

Louisiana-Pacific Canada Ltd.



Louisiana-Pacific Canada Ltd.

Malakwa, B.C.

Support Document for :

Replacement Forest Stewardship Plan

(previous FSP #75)

Applicable to LP's operations on

TFL 55

Date: October 21, 2016

DRAFT

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1.0 INTRODUCTION

This document is not part of the FSP. The FSP Support Document, the FSP itself, and the FSP map have been prepared for TFL 55 by LP staff.

This Forest Stewardship Plan applies to Tree Farm Licence 55 (TFL 55), which is held by Louisiana-Pacific Canada Ltd. (LP). The Annual Allowable Cut (AAC) for TFL 55 is currently 90,000 m³.

The gross area of TFL 55 is 92,604 hectares. Approximately 53,585 hectares of this, or 58%, is considered productive forest. The TFL is situated in the Selkirk Mountains north of Revelstoke National Park, between Goldstream River and Mica Creek along the eastside of the Revelstoke Reservoir. Highway 23, which traverses along the eastside of the Revelstoke Reservoir to Mica town site, provides the primary access to the TFL.

TFL 55 lies in the interior wet-belt and is covered, in part, by three biogeoclimatic zones: alpine tundra (AT), interior cedar-hemlock (ICH) and Engelmann spruce-subalpine fir (ESSF). The forests are mixtures of predominately hemlock, cedar, and Douglas-fir types at lower elevations, with balsam-spruce types at higher elevations. The climate is characterized by warm summers and cool winters, marked by characteristically heavy rainfall and high levels of winter snowfall.

2.0 FOREST DEVELOPMENT UNITS

Forest Development Units (FDU's) indicate areas that will contain forest development activities and that will have a common set of objectives, results, and strategies.

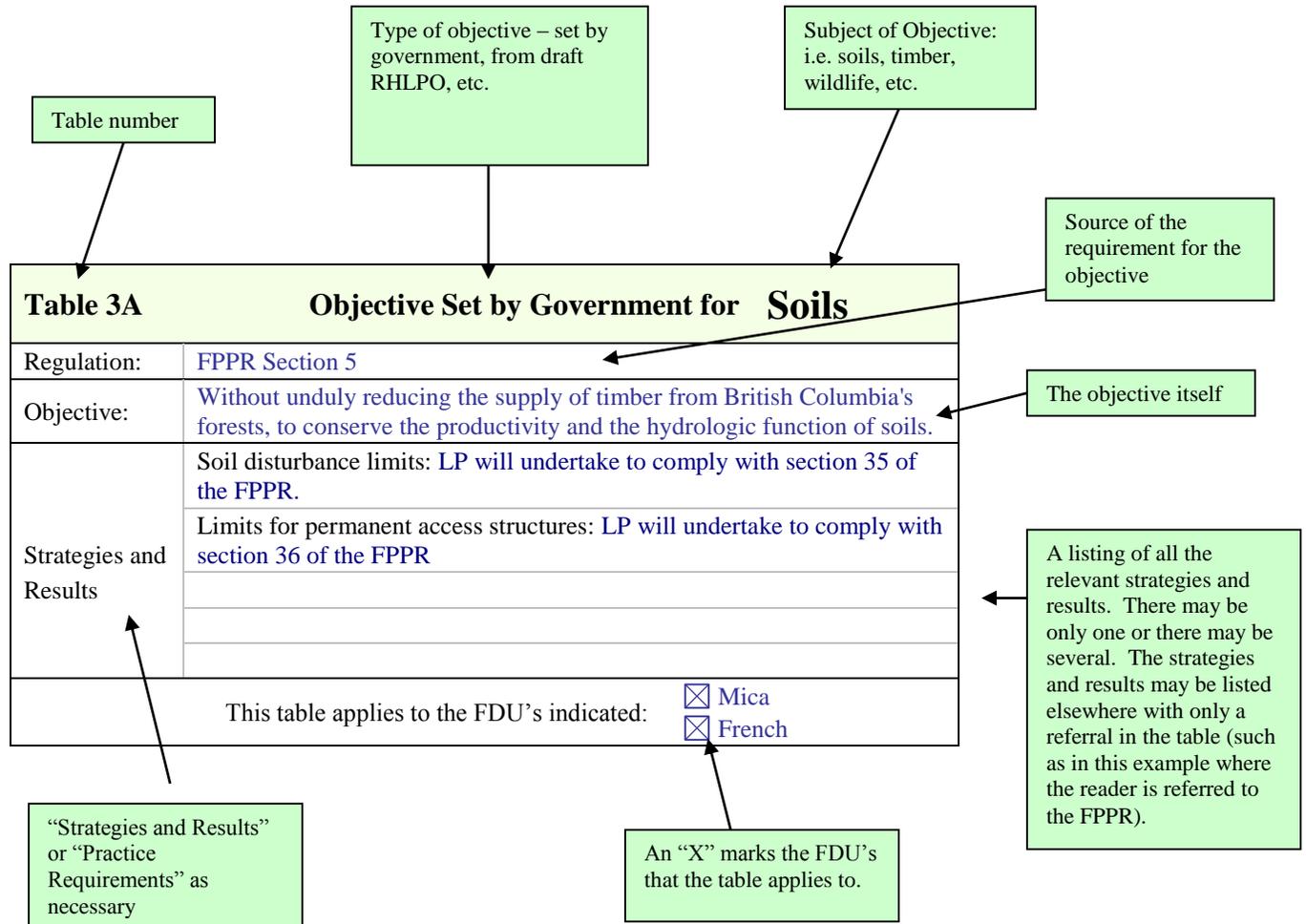
The split between the FDU's (Mica and French) generally follows the same boundaries of the Mica and French Landscape Units. No private land is included in FDU's.

3.0 OTHER PLANS

The Government Actions Regulation Order (Ungulate Winter Range #U-3-005) (GAR) and Revelstoke Higher Level Plan Order (RHLPO) are the laws that prevail over this FSP.

4.0 OBJECTIVES, STRATEGIES, AND RESULTS

The key to the FSP is the objectives, strategies, and results (or practice requirements). In the FSP document, these are summarized in Tables 2A and 2B. Then, each objective with its strategy(s) and result(s) is displayed in a table that looks something like this:



Legislation as of the date of submission

35 (1) In this section:

"first agreement holder" means an agreement holder that is not a fibre recovery tenure holder;

"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 or a fibre supply licence to cut, which holder 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).

(4.1) Despite subsections (3) and (4), if a first agreement holder is authorized to carry out timber harvesting in an area and a fibre recovery tenure holder is authorized to carry out timber harvesting in an area that overlaps with the area of the first agreement holder, the agreement

holders must not cause the cumulative amount of soil disturbance from all primary forest activities carried out on the area of overlap to exceed 25% of that area.

(4.2) Subsection (4.1) does not apply in respect of any area of overlap occupied by a permanent access structure.

(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) or the holders have not exceeded the limit described in subsection (4.1), as applicable;

(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 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 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.

Legislation as of the date of submission**Objectives set by government for wildlife**

- 7 (1) 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.
- (2) A person required to prepare a forest stewardship plan must specify a result or strategy in respect of the objective stated under subsection (1) only if the minister responsible for the *Wildlife Act* gives notice to the person of the applicable
- (a) species referred to in subsection (1), and
 - (b) indicators of the amount, distribution and attributes of wildlife habitat described in subsection (1).
- (3) If satisfied that the objective set out in subsection (1) is addressed, in whole or in part, by an objective in relation to a wildlife habitat area or an ungulate winter range, a general wildlife measure, or a wildlife habitat feature, the minister responsible for the *Wildlife Act* must exempt a person from the obligation to specify a result or strategy in relation to the objective set out in subsection (1) to the extent that the objective is already addressed.
- (4) On or after December 31, 2004, a notice described in subsection (2) must be given at least 4 months before the forest stewardship plan is submitted for approval.

Legislation as of the date of submission**Stream 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) and (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 extends to 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).

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:
 - (i) Ponderosa Pine;
 - (ii) Bunch Grass;
 - (iii) Interior Douglas-fir, very dry hot, very dry warm or very dry mild;
 - (iv) Coastal Douglas-fir;
 - (v) Coastal Western Hemlock, very dry maritime, dry maritime or dry sub-maritime;
 - (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).

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
 - (i) Ponderosa Pine,
 - (ii) Bunch Grass,
 - (iii) Interior Douglas-fir, very dry hot, very dry warm or very dry mild,
 - (iv) Coastal Douglas-fir, or
 - (v) Coastal Western Hemlock, very dry maritime, dry maritime or dry sub-maritime;
- (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).

Restrictions in a riparian management area

- 50** (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.

Restrictions in a riparian reserve zone

51 (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 licence to cut, master licence to cut or free use permit issued in respect of an area that is subject to a licence, permit, or other form of tenure issued under the *Land Act*, *Coal 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 licence, 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.

Restrictions in a riparian management zone

52 (1) A holder of a minor tenure who fells trees in a cutblock within a riparian management zone of a class described in Column 1 must ensure that

- (a) the percentage of the total basal area within the riparian management zone specified in Column 2 is left as standing trees, and
- (b) the standing trees are reasonably representative of the physical structure of the riparian management zone, as it was before harvesting:

Column 1 Riparian Class	Column 2 Basal Area to be Retained Within Riparian Management Zone (%)
S1-A or S1-B stream	≥20
S2 stream	≥20
S3 stream	≥20
S4 stream	≥10
S5 stream	≥10
S6 stream	Not applicable
All classes of wetlands or lakes	≥10

- (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.

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.

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.

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.

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.

Use of livestock in riparian areas

- 58** An agreement holder who uses livestock for site preparation or brush control for the purpose of carrying out a silviculture treatment must not
- (a) construct a livestock corral
 - (i) in a riparian management area,
 - (ii) on an area that drains directly into a fish stream or a fish-bearing wetland or lake, or
 - (iii) on an area in a community watershed that drains directly into a potable water source, or
 - (b) use the livestock in a riparian management area that is in a community watershed.

Division 4 — Watersheds

Protecting water quality

- 59** An authorized person who carries out a primary forest activity must ensure that the primary forest activity does not cause material that is harmful to human health to be deposited in, or transported to, water that is diverted for human consumption by a licensed waterworks.

Licensed waterworks

- 60** (1) An authorized person who carries out a primary forest activity must ensure that the primary forest activity does not damage a licensed waterworks.
- (2) An authorized person must not harvest timber or construct a road in a community watershed if the timber harvesting or road construction is within a 100 m radius upslope of a licensed waterworks where the water is diverted for human consumption, unless the timber harvesting or road construction will not increase sediment delivery to the intake.

Legislation as of the date of submission

Maximum cutblock size

- 64** (1) If an agreement holder other than a holder of a minor tenure harvests timber in a cutblock, the holder must ensure that the size of the net area to be reforested for the cutblock does not exceed
- (a) 40 hectares for areas located in the Kootenay Boundary Forest Region, South Coast Forest Region, Thompson Okanagan Forest Region or West Coast Forest Region, as established by the Administrative Boundaries Regulation, and
 - (b) 60 hectares for areas located in the Cariboo Forest Region, Northeast Forest Region, Omineca Forest Region or Skeena Forest Region, as established by the Administrative Boundaries Regulation.
- (2) Subsection (1) does not apply to an agreement holder where
- (a) timber harvesting
 - (i) is being carried out on the cutblock
 - (A) to recover timber damaged by fire, insect infestation, wind or other similar events, or
 - (B) for sanitation treatments, or
 - (ii) is designed to be consistent with the structural characteristics and the temporal and spatial distribution of an opening that would result from a natural disturbance, and
 - (b) the holder ensures, to the extent practicable, that the structural characteristics of the cutblock after timber harvesting has been substantially completed resemble an opening that would result from a natural disturbance.
- (3) Subsection (1) does not apply if the timber harvesting that is being carried out on the cutblock retains 40% or more of basal area of the stand that was on the cutblock before timber harvesting.
- (4) Subsection (1) does not apply if no point within the net area to be reforested is
- (a) more than two tree lengths from either
 - (i) the cutblock boundary, or
 - (ii) a group of trees reserved from harvesting that is greater than or equal to 0.25 ha in size, or
 - (b) more than one tree length from a group of trees reserved from timber harvesting that is less than 0.25 ha in size.

Harvesting adjacent to another cutblock

- 65** (1) In this section:

"adjacent" means an area that is sufficiently close to a cutblock that, due to its location, could directly impact on, or be impacted by, a forest practice carried out within the cutblock;

"existing cutblock" means a cutblock that was previously harvested under an agreement other than a minor tenure;

"new cutblock" means a cutblock on which harvesting has not yet started and that is adjacent to an existing cutblock;

"non-conforming portion" means an area within an existing cutblock on which the stocking and height requirements of subsection (3) have not been met.

- (2) An agreement holder other than a holder of a minor tenure must not harvest timber on a new cutblock, unless
- (a) all existing cutblocks that are adjacent to the new cutblock meet the requirements set out in subsection (3), or
 - (b) the combined area of the new cutblock and any non-conforming portions that are immediately adjacent to the new cutblock does not exceed the requirements relating to cutblock size set out in section 64 (1) [*maximum cutblock size*].
- (3) For the purpose of subsection (2) (a), an existing cutblock must meet the criteria set out in one of the following paragraphs:
- (a) at least 75% of the net area to be reforested of the existing cutblock is stocked such that the average height of the tallest 10% of the trees on the area is a minimum of 3 m and
 - (i) is stocked in accordance with the applicable stocking standards, as described under section 16 [*stocking standards*],
 - (ii) if the area is on the Coast, other than the Nass timber supply area, is stocked with at least 500 trees/ha of a commercially valuable species that are at least 1.3 m in height, or
 - (iii) if the area is in the Interior or in the Nass timber supply area, is stocked with at least 700 trees/ha of a commercially valuable species that are at least 1.3 m in height;
 - (b) the part of the net area to be reforested of the existing cutblock that is closest to the new cutblock
 - (i) must be at least half of the net area to be reforested,
 - (ii) is stocked such that the average height of the tallest 10% of the trees on the area is a minimum of 3 m, and
 - (iii) is stocked
 - (A) in accordance with the applicable stocking standards for that cutblock, as described under section 16,
 - (B) if the area is on the Coast, other than the Nass timber supply area, with at least 500 trees/ha of a commercially valuable species that are at least 1.3 m in height, or
 - (C) if the area is in the Interior or in the Nass timber supply area, with at least 700 trees/ha of a commercially valuable species that are at least 1.3 m in height.
- (4) Subsection (2) does not apply if section 64 (2), (3) or (4) apply to the new cutblock.

Wildlife tree retention

- 66** (1) If an agreement holder completes harvesting in one or more cutblocks during any 12 month period beginning on April 1 of any calendar year, the holder must ensure that, at the end of that 12 month period, the total area covered by wildlife tree retention areas that relate to the cutblocks is a minimum of 7% of the total area of the cutblocks.
- (2) An agreement holder who harvests timber in a cutblock must ensure that, at the completion of harvesting, the total amount of wildlife tree retention areas that relates to the cutblock is a minimum of 3.5% of the cutblock.
- (3) For the purposes of subsection (1) and (2), a wildlife tree retention area may relate to more than one cutblock if all of the cutblocks that relate to the wildlife tree retention area collectively meet the applicable requirements of this section.

(4) A fibre recovery tenure holder is exempt from this section.

Restriction on harvesting

67 An agreement holder must not harvest timber from a wildlife tree retention area unless the trees on the net area to be reforested of the cutblock to which the wildlife tree retention area relates have developed attributes that are consistent with a mature seral condition

Table 3E	Objective Set by Government for:	Cultural Heritage Resources FPPR Section 10
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Legislation as of the date of submission

10 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*.

PREAMBLE

The preamble is meant to provide context and does not form part of the order.

The Revelstoke and Area Land Use Planning Final Recommendations (October 1999) developed by the Revelstoke Minister's Advisory Committee were endorsed by government in April 2001. This document provided comprehensive guidance for the management of resource values that exist within the area. Key recommendations were selected from the report for establishment as a higher level plan order under Part 2 of the *Forest Practices Code of British Columbia Act*. Other provisions were not included in the higher level plan order because:

- they are satisfactorily addressed by the *Forest Practices Code of British Columbia Act* and the *Forest and Range Practices Act*;
- they will be addressed through provisions and procedures of other legislation;
- they do not relate to strategic and operational plans under the *Forest Practices Code of British Columbia Act* and the *Forest and Range Practices Act* and;
- the potential social and economic impacts of some provisions have not been analyzed.

Implementation of this Order should be guided by the contents of implementation policies and data preparation reports developed to support this Order. Future policy and information documents can be found on the following website- <http://srmwww.gov.bc.ca/kor/hlp/rev.htm>.

Government has established a goal of maintaining full access outside of protected areas for subsurface resource exploration and development. Consequently, the objectives established by this higher level plan order are not intended to have an impact on the permitting of subsurface resource exploration and development.

REVELSTOKE HIGHER LEVEL PLAN ORDER

ORDER ESTABLISHING RESOURCE MANAGEMENT ZONES AND RESOURCE MANAGEMENT ZONE OBJECTIVES WITHIN THE AREA COVERED BY THE REVELSTOKE AND AREA LAND USE PLAN AS A HIGHER LEVEL PLAN PURSUANT TO SECTIONS 3(1) AND 3(2) OF THE FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT (THE ACT)

PART 1

Establishment of Resource Management Zones

Pursuant to Section 3(1) of the Act, the following zone as presented on Map 1.0 (attached) is established as a Resource Management Zone (RMZ):

- A Revelstoke Resource Management Zone;**

PART 2

Resource Management Zone Objectives

The Revelstoke Higher Level Plan Order establishes Resource Management Objectives. Pursuant to Section 3(2) of the Act, objectives 1 to 4 in Part 2 of this order are established as Resource Management Zone objectives for the RMZ established above.

- 1) Biodiversity Emphasis:
 - a) For the sole purpose of implementing objective 2 (old and mature forest), biodiversity emphasis is assigned within landscape units as outlined on Map 1.1.
- 2) Old and Mature Forest:
 - a) To contribute to the conservation of biodiversity, maintain mature and old and old seral forests to the levels indicated in tables 2.1, 2.2, 2.3 and as specified in subsection b) below. Requirement levels are to be met at the biogeoclimatic subzone variant level using the variants mapped on map 2.1.

Table 2.1 Seral Distribution for Natural Disturbance Type (NDT) 1
(percentage of forest¹ area within the biogeoclimatic unit of each landscape unit by area above and below the operability line)

Biogeoclimatic Units and Seral Stage	Seral Requirements by Biodiversity Emphasis (%)		
	Low	Intermediate	High
Interior Cedar Hemlock (ICH) Mature and Old	>17	>34	>51
ICH Old	>13	>13	>19
Engelmann Spruce-Subalpine Fir (ESSF) Mature and Old	>19	>36	>54
ESSF Old	>19	>19	>28

¹This includes all Crown Land including protected areas, National Parks, Provincial Parks, any woodlot tenures that are granted following the implementation of this order, and private land in Tree Farm Licences. This does not include non-productive forest as defined in the Landscape Unit Planning Guide (March 1999).

Table 2.2 Seral Distribution for NDT 2
(percentage of forest¹ area within the biogeoclimatic unit of each landscape unit by area above and below the operability line)

Biogeoclimatic Units and Seral Stage	Seral Requirements by Biodiversity Emphasis (%)		
	Low	Intermediate	High
Interior Cedar Hemlock (ICH) Mature and Old	>15	>31	>46
ICH Old	>9	>9	>13
Engelmann Spruce-Subalpine Fir (ESSF) Mature and Old	>14	>28	>42
ESSF Old	>9	>9	>13

Table 2.3 Seral Distribution for NDT 3
(percentage of forest¹ area within the biogeoclimatic unit of each landscape unit by area above and below the operability line)

Biogeoclimatic Units and Seral Stage	Seral Requirements by Biodiversity Emphasis (%)		
	Low	Intermediate	High
Interior Cedar Hemlock (ICH) Mature and Old	>14	>23	>34
Interior Cedar Hemlock (ICH) Old	>14	>14	>21

- b) In Tree Farm License 55 and 56, there are no mature and old seral requirements for low biodiversity emphasis areas and old seral requirements are reduced to 1/3 of the old seral requirements in low emphasis areas. Full old seral requirements must be achieved within 240 years.
- c) Seral requirements must be met independently above and below the operability line for each variant within a landscape unit (map 2.1).
- d) Seral requirements for c) above can be adjusted provided:
 - i) the seral requirements are achieved for the combined area above and below the operability line within a biogeoclimatic unit and within a landscape unit and old growth conservation values are maintained or enhanced considering the stand age, presence of old growth attributes, successional status, human impact, dispersion/connectivity of the stand, and the rarity of the stand or;
 - ii) the regional director Ministry of Sustainable Resource Management (MSRM) is satisfied that such adjustments to seral targets will benefit caribou habitat.
- e) Mature and old and old seral forests are defined as shown in Table 2.4.

Table 2.4 Mature and Old and Old Seral Forest Age Definitions

NDT	Biogeoclimatic Unit	Mature and Old Seral Age (years)	Old Seral Age (years)
1	ICH	>100	>250
1	ESSF	>120	>250
2	ICH	>100	>250
2	ESSF	>120	>250
3	ICH	>100	>140

- f) Where a registered professional forester or registered professional biologist determines that a forest stand has sufficient biological value to be classified as mature and old or old seral forest considering the stand age, presence of old growth attributes, size of the stand (ha), the amount of human impact, dispersion/connectivity of the stand and rarity of the stand, then that stand may be used in meeting the targets as opposed to solely using age provided:
 - i) The area identified is mapped and the map(s) are available for review by government and to other licensees with adjacent operating areas and;
 - ii) the areas are tracked and are incorporated in seral analysis reports;
- g) Where minimum seral requirements can not be achieved due to deficits in suitably aged stands, deficits must be recruited from the oldest available stands within the applicable unit. An alternate recruitment area to replace a stand recruited above may be used provided:
 - i) the area identified is equal or larger in size;
 - ii) the area has equal or superior value for future old growth conservation, considering stand age, elements of old growth attributes, size of the stand (ha), the amount of human impact, dispersion/connectivity of the stand and rarity of the stand and;

- iii) the area identified is mapped and the map(s) are available for review by government and available to other licensees with adjacent operating areas and;
 - iv) the areas are tracked and incorporated in seral analysis reports.
- h) Where mature and old or old seral forest is damaged or destroyed by natural events (fire, insect infestation, blowdown, etc.) in a seral deficit area, that forest stand can be salvaged provided the stand is no longer suitable to contribute to old growth conservation considering old growth attributes.
- i) Old seral requirements contained in Objective 2 of this order will cease to have effect upon the establishment of spatial objectives identifying Old Growth Management Areas (OGMA's) by the Minister or his designate, provided the area of OGMA's established is consistent with the old seral requirements noted above.
- 3) Caribou:
- a) Contribute to maintenance and viability of the existing Mountain Caribou subpopulations by retaining seasonal habitats according to the Caribou habitat requirements shown in Table 3.1, within the Caribou habitat areas shown on Map 3.1, and subject to the following conditions in b) through f).

Table 3.1 Caribou Habitat Requirements

Location	BEC Zone	Minimum forest retention area		Forest age class
Above Caribou Line	ESSF Parkland	100%		All age classes
	ESSF	≥70%		≥8
	ICH	≥70%		≥8
Below Caribou line	ESSF	Option 1	≥30%	≥8
			≥10%	9
			Plus 20% Partial cut (with minimum 65% basal area maintained)	≥8
	Option 2	≥40%	≥8	
		≥10%	9	
	ICH	≥40%	≥8	
		≥10%	9	

- b) Maintain mature and old and old seral forests to the levels indicated in tables 2.1 and 2.2 in those areas identified as intermediate biodiversity management on map 3.1. Mature and old and old are defined as shown in Table 2.4.
 - c) For all zones in the Caribou Habitat Requirements table and areas identified as intermediate biodiversity management on map 3.1, forest cover requirements are determined by applying percentages to the Crown forested landbase within mapped caribou habitat of each landscape unit. For this objective, Crown forested land base excludes Provincial Parks, Protected Areas, Ecological Reserves and Federal Parks. The resultant forest cover area requirements are applied to slopes less than 80 percent.
 - d) Immature caribou habitat identified on Map 3.1 does not currently contribute to meeting forest retention targets. A spatially explicit recruitment strategy must be in place prior to any harvesting in this area and once the recruitment strategy is in place, the immature area will contribute to caribou forest retention targets.
 - e) The "Caribou Line" referred to in Table 3.1 is defined as the Operability Line in effect during 1994 and as shown on Map 3.1.
 - f) Where there are deficits in minimum forest retention area percentages, deficits must be recruited from the oldest available stands within the mapped caribou habitat of each landscape unit. The Regional Director Ministry of Sustainable Resource Management (MSRM) may approve an alternate caribou habitat recruitment strategy provided:
 - i) the strategy has been developed by a professional biologist;
 - ii) the strategy contains a professional opinion from the registered biologist indicating that the strategy will benefit caribou habitat in the future;
 - iii) the strategy is spatially explicit;
 - iv) the strategy is not in conflict with any existing caribou recovery plan for the specific herd;
 - v) and the Regional Director MSRM is satisfied that the strategy will benefit caribou habitat.
- 4) Grizzly Bear Management:
- a) Contribute to the viability of existing Grizzly Bear populations by retaining a minimum 50 metre width of forest cover adjacent to high value habitat on one side of the avalanche chute, where timber harvesting is proposed parallel to the high value habitat and one of the following conditions apply:
 - i) both sides of the avalanche chute are proposed for harvest;
 - ii) only one side of the avalanche chute is forested;
 - iii) the average forest cover height within 50 metres on either side of the avalanche chute is less than 10 metres; or
 - iv) the width of the forested area is less than 50 metres on either side of the avalanche chute.
 - b) Mature and old and old seral forests are to be used in meeting (a) above, if in implementing Objective 2, mature and old and old seral forests must be maintained in the timber harvesting land base. In the absence of such opportunities, forest cover with a minimum height of 10 metres is to be maintained.

- c) High value habitat within an avalanche chute is defined as an area that is:
- i) A herb or low shrub vegetation communities as defined in the BC Land Cover Classification Scheme;
 - ii) Situated on slopes < 70%;
 - iii) Situated on warmer aspects northeast through to northwest (45 degrees through to 315 degrees) and;
 - iv) Situated in an avalanche chute that is 20 metres wide or greater between forested edges, excluding forest stands situated within the avalanche chute.

PART 3

Monitoring and review

The implementation of the higher level plan order will be monitored on an ongoing basis to assess the social, economic and environmental impacts of the order. Government may initiate a review of the plan to deal with specific issues or where the plan is felt to be outdated. Government may also initiate a full review of this order where a forest licensee or local government can show that this order, variances to this order or other circumstances outside the plan such as a Caribou recovery plan have a material adverse impact on timber supply or the delivered cost of wood.

PART 4

Filing the Order

This order will be filed with Regional Director, Southern Interior Region, Ministry of Sustainable Resource Management on March 25, 2005.

PART 5

Effective Date

This order comes into effect immediately. Despite subsection 16 (2) of the *Forest and Range Practices Act*, all forest stewardship plans submitted after the effective date must be consistent with this order.

The Honourable George Abbott
Minister of Sustainable Resource Management

Date

Revelstoke

Preamble

The preamble provides background and context but does not form part of the legal order.

This order is for the purposes of facilitating the Mountain Caribou Recovery Implementation Plan announced on October 16, 2007.

Habitat management direction for mountain caribou is being consolidated under a few legal tools. To facilitate that goal, this order cancels caribou habitat management objectives in the Revelstoke order March 2005, and eliminates duplication or conflicts in management direction.

MINISTRY OF AGRICULTURE AND LANDS

MINISTERIAL ORDER

**ORDER - REVESTOKE - 01
REVELSTOKE HIGHER LEVEL PLAN ORDER
CANCELLING THE CARIBOU OBJECTIVE IN THE REVELSTOKE
HIGHER LEVEL PLAN ORDER**

Relationship with *Forest and Range Practices Act* Objectives

1. Pursuant to section 93.4 of the *Land Act* this order amends the Revelstoke Higher Level Plan Order (Revelstoke HLP) made by the Minister of Sustainable Resource Management on March 25, 2005.

The Revelstoke HLP order is amended as follows

2. Objective 3, Table 3.1 and Map 3.1 of the Revelstoke HLP order are cancelled.

Transition

3. This order takes effective when notice of this order is posted in the Gazette.


Steve Carr, Chief Executive Officer
Ministry of Agriculture and Lands

Jan 8/09
Date

Revelstoke Higher Level Plan Order Amendment 02

Preamble

The preamble is meant to provide context and does not form part of the order.

Part 3 of the 2005 Revelstoke Higher Level Plan Order states that the order will be monitored on an ongoing basis to assess the social, economic and environmental impacts of the order.

The implementation in 2009 of legal orders under the Mountain Caribou Recovery Strategy impacts the issues dealt with this order by (a) protecting additional areas which are suitable for biodiversity conservation and (b) increasing constraints on timber supply.

A review of the biodiversity objectives of the order has been completed by government and this amendment has been initiated to provide the appropriate social, economic and environmental balance for the Revelstoke Higher Level Plan Order area. The intent of this amendment is to balance timber supply impacts while maintaining protection of biodiversity.

**MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE
OPERATIONS**

MINISTERIAL ORDER

**ORDER – REVELSTOKE – 02
REVELSTOKE HIGHER LEVEL PLAN ORDER
AMENDMENT TO OBJECTIVES 1 (BIODIVERSITY EMPHASIS)
AND 2 (OLD AND MATURE FOREST)**

Part 1 - Interpretation

Relationship to Forest and Range Practices Objectives

Pursuant to Section 93.4 of the *Land Act* this order amends the Revelstoke Higher Level Plan Order (Revelstoke HLP) made by the Minister of Sustainable Resource Management on March 25, 2005.

Part 2 – Definitions

The Revelstoke HLP is amended to include the following definitions:

In this order:

1. 'Crown forested land base' means the forested land that contributes to forest objectives such as landscape-level biodiversity, wildlife habitat and visual quality including forested areas that are within protected areas, National parks, Provincial Parks, any woodlot licence tenures that are granted following the approval of the March 25, 2005 Revelstoke HLP, and private lands within Tree Farm Licenses, but not including non-productive forest areas with tree species.
2. 'Non-productive forest' means areas not covered with productive forest including rock, swamp, alpine forest areas, areas occupied by non-commercial tree or brush species and all low-volume deciduous forest types.

Part 3 - Amendments

1) **Biodiversity Emphasis:** of the Revelstoke HLP is repealed and replaced with the following:

1) **Biodiversity Emphasis:**

For the sole purpose of implementing objective 2 (Old Forest), biodiversity emphasis is assigned within landscape units as outlined on Map 1.1.1 dated June 30, 2011 as attached.

2) **Old and Mature Forest,** of the Revelstoke HLP is repealed and replaced with the following:

2) **Old Forest:**

a) To contribute to the conservation of biodiversity, maintain old seral forests to the levels indicated in Tables 2.1 and 2.2.

Table 2.1 Old Seral Distribution for Natural Disturbance Type 1

Biogeoclimatic Units	Seral Requirement by Biodiversity Emphasis (%)		
	Low	Intermediate	High
Interior Cedar Hemlock (ICH)	>13	>13	>19
Engelmann Spruce-Subalpine Fir (ESSF)	>19	>19	>28

Table 2.2 Old Seral Distribution for Natural Disturbance Type 2

Biogeoclimatic Units	Seral Requirement by Biodiversity Emphasis (%)		
	Low	Intermediate	High
Interior Cedar Hemlock (ICH)	>9	>9	>13

b) Excepting Landscape Unit R3 on Map 1.1.1, old seral requirements are reduced down to 1/3 of the seral requirements identified in Tables 2.1 and 2.2, within areas identified as low biodiversity emphasis on Map 1.1.1 dated June 30, 2011 as attached.

c) Full old seral requirements must be achieved within 240 years.

d) Requirement levels, as expressed in Tables 2.1 and 2.2, are to be met at the biogeoclimatic subzone variant level using the variants mapped on Map 2.1.1 dated June 30, 2011 as attached.

e) Seral requirements in Tables 2.1 and 2.2 are expressed as a percentage of the Crown forested land base. Old seral forests are defined as shown in Table 2.3.

Table 2.3 Old Seral Forest Age Definitions

Natural Disturbance Type (NDT)	Biogeoclimatic Unit	Old Seral Age (years)
1	ICH	>250
1	ESSF	>250
2	ICH	>250

f) Where a registered professional forester or registered professional biologist determines that a forest stand has sufficient biological value to be classified as old seral forest considering the stand age, presence of old growth attributes, size of the stand (ha), the amount of human impact, dispersion/connectivity of the stand and rarity of the stand, then that stand may be used in meeting the seral target as opposed to solely using age provided a rationale is documented and the area is mapped.

g) Where minimum seral requirements cannot be achieved due to deficits in suitably aged forest stands, deficits must be recruited from the oldest available forest stands within the applicable unit or through an alternate recruitment strategy developed by a registered professional forester or registered professional biologist that identifies a forest stand area that would be equal or superior in terms of old growth potential considering forest stand age, elements of old growth attributes, size of the stand (ha), the amount of human impact, dispersion/connectivity of the stand, rarity of the stand.

h) Where a recruitment strategy is developed under paragraph g), the rationale for choosing the forest stand area must be documented and mapped.

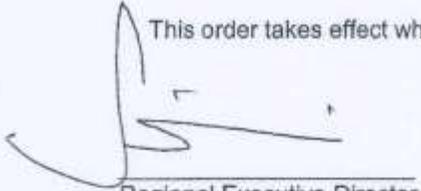
i) Where old seral forest is damaged or destroyed by natural events (fire, insect infestation, blow down, etc.) in a seral deficit area, that forest stand can be salvaged provided the stand no longer contains suitable old growth attributes to be considered old seral forest.

Part 4 - Implementation

Maps 1.1 and 2.1 are repealed.

Effective Date

This order takes effect when notice of this order is posted in the B.C. Gazette.



Regional Executive Director
Kootenay Boundary Region
Ministry of Forests, Lands and Natural Resource Operations

2011/12/16
Date

**ORDER – Ungulate Winter Range****# U-3-005****Mountain Caribou – Revelstoke Shuswap Planning Unit**

This order is made under the authority of sections 9(2) and 12(1) of the *Government Actions Regulation* (B.C. Reg. 582/2004) (GAR).

1. The Deputy Minister of Environment, being satisfied that
 - i. the following areas contain habitat that is necessary to meet the winter habitat requirements for mountain caribou (*Rangifer tarandus caribou*), and
 - ii. the habitat requires special management that is not otherwise provided for under GAR or another enactment.
 orders that
 - a) this order cancels and replaces the order that became effective on February 12, 2009, entitled "ORDER – Ungulate Winter Range #U-3-005",
 - b) the areas shown in the map set out in the attached Schedule A (U-3-005) and contained in the ungulate winter range (UWR) spatial layer stored in the Land and Resource Data Warehouse (*tuwr_bc*) are established as ungulate winter range U-3-005 for mountain caribou. The centre point of the line on the attached Schedule A is what establishes the UWR boundary, and
 - c) if there is a discrepancy between the areas shown in the map set out in the attached Schedule A and the UWR spatial layer stored in the Land and Resource Data Warehouse (*tuwr_bc*), the areas as detailed in the UWR spatial layer will take precedent.

2. The Deputy Minister of Environment, being satisfied that
 - i. the general wildlife measures (GWMs) described below are necessary to protect and conserve the habitat of mountain caribou, and
 - ii. GAR or another enactment does not otherwise provide for that protection or conservation.
 orders that
 - a) the GWMs outlined in Schedule 1 are established for UWR U-3-005.

Schedule 1 – General Wildlife Measures applicable to UWR U-3-005

Definitions:

Words and expressions not defined in this order have the meaning given to them in the *Forest and Range Practices Act* (FRPA) and the regulations made under it unless context indicates otherwise.

helicopter landing means a location where individuals disembark the helicopter, most often at the top of a ski run.

helicopter pickup means a locations where individuals embark the helicopter, most often at the bottom of a ski run.

incursion means new timber harvesting or road construction that crosses an UWR boundary and occurs within an UWR unit.

mineral exploration activity means an activity involving the cutting of trees or construction and or maintenance of roads and trails related to the exploration and development of a mineral or placer tenure under the *Mineral Tenures Act* and which requires a Notice of Work permit under the *Mines Act*.

mineral cell means a Mineral Titles Online claim acquisition unit and is 16 to 21ha, depending on latitude.

ski run development means cutting non-merchantable timber (<15cm diameter at stump height for PI, < 20cm diameter at stump height for all other species), and removing hazardous stems through primarily hand falling techniques. This includes glading in mature forests, cutting in old burns, spacing in avalanche chutes and alder cutting. This is not considered logging, as no cut trees are extracted from the area.

snow trail means winter snow trails for cat-ski travel. They are developed using snow and may have trees cut or removed for access. Snow trails rarely have side-cuts into mineral soils.

treatment area means the specific geographic area identified in tenure management plans for adventure tourism tenure holders as an individual run and referred to as the "identified ski terrain" or "ski-pod". Treatment areas can be defined spatially as having a running length and width.

UWR unit means a portion of UWR U-3-005 that is discrete from any other portion. i.e. not contiguous with another portion.

General Wildlife Measures:

1. Timber harvesting and road construction must not occur within UWR U 3-005 (the UWR) except as provided in GWMs 2, 3, 4, 5, and 6.
2. GWM 1 does not apply to a portion of the UWR (the portion) if
 - a) timber harvesting and road construction in the portion would facilitate access to timber harvesting opportunities outside of the UWR;
 - b) there is no other practicable option to access those timber harvesting opportunities outside of the UWR;
 - c) timber harvesting and road construction activities within the portion are conducted to the minimum extent necessary to access those timber harvesting opportunities outside of the UWR; **and**
 - d) once access through the portion to the area outside of the UWR is no longer required to meet harvesting needs and silviculture obligations, roads within the portion are promptly deactivated as per sections 82(1)(a), (b), and (c) of the *Forest Planning and Practices Regulation* (FPPR).
3. GWM 1 does not apply to the area of an incursion if
 - a) the incursion is to provide for a logical harvesting boundary or a logical road location that utilizes a physical feature or administrative boundary;
 - b) the area of incursion does not exceed 5 hectares;
 - c) the area of an individual harvest unit within the UWR unit is less than the area of the same harvest unit outside of the UWR unit;
 - d) the total cumulative area of incursions for multiple harvest units and clearing width for roads does not exceed 20 hectares or 5% of the total area of the UWR unit, whichever is greater; **and**
 - e) if the area of incursion exceeds two hectares, prior to timber harvesting or road construction occurring in the area of incursion
 - i. an alternative area of equivalent or better quality caribou habitat is identified outside of the UWR, but within the same TSA or TFL as the incursion, **and**
 - ii. the mapped location of the alternative area is provided to the office of the Regional Manager of the Ministry of Environment (MoE), and the District Manager of the Ministry of Forests and Range (MoFR).
4. Timber harvesting may occur within the UWR to the extent necessary to create guyline tiebacks for timber harvesting.

Mineral Exploration Activities

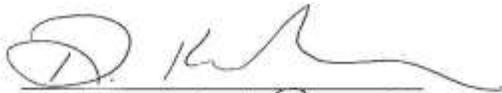
5. GWM 1 does not apply for the purposes of mineral exploration activities if:
 - a) exploration activities occur outside of the peak calving period of May 15th – June 15th;
 - b) exploration activities use existing clearings, trails and roads unless it is not practicable to do so;

- c) new trails and roads are not built in areas closed to snowmobile use under the *Wildlife Act* using *Motor Vehicle Prohibition Regulation*, Schedule 7, Section 7.1;
- d) any necessary tree harvesting avoids mature stands (≥ 80 years old) and avoids the removal of lichen-bearing trees, unless it is not practicable to do so;
- e) an individual forest opening (defined as the total tree harvested area created for the purposes of mineral exploration and mining activity) is not greater than 1ha, not including forest openings for the purposes of building trails and roads;
- f) the total of individual forest openings (defined as the total tree harvested area created for the purposes of mineral exploration and mining activity), including those created for the purposes of building trails and roads does not exceed:
 - i. 10 percent of the mineral cell, OR
 - ii. 10 percent of any defined aggregate of mineral cells up to a maximum of 25 mineral cells;
- g) new trails and roads do not have a running width greater than 6m except for the purposes of safety or culvert placement; and
- h) actions are taken on newly constructed or reconstructed trails and roads to restrict access. This will be site-specific and could include, but is not limited to:
 - i. Use of signage and gates on active trails and open roads where practicable;
 - ii. Use of signage and safe (defined as large and clearly visible), impassable barricades across seasonal or permanently deactivated road surface widths.

Guided Adventure Tourism Activities

- 6. GWM 1 does not apply for the purposes of guided adventure tourism activities if:
 - a) For the purposes of ski run development, construction and maintenance:
 - i. ski run development does not occur within the calving period of May 15th to June 15th;
 - ii. use of existing forestry openings or natural openings is maximized in order to minimize cutting in treatment areas;
 - iii. individual tree spacing within treatment areas is 5-8m, with retention of forest 'clumps' (10-20 trees or 1-2 tree lengths in size) spaced at <100m intervals throughout the treatment area;
 - iv. >90% of conifer stems >20cm DBH in treatment areas are retained from cutting. The full range of tree species, ages and sizes must be represented following treatment, similar to pre-treatment forest stand species composition and size-class distribution;
 - v. individual ski run development/treatment areas are separated from adjacent treatment areas by an area at least 3-4 times the treatment area;
 - vi. forest stands with trees bearing lichen on slopes <40% are avoided when selecting treatment areas, unless there is no other practicable option;
 - vii. any harvesting avoids mature stands (>80 yrs old) and avoids removal of trees bearing lichen, unless there is no other practicable option; and
 - viii. areas of forest stands requiring removal of large veteran legacies or a significant number of standing dead snags to make the work site safe shall be avoided, unless there is no other practicable option.

- b) For the purposes of helicopter landings and pickup site development, construction and maintenance::
- i. helicopter landing and pickup site development does not occur within the calving period of May 15th to June 15th;
 - ii. use of existing forestry openings or natural openings is maximized in order to minimize cutting when selecting helicopter landings and pickup sites;
 - iii. where harvesting is required the amount of cutting will not result in the total opening size to exceed 1 ha; and
 - iv. any harvesting avoids mature stands (>80 yrs old) and avoids removal of trees bearing lichen, unless there is no other practicable option.
- c) For the purposes of snow trail development, construction and maintenance:
- i. snow trail development does not occur within the calving period of May 15th to June 15th;
 - ii. snow trail development does not occur in areas closed to snowmobile use under the Wildlife Act using Motor Vehicle Prohibition Regulations Schedule 7, Section 7.1;
 - iii. existing forestry openings or natural openings are used to minimize cutting when developing snow trails;
 - iv. the volume of timber to be removed does not exceed 50m³ of per 3 km of individual trail when developing a snow trail. An individual snow trail is defined as a contiguous snow trail route used by a snow-cat machines for the purpose of transporting skiers to skiable terrain;
 - v. any harvesting avoids mature stands (>80 yrs old) and avoids removal of trees bearing lichen, unless there is no other practicable option; and
 - vi. actions are taken on snow trails to restrict summer access. This will be site-specific and could include, but not limited to the use of large, impassable boulders, root balls, and felled trees.



Signed this 9 day of Dec., 2009
Doug Konkin, Deputy Minister
Ministry of Environment

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Appendix 1:

The following information is provided by MoE as background information and support to the order establishing UWR U-3-005. This appendix is not part of the order.

1. **Activities to which the order does not apply:** Section 2(2) of the *Government Actions Regulation* states

An order under any of sections 5 to 15 does not apply in respect of

(a) any of the following entered into before the order takes effect:

(i) a cutting permit;

(ii) a road permit;

(iii) a timber sale licence that does not provide for cutting permits;

(iv) a forestry licence to cut issued by a timber sales manager under section 47.6 (3) of the Forest Act;

(v) subject to subsection (3), a minor tenure,

(b) a declared area,

(c) areas described in section 196 (1) of the Act, and

(d) areas referred to in section 110 of the Forest Planning and Practices Regulation.

2. **Compliance with the GWMs and Exemptions:** If timber harvesting and road building activities cannot be carried out in compliance with the established GWMs, an exemption is required from the requirement to comply with the GWMs if the activities are to proceed. The authority to consider an exemption is provided in section 92(1) of the FPPR. An exemption may be provided if the Minister's delegate (MoE Regional Manager, Environmental Stewardship Division, for the region that the UWR is located) is satisfied that the intent of the GWM will be achieved or that compliance with the provision is not practicable, given the circumstances or conditions applicable to a particular area.

If an exemption is desired, an exemption application should be submitted to the Minister's delegate with a rationale describing the nature of the problem and options to integrate UWR conservation with proposed activities. This submission will assist in timely consideration of the matter, and will inform the conditions, if any, of the exemption that may be granted prior to commencement of activities. Upon receipt of a complete exemption application, a determination will normally be made within 14 days of arrival. Incomplete packages will be returned to the proponent for re-submission.

Forest Health

Any activities to address forest health factors within the UWR that cannot be accommodated by the established GWMs will require an exemption if they are to proceed. This approach is being taken as a short term measure until final GWM language can be developed to identify those specific circumstances where the requirements of no timber harvesting and road building should not apply to activities related to address forest

health factors, and therefore an exemption would not be required. The final GWMs will be consistent with the intent and direction contained in Forest Health report once it is finalized. It is MoE's intention that these GWMs will be completed and that U-3-005 will be considered for amendment to include these GWMs prior to late mid-2009.

3. **GWM 2:** The intent of GWM 2 is to identify those specific circumstances where the requirements of no timber harvesting and no road building do not apply in order to provide access to timber that has been isolated by the no harvest zone boundary. All the conditions in GWM 2 must be met. Where the conditions cannot be met an exemption is required.
4. **GWM 3:** The intent of GWM 3 is to identify those specific circumstances where the requirements of no timber harvesting and no road building do not apply in order to provide operational flexibility around no harvest zone boundaries. The intent of this GWM is to recognize that issues arise when reconciling a mapped boundary, often mapped at a much smaller scale, to a line on the ground. All the conditions in GWM 3 must be met. Where the conditions cannot be met an exemption is required.
GWM 3(d) - MoE will work with MoFR to track the harvesting and road building that has occurred within the no harvest zone and make this information available to *Forest Act* agreement holders in order to meet the requirements of GWM 3(d).
GWM 3(e) - The requirement to provide the location of an alternative area of equivalent or better quality caribou habitat to the MoE regional office will allow MoE to amend the no harvest boundary to include these areas in the future.
5. **GWM 5:** When conducting mineral exploration activities within the no harvest zone, the requirements of no timber harvesting and no road building do not apply if the conditions outlined in GWM 5 are met. These conditions are consistent with Notice of Work permit conditions that have been developed to address mineral exploration activities in mountain caribou habitat (see document titled "Notice of Work Permit Conditions and Operational Guidance for Mineral Exploration Activity in Mountain Caribou Habitat"). Where activities are carried out consistent with the permit conditions, activities will also be consistent with the conditions outlined in GWM 5 and can proceed without an exemption from the Ministry of Environment. Where either the conditions outlined in GWM 5 or associated Notice of Work permit conditions cannot be met, an exemption will be required from the Ministry of Environment prior to work proceeding. In addition to the conditions outlined in GWM 5 persons conducting mineral exploration activities should also consider the operational guidance that has been developed and available in the document referenced above. Permit conditions 9 and 10 have not been included in the conditions outlined in GWM 5 because these are not activities managed under the *Forest and Range Practices Act*.
6. **GWM 6:** When conducting activities associated with guided adventure tourism, specifically the development of ski runs, helicopter landing and pick up sites and snow trails, the requirements of no timber harvesting and no road building do not apply if the

conditions outlined in GWM 6 are met. These conditions are consistent with the standard operating practices developed for these activities (see the document titled "Standard Operating Practices for Ski Run Development, Helicopter Landing and Pickup Site Development, and Snow Trail Development in Mountain Caribou Habitat"). Where activities are carried out consistent with the standard operating practices, activities will also be consistent with the conditions outlined in GWM 6 and can proceed without an exemption from the Ministry of Environment. Where either the conditions outlined in GWM 6 cannot be met, an exemption will be required from the Ministry of Environment prior to work proceeding. In addition to the conditions outlined in GWM 6 persons conducting guided adventure tourism activities should also consider the operational guidance that has been developed and available in the document referenced above.

7. **Adaptive Management:** The Mountain Caribou Science Team identified key uncertainties related to mountain caribou ecology and the efficacy of proposed recovery actions. Government is committed to supporting the implementation of an adaptive management strategy. Both the implementation and effectiveness of management actions will need to be monitored. Implementation efforts will need to be monitored closely and assessed to determine whether the strategy needs to be modified in order to meet recovery goals. In addition, research addressing knowledge gaps should be supported. The Recovery Implementation Plan includes the development of adaptive management and effectiveness monitoring plans for habitat, recreation and predator-prey management efforts.

Wording for this Objective is contained in pages 6-8 of the RHLPO listed in Table 4A. (above)

Attributes:

Species:
Coeur d'Alene
Salamander

Attribute	Characteristics
Size:	Generally less than 20 ha in size although the size should be based on the extent of suitable aquatic habitat, micro-climate and hydrological considerations. Areas managed for this species should include a 20-40 m management zone around the core area. The core area should include all suitable habitat (i.e., deep wet talus) plus adjacent suitable foraging habitat (forested habitat within 50 m of the wet bedrock or talus). The area should encompass known observations and suitable aquatic habitat.
Habitat Attributes	Wet microhabitats are characterised by waterfall splash zones, rock seepages, fissured bedrock in association with streams, deep wet talus. Observations are more common in areas of steep topography with surficial bedrock. Minimum canopy cover at stream sites of 42% with a mean of 83% (+/- 15%). Canopy cover at seepage sites of 57% (+/- 15%).
Elevation	500 - 1550 m.



December 30, 2004

**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF
WILDLIFE HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN
THE COLUMBIA FOREST DISTRICT**

This Notice is given under the authority of section 7(2) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/04) and 9(3) of the *Woodlot Licence Planning and Practices Regulation* (B.C. Reg. 21/04).

The following Notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk outlined in Schedule 1.

Approved Wildlife Habitat Areas are not included in the indicators of amount, distribution and attributes for each of the species outlined in Schedule 1. As per section 7(3) of the *Forest Planning and Practices Regulation*, forest tenure holders are exempt from the obligation to specify a result or strategy in relation to the objective set out in section 7(1) of the *Forest Planning and Practices Regulation*, for approved Wildlife Habitat Areas.

This Notice applies to the Columbia Forest District.

Schedule 1

1) Coeur d'Alene Salamander (*Plethodon idahoensis*)

Amount:

1. 60 ha not exceeding an impact to the mature timber harvesting landbase of 36 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Coeur d'Alene Salamander in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account for Coeur d'Alene Salamander in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

5.0 STOCKING STANDARDS

LP has adopted – **without change** – the stocking standards created by the local office of the Ministry of Forests with consideration given to climate change and long-term forest health issues. These are entitled “DCO FSP Stocking Standards V 3.0” and were received April 13, 2010 from Columbia Forest District Staff.

6.0 OTHER MEASURES

6.1 Invasive Plants

See section 6.1 of the LP FSP for reducing the introduction or spread of Invasive Plants on the TFL. The Columbia Shuswap Invasive Species Society Operational Plan is found at the link below. The priority species list can be found in Appendix 7 of this document.

http://columbiashuswapinvasives.org/wp-content/uploads/2014/03/CSISS_Operational_Plan_Final.pdf

6.2 Range Barriers

As stated in the FSP.

6.3 Forest Health Strategy

As stated in the FSP.

7.0 CUMULATIVE EFFECT OF MULTIPLE FSP'S

There is one other FSP within TFL 55. BCTS operates within TFL 55 in the Stitt-Normans Wood and BMX-Bigfish areas.

8.0 REVIEW AND REFERRAL

8.1 FSP Information Sharing

As stated in the FSP.

8.2 Public notice of proposed development

In addition to the yearly First Nations information sharing (refer to Table 3E-2), once a year, LP will make available to the public and affected known stakeholders, the cutblocks and roads that are proposed for development. These plans will be advertised through local newspaper and posted on a company website and/or available at the LP Malakwa office. If additional areas are considered for development later during the year, those areas won't necessarily be advertised but affected stakeholders will be notified. Some known stakeholders are referred to in Sections 8.3-8.7 below.

8.3 Commercial Helicopter and Backcountry Recreation

There is one commercial helicopter skiing and outdoor recreation company operating within TFL 55. Canadian Mountain Holidays (CMH) operates one lodge within the TFL boundary and one just south of the TFL boundary across the French River.

LP will:

1. Continue to maintain a mapping system that includes information on location of ski runs, skier drop-off points, skier pick-up points, and infrastructure such as lodges¹.
2. Refer for comment, any cutblocks that are within ski runs or that interfere with skier drop-off or pick-up points.
3. Meet periodically to share information on forest management and heli-ski issues.

8.4 Private Lands

Beaumont Timber Company Ltd. (BTC) is the owner of lands adjacent to the western boundary of the TFL 55 upon which certain private roads are located which LP uses for the purpose of obtaining access to and from provincial crown timber. LP and BTC have ongoing agreements for road use and new road construction.

8.5 BC Hydro

The Mica Dam site is situated north of the TFL 55 boundary. The BC Hydro transmission line right of way transects the TFL boundary in a few instances. LP obtains agreements with BC Hydro when utilizing the right of ways.

8.6 Trap Licences and Guide Outfitters

There are four active trap licences and one guide outfitter operating within the TFL boundary.

8.7 Mining Tenures

Various mining tenures occur near and around the TFL55; mostly in the French Creek area.

8.8 Fred Laing Ridge Trail

The Fred Laing Ridge Trail is located north of the TFL boundary. The trail head accessed through TFL 55.

9.0 REVISIONS

An area for future revisions to the FSP is provided in Appendix 4 of the FSP document.

¹ The heli-ski company must continue to provide LP with location information of runs, pickups, drop-offs and other infrastructure.

10.0 MAPS

One map of 1:60,000 scale was sufficient to provide all the necessary information. The map identifies the features required by the FPPR (Section 14), where applicable, in effect on the date of submission of this FSP. The FSP map can be downloaded by visiting the following web page and scrolling down to the “Literature” section:

<http://lpcorp.com/sustainability/sustainable-forestry/>

FPPR Requirements displayed on map:

- ◆ FDU’s – Mica, French
- ◆ Ungulate Winter Range: #U-3-005 Areas - pink
- ◆ Wildlife Habitat Areas: None
- ◆ Fisheries sensitive watershed: None
- ◆ Scenic Areas: None
- ◆ L1 Lakes:
- ◆ Community watersheds: None
- ◆ OGMA’s (non-legal)
- ◆ Areas where timber harvesting is prohibited by enactment: None
- ◆ Cutting Permits
- ◆ Road Permit roads

Appendix 6

DCO April 2000 Local Area Agreement for Fish Stream Identification

Columbia Forest District April 2000 Local Area Agreement for the purpose of Fish-stream Identification pursuant to the Forest Practices Code for Category 1 Streams (Low Risk)

PURPOSE:

This Local Area Agreement (LAA) is an agreement between Ministry of Environment Lands and Parks, the Ministry of Forests, and the Forest Licensees in the Kootenay Environment Region. This agreement, through risk management, is intended to reduce the expense and time of conducting the detailed fish surveys needed to prove fish absence where the risk and consequence of error is low (Category 1 streams).

SCOPE:

This MOU applies to operational planning under the British Columbia Forest Practices Code (BCFPC) within the Columbia Forest District in the Kootenay Environment Region.

CONDITIONS:

1. Users of this agreement must be competent in fish stream identification procedures and applications as detailed in *Fish-stream Identification Guidebook (FSIG). Second Edition. August 1998, FPC.*
2. The Agreement is based on best available resource information and may be amended from time to time as agreed to by the FPC Implementation Team, as new information becomes available through field audits, inventory or research.
3. Amendments may increase or decrease the scope of this Agreement. For example, the latter will occur if the new information indicates an unacceptable risk to fish resources.
4. In situations where existing or future fish inventory data demonstrates fish presence contrary to application of the Agreement, the pertinent fish data prevails.
5. Annual review based on a random sampling field check, to ensure proper application of the LAA and that it accurately classifies stream reaches.
6. Users of this LAA must develop and retain a consolidated map (which may become part of an aggregated Forest District map) indicating the known classification and method of classification for streams within their operating area.
7. It remains the responsibility of Licensees to ensure that fish and fish habitat as defined by the Canada *Fisheries Act* are protected from direct or indirect adverse effects of licensee activities.
8. The effective date of this agreement is June 1 2000. A joint evaluation of the effectiveness of this agreement is to be completed prior to June 1, 2001.

DEFINITIONS:

The following terms are used throughout the agreement and not defined in the FSIG.

Category 1 stream: Low Risk of error/Low consequence of error (Framework for LAA 1999).

Standing water: greater than 1m in depth; standing water includes lakes, ponds, wetlands with an area of open water >0.25 hectares.

Stream Order: is stream order at a scale of 1:20,000 using methodology described in *Reconnaissance (1:20 000) Fish and Fish Habitat Inventory.*

Data Management: Data collection, reporting and storage must be consistent with that specified in the FSIG, for that data type being collected.

Qualified individual: Determined by Licensee.

DECISION KEY

NOTE: Reach breaking is an integral part of assigning stream riparian classes. Thus, it is important to ensure that this is done correctly by qualified individuals. A field visit is highly recommended within the area of interest to ensure that the reaches are classified correctly.

STEP 1

Procedure: Review of existing inventory data to determine if existing information is available to interpret fish or non-fish bearing status.

Test Criteria: Existing information allows for fish or non-fish bearing status determination.

→*No*; continue to **STEP 2**.

→*Yes*; classify stream with supporting data; inventory complete. Interpretations of historic data can also be used for upstream reaches. This should be discussed with the FES and/or the Inventory Specialist for different scenarios.

NOTE: Existing data must follow FSIG or RIC standards unless data is approved by FES and/or the Inventory Specialist.

STEP 2

Procedure: Channel width and Gradient are measured following RIC standards.

Test Criteria: less than 20% gradient

AND

less than 1.5m channel width

AND

does not contain standing water upstream of the stream mouth.

→*No*; not covered under agreement (for streams greater than 20% refer to *Fish-stream Identification Guidebook*, pg. 17).

→*Yes*; covered under agreement, continue to **STEP 3**.

STEP 3

Procedure: Connectivity of stream for fish passage is visually determined in field by qualified individual.

Test Criteria: connectivity of stream for fish passage is interrupted by the presence of a permanent fish barrier in stream

OR

the disappearance of a defined channel for a length that renders it a likely fish barrier.

→*No*; continue on to **STEP 4**.

→*Yes*; designate stream network upstream of barrier as non-fish bearing.

STEP 4

Procedure: Office determination of stream order, by qualified individual using 1:20,000 scale TRIM, forest cover maps and aerial photography, as available. If stream does not appear on TRIM (1:20k) or forest cover maps assume that stream is 1st Order. Determine stream reach gradient in field for reach of interest.

Test Criteria: stream reach gradient is greater than 15% (only applies to 1st Order streams flowing directly into a 3rd Order or 2nd Order stream).
OR
stream reach gradient is greater than 17% (only applies to 2nd Order streams flowing directly into a 3rd Order).

→*Yes*; designate stream reach and upstream stream network as non-fish bearing.
→*No*; continue on to *STEP 5*.

STEP 5

Procedure: Determine stream reach field gradient, channel width and stream Order for reach of interest.

Test Criteria: Channel width is <1.0m
AND
stream reach gradient is greater than 12% (only applies to 1st Order streams flowing directly into a 3rd Order or 2nd Order stream).

→*Yes*; designate stream reach and upstream stream network as non-fish bearing.
→*No*; continue on to *STEP 6*.

STEP 6

Procedure: If desirable, inventory stream reach following FSIG standards.

Agreed to on this date: June 1, 2000

Name
Position
Company

Bob Brade
Forest Ecosystem Specialist
Ministry of Environment

David Raven
District Manager
Columbia Forest District

Appendix 7

CSISS Operational Plan “Appendix A-Table 1 & 2”

APPENDIX A: Priority Plants in the Columbia Shuswap Listed by IPMA

Table 1: Definition of Priority Ranking Categories for Invasive Plant Species.

Priority Ranking	Description
EDRR WATCHLIST (Prevention) (1)	These species are not currently known in this IPMA but are known to occur in the Columbia-Shuswap region. The goal for these species is immediate eradication if they are detected. EDRR reporting and action protocols for these species are outlined in Section 3.4. These sites are extremely high priority for treatment and eradication is the management objective.
ERADICATION OR ANNUAL CONTROL (2)	These species are known in the IPMA but with very limited distribution. Some of these species may have been present for a relatively long period so monitoring for spread is the management objective. Other species are relatively new to the IPMA so eradication is the objective.
CONTAINMENT (3)	These species are abundant (with no expectation of eradication) in certain portions of the IPMA but have not yet infested all potential habitats. Management efforts are delineated by containment lines which may be based on geographic (i.e. a specific region) or jurisdictional boundaries (e.g. private gardens only). Some of these species have biocontrol (BC) agents available which may be useful within the containment line. Containment is the management objective.
ESTABLISHED (BIOCONTROL OR SITE-SPECIFIC APPROACH) (4)	These are widespread species that are beyond landscape-level control and/or have relatively low impact. Land managers may choose to treat these species at high priority sites (e.g. wildlife habitat, corridors of spread, adjacent to agricultural land, restoration goals, etc.) based on specific land management objectives. Some of these species have biological control agents available.
INSUFFICIENT INFORMATION (5)	There is insufficient information for these species on their distribution, impacts, potential for spread and/or feasibility of control. In some cases, species have also been classified in one of the other categories because enough is known about their distribution. They also appear in this category because further information is still required.

Table 2: Priority Invasive Plant Species in the Columbia Shuswap by IPMA.

Species	Bio-control?	Relevant legislation ¹	Salmon Arm IPMA	Revelstoke IPMA	Golden IPMA
Baby's breath		CCA, FRPA	1	1	2
Bighead knapweed			2	1	1
Bittersweet nightshade			5	5	5
Black knapweed		FRPA	1	2	1
Blueweed		WCA, FRPA	2	2	2
Bull thistle	Y	CCA, FRPA	4	4	4
Burdock		WCA, FRPA	4	4	4
Canada thistle	Y	WCA, CCA, FRPA	4	4	4
Caraway			1	1	2
Chicory			4	4	4
Common bugloss		FRPA	1	1	2
Common comfrey			4	4	4
Common tansy		WCA, FRPA	3	3	3
Curled dock			4	4	4
Cypress spurge			2	1	2
Dalmatian toadflax	Y	WCA, CCA, FRPA	4	4	4
Diffuse knapweed	Y	WCA, CCA, FRPA	4	4	5
Eyebright			5	5	5
Field bindweed			5	5	5
Field scabious		FRPA	2	1	1
Hairy cat's ear			5	5	5
Hawkweed spp.			4	4	4
Himalayan blackberry		CCA	1	5	5
Hoary alyssum		FRPA	5	1	1
Hoary cress		WCA, FRPA	5	1	1
Hound's tongue	Y	WCA, CCA, FRPA	4	4	4
Knotweeds		WCA, CCA, FRPA	2	2	2

Table 2 CONT: Priority Invasive Plant Species in the Columbia Shuswap by IPMA

Species	Biocontrol?	Relevant legislation ¹	Salmon Arm IPMA	Revelstoke IPMA	Golden IPMA
Lady's thumb			5	5	5
Leafy spurge	Y	WCA, CCA, FRPA	2	2	1
Marsh plume thistle		FRPA	1	2	1
Meadow goat's beard			4	4	1
Meadow knapweed		WCA, FRPA	2	2	1
Mouse-ear hawkweed			5	5	1
Orange hawkweed		WCA, FRPA	4	4	5
Oxeye daisy		FRPA	4	4	4
Perennial sow thistle		WCA	4	4	4
Policeman's helmet		CCA	2	2	2
Puncturevine		FRPA	5	1	
Purple loosestrife	Y	WCA, CCA, FRPA	2	2	1
Rush skeletonweed	Y	WCA, CCA, FRPA	2	1	1
Russian knapweed		FRPA	5	1	1
Scentless chamomile		WCA, CCA, FRPA	5	5	2
Scotch broom		CCA, FRPA	2	1	1
Scotch thistle		FRPA	2	2	1
Spotted knapweed	Y	WCA, CCA, FRPA	4	4	3
Squarrose knapweed			1	1	2
St. John's Wort	Y	CCA, FRPA	4	4	5
Sulphur cinquefoil		WCA, FRPA	4	4	5
Tall Buttercup			5	5	5
Teasel		FRPA	2	1	2
Wormwood (Absinth)			1	1	5
Yellow flag-iris		WCA, CCA, FRPA	3	1	1
Yellow hawkweeds		FRPA (meadow)	4	4	4
Yellow (common) toadflax		WCA, CCA, FRPA	4	4	4

¹ WCA= Weed Control Act; CCA=Community Charter Act; FRPA=Forest and Range Practices Act

