authorized person who carries out a primary forest activity must conduct the primary forest activity at a time and in a manner that is unlikely to harm fish or destroy, damage or harmfully alter fish habitat.

Strategy (Cont'd)

3. ECFL adopts as a strategy the Retention Strategy - Minimum Retention within the RMA as shown in Table 5.5.4. Results will be calculated on all features as an average over a cutblock or Cutting Permit.
4. ECFL may make application to take an existing non-status road within the RMA of non-salmon bearing streams or other riparian features under road permit where there will be no introduction of deleterious material to the feature through modification or maintenance.
5. Given the salvage nature of the majority of harvesting and the high levels of dead MPB attacked pine being targeted for harvesting, ECFL will strive to retain such windfirm trees and other vegetation in riparian management zones on all S4 streams, sufficient to:
   a. maintain streambank stability and channel processes, and
   b. minimize adverse changes to stream shade and organic input to the stream; as are practicable given the level of attack present at pre-harvest. No attempt will be made to create conditions that do not exist at pre-harvest.

Results

2. On W1 to 5 wetlands classified as key wetlands for moose habitat purposes, ECFL commits to retaining 50 % of the RMA until green-up is achieved. See also Appendix 9.1 and Section 5.9.
3. Riparian retention will follow that shown in the following Table 5.5.4 - Riparian

Management Area, Reserve Zone and Riparian Management Zone Specifications and Retention table.

4. ECFL will, in riparian management zones on W3 and W4 wetlands and L3 and L4 lakes, retain deciduous patches, significant wildlife trees and major wildlife features.
5. ECFL will, for L3 lakes and selected L1 lakes shown on LUO *map* 6c and Appendix 9.1 and defined by the spatial dataset, *Cariboo-Chilcotin L3/LI Lakes,* maintain a 10 meter riparian reserve zone.

Table 5.5.4 - Riparian Management Area, Reserve Zone and Riparian Management Zone Specifications and Retention Table

Riparian Feature	**Width (m)**	**Riparian Class**	**Riparian Reserve Zone Minimum Width* (m)**	**Riparian Management Zone Minimum Width (m)**	**Riparian Management Area Minimum Width (m)**	**Retention Strategy - Minimum Retention within the RMA.**
		All Classes				Retain naturally occurring ground vegetation, shrubs, non-merchantable stems, advanced regeneration and deciduous stems to the extent practicable within 10 meters of the shoreline, feature edge or Reserve Zone edge if present except in areas prescribed for mistletoe control, site preparation and planting. Note: Retention percentages for the management zone for dominant and codominant trees are for the portion of the RMA affected by harvesting and not the entire Feature RMA.
Streams						
All streams in community watersheds, and all fish streams	> 100	S1 - A	0	100	100	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area.
	> 20	S1 - B	50	20	70	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area. Note: The primary objective of the management zone for these riparian classes is to manage the risk of windthrow to the reserve zone.
	> 5 ≤ 20	S2	30	20	50	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area. Note: The primary objective of the management zone for these riparian classes is to manage the risk of windthrow to the reserve zone.
All streams in community watersheds, and all fish streams	1.5 ≤ 5	S3	20	20	40	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area. Note: The primary objective of the management zone for these riparian classes is to manage the risk of windthrow to the reserve zone.
	< 1.5	S4	0	30	30	Minimum 30% of the pre-harvest basal area or 30 % of the RMZ area. On S4 streams with known Bull trout populations (Within Niut SRDZ as per Appendix 1), a No-harvest Zone of 20 m will be maintained.

Riparian Feature	**Width (m)**	**Riparian Class**	**Riparian Reserve Zone Minimum Width* (m)**	**Riparian Management Zone Minimum Width (m)**	**Riparian Management Area Minimum Width (m)**	**Retention Strategy - Minimum Retention within the RMA.**
Streams outside of community watersheds that are not fish streams	> 3	S5	0	30	30	Minimum 20% of the pre-harvest basal area or 20 % of the RMZ area.
	≤3	S6	0	20	20	On a cutblock or cutting permit average the influenced RMA of S6 streams will have an average basal area retention of 5% or 5% of the RMZ area if timbered. The influenced RMA will include portions of the RMA which are included in retention areas (WTPs, etc).
Wetlands and shrub-carrs	**Size (ha)**	**All**	Note: Retention percentages for the management zone for dominant and codominant trees are for the harvest area (cutblock) and not the entire wetland RMA.			
Any location	> 5 ha	W1	10	40	50	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area. Retain minimum of 75% of deciduous concentrated near the RRZ.
	> 1 ≤ 5	W2	10	20	30	Minimum 50% of the pre-harvest basal area or 50 % of the RMZ area.
	> 1 ≤ 5	W3	0	30	30	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area. Retain minimum of 75% of deciduous concentrated near the RRZ.
	> 0.25 ≤ 1	W4	0	30	30	Minimum 50% of the pre-harvest basal area or 50 % of the RMZ area.
2 or more individual wetlands and/or shrub-carrs with overlapping riparian management zones.	Combined size of wetlands ≥ 5	W5	10	40	50	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area. Retain minimum of 75% of deciduous concentrated near the RRZ.
For W3 & W4 wetlands			Retain deciduous patches, significant wildlife trees and major wildlife features.			
For Key Wetlands per map 11.		All	per map 11	per map 11.	per map 11.	Minimum 50% of the RMZ area.

Riparian Feature	Width (m)	Riparian Class	Riparian Reserve Zone Minimum Width (m)	Lakeshore Management Zone – Classified Lake; Riparian Management Zone – non-Classified Lake -Minimum Width (m)	Riparian Manage - ment Area Minimum Width (m)	Retention Strategy - Minimum Retention within the RMA.
Lakes	**Size (ha)**	**All**	Note: Retention percentages for the management zone for dominant and codominant trees are for the harvest area (cutblock) and not the entire wetland RMA.			
Any location	> 5	L1	10	Per map 6a data.	Map 6a + 10	See Classified Lakes Management, Section 5.6
Any location.	> 5	L1A	10	200	210	See Classified Lakes Management, Section 5.6
Any location.	> 5	L1B	10	200	210	See Classified Lakes Management, Section 5.6
Any location (applicable only if the lake has not been addressed in Section 5.6 Lakes).	> 1 ≤ 5	L2	10	20	30	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area.
	> 1 ≤ 5	L3	0	30	30	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area.
	> 1 ≤ 5	L3 – per map 6c data.	10	30	40	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area.
	> 0.5 ≤ 1	L3 – per map 6a data.	10	Per map.	Per map.	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area.
	> 0.5 ≤ 1	L4	0	30	30	Minimum 10% of the pre-harvest basal area or 10 % of the RMZ area.
For L3 & L4 lakes as per LUO Map 6c.			Retain deciduous patches, significant wildlife trees and major wildlife features.			

5.5.5 Wildlife and Biodiversity at the Landscape Level

Objective 19	Source of Objective
1. Conserve biological diversity through the establishment of a. Landscape Units and b. objectives for retention of old growth, c. seral stage distribution, d. landscape connectivity, e. species composition, f. temporal distribution of cutblocks, (and at the stand level: g. stand structure, h. retention of coarse woody debris and i. retention of wildlife trees.)	CCLUP 90-Day Report Pg. 153.
LUO - Wildlife Tree Retention 6 Where harvesting removes >50 percent of the pre-harvest stand basal area or where the harvest is part of a shelterwood silvicultural system, meet or exceed the minimum areas for wildlife tree retention for each harvest area (cutblock or cutting permit) as set out in schedule 1. 7 Where practicable, in partially cut stands, where harvesting removes <50 percent of the pre-harvest basal area, retain high-value, wildlife trees up to the limits in schedule 1.	CCLUP Land Use Order - April 2011.
Old Growth Management Areas (OGMA) 8 Retain old forest and natural successional processes by maintaining as no-harvest area the permanent OGMA-static, permanent OGMA-rotating, and transition OGMAs as shown on *map* 3 and defined by the spatial dataset, *Cariboo-Chilcotin Old Growth Management Areas.* 9 Despite objective 8, harvesting and road-building are permitted in permanent OGMA-static or permanent OGMA-rotating for any of the following reasons: (a) Harvesting incursions of 10 hectares or less that better align OGMA boundaries with intended geographic features, (b) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, (c) Road and fence construction where no other practicable location is available, (d) Thinning-from-below to enhance old forest attributes in OGMAs located within Mule Deer Winter Range in the shallow and moderate snowpack zones, (e) Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and over-topped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics. (f) Where permanent-rotating OGMAs on *map 3* have:	

(i) mature conifer mortality exceeding 50% by basal area> 17.5 cm DBH or, (ii) stand age exceeding 200 years for stands with 70% or greater Lodgepole Pine by basal area> 17.5 cm DBH. **10** Despite objective 8, primary forestry activities are permitted in transition old growth management areas for any the following reasons: (a) Harvesting incursions of 10 hectares or less that better align OGMA boundaries with intended geographic features, (b) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, (c) Road and fence construction where no other practicable location is available, (d) Thinning-from-below to enhance old forest attributes in OGMAs located within Mule Deer Winter Range in the shallow and moderate snowpack zones, (e) Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics, (f) Equivalent old forest exists in locations contributing to the permanent OGMA target in the same LU-BEC unit, (g) Conifer mortality exceeds 50% of stand basal area in the transition OGMA. **11** Changes to OGMAs resulting from harvesting or road building under objective 9 or 10 must be reported by licensees to ILMB and MOFR upon completion.	
2. Chezacut and Eagle IRMZ; Niut and Potato Range SRDZ: Manage for the biodiversity targets that will be developed in the Regional Biodiversity Conservation Strategy. The following seral stage targets will be used in the development of the strategy: "old forest" category: 7% to 19% range. "mature/old forest" category: 17% to 36% range.	CCLUP 90-Day Report Pg. 79, 81, 97, 101.
3. To establish Landscape units which include both the Special Resource Development Zone and adjacent protected area; manage in conjunction with protected area to maintain representational values - Niut and Potato Range SRDZ. 4. To establish Landscape units which include both the Integrated Resource Management Zone and adjacent protected area; manage in conjunction with protected area to maintain representational values – Chezacut, and Eagle IRMZ. LUO - Landscape Units for Biodiversity Management 5. Maintain biodiversity in accordance with the landscape units and biodiversity emphasis shown on map 2 and defined by the spatial dataset, Cariboo-Chilcotin Landscape Units.	CCLUP 90-Day Report Pg. 79, 81, 97, 101. CCLUP Land Use Order - April 2011.
Applicable area	
FDU 1 - applicable RDZ/RMZ.	

Strategy

1. Landscape level Connectivity: Elements contributing to Landscape level connectivity include OGMAs, Fraser River Mainstem buffer, Riparian Reserves, WTPs, Retention areas, additional retention structure (Chief Forester Guidance, Dec. 2005), and sensitive Habitats. A qualified professional will consider connectivity at the sub-Landscape level when planning the location of WTPs and retention areas. Species composition is guided through the Silviculture Stocking Standards included in this FSP (Section 8 and Appendix 2) including deciduous species.

FDU 1 - applicable RDZ/RMZ.

Result or Strategy

1. ECFL adopts Old Growth Management Areas (OGMAs) as per CCLUP Land Use Order – April 2011 map 3 as shown in Appendix 9.1.
2. ECFL will not conduct harvesting operations within any permanent OGMAs, except for incursions of 10 hectares or less that better align OGMA boundaries with intended geographic features, or for incidental areas of less than or equal to 1 ha resulting from mapping/GPS overlaps.
3. ECFL will not construct roads within an OGMA unless no other practicable location is available to provide access to high priority stands and will notify the appropriate Designated Decision Maker of intended action.
4. ECFL will propose harvesting and associated in Transitional and Rotational OGMAs only when stand composition is $\geq$ 70% lodgepole pine by volume and attack levels exceed 50% of the stands pine volume including deciduous or if control of fir bark beetle is required or per Biodiversity updates and LUO Objectives 10.
5. ECFL will submit changes to OGMAs resulting from harvesting or road building under LUO April 2011 objectives 9 or 10 to ILMB and MOFR annually.
6. ECFL will conduct harvesting within fire interface areas as directed by a district manager.
7. ECFL will utilize the Zone and Landscape Units as shown in Appendix 1 per the boundaries established by the MoFR per the Biodiversity Conservation Strategy Guidebook, July 1996 and the CCLUP Land Use Order - April 2011 Cariboo-Chilcotin Landscape Units map 2.

8. Seral Stage Targets
   i. ECFL will adopt the seral stage targets (Mature + Old and Old Forest) as shown in Appendix 3. For areas being salvaged, drawdown of Mature+Old and Old is believed to be consistent with current Ministry of Forests and Range objectives and with the Strategies outlined in Regional Biodiversity Conservation Strategy Update Notes # 7b, 8, 10 and 11. Harvesting BELOW M+O and O targets will take place but only in stands meeting the following criteria as identified in Biodiversity Updates 8, 10 and 11 - 70% pine and 30+% attack; 7b – fir/spruce rules. Where necessary, harvest may include green stands as part of the attack control strategy.
   ii. A qualified professional will consider the most current seral stage analysis tables available in determining whether drawdown issues may be of concern, except when harvesting is conducted in stands meeting the criteria of greater than 70 % volume of Pine in NDTs 3 or 4 and 30+% attack, and appropriate fir and spruce criteria.
9. Regarding the Conservation of Biological Diversity see also Section 5.5.6.
10. Landscape level Connectivity: Elements contributing to Landscape level connectivity include OGMAs, Riparian Reserves, WTPs, Retention areas, additional retention structure (Chief Forester direction), and sensitive Habitats. A qualified professional will consider connectivity at the sub-Landscape level when planning the location of WTPs and retention areas.

11. Species composition is guided through the Stocking Standards included in this FSP (Sections 8 and Appendix 9.2) including deciduous species.

Landscape Units included within FDU 1:

CCLUP Zone	**Landscape Units**
Chezacut IRMZ	Puntzi, Pyper, Sisters, Tatla/Little Eagle Lake.
Eagle IRMZ	Tatla/Little Eagle Lake, Upper Tatlayoko
Niut SRDZ	Crazy Creek, Middle Lake, Westbranch.
Potato Range SRDZ	Upper Tatlayoko.

5.5.6 Biodiversity Conservation - Stand Level - Wildlife Tree Retention

Objective 20	Source of Objective
1. Conserve biological diversity through retention of coarse woody debris and retention of wildlife trees. LUO - Wildlife Tree Retention 6. Where harvesting removes >50 percent of the pre-harvest stand basal area or where the harvest is pmt of a shelterwood silvicultural system, meet or exceed the minimum areas for wildlife tree retention for each harvest area (cutblock or cutting permit) as set out in schedule 1. 7. Where practicable, in partially cut stands, where harvesting removes <50 percent of the pre-harvest basal area, retain high-value, wildlife trees up to the limits in schedule 1.	CCLUP 90-Day Report Pg 153. CCLUP Land Use Order - April 2011.
Applicable area	
FDU 1	
Result or Strategy	
1. ECFL adopts as written on the date of FSP approval the WT Retention Targets as per the CCLUP Land Use Order - April 2011 Schedule 1 and as shown in Appendix 9.4. 2. ECFL will measure WT retention as either individual trees or as patches under the following specifications: a. At the Cutting Permit Level, the percentage will be measured as a percentage of the Gross CP area defined as the cumulative of gross block areas under a Site Plan. b. As the calculation of WT percentage using an estimate of the area of designated patches which may include the basal area equivalency in hectares of individual stems. c. The percentage WT implementation will be assessed against the biogeoclimatic unit which contains the greatest proportion of area under the Site Plan. 3. ECFL commits to incorporate the guidance presented in the Chief Forester letter of Dec. 2005, regarding higher levels of (Wildlife Tree) Retention in large blocks proposed for salvage harvest. WT Retention will be established per current percentage Guidelines. Higher retention areas/%, where incorporated, may not be proposed as long term retention. A qualified professional will consider patch size distribution when proposing and implementing harvesting.	

5.6 Quality Lakes for Wilderness Fisheries and Quality Stream Fisheries.

Objective 21	Source of Objective
1. Chezacut IRMZ: To manage the area surrounding Puntzi and Chilcotin Lakes as key White Pelican habitat. 2. Niut SRDZ: To manage for Dolly Varden habitat by applying modified management regimes over additional riparian buffers (estimated to be about 1% of the forest area). 3. Potato Range SRDZ: To manage approximately 4 lakes as quality lakes for wilderness fisheries. **LUO - Lakes Management** **16** For the lakeshore management zones shown on *map 6a* and defined	CCLUP 90-Day Report Pg. 79, 81, 97. Land Use Order, April 2011 – CCLUP: Section

by the spatial dataset, *Cariboo-Chilcotin Lakeshore Classes,* maintain the lakeshore management zones in accordance with schedule 2. **17** For the lakes shown on *map 6b* and defined by the spatial dataset, *Cariboo-Chilcotin Lake Management Classes,* manage the lakes in accordance with Schedule 3. **18** Despite objectives 16 and 17, variance from the VQOs and the maximum disturbance limits in schedule 2 and the lake management intent in schedule 3 is permitted in lakeshore management zones for any of the following reasons: (a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, (b) Road and fence construction in Class A lakeshore management classes where there is no other practicable location available, (c) Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics. **19** For refugia and wilderness fisheries lakes, locate new roads away from the lakeshore, sufficient to protect the existing character of the lake, unless no other practicable route exists. **LUO - Stream, Wetland and Lake Riparian Areas** **20** (a) Maintain riparian reserve zones as no harvest areas. **(b)** Despite objective 20(a), primary forest activities may be carried out in riparian reserve zones for the following purposes: I. where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, II. felling or modifying a tree that is a safety hazard, if there is no other practicable option for addressing the safety hazard III. constructing a stream crossing IV. creating a corridor for full suspension yarding v. creating guyline tiebacks VI. felling or modifying a tree under an occupant license to cut, master license to cut or free use permit issued in respect of an area that is subject to a license permit, or other form of tenure issued under the Land Act, Geothermal Resources Act, Mines Act, Mineral Tenure Act, Mining Right of Way Act, Ministry of Lands, Parks and Housing Act or Petroleum and Natural Gas Act, if the felling or modification is for a purpose expressly authorized under that license, permit or tenure, VII. felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail.	16, 17 and 18.

21 Except at road crossings, retain windfirm trees and other vegetation in riparian management zones on all S4 streams, sufficient to: (a) maintain streambank stability and channel processes, and (b) minimize adverse changes to stream shade and organic input to the stream. **22** In riparian management zones on W3 and W4 wetlands and L3 and L4 lakes retain deciduous patches, significant wildlife trees and major wildlife features. **23** For L3 lakes and selected L1 lakes shown in *map* 6c and defined by the spatial dataset, *Cariboo-Chilcotin L3/LI Lakes,* maintain a 10 meter riparian reserve zone.	
Applicable area	
Specified lakes and classified lake management zones within FDU 1.	
Result or Strategy	
1. ECFL will incorporate Land Use Order April 2011 – CCLUP Sections 16, 17, 18, 20, 22 and 23 and associated maps 6a, 6b and 6c regarding Lakeshore Management Zones. 2. ECFL will adhere to the Lakeshore Management Zone Strategies for Classified Lakes (See Table 5.6: Lakeshore Management Zone (LMZ) Strategies for Classified Lakes below). Schedule 2 material is incorporated into Table 5.6. 3. ECFL will locate new permanent access roads a minimum of 2000 m away from key Wilderness Fisheries lakes or not closer than access that already exists unless no other practicable route exists. Any roads constructed within the zone will be deactivated to prevent regular 4x4 vehicular access immediately post-harvest. 4. Lakeshore Management Zone and Class Objectives, per Schedule 2 and 3 of the April 2011 CCLUP Land Use Order, are shown on LUO maps 6a, 6b and 6c.	

CCLUP Land Use Order, April 2011 – Schedule 3 Lake Management Classes:

General Lake	Manage the area around the lake to maintain a predominantly rural or natural setting. Road access includes 2-wheel drive roads.
Quality Lake	Manage the area around the lake to provide quality natural features with pristine surroundings and a natural appearing environment. Minimize road access and land development.
Refugium Lake	Manage the area around the lake to conserve the special ecological or physiographic features or habitats.
Wilderness Fisheries Lake	Manage the area surrounding the lake to maintain natural features in an undisturbed, wilderness setting.

Table 5.6: Lakeshore Management Zone (LMZ) Strategies for Classified Lakes

	A Class	B Class	C Class	D Class	E Class
Recommended Visual Quality Class within the LMZ	Preservation	Retention	Partial Retention	Modification	Modification
		Maintain a natural looking landscape incorporating visual landscape design concepts.			
Preferred Forest Management Practices for the Lakeshore Management Zone:	No harvest.	Clear cutting 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.
Forest Disturbance and Retention in the Lakeshore Management Zone:		Conserve deciduous patches, significant wildlife trees, major wildlife features, and moist under-story habitats.			
Uneven-Aged / Selection Silvicultural Systems (partial cut):*	No harvest; this restriction may be waived by government on a site specific basis for the management of fire, windthrow, above endemic levels of pests or disease.	≤20% of the LMZ area per 20 years and ≥50% of the original basal area must be retained.	≤40% of the LMZ area per 20 years and ≥50% of the original basal area must be retained.	≤60% of the LMZ area per 20 years and ≥50% of the original basal area must be retained.	≤100% of the LMZ area per 20 years and ≥50% of the original basal area must be retained.
Even Aged Silvicultural Systems (clearcut):*	No harvest; this restriction may be waived by government on a site specific basis for the management of fire, windthrow, above endemic levels of pests or disease.	≤10% of the LMZ area.	≤20% of the LMZ area.	≤30% of the LMZ area.	≤50% of the LMZ area.
		<5 ha cutblocks.	<10 ha cutblocks.		
		Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 300 metres.	Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 400 metres.	Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 500 metres.	Maximum lateral distance of an individual opening along the LMZ / RRZ interface is 500 metres.
Combined Silvicultural Systems (partial and clearcut):	Incorporate/combine the recommendations as per the even and un-even aged silvicultural system guidelines.				
Roads, Landings and Skid Trails in the Lakeshore Management Zone:	No new roads, borrow pits or landings should be located in the LMZ unless there are no feasible alternatives.	Locate operational/haul roads outside of the LMZ.	Locate operational/haul roads outside of the LMZ.	Locate operational/haul roads >75 metres away from the RRZ.	Locate operational/haul roads >40 metres away from the RRZ.
		Locate spur/block roads and landings >200 metres away from the RRZ.	Locate spur/block roads and landings >100 metres away from the RRZ.	Locate spur/block roads and landings >40 metres away from the RRZ.	Locate spur/block roads and landings >40 metres away from the RRZ.
		Locate skid trails >30 metres away from RRZ.	Locate skid trails >30 metres away from RRZ.	Locate skid trails >30 metres away from RRZ.	Locate skid trails >30 metres away from RRZ.

		Back spar trails are not recommended without an approved rehabilitation plan.	Back spar trails are not recommended without an approved rehabilitation plan.		

* translated to area or basal area retention objectives for each LMZ forest management class (Adopted from ILMB LMZ Table).

5.7 Grizzly Bear.

Objective 24	**Source of Objective**
1. Chezacut, and Eagle IRMZ; Niut and Potato Range SRDZ: To manage for **grizzly bear**, moose, furbearer, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.	CCLUP 90-Day Report Pg. 79, 81, 97, 101.
LUO - Grizzly Bear 33. Apart from existing Wildlife Habitat areas, retain security cover adjacent to critical grizzly bear foraging habitats which include salmon and trout spawning reaches or shoals, and herb-dominated avalanche track and run-out zones on southerly and westerly aspects, in very high, high and moderate capability grizzly bear units shown on map 12 and defined by the spatial dataset, Cariboo-Chilcotin Grizzly Bear Capability. 34. In very high, high and moderate capability grizzly bear units shown on map 12 and defined by the spatial dataset, Cariboo-Chilcotin Grizzly Bear Capability, conduct silvicultural treatments on cutblocks to retain as much existing natural berry production as practicable.	CCLUP Land Use Order - April 2011.
Applicable area	
Critical fish habitat areas; very high, high and moderate grizzly bear capability areas as defined in the LUO 2011 spatial dataset Cariboo-Chilcotin Grizzly Bear Capability map 12, and grizzly bear proposed Wildlife Habitat Areas within FDU 1.	
Strategy	
1. A qualified professional will consider protection of active denning sites and ECFL will provide a minimum 100 m buffer in the form of a WTP as practicable. 2. Where a denning site is found to be active, ECFL will prepare an operational response that considers the location of the den, potential security cover, and noise/disturbance reduction from harvesting actions through alternative scheduling. 3. ECFL will not use herbicides in the areas identified as high and moderate grizzly bear habitat capability primarily in order to protect berry production. 4. ECFL will retain security cover adjacent to critical grizzly bear foraging habitats which include salmon and trout spawning reaches or shoals, and herb-dominated avalanche track and run-out zones on southerly and westerly aspects, in very high, high and moderate capability grizzly bear units as defined in the LUO 2010 spatial dataset Cariboo-Chilcotin	

Grizzly Bear Capability map 12. 5. ECFL will conduct silvicultural treatments on cutblocks to retain as much existing natural berry production as practicable in very high, high and moderate capability grizzly bear units as shown on the LUO 2010 spatial dataset Cariboo-Chilcotin Grizzly Bear Capability map 12.

5.8 Moose.

Objective 25	Source of Objective
1. Chezacut, and Eagle IRMZ: , Niut and Potato Range SRDZ: To manage for grizzly bear, **moose**, furbearer, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.	CCLUP 90-Day Report Pg. 79, 81, 97, 101.
2. *Moose and other Species:* Moose are a particularly important species in the Cariboo region. The current population is estimated at 18,000. They are the most widely distributed large mammal in the region and, as well as supporting wildlife viewing, they also support resident and guided hunting. In addition, moose account for the largest proportion of the native sustenance kill in the region. Their habitat needs will be largely met through application of the FPC; of particular importance are the conservation of wetland and riparian areas. This management includes forested buffers around wetland and riparian areas. These habitats provide winter habitat throughout the region but are particularly important in ERDZ polygons 1,2,5,6,7,13; IRM polygons A,B,C,D,E, and SRDZ polygons B and 0. Upland habitats also provide winter habitat for moose. Management of these areas for moose requires that both cover and early seral (shrubby) habitat is available. This can largely be provided if the biodiversity guidelines for the distribution of seral stages on a Landscape Unit basis are followed. Upland habitats are particularly important in ERDZ polygons 3,4,5,8, and SRDZ polygon M. Other aspects of moose habitat needs have to be addressed on a site specific basis. This includes calving areas and summer habitat protection which can be addressed under the biodiversity conservation requirements and the access management targets specified for each polygon. Moose management also requires careful access management. Excessive access can produce disturbance and can result in high poaching or hunter harvest levels. All of the areas indicated above require access planning. This is particularly true in the IRM polygons and in polygons I and 2 in the ERDZ.	CCLUP 90-Day Report Pg. 155-156.
3. Limitations on permanent access and deactivation of temporary roads are required. Road crossings of wetlands and riparian areas should be as limited as possible. Additional buffering of wetlands	

(up to 200 meters) may be required adjacent to key wetlands or riparian habitats, particularly on the Chilcotin Plateau. **LUO - High Value Wetlands for Moose** **32.** Retain sufficient vegetation to provide security and thermal cover for wintering moose adjacent to high-value wetlands shown on map 11 and defined by the spatial dataset, Cariboo-Chilcotin High Value Wetlands for Moose, and adjacent to W1, W3, or W5 wetlands including shrub-carrs.	CCLUP Land Use Order - April 2011.
Applicable area	
Key wetlands and their applicable Riparian Management Zones within FDU 1.	
Result or Strategy	
1. There are no Key wetlands for moose within the FDU so no Results or Strategies are presented. 2. ECFL will utilize CCLUP Land Use Order - April 2011 Key Wetland information shown on map 11 per the spatial dataset, Cariboo-Chilcotin High Value Wetlands for Moose, and adjacent to W1, W3, or W5 wetlands including shrub-carrs when planning harvest development. 3. ECFL will, where practicable given the predominantly dead pine stands being harvested, retain vegetation to provide security and thermal cover for wintering moose adjacent to W1, W3, or W5 wetlands including shrub-carrs shown on map 11, the High Value Moose Wetland map in Appendix 1 and defined by the spatial dataset, Cariboo-Chilcotin High Value Wetlands for Moose. 4. Given the salvage nature of much of the proposed harvest, vegetation retention will focus on immature conifers – preferably at least 3 m in height, deciduous spp., and smaller merch conifers that are deemed to be more windthrow resistant. In areas where there are predominantly heavily attacked mature pine stands ARM may not meet Visual or Thermal objectives. Where Visual and/or Thermal Cover do not exist in the pre-harvest stand due to high levels of MPB attack, there will be no attempt made to create it.	

5.9 Furbearer (Including Fisher).

Objective 26	Source of Objective
1. Chezacut and Eagle IRMZ: , Niut and Potato Range SRDZ: To manage for ….. furbearers ……	CCLUP 90-Day Report Pg. 79, 81, 97, 101.
Applicable area	
FDU 1	
Result or Strategy	
4. ECFL will undertake to comply with the Strategies presented in this FSP for Wildlife Tree retention, Landscape level and stand level biodiversity and riparian management as presented in Sections 5.5.4, 5.5.5 and 5.5.6.	

5.10 Species At Risk and Other Sensitive Habitats.

Objective 27	Source of Objective
1. Chezacut and Eagle IRMZ: Niut and Potato Range SRDZ: To manage for grizzly bear, moose, furbearer, **species at risk and other sensitive habitats** within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy... LUO - Grasslands 25. Implement silvicultural practices that facilitate restoration of open grassland condition when harvesting forest in the grassland benchmark area shown on map 8 and defined by the spatial dataset Cariboo-Chilcotin Grassland Benchmark Area..	CCLUP 90-Day Report Pg. 79, 81, 97, 101. CCLUP Land Use Order - April 2011.
Applicable area	
FDU 1.	
Result or Strategy	
1. For the species identified below, ECFL will record the geographic location of the occurrence of the following attributes and features identified by ECFL during forest management activities and upon reasonable request by ILMB or other agencies, make the attribute information collected available: a. Badger - dens or tunnels only. b. Goshawk - nest sites only. c. Great Blue Heron - nest sites only. d. Grizzly Bear - dens only. e. Lewis's Woodpecker - nest sites only. f. Long-billed Curlew - nest sites only. g. Long-eared Myotis - roosting sites only. h. Sandhill Cranes - nest sites only. i. Sharp-tailed grouse - leks only. j. Wolverine - dens or tunnels only. 2. In the absence of General Wildlife Measures specified under FRPA, ECFL will follow procedures as outlined in the Identified Wildlife Management Strategy (2004) for protection of habitat and amelioration of disturbance per the listed species as dated one month previous	

to CP submission date.
3. As per Section 7(3) *FPPR*, a result or strategy is not required for prairie falcon as the objectives, in whole or in part, are addressed by a General Wildlife Measure. Refer to GAR Order of 5-003 to 5-005; and areas are not within the ECF area. 4. As per Section 7(3) *FPPR*, a result or strategy is not required for White Pelican as the objectives, in whole or in part, are addressed by a General Wildlife Measure. Refer to GAR Orders of 5-014, 5-021, 5-029, and the General Wildlife Measures for the Wildlife Habitat Areas. ECFL will adhere to these WHA/GWMs. 5. Regarding other species at risk as noted by the Ministry of Environment, ECFL understands that the majority of these species are associated with grasslands, grassland interface areas and areas generally considered to be represented within Mule Deer Winter Ranges. ECFL considers the risk of encountering these species minimal given the ECF area location and License restrictions. 6. See Section 5.13 for Grassland management Results and Strategy. **5.10.1 Mountain Goat** 7. Pertaining to Mtn. Goat, for known areas of calving, ECFL will restrict helicopter logging within 1 km during the period May 1 to June 1. 8. Where harvesting is proposed within a Mountain Goat Winter Range, a qualified professional will consider, and ECFL will utilize, measures to provide for security cover adjacent to escape terrain.

Objective 28	**Source of Objective**
1. Chezacut and Eagle IRMZ. To manage for …… and other sensitive habitats….**including key leading spruce stands….**	CCLUP 90-Day Report Pg. 97, 101.
Applicable area	
FDU 1	
Strategy	
1. ECFL commits to not clear cut harvest in stands comprised of predominantly spruce (> 75% BA of merchantable stems) that are greater than 2 ha in size exclusive of fringes and fingers of timber types in the Chezacut and Eagle IRMZ.	

5.11 Mule Deer.

Objective 29	**Source of Objective**
1. Chezacut and Eagle IRMZ, Niut and Potato Range SRDZ: To maintain Mule Deer winter range values through modified harvest regimes….	CCLUP 90-Day Report Pg. 79, 81, 97, 101.
Applicable area ECF Area	
Mule Deer Winter Ranges (MDWRs) within FDU 1.	
Result or Strategy	
1. ECFL will adhere to the WHA/GWMs concerning Mule Deer Winter Range, in GAR Orders of December 23, 2004 U5-002 and U5-003 and as replaced on December 7, 2006.	

5.12 Bull Trout.

Objective 30	Source of Objective
1. Niut SRDZ: To manage for Dolly Varden habitat by applying modified management regimes over additional riparian buffers (estimated to be about 1% of the forest area).	CCLUP 90-Day Report Pg. 79, 87.
Applicable area	
Specified riparian areas of Known Bull trout streams within the Niut SRDZ as shown in Appendix 9.1.	
Strategy	
1. ECFL commits to restrict harvest within riparian reserve zone areas located adjacent to known Bull trout streams unless an exemption is provided by the District Manager outside the normal CP approval process. 2. On S4 streams with Known Bull trout populations, a minimum No-harvest Zone of 20 m will be maintained.	

5.13 Grasslands and Grassland Habitats.

Objective 31	Source of Objective
1. South Chilcotin SRDZ: To manage in conjunction with the Protected Area to maintain grassland complex of species at risk. 2. Grasslands IRMZ To manage in conjunction with the Protected Areas to maintain or enhance key grassland habitats, as per the Grasslands biodiversity strategy and grazing resources strategies. LUO - Grasslands 25. Implement silvicultural practices that facilitate restoration of open grassland condition when harvesting forest in the grassland benchmark area shown on map 8 and defined by the spatial dataset Cariboo-Chilcotin Grassland Benchmark Area.	CCLUP 90 day Report Pg. 87, 103. CCLUP Land Use Order - April 2011.
Applicable area	
Grassland Benchmark areas within FDU 1.	
Result or Strategy	
1. ECFL commits to incorporate grassland restoration type stocking standards on identified grassland interface areas. 2. ECFL commits to utilize CCLUP Land Use Order - April 2011 Grassland map 8 and spatial dataset Cariboo-Chilcotin Grassland Benchmark Area. 3. ECFL will implement silvicultural practices that facilitate restoration of open grassland condition when harvesting forest in the grassland benchmark areas shown on map 8 and in Appendix 1 and as defined by the spatial dataset Cariboo-Chilcotin Grassland Benchmark Area..	

6 Other

6.1 Recreation Sites and Trails

Objective 32	Source of Objective
1. Grand-parented objectives for various specific Recreation Sites and Trails.	*FRPA s. 180* *FRPA s. 181.*
Applicable area	
FDU 1	
Strategy	
1. ECFL will undertake to consult with appropriate agency staff when proposing harvesting or road building activities adjacent to a Recreation site or Recreation trail regarding safety and timing considerations and carry out agreed to actions. 2. ECFL will undertake to consult with appropriate agency staff when proposing harvesting or road building activities that will cross an identified recreation trail regarding safety and timing considerations and carry out agreed to actions. See Appendix 9.5. 3. ECFL commits to buffering Recreation Trails per the Grand Parented Objectives (Appendix 9.5).	

6.2 Community Areas of Special Concern

Objective 33	Source of Objective
LUO - Community Areas of Special Concern **14** Maintain community areas of special concern (CASC) shown on *map* 5, and defined by the spatial dataset, *Cariboo-Chilcotin CASC* as no-harvest areas. **15** Despite objective 14, primary forest activities are permitted in community areas of special concern for the following reasons: (a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, (b) Road and fence construction where there is no other practicable location available, 1. (c) Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics.	CCLUP Land Use Order - April 2011..
Applicable area	
FDU 1, per CCLUP Land Use Order - April 2011 map 5.	
Strategy	
1. ECFL commits to not harvest in Community Areas of Special Concern. Where harvesting is requested within a CASC, ECFL will consider requesting a variance to the CCLUP Land Use Order - April 2011 per Section 15. Other reasons for considering harvest would include safety, emergency access, and protection of infrastructure and transmission lines (primarily from blowdown associated with Mountain Pine Beetle and Fir bark beetle attacked trees). CCLUP Land Use Order – April 2011 Section 15:	

15 Despite objective 14, primary forest activities are permitted in community areas of special concern for the following reasons:

(a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest,

(b) Road and fence construction where there is no other practicable location available,

(c) Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics.

7 Measures

7.1 Invasive plants.

Requirement.	Source of requirement.
1. For the purpose of section 47 *[invasive plants]* of the Act, a person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction or spread is likely to be the result of the person's forest practices.	*FPPR* Sec 17.
Applicable area	
FDU 1	
Measure.	
1. On disturbed areas exceeding 0.1 ha not subject to reforestation activities, ECFL will broadcast seed that meets or exceeds Common No. 1 Forage Mixture (Specifications as defined by the Canada Seeds Act) within a specified time frame (generally either the first early spring or late fall period after disturbance) not exceeding one year. 2. Equipment being brought in from areas with known populations of Invasive Plants will have soil removed prior to transport to a new operating area. 3. ECFL will work with its grader and bulldozer operators to avoid spreading noxious weeds (primarily knapweed) when conducting road maintenance work or when removing overburden from borrow pits through actions including minimizing soil disturbance, using known infestation mapping from the provincial Invasive Alien Plant Program (IAPP) website during the planning stages, making reasonable efforts to schedule work in weed-free areas first and to be cognizant of when invasive plants are likely to have set seeds. 4. ECFL will report invasive plant sightings to applicable government agencies on a regular basis (early spring and early winter). 5. Where ECFL is shown to be responsible for introducing an invasive plant species, ECFL will enter into discussions with the Permittee and MoFR range staff to confirm how plants were introduced. If ECFL operations are deemed responsible ECFL will prepare a removal plan in conjunction with the Permittee and MoFR staff and implement the removal plan in a timely manner. 6. The following list of Priority and Invasive Plant species (Table 7.1) will be managed per Legislation.	

Table 7.1: Priority Invasive Alien Plants by Plan Sub-region in the Cariboo Chilcotin Coast – From CCCIPC Regional Strategy.	
Species	**Legislation**
Annual sow thistle	WCA, CRD
Baby's breath	FRPA, CRD
Blueweed	FRPA, WCA, CRD
Bull thistle	FRPA
Common toadflax	WCA, CRD
Canada thistle	FRPA, WCA, CRD
Common burdock	FRPA, WCA
Common tansy	FRPA, WCA, CRD
Dalmatian toadflax	FRPA, WCA, CRD
Diffuse knapweed	FRPA, WCA, CRD
Field scabious	FRPA, WCA, CRD
Hoary alyssum	FRPA, WCA, CRD
Hoary cress	FRPA, WCA, CRD
Hound's-tongue	FRPA, WCA, CRD
Invasive Knotweeds	FRPA, CRD
Invasive Yellow hawkweed spp	FRPA (just meadow hawkweed is listed)
Leafy spurge	FRPA, WCA, CRD
Marsh plume thistle	FRPA, WCA, CRD
Meadow knapweed	FRPA, WCA, CRD
Night-flowering catchfly	WCA, CRD
Nodding thistle	FRPA, CRD
Orange hawkweed	FRPA, WCA, CRD
Oxeye daisy	FRPA, WCA, CRD
Perennial pepperweed	FRPA, WCA, CRD
Perennial sowthistle	WCA, CRD
Plumeless thistle	FRPA, WCA, CRD
Purple loosestrife	FRPA, CRD
Russian Knapweed	FRPA, CRD
Scentless chamomile	FRPA, WCA, CRD
Scotch thistle	WCA, CRD
Spotted knapweed	FRPA, WCA, CRD
St. John's wort	FRPA, CRD
Sulphur cinquefoil	FRPA, WCA, CRD
Tansy ragwort	FRPA, WCA, CRD
Velvetleaf	WCA, CRD
Wild oats	WCA, CRD
Yellow flag iris	FRPA, CRD

FRPA = Invasive Plant regulation, WCA = Weed Control Act, CRD = CRD bylaws. Bolded = CCCIPC Priority Plants.

Note that **Himalayan balsam** is a priority species in this plan, but is not currently legislated to be managed. Local government could list it in their bylaws under the Community Charter Act.

7.2 Natural Range Barriers.

Requirement.	**Source of requirement.**
1. For the purpose of section 48 *[natural range barriers]* of the Act, a person who prepares a forest stewardship plan must specify measures to mitigate the effect of removing or rendering ineffective natural range barriers.	*FPPR* Sec 18.
Applicable area	
FDU 1	
Measure.	
1. ECFL will notify affected grazing tenure holders of the general location of cutblocks and roads during the initial planning stages of block development for review and/or consult with a District Range Agrologist, and 2. Where the grazing tenure holder indicates that a range barrier will be removed or made ineffective, ECFL will make practicable efforts to reach an agreement with the grazing tenure holder and the Ministry of Forests and Range on mitigative measures, and to complete the construction of the mitigating measures, and; 3. Where the FSP holder and grazing Permittee cannot come to a practicable compromise, the FSP holder will discuss the issue with Ministry of Forests and Range range staff and will consider arbitration with a mutually agreed party as a potential means of resolution. 4. Any fence damaged by ECFL operations will be repaired to the previous condition of the fence or better subject to cattle presence, weather and other pertinent time frames.	

8 Silviculture

8.1 Stocking Standards.

Stocking standards are presented in Section 9.2 - Appendix 2. Silviculture Stocking Standards are those stated in *Establishment to Free Growing Guidebook - Cariboo Forest Region – Revised edition May 2000 and January 15, 2002 and 2004 revision*, except where stated otherwise within this FSP.

8.2 Variances from Stocking Standards.

8.2.1 Deciduous Stocking

Rationale for accepting Aspen as an Acceptable species: There are a number of factors that contribute to aspen being considered for Acceptable status. 1) Aspen is considered to be a commercial species. The growth rates of aspen in the short to midterm are expected to provide some potential volume to ease the current forecast midterm TSR volume dearth. 2) In stands where aspen is already forming a portion of the stand, aspen retention during harvesting provides stems/volume/fibre that will reach merchantable size over a shorter period of time. 3) Forest Health issues may indicate that aspen and other deciduous species will be an important buffering species to hedge against debilitating Forest Health vector attacks (e.g. from rusts, insects).

ECFL anticipates that the community may desire to plant more deciduous species (aspen, cottonwood, willow, alder and birch). One area considered is for tactical fireguard areas.

8.2.1.1 Deciduous trees left at the time of harvest are not considered to be competing at time of Free-growing evaluation. All deciduous stems > 10 cm at dbh at the time of free-growing evaluation are considered non-competing.

8.2.1.2 Aspen will be considered acceptable up to the percent of stems that existed pre-harvest (as determined from the cruise compilation or based on professional consideration of site characteristics and pre-harvest aspen/deciduous stocking. The documentation would be kept in the Cutting Permit file with Site Plan documents.). ECFL will identify the SU in the Site Plan as a Deciduous SU.

8.2.1.3 Shrub species managed for riparian, wildlife values or erosion control are to be considered non-deleterious at the time of free-growing evaluation (specific examples include dwarf shrubs, forbs, rose and soopalallie).

8.2.1.4 Deciduous /Trembling Aspen (At) Forest Health Free Growing Damage Criteria

Unless otherwise stated in regulation or an approved FSP stocking standard, an acceptable hardwood crop tree must:

- the tree pith must not be laterally displaced more than 30 cm from the location of the root-crown pith.
- not originate from a cut stump[1].

[1] Stems originating from the sides or cut surface of stumps are very susceptible to breakage at the coppice point

- have at least one live leader[2].
- not have a wound that is greater than 10% of the stem circumference nor is greater than 10% of the total length of the stem.[3].
- not have any fungal infections or insect infestations affecting tissues below the bark surface, visible without destructive sampling[4].
- not be browsed so as to limit its ability to become a crop tree.

Note: These standards apply to mixed conifer and broadleaf stands managed for oriented strand board, sawlog production or landscape-level biodiversity objectives.

8.2.2 Dwarf Mistletoe - Lodgepole Pine

Where dwarf mistletoe control treatments are conducted post-harvest, Lodgepole Pine dwarf mistletoe will not be considered to be deleterious at the time of free-growing evaluation.

To accommodate biodiversity, riparian zones may have a minimum 10 m buffer within which non-merchantable stems and advanced regeneration will be retained as practicable. See Riparian Retention Table in Section 5.5.4 and Section 8.2.5.

For harvesting proposed adjacent to Highway 20, ECFL will retain advanced regeneration and poles as practicable to provide visual screening as needed up to 200 m from the right of way fence or ditch center if no fence is present. These stems may be infested with mistletoe and other Forest Health Agents but will not be considered deleterious to growth for purposes of determining regeneration or Free Growing. See also Section 5.3.2 and 8.2.5.

In other visually sensitive areas (e.g. - Highway/travel corridors, scenic areas, Lakeshore Mgmt zones), ECFL may prescribe retention of advanced regeneration and poles as practicable to provide visual screening as needed up to 200 m from the right of way fence or ditch center if no fence is present. These stems may be infested with mistletoe and other Forest Health Agents but will not be considered deleterious to growth for purposes of determining regeneration or Free Growing. See also Section 5.3.2 and 8.2.5.

[2]The objective is that the tree has a single stem that will develop into a healthy crop tree. Accordingly, a healthy, free growing aspen tree must have an identifiable live leader. It is not important if a portion, but not all, of the leader is browsed or killed for example by venturia blight. There is no agreement on a minimum leader length of a healthy aspen tree and as a result no minimum length is prescribed.

[3] This criterion is modified from the conifer criterion, and threshold percent values are chosen subjectively. Research is needed to determine more exactly the size of an open wound at free growing assessment that is likely to limit the development of a healthy crop tree. A wound is defined as an injury in which the cambium is dead or completely removed from the tree exposing the sapwood. Measure the wound across the widest point of the exposed sapwood. Healed-over wounds (= scars) are acceptable. Causes of mechanical damage to aspen commonly include gnawing by beaver, cattle, deer, elk or moose; logging activities; or windthrow scraping. Fire or sunscald damage can also cause wounds. Injury of young aspen stems is considered an important entry court for decay organisms. Injury of mature aspen is a lesser concern since the resulting potential damage of decays before harvesting would likely be much less.

[4] Visible stem infections include cyptospora canker or sooty-bark canker, and visible insect infestations, poplar borer. The significance of some diseases, such as armillaria root disease, to aspen is unknown or uncertain, and several cannot be feasibly identified by visual features during free growing surveys.

8.2.3 Free-Growing Dates

The late free-growing date for all areas harvested under this FSP will be 20 years. There will be no stated early free-growing date.

8.2.4 Leave Tree Form, Vigour and Health

The standard for conifer stems retained from harvest as a result of meeting non-timber objectives may be varied such that all stems of appropriate species regardless of form, vigour and health will be considered acceptable. Primary examples are situations where overstory dead pine is removed and the understory vegetation, including advanced Pl or aspen regeneration, is retained for purposes such as visual/line of sight breaks, trail buffering, visual management or increased riparian protection. Anticipated frequency is expected to be low and occurrences will be identified in SPs.

Within dry alder complexes the conifer height to brush height ratio is reduced to 100% for brush species other than aspen, cottonwood, or birch (e.g. willow and alder).

8.2.5 Maximum Density

The maximum density for Lodgepole Pine leading stands (Pine stocking $\geq$ 80 % of inventory) is considered to be 25,000 countable stems per hectare.

All other species and mixed pine stands of $\leq$ 80% pine stocking by inventory will remain at 10,000 countable stems per hectare at free-growing.

8.2.6 Minimum Inter-tree Distance

Minimum Inter Tree Distance (MITD) is 2.0 metres.
The minimum inter-tree distance may be varied to 1.0 m on hygric, sub-hygric, mechanically site-prepared areas, areas affected by rock or high cattle damage/concentration; areas where climatic condition and/or cattle damage impact on seedling survival can be modified through the use of obstacle planting; areas where non-timber objectives impact on tree planting site location; areas where existing stems > 10 cm dbh preclude meeting minimal site stocking objectives at the 2.0 m spacing distance.

8.2.7 Post Spacing Densities

Post-spacing minimum density is 2200 countable stems per hectare and maximum density is 5000 countable stems per hectare unless an exception is requested as determined on a site specific basis through a professional evaluation that will consider a number of factors including crop tree species, health and vigour, site characteristics, site series and target timber product.

8.2.8 Sx as a preferred species in SBPSxc 01.

The intent of this variation is to incorporate Sx on biologically restricted areas where Sx is growing well and is expected to be a merchantable component of the stand.

9 Appendices

1. Detail Maps: 1:200,000.
2. Stocking Standards Tables.
   (The following BEC zones/series have been included in FDU 1.
   IDFdk4, IDFdw.
   ESSFxv1.
   MSdc2, MSxv.
   SBPSxc.)
3. Minimum Mature+Old and Old Seral Stage Targets.
4. Wildlife Tree Retention Targets.
5. Interpretive Forest Sites, Recreation Sites and Recreation Trails Objectives.
6. Lake Management Table.

9.1 Appendix 1 - Maps

The following maps are available with this FSP.

An overview map for the ECF Area is available separately that shows the following information:

1. Forest Range Units; CCLUP Zones; Landscape Units.
2. Trap Line numbers and areas; Guide Outfitter areas and names.
3. Biogeoclimatic Zones and Sub-zones.

The following data sets are the LUO 2011 data available on CD or at the following url: ftp://ftp.geobc.gov.bc.ca/publish/Regional/WilliamsLake/Cariboo-Chilcotin_LUOR_Order/

4. Old Growth Management Areas.
5. Critical Fish Habitat - Salmon, Bull Trout and All Other Species.
6. Back Country polygons; Grassland Benchmarks.
7. Lake Classifications; Goal 2 Protected Areas.
8. Visual Polygons.
9. Sensitive Trail Networks.
10. Wildlife Habitat Management Areas; Mule Deer Winter Ranges; Caribou areas.
11. Grizzly Bear Habitat Capability; Bighorn Sheep and Mtn. Goat Winter Ranges.
12. Community Areas of Special Concern.
13. Key/High Value Wetlands.

9.2 Appendix 2 - Stocking Standards

The following table identifies the common footnotes found in the Stocking Standards Table. A complete set of footnotes can be found at the end of the Stocking Standards Table

	Footnote		Footnote
1	elevated micro-sites are preferred	32	limited by growing-season frosts
27	partial canopy cover required for successful establishment	34	risk of snow damage
28	limited by moisture deficit	37	risk of heart rots

			Regeneration Guide							***Free Growing Guide***			
Stock	***BGC***		**Species**		**Stocking**				**Regen**	**Assessment**		**Min. Height**	
Standard	**Classification**		**Conifer / Deciduous**		**Target**	**MIN pa**	**MIN p**		**Delay**	**Ht. > Brush %**	**Latest**	**Species**	**Ht**
Number	**Zone/SZ**	**Series**	**Preferred (p)**	**Accept. (a)**	**(well-spaced/ha)**				**(Max yrs)**		**(yrs)**		**(m)**
	ESSFxv1	01	Pl[32] Se[32]	Bl[32,50] Pa	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		02	Pl Pa	Bl[28]	800	500	400		7	125	20	Pl	0.8
												Others	0.6
		03	Pl Pa		800	500	500		7	125	20	Pl	0.8
												Pa	0.6
		04	Pl Pa	Bl[28] Se[28]	1000	600	500		7	125	20	Pl	0.8
												Others	0.6
		05	Pl Pa	Bl[28] Se[28]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		06	Pl Se[32]	Bl[32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		07	Pl[32] Se[32]	Bl[32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		08	Pl[1,32] Se[1,32]	Bl[1,32]	600	400	300		7	125	20	Pl	0.8
												Others	0.6
		09	Se[1,32] Bl[1,32]	Pl[1]	800	500	400		7	125	20	Pl	0.8
												Others	0.6
	IDFdk4	01	Fd[27,32] Pl	Sx[13,28]	1200	700	600		7	125	20	Pl	1.4
												Fd	1.0
												Sx	0.8
	01 (decid)	01	Fd[27,32] Pl	Sx[13,28] At[a]	1200	700	600		7	125	20	Pl	1.0
												At	1.5
												Fd	1.0
												Sx	0.8

			Regeneration Guide							Free Growing Guide			
Stock	BGC		Species		Stocking				Regen	Assessment		Min. Height	
Standard	Classification		Conifer / Deciduous		Target	MIN pa	MIN p		Delay	Ht. > Brush %	Latest	Species	Ht
Number	Zone/SZ	Series	Preferred (p)	Accept. (a)	(well-spaced/ha)				(Max yrs)		(yrs)		(m)
	IDFdk4	02*	Fd[27,28] Pl[28]		800	500	500		7	125	20	Pl	1.0
												Fd	0.8
		03*	Fd[27,28]		800	500	500		7	125	20	Fd	0.8
		04*	Fd[27,28] Pl[28]	At[b]	1000	500	400		7	125	20	Pl, At	1.0
												Fd	0.8
		05	Fd[27,28] Pl	At[b]	1200	700	600		7	125	20	Pl, At	1.4
												Fd	1.0
		06	Pl	Sx[28,32] At[b]	1000	500	400		7	125	20	Pl, At	1.0
												Sx	0.6
		07	Fd[27] Pl	At[b]	1200	700	600		7	125	20	Pl, At	1.4
												Fd	1.0
		08	Pl Sx[32]	At[b]	1000	500	400		7	125	20	Pl, At	1.0
												Sx	0.6
		09	Fd[1,32] Pl Sx		1200	700	700		7	125	20	Pl	1.4
												Fd	1.0
												Sx	0.8
	09 (decid)	09	Fd[1,32] Pl Sx	Act[a] At[a]	1200	700	600		7	125	20	Pl	1.4
												Fd	1.0
												Sx	0.8
												At, Act	1.5
		10	Sx[1,32]	Pl[1]	1000	500	400		7	125	20	Pl	1.0
												Sx	0.6
	10 (decid)	10	Sx[1,32]	Pl[1] Act[a] At[a]	1000	500	400		7	125	20	Pl	1.0
												Sx	0.6
												At, Act	1.2
	MSdc2	01	Pl Sx[28]	Bl[28] Fd[32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		02*	Fd[28] Pl	Bl[28] Pa[53]	1000	500	400		7	125	20	Pl	0.8
												Others	0.6
		03	Fd Pl	Bl[28] Pa[53]	1000	500	400		7	125	20	Pl	0.8
												Others	0.6
		04	Pl Sx[28]	Bl[28]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		05	Sx[32] Pl[1]	Bl[32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8

			Regeneration Guide							Free Growing Guide			
Stock	BGC		Species		Stocking				Regen	Assessment		Min. Height	
Standard	Classification		Conifer / Deciduous		Target	MIN pa	MIN p		Delay	Ht. > Brush %	Latest	Species	Ht
Number	Zone/SZ	Series	Preferred (p)	Accept. (a)	(well-spaced/ha)				(Max yrs)		(yrs)		(m)
	MSdc2	06	Sx[32] Pl[1]	Bl[32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		07	Sx Bl	Pl[1]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		08	Sx[1,32]	Bl[1,32] Pl[1,32]	1000	500	400		7	125	20	Pl	0.8
												Others	0.6
	MSxv	01	Pl Sx[28,32]	Bl[16,28,32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		02	Pl[32]		1000	500	500		7	125	20	Pl	0.8
		03	Pl		1000	500	500		7	125	20	Pl	0.8
		04	Pl Sx[32]	Bl[16,28,32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		05	Pl Sx[32]	Bl[32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		06	Pl Sx[32]	Bl[16,32]	1200	700	600		7	125	20	Pl	1.0
												Others	0.8
		07	Pl Sx[32]	Bl[16,32]	1000	500	400		7	125	20	Pl	0.8
												Others	0.6
		08	Sx[1,32]	Pl Bl[1,16,32]	1000	500	400		7	125	20	Pl	0.8
												Others	0.6
		09	Sx[1,32]	Bl[1,32] Pl[1]	400	200	200		7	125	20	Pl	0.8
												Others	0.6
	SBPSxc	01	Pl		1200	700	700		7	150	20	Pl	1.4
												Sx	0.6
	Sx as Preferred	01	Pl, Sx		1200	700	700		7	150	20	Pl	1.4
	Sx as Preferred											Sx	0.6
	01 (decid)	01	Pl, Sx	At[a]	1200	700	600		7	150	20	Pl	1.0
												Sx	0.6

												At	1.5
		02a	Fd[9,11,18,28] Pl	At[b]	1000	500	400		7	150	20	Pl, At	1.0
												Fd	0.6
			Regeneration Guide							***Free Growing Guide***			
Stock	***BGC***		**Species**		**Stocking**				**Regen**	**Assessment**		**Min. Height**	
Standard	**Classification**		**Conifer / Deciduous**		**Target**	**MIN pa**	**MIN p**		**Delay**	**Ht. > Brush %**	**Latest**	**Species**	**Ht**
Number	**Zone/SZ**	**Series**	**Preferred (p)**	**Accept. (a)**	**(well-spaced/ha)**				**(Max yrs)**		**(yrs)**		**(m)**
	SBPSxc	02b	Pl	At[b]	1000	500	400		7	150	20	Pl, At	1.0
		02c*	Fd[9,11,18,28] Pl	At[b]	1000	500	400		7	150	20	Pl, At	1.0
												Fd	0.6
		03	Pl Sx[32]	At[b]	1000	500	400		7	150	20	Pl, At	1.0
												Sx	0.6
		04	Pl Sx[32]		1200	700	700		7	150	20	Pl	1.4
												Sx	0.8
	04 (decid)	04	Pl Sx[32]	At[a]	1200	700	600		7	150	20	Pl	1.4
												Sx	0.8
												At	1.4
		05	Pl[1] Sx[1,32]		1000	500	500		7	150	20	Pl	1.0
												Sx	0.6
	05 (decid)	05	Pl[1] Sx[1,32]	Act[a] At[a]	1000	500	400		7	150	20	Pl	1.0
												At, Act	1.2
												Sx	0.6
		06	Pl Sx[32]		1000	500	500		7	150	20	Pl	1.0
												Sx	0.6
	06 (decid)	06	Pl Sx[32]	Act[a] At[a]	1000	500	400		7	150	20	Pl	1.0
												At, Act	1.2
												Sx	0.6

Grassland Restoration Stocking Standards

Grassland Restoration Stocking Standards to be applied to areas within or adjacent to Grassland Benchmark zones. In these areas, ECFL will retain some larger stems, primarily expected to be fir and deciduous; will not conduct mistletoe control treatments; will not plant any conifer species; and will not attempt to increase stocking beyond what is anticipated to fill in from natural regeneration processes.

			Regeneration Guide						***Free Growing Guide***			
Stock Standard Number	***BGC***		**Species**		**Stocking**			**Regen**	**Assessment**		**Min. Height**	
	Classification		**Conifer / Deciduous**		**Target**	**MIN p-a**	**MIN p**	**Delay**	**Ht. > Brush %**	**Latest**	**Species**	**Ht**
	Zone/SZ	**Series**	**Preferred (p)**	**Accept. (a)**	**(well-spaced/ha)**			**(Max yrs)**		**(yrs)**		**(m)**
	IDFxm	01, 02, 03, 04, 05.	Fd[27,32] Pl	At[a]	0	0	0	N/A	N/A	N/A	Pl	N/A
											Fd	N/A
											At	N/A
	IDFdk3	01, 02, 03, 04, 05, 06.	Fd[27,32] Pl	At[a]	0	0	0	N/A	N/A	N/A	Pl	N/A
											Fd	N/A
											At	N/A
	IDFdk4	01, 02, 03, 04, 05, 06, 07.	Fd[27,32] Pl	At[a]	0	0	0	N/A	N/A	N/A	Pl	N/A
											Fd	N/A
											At	N/A

Uneven-aged Stocking Standards* -- Single-tree selection only

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Target from Table A standards		Target pa	MIN pa	MIN p		**Target from Table A standards**		Target pa	MIN pa	MIN p
(stems/ha)		(well-spaced/ha)				(stems/ha)		(well-spaced/ha)		
1200	1	600	300	250		**800**	1	300	150	150
	2	800	400	300			2	400	200	200
	3	1000	500	400			3	600	300	300
	4	1200	700	600			4	800	400	400
1000	1	400	200	200		**600**	1	300	150	150
	2	600	300	250			2	400	200	200
	3	800	400	300			3	500	300	300
	4	1000	500	400			4	600	400	400
900	1	400	200	200		**400**	1	200	100	100
	2	500	300	250			2	300	125	125
	3	700	400	300			3	300	150	150
	4	900	500	400			4	400	200	200

* Maximum regeneration delay is seven years. Regeneration delay can be met immediately following harvest if the residual stand has no significant damage or pest problems and meets minimum stocking standards. If regeneration is achieved immediately following harvest, earliest free growing date is 12 months after completion of harvest and the latest date is 24 months after completion of harvest.

Stand Layer Definition

Layer 1	Mature	trees >= 12.5 cm dbh
Layer 2	Pole	trees 7.5 cm to 12.4 cm dbh
Layer 3	Sapling	trees >= 1.3 m height to 7.4 cm dbh
Layer 4	Regeneration	trees < 1.3 m height

*** pa - preferred and acceptable species p - preferred species

Preferred and acceptable species and "Target from Table A standards' are as specified in Table A by biogeoclimatic ecosystem classification (BEC) site series.

	Footnote		Footnote
1	elevated microsites are preferred	28	limited by moisture deficit
4	restricted to medium-textured soils	32	limited by growing-season frosts
9	restricted to southerly aspects	34	risk of snow damage
11	restricted to crest slope positions	37	risk of heart rots
13	restricted to upper elevations of biogeoclimatic unit	50	restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
14	restricted to lower elevations of biogeoclimatic unit		
15	restricted to northern portion of biogeoclimatic unit in region	53	minor component
16	restricted to southern portion of biogeoclimatic unit in region		
17	restricted to western portion of biogeoclimatic unit in region	#	**Broadleaf Management Constraints**
18	restricted to eastern portion of biogeoclimatic unit in region	a	productive, reliable, and feasible regeneration option
19	restricted	b	limited in productivity, reliability and/or feasibility
27	partial canopy cover required for successful establishment		

9.3 Appendix 3 - Mature + Old, Old, Interior Old Forest Representation Targets

and Early Seral Forest Guidelines (% Biodiversity Forest Landbase*)

Bidwell / Lava Landscape Unit – Low Biodiversity Emphasis					
Natural Disturbance Type-Biogeoclimatic Variant	Area (ha	Mature + Old Forest (%)	Old Forest (%)		
2-ESSFxv1	4,121	>28	>9		
3-MSxv	11,804	>26	>14		
3-SBPSxc	44,683	>17	>7		
4-IDFdk4(fir group)	962	>43	>21		
4-IDFdk4(pine group)	3,669	>23	>11		
4-IDFdw(fir group)	90	>43	>21		
4-IDFdw(pine group)	734	>23	>11		
Klinaklini Landscape Unit – Intermediate Biodiversity Emphasis					
Natural Disturbance Type-Biogeoclimatic Variant	Area (ha	Mature + Old Forest (%)	Old Forest (%)		
2-ESSFxv1	7,278	>28	>9		
3-MSxv	8,484	>26	>14		
3-SBPSxc	2,355	>17	>7		
4-IDFdk4(fir group)	446	>43	>21		
4-IDFdk4(pine group)	841	>23	>11		
Puntzi Landscape Unit – High Biodiversity Emphasis					
Natural Disturbance Type-Biogeoclimatic Variant	Area (ha	Mature + Old Forest (%)	Old Forest (%)		
3-MSxv	9,564	>14	>14		
3-SBPSxc	36,332	>8	>7		
4-IDFdk4(fir group)	3,002	>22	>21		
4-IDFdk4(pine group)	8,856	>11	>11		
Pyper Landscape Unit – High Biodiversity Emphasis					
Natural Disturbance Type-Biogeoclimatic Variant	Area (ha	Mature + Old Forest (%)	Old Forest (%)		
3-SBPSxc	36,596	>8	>7		
4-IDFdk4(fir group)	8,214	>22	>21		
4-IDFdk4(pine group)	22,549	>11	>11		
4-IDFxm(fir group)	1,921	>22	>21		
4-IDFxm(pine group)	1,871	>11	>11		
Sisters Landscape Unit – High Biodiversity Emphasis					
Natural Disturbance Type-Biogeoclimatic Variant	Area (ha	Mature + Old Forest (%)	Old Forest (%)		
3-SBPSxc	28,021	>17	>7		
4-IDFdk4(fir group)	8,525	>43	>21		
4-IDFdk4(pine group)	14,692	>23	>11		
4-IDFxm(fir group)	1988	>43	>21		
4-IDFxm(pine group)	737	>23	>11		
Westbranch Landscape Unit - High Biodiversity Emphasis					
Natural Disturbance Type-Biogeoclimatic Variant	Area (ha	Mature + Old Forest (%)	Old Forest (%)		
2-ESSFxv1	4601	>42	>13		
3-MSdc2	2758	>39	>21		
3-MSxv	2736	>39	>21		
3-SBPSxc	448	>25	>10		
4-IDFdk4 (fir group)	1739	>65	>32		
4-IDFdk4 (pine group)	2895	>34	>16		
4-IDFdw (fir group)	1822	>65	>32		

4-IDFdw (pine group)	1757	>34	>16		
Tatla/Little Eagle Landscape Unit – High Biodiversity Emphasis					
Natural Disturbance Type-Biogeoclimatic Variant	Area (ha	Mature + Old Forest (%)	Old Forest (%)		
2-ESSFxv1	141	>14	>9		
3-MSxv	4,394	>14	>14		
3-SBPSxc	56645	>8	>7		
4-IDFdk4(fir group)	860	>22	>21		
4-IDFdk4(pine group)	4214	>11	>11		
Upper Tatlayoko Landscape Unit – High Biodiversity Emphasis					
Natural Disturbance Type-Biogeoclimatic Variant	Area (ha	Mature + Old Forest (%)	Old Forest (%)		
2-ESSFxv1	4858	>28	>9		
3-MSdc2	554	>26	>14		
3-MSxv	11x892	>26	>14		
3-SBPSxc	4,437	>17	>7		
4-IDFdk4(fir group)	3,185	>43	>21		
4-IDFdk4(pine group)	8855	>23	>11		
4-IDFdw(fir group)	1545	>43	>21		
4-IDFdw(pine group)	1,859	>23	>11		

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

**Interior old calculated as the percentage of the Old Forest specified in the Biodiversity Guidebook, September 1995.

9.4 Appendix 4 - Wildlife Tree Retention Targets

Landscape Unit – Biogeoclimatic Sub-unit	Minimum Wildlife Tree Retention Target (% gross harvest area)	Landscape Unit – Biogeoclimatic Sub-unit	Minimum Wildlife Tree Retention Target (% gross harvest area)
Bidwell /Lava		**Upper Tatlayoko**	
2-ESSFxv1	7	2-ESSFxv1	4
3-MSxv	6	3-MSdc2	5
3-SBPSxc	7	3-MSxv	6
4-IDFdk4(fir group)	2	3-SBPSxc	6
4-IDFdk4(pine group)	3	4-IDFdk4(fir group)	5
4-IDFdw(fir group)	6	4-IDFdk4(pine group)	6
4-IDFdw(pine group)	2	4-IDFdw(fir group)	3
Chilanko		4-IDFdw(pine group)	6
3-MSxv	6		
3-SBPSxc	7	**Klinaklini**	
4-IDFdk4 (fir group)	5	2-ESSFxv1	7
4-IDFdk4(pine group)	6	3-MSxv	6
Westbranch		3-SBPSxc	7
2-ESSFxv1	3	4-IDFdk4(fir group)	5
3-MSdc2	3	4-IDFdk4(pine group)	7
3-MSxv	5	**Puntzi**	
3-SBPSxc	4	3-MSxv	6
4-IDFdk4 (fir group)	5	3-SBPSxc	6
4-IDFdk4 (pine group)	3	4-IDFdk4(fir group)	6
4-IDFdw (fir group)	4	4-IDFdk4(pine group)	7
4-IDFdw (pine group)	5	**Pyper**	
		3-SBPSxc	7
		4-IDFdk4(fir group)	6
		4-IDFdk4(pine group)	7
		4-IDFxm(fir group)	6
		4-IDFxm(pine group)	6
		Tatla/Little Eagle	
		2-ESSFxv1	7
		3-MSxv	6
		3-SBPSxc	7
		4-IDFdk4(fir group)	5
		4-IDFdk4(pine group)	6

9.5 Appendix 5 - Interpretive Forest Sites, Recreation Sites and Recreation Trails

Proj. No.	Project Name	Type	Objectives
2614	Horn Lake	Site	2/24/2003 The objectives are to manage the Horn Lake recreation site for roaded recreation experience and maintain it in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The lake shoreline will be maintained and coniferous vegetation features will be retained. Opportunities for fishing, camping, boating, canoeing, picnicking, and wildlife and panoramic mountain viewing will be provided at the site. Access will be maintained for two wheel drive vehicles from mid May to early October.
2616	Eagle Nest Lake	Site	2003/02/04 The objectives are to manage the Eagle lake recreation site for roaded recreation experience and maintain it in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The lake shoreline will be maintained and deciduous and coniferous vegetation features will be retained. Opportunities for fishing, camping boating, canoeing, windsurfing, sailing, picnicking, and wildlife viewing will be provided at the site. Access will be maintained for two wheel drive vehicles from late April to early October
2620	Puntzi Lake	Site	2003/02/04 The objectives are to manage the Puntzi Lake recreation site for roaded recreation experience and maintain it in a safe socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The lake shoreline will be maintained and coniferous and deciduous vegetation features will be retained. Opportunities for fishing, swimming, boating, canoeing, picnicking, and wildlife viewing will be proved at the site. Access will be maintained for two wheel drive vehicles from mid May to early October
2624	Bluff Lake	Site	2003/02/04 The objectives are to manage the Bluff Lake recreation sites and access to the Bluff Lake the existing Trail for roaded recreation experience and maintain them in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The lake shoreline will be maintained and coniferous vegetation features will be retained. Opportunities for fishing, camping, boating, canoeing, picnicking, and wildlife viewing will be provided at the site. Opportunities for hiking, climbing, wildlife and panoramic mountain viewing will be provided along the trail. Access will be maintained for two wheel drive vehicles from late April to early October
2625	One Eye Lake	Site	2003/02/24 The objectives are to manage the One Eye Lake recreation site for roaded recreation experience and maintain it in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests and Range Standards. The lake shoreline will be maintained and coniferous and deciduous vegetation features will provided at the site. Access will be maintained for two wheel drive vehicles from mid May to early October.
2626	Sapeye Lake	Site	2003/02/24 The objectives are to manage the Sapeye Lake recreation site for roaded recreation experience and maintain it in a safe socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The lake shoreline will be maintained and coniferous and deciduous vegetation features will be retained. Opportunities for fishing, camping, boating, canoeing, picnicking, hiking and wildlife and panoramic mountain viewing will be provided at the site. Rough road access will be maintained for four wheel drive vehicles from mid May to early October.

Proj. No.	Project Name	Type	Objectives
2619	Pinto Lake	Site	2003/02/24 The objectives are to manage the Pinto Lake recreation site for roaded recreation experience and maintain it in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The lake shoreline will be maintained and coniferous and deciduous vegetation features will be retained. Opportunities for camping, canoeing, picnicking, and wildlife viewing will be provided at the site. Access will be maintained for two wheel drive vehicles from mid May to early October.
2632	Tatla lake	Site	2003/02/24 The objectives are to manage the Tatla Lake recreation site for roaded recreation experience and maintain it in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The lake shoreline will be maintained and deciduous and coniferous vegetation features will be retained. Opportunities for fishing, camping, boating, canoeing, picnicking and wildlife viewing, will be provided at the site. Rough road access will be maintained for two wheel drive vehicles from mid May to early October.
2633	Choelquoit Lake	Site	2003/02/24 The objectives are to manage the Choelquoit Lake recreation site for roaded recreation experience and maintain it in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The lake shoreline will be maintained and coniferous vegetation features will be retained. Opportunities for fishing, camping, boating, sailing, windsurfing, canoeing, picnicking and wildlife viewing, will be provided at the site. Rough road access will be maintained for two wheel drive vehicles from mid May to early October.
2985	Tatla Lake Ski Trails	Trail	2003/02/24 The objectives are to manage the Tatla Lake Cross Country Ski Trails for a semi-primitive recreation experience and maintain it in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The use of motor vehicles is prohibited from November 15th to may 1st of each year. The coniferous and deciduous vegetation features will be maintained along both sides of the trail for 100 meters to provide a wilderness setting. Opportunities for cross country skiing, hiking, biking, and wildlife viewing will be provided at the site. Access to the parking area will be maintained for seasonal use.
5826	Sapeye Creek Trail	Trail	2003/02/24 The objectives are to manage the Sapeye Creek and Waterlilly Recreation Trails for a semi-primitive recreation experience and maintain it in a safe, socially acceptable, and environmentally sound condition to Ministry of Forests Standards. The use of motor vehicles is prohibited. The coniferous and deciduous vegetation features will be maintained along both sides of the trail for 100 meters to provide a wilderness setting. Opportunities for cross country skiing, hiking, biking, photography and wildlife and panoramic mountain viewing will be provided at the site. Rough road access to the parking area will be maintained for four wheel drive vehicles from mid May to early October.

10 Amendment Log and Summary of Changes

Am #	Date Submitted	Type	Summary of Changes
1	June 21, 2012	Major	**Holder of the plan – No Change.** **FDU Area – No Change.** **Maps – Maps replaced by Land Use Order April 2011 Map set and spatial data.** **Text Changes:** 1 – S. 2 – Definitions amended to include High Value Wildlife trees. 2 – S. 4.2, 4.3, 4.6 & 4.7 amended to include LUO 2011 objectives set by government. 3 – S. 5.3.1 – Add LUO objectives; Result 1 – Delete Non-buffered trails; add harvest exception text from LUO. 4 – 5.3.2 – Scenic area text & objectives added. Result 2 – Add description of harvest design. Add LUO Section 18 Variance. 5 – S. 5.5.1 – LUO Objectives added. 6 – S. 5.5.3 – LUO Objectives added. Strategy 1 commitment to use LUO map and Dataset added. 7 - S. 5.5.4 – LUO Objectives added. Strategy # 3 added regarding S4 stream protection in high windthrow areas. Result # 3 and 4 added indicating increased buffers on L1 & L3 lakes & W1, W3 & W5 wetlands. 8 – Table 5.5.4 – Riparian buffer changes amended into table. 9 – S. 5.5.5 – Revised LUO WTR and OGMA objectives added. Results & Strategies amended to include references to LUO mapping and spatial data and reporting. 10 – S. 5.5.6 – LUO WTR objectives amended into text. Result & Strategy amended to include map references and spatial data. 11 – S. 5.6 – LUO Lakes & Wetland/Riparian objectives added. Results & Strategies amended to include map and spatial data. LUO Schedule 3 incorporated. Table 5.6 amended to incorporate Lakeshore Mgmt text. 12 – S. 5.7 – Grizzly Section amended to include LUO objectives and Results & Strategies amended to include LUO objectives and data sets. 13 – S. 5.8 - Moose Section amended to include LUO objectives and Results & Strategies amended to include LUO objectives and data sets. Visual & Thermal cover text added. 14 – S. 5.10 – Add reference to Grassland objective. 15 – S. 5.13 – Add LUO Grassland objective, text and spatial data reference added. Results & Strategies regarding Grassland Silv. Strategy Amended. 16 – S. 6.2 – Amend Community Areas of Special Concern (CASC) section to incorporate LUO text.

			17 – S. 7.1 - Invasive Plant Spp. List updated. 18 – Mapping – Reference to LUO Spatial data and maps added. Appendix 9.4 - Wildlife Tree Retention Target table amended to incorporate revised Targets. 19 – S. 9.6 – Lake buffer table deleted. Reference set replaced by LUO 2011 Maps and spatial data sets. 20 - S. 10 – LUO Amendments and changes made summarized in Amendment Log.