



BCTS
BC Timber Sales

Okanagan-Columbia Forest Stewardship Plan

This Forest Stewardship plan is applicable to BC Timber Sales', Okanagan Indian Band's (NRFL A91086 and FL A91117) and Cherry Ridge Management Committee's Replaceable Community Forest Agreement (CFA) K3T planning, operations, licenses, and permits within Okanagan Shuswap and Selkirk Natural Resource Districts. Consolidated as of February 21, 2023 to include Amendment #6.

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<https://www2.gov.bc.ca/gov/content/industry/forestry/bc-timber-sales/fsp/okanagan-columbia-fsp>

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Forest Stewardship Plan

1.0 Introduction and Interpretation

1.2 Introduction

British Columbia Timber Sales (BCTS), Okanagan Columbia Business Area (TOC) operates in two Forest Districts and three Timber Supply Areas (TSA's) within the Southern Interior Forest Region (SIR). In the Okanagan Shuswap Natural Resource District TOC operates in the Okanagan TSA and in the Selkirk Natural Resource Districts TOC operates in the Golden and Revelstoke TSA's. The administrative and management centre for the business area is the Timber Sales Office (TSO) located in Vernon, BC. There are field teams in Revelstoke and Vernon.

1.3 British Columbia Timber Sales Program

BC Timber Sales (BCTS) was founded in 2003 with a mandate to provide the cost and price benchmarks for timber harvested from public land in British Columbia. Through 12 Business Areas and an operational presence in 33 locations, BCTS manages some 20 percent of the provincial Crown allowable annual cut.

Goal: Provide credible representative price and cost benchmark data for the Market Pricing System through auctions of timber harvested from public land in British Columbia.

Objective: Sell the full BC Timber Sales' apportionment over the business cycle, consistent with safe practices and sustainable forest management;

1. Generate direct net revenue and indirect revenue for the province over the business cycle; and
2. Continuous business improvement.

1.4 Interpretation

Definitions under Acts and Regulations: Unless specifically indicated otherwise, terms used in this Forest Stewardship Plan (FSP) have the same meaning as they are defined in relevant British Columbia Acts and Regulations.

1.5 Definitions Specific to this FSP

1. **“act”** means the *Forest and Range Practices Act* RSBC 2002, c.69;
2. **“adjacent”** as defined in *FPPR* 65(1) 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”;
3. **“administrative boundary”** means features including but not limited to private property lines, area-based tenure boundaries, protected area boundaries, or boundaries associated with the buffer of an inventory permanent sample plot that may influence primary forest activities;
4. **“agreement holder”** is defined in *FPPR* section 1 and “means a holder of an agreement under the *Forest Act*, other than a woodlot licence” and for the purposes of this *FSP*, applies to the agreement holders listed in section 2.6, or any successor or assignee of that *agreement*, unless this *FSP* no longer applies to that agreement holder;
5. **“basal area”** means
 - a) for the purposes of stocking standards, the cross-sectional area per hectare of the crop trees, and
 - b) for the purposes of retention of basal area in the riparian management zone, the cross-sectional area per hectare of standing trees, whether living or dead;
6. **“BEC”** means Biogeoclimatic Ecosystem Classification;
7. **“cumulative effects”** means, changes to economic, environmental and social values on the landscape caused by the combined effect of present, past and reasonably foreseeable human actions or natural events.
8. **“current”** means, in the context of a *FSP*, timber sale licence, FSR or *RP*, an approved document that has not expired or been replaced;
9. **“cutblock”** means an area:
 - a) in which a holder of a Licence has harvested timber under a timber sale licence; or
 - b) in which a holder of a Licence is authorized to harvest timber but where harvesting has not occurred;
10. **“damaged timber”** means timber that has been or is in imminent danger of being damaged, significantly reduced in value, lost or destroyed due to damage agents such as fire, insect infestation, disease, or wind, as determined by a *qualified professional*.
11. **“dbh”** means diameter breast height, a standard method of expressing the diameter of the bole of a tree, generally measured at a height 1.3 metres above the point of germination.
12. **“established cutblock”** means a cutblock in which one of the following has been met:
 - (i) harvested under a licence to which this *FSP* applies
 - (ii) declared under this *FSP*;
 - (iii) identified spatially in the BC Geographic Warehouse as a cutblock:
 - a) harvested under a timber sale licence or *major licence* to which this *FSP* does not apply; or
 - b) included in a timber sale licence
13. **“established road”** means a road that has been:
 - (i) constructed under a TSL, FSR or *RP* issued under or associated with a licence to which this
 - a) *FSP* applies;
 - (ii) declared under this *FSP*;
 - (iii) included within a current TSL, FSR or *RP* issued under or associated with a licence to which this
 - a) *FSP* applies, whether the TSL, FSR or *RP* is or is not subject to this *FSP*;
 - (iv) identified spatially in the BC Geographic Warehouse as a road:
 - a) constructed by a person other than an agreement holder; or
 - b) included within a CP, FSR or *RP* issued in respect of a Licence to which this *FSP* does not apply.
14. **“FDU”** means a Forest Development Unit;
15. **“Forest Act”** means the *Forest Act* R.S.B.C. 1996, c.157;

16. **“forested area”** means a polygon identified in the *VRI* as contributing to the forest management land base, as indicated by the Forest Management Land base Indicator attribute. This attribute indicates whether a polygon is forested or has been forested and is capable of producing a stand of trees. Polygons classified as lakes, rock, alpine, shrub and wetland are not considered forested area.
17. **“FPC”** means the Forest Practices Code of British Columbia Act R.S.B.C. 1996, c. 159 and all regulations there under;
18. **“FRPA”** means the Forest and Range Practice’s Act SBC 2002 and all regulations there under;
19. **“FSP”** means a Forest Stewardship Plan;
20. **“FSP holder” or “holder”** means the *agreement* holders listed in Paragraph 2.6, or any successor or assignee of that *agreement*, unless this *FSP* no longer applies to that *agreement holder*;
21. **“GAR”** means the Government Actions Regulation B.C. Reg. 582/2004;
22. **“government”** means the government of British Columbia;
23. **“initial silviculture activities”** means the latter of site preparation, initial reforestation including tree planting or direct seeding, or debris pile burning;
24. **“legislated planning date”** means:
 - a) subject to Clause (ii), the date 4 months before the date of submission; or
 - b) if an enactment or an objective set by *government* requires that a date different than the date referred to in Clause (i) be applied under this *FSP*, then that different date;
25. **“licence”** means an agreement under the *Forest Act*;
26. **“major licence”** has the meaning given to it under the *Forest Act*;
27. **“main haul roads”** means capitalized roads as determined by the Natural Resource Districts.
28. **“minimum stocking standards”** means the minimum stocking standards that apply when
 - a) establishing a free growing stand, or
 - b) meeting the minimum requirements of section 44 (4) [Free growing stands generally]
29. **“minister”** means the minister responsible for the *Forest Act* and *Forest and Range Practices Act*, and *Forest Planning and Practices Regulation*
30. **“natural Disturbance type 4”** means ecosystems with frequent stand-maintaining fires including grasslands, shrubland, and forested communities that normally experience frequent low intensity fires.
31. **“natural range barrier”** a stand of trees or topographic feature that stops or impedes livestock movement to or from an adjacent area.
32. **“net area to reforest” or “NAR”** has the meaning given to it in FPPR section 1 (2);
33. **“Old Growth Management Area (OGMA)”** means a non-legal area, spatially identified as an OGMA to meet the objectives specified in the OSLRMP Order establishing provincial non-spatial Old Growth Objectives (June 30th, 2004) and is stored in the BC Geographic Warehouse. Changes to this data related to incursion and replacement are housed internally by the holder.
34. **“OSLRMP”** means the Okanagan-Shuswap Land and Resource Management Plan;
35. **“OSLRMP” “LUO” or “LUO”** means the “*PROVINCE OF BRITISH COLUMBIA, ORDER OF THE MINISTER OF AGRICULTURE AND LANDS ESTABLISHING OBJECTIVES SET BY GOVERNMENT IN THE AREA COVERED BY THE OKANAGAN-SHUSWAP LAND AND RESOURCE MANAGEMENT PLAN IN THE OKANAGAN SHUSWAP FOREST DISTRICT*”, established pursuant to section 93.4 of the Land Act, and effective March 1, 2007;
36. **“practicable”** means that which is feasible or performable given the relevant circumstances and includes consideration for being both practical and reasonably economically feasible;

37. **“primary forest activity”** has the meaning given to it in *FPPR* section 1, and “means one or more of the following:
- (i) timber harvesting;
 - (ii) silviculture treatments; or
 - (iii) road construction, maintenance and deactivation”;
38. **“qualified professional”** means a registered member in good standing with a professional association whose training, ability and experience makes the member professionally competent in the relevant area of practice. Where the activities fall within the scope of practice of members of a professional regulatory body this person will be a Qualified Registered Professional.
39. **“qualified registered professional”** means a person who:
- (i) Has the appropriate education, training and experience to carry out the activity; and
 - (ii) Is a member of, or licensed by, a regulatory body in British Columbia that has the legislated authority to regulate its members’ performance of the activity.
40. **“range agreement”** means a grazing tenure held by a range agreement holder and issued under the *Range Act* or *Land Act*. Spatial and attribute data for range agreements are housed in the BC Geographic Warehouse.
41. **reasonable amount of time for review and comment** means a written referral (either mailed or sent electronically) or advertisement, including a link to a map, provided by the FSP Agreement Holder with a specified time (either 30 or 60 days, or another time period if agreed to with a First Nation or stakeholder or indicated in an advertisement) allowed for providing comments in order for the comments to be considered.
42. **“road”** has the meaning given to it in *FPPR* section 1;
43. **“RP”** means a road permit;
44. **“safety hazard”** means a situation or circumstance the *holder* determines to be a potential source of harm to workers based on WorkSafe BC regulations and policies, or the general public. Safety hazards include but are not limited to danger trees (snags), inadequate visibility, falling objects, steep slopes, unstable terrain, etc.;
45. **“scenic area”** has the meaning given to it under *FPPR* section 1;
46. **“stubs”** are mature live or dead trees that are either mechanically felled or broken off at least 2.5 m above the ground.
47. **“THLB”** means Timber Harvesting Land Base as defined in the Timber Supply Review document for the Timber Supply Areas applicable to this *FSP*;
48. **“VRI”** means Vegetation Resource Inventory, the photo-based inventory data of the BC Provincial forest which is housed in the BC Geographic Warehouse. The VRI data that is relevant to specific *FSP* results or strategies is the version of VRI that is available not less than 18 months prior to cutting authority application or amendment;
49. **“wildlife habitat area”** as defined in *FPPR* section 1 “means a wildlife habitat area continued under section 180 (b) [grand parenting specified designations] of the *Act* or established under the Government Actions Regulation”.
50. **“wildlife tree retention area”** means an area occupied by wildlife trees that is located a) in a cutblock, b) in an area that is contiguous to a cutblock, or c) in an area that is sufficiently close to the cutblock that the wildlife trees could directly impact on, or be directly impacted by, a forest practice carried out in the cutblock.

1.6 Acronyms

AOA – Archeological Overview Assessment	BA – Basal Area
BCTS – BC Timber Sales	BEC – Biogeoclimatic Ecosystem Classification
BG Bunchgrass Biogeoclimatic Zone	CHR – Cultural Heritage Resource
DBH – Diameter at Breast Height	DFP – Deviation from Potential
ESSF Engelmann Spruce Subalpine Fir	ERR's-Enhanced Riparian Reserves
FDU – Forest Development Unit	FG – Free Growing
FPC – Forest Practices Code	FPPR – Forest Planning and Practices Regulation
FRPA – Forest and Range Practices Act	FSP – Forest Stewardship Plan
FSR – Forest Service Road	
FLNRORD - Ministry of Forests, Lands, and Natural Resource Operations and Rural Development	
HLP – Higher Level Plan	IAPP – Invasive Alien Plant Program
ICH – Interior Cedar Hemlock Biogeoclimatic Zone	IDF – Interior Douglas-fir
LRMP – Land and Resource Management Plan	LRUP – Local Resource Use Plan
MS – Montane Spruce Biogeoclimatic Zone	MSS – Minimum Stocking Standard
NAR – Net Area to Reforest	NDT4 – Natural Disturbance Type 4
OGMA – Old Growth Management Area	PP – Ponderosa Pine Biogeoclimatic Zone
QP-Qualified Professional	QRP – Qualified Registered Professional
RMA- Riparian Management Area	RMZ – Riparian Management Zone
RPF – Registered Professional Forester	RRZ – Riparian Reserve Zone
SU – Standards Unit	TSA – Timber Supply Area
TSL – Timber Sale License	TSM – Timber Sales Manager
TSR – Timber Supply Review	VQO – Visual Quality Objective
WTRA's – Wildlife Tree Retention Areas	

1.7 References

The following acts, regulations and higher level plan documents are relevant to FSP's and are specifically referenced in this FSP:

Forest Act

http://www.bclaws.ca/civix/document/id/complete/statreg/96157_03

Forest and Range Practices Act (FRPA)

http://www.bclaws.ca/Recon/document/ID/freeside/00_02069_01

Forest Planning and Practices Regulation (FPPR)

http://www.bclaws.ca/civix/document/id/loo83/loo83/12_14_2004

Forest Recreation Regulation (FRR)

<https://icw.for.gov.bc.ca/ftp/HFP/external/!publish/FPC%20archive/fpc/fpcaregs/FORREC/FRR.HTM>

Government Action Regulation

<https://www.for.gov.bc.ca/hth/frpa-admin/frpa-implementation/gar.htm>

Higher Level Plans

<https://www.for.gov.bc.ca/tasb/slrp>

2.0 Forest Stewardship Plan

A FSP is a requirement of the Forest and Range Practices Act (FRPA). The plan is a results based, broad level plan that shows areas of potential forest development activities that may occur over a period of five years. The plan is approved for a five year term with no annual updates and may be extended for up to another five years bringing the total term to ten years. Areas identified in the FSP for development are referred to as FDU's and are described in detail in the FSP document. The FSP is a vehicle by which the holder of the FSP communicates results and/or strategies that will be used to achieve the resource management objectives set by government under *FRPA* in each FDU. Each objective is identified in the FSP document and the results and/or strategies that will be employed to achieve the objective are articulated for the FDU's to which the results and/or strategy pertains. In essence, the results and strategies can be thought of as the "means" that will be used to achieve the "end" where the end is the objective. Following approval of the FSP, the Timber Sales Manager (TSM) can award Timber Sale Licences (TSL's) or issue Road Permits (RP's) on a competitive basis to registrants of the BCTS program. Following the approval of the FSP the District Manager will be the statutory decision maker for cutting authorities applied for by the Okanagan Indian Band (OKIB) or by the Cherryville Community Forest (CCF).

This Forest Stewardship plan does not contain maps depicting the precise location of proposed harvesting or roads. Proposed harvesting and road construction by the Holders of this FSP can be viewed at the following [link](#).

2.1 Various Plans and Legal Framework

Agreement holders are responsible for following several plans that are used to guide their forest management activities. Some of the plans are land use plans, and some are legislated requirements such as an FSP. TOC also has 5 year operational plans which are used as a decision aid for engineering across broad geographical areas.

The primary plans used (if applicable) by the agreement holders are listed in the section 2.2.

2.2 Higher Level Plans

A Higher Level Plan (HLP) is a land use plan created for a broad geographic area such as a Timber Supply area (TSA). HLP's are generally the product of organized and focused discussions and negotiation with multiple stakeholders over a long period of time. HLP's are designed to identify the resources in the plan area and zone them spatially. Within a Resource Management Zone (RMZ) objectives are identified as well as strategies to achieve those objectives and activities that are permitted within the RMZ. The legal portion of a HLP is the RMZ and the objectives for that RMZ. The FSP and any plans that flow from the FSP must be consistent with any HLP in effect covering the area where the holder of a FSP proposes to conduct forest activities. TOC, OKIB and CCF are guided by and work towards the spirit and intent of these higher level plans. The Okanagan Shuswap Natural Resource district is guided by the Okanagan Shuswap Land and Resource Management Plan (OSLRMP) and legal direction for this district is found in the Order Establishing Objectives in Okanagan Shuswap LRMP Area. TOC also operates in the Selkirk Natural Resource District and within that district both the Golden TSA and the Revelstoke TSA have

HLP's that TOC is required to be consistent with. In the Golden TSA the HLP is the Kootenay Boundary Land Use Plan Order (KBLUP). In the Revelstoke TSA the HLP is referred to as the Revelstoke Higher level Plan Order (RHLP). The HLP's can be viewed on the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) website at :

<https://www2.gov.bc.ca/gov/content/industry/crown-land-water/land-use-planning/regions>

2.3 Submission Date

The date of submission of this FSP is August 24th, 2018.

2.4 Term

The Term of this FSP will be five (5) years beginning on the Commencement Date of approval by the Delegated Decision Maker (DDM) for the Ministry of FLNRORD or another date specified by the DDM.

2.5 Commencement Date

September 1, 2018

2.6 FSP Holder and Agreement Holders

1. The holder of this FSP is the Timber Sales Manager (TSM) for the BC Timber Sales (BCTS) Okanagan-Columbia Business Area. Here after referred to as 'agreement holder' along with the Okanagan Indian Band and the Cherryville Community Forest.
2. Okanagan Indian Band Forestry LLP (NRFL A91086 and FL A91117) and Cherry Ridge Management Committee and their Replaceable Community Forest Agreement CFA (K3T) are agreement holders to this FSP.
3. For the purposes of FRPA section 3(4), this FSP applies to each timber sale permit or cutting permit issued and each road permit granted:
 - a. on or after the date the term of this FSP commences as specified in Section 2.5;
 - b. within an FDU; and
 - c. in respect of the agreements under the Forest Act and the agreement holders specified in sub-section 2 of Section 2.6.

2.7 Forest Development Units and Rationale

FDU's are areas where forest practices will occur over the term of this FSP. FDU's have common sets of objectives, results and/or strategies. FDU's in this FSP are located within the Okanagan Shuswap and Selkirk Natural Resource Districts (**Appendix A**). Boundaries for the FDU's have been categorized under the following:

79 FDU's in total

71 FDU's for TOC operating areas

1 FDU covering Okanagan TSA outside of TOC FDU's

1 FDU covering Revelstoke TSA outside of TOC FDU's

1 FDU covering Golden TSA outside of TOC FDU's

3 FDU's covering TFL 49, TFL 55, and TFL 56

2 FDU's covering TFL 59, TFL 33 where TOC has a set apportionment in these TFL's but no designated operating areas.

The rationale for the 3 large FDU's that cover the OK TSA, Revelstoke TSA and Golden TSA is to provide for improved administrative efficiency for TOC and government, by reducing the number of amendments to the *FSP* to revise FDU boundaries for incidental reasons. Larger FDU's will allow TOC to be able to enter into business to business agreements with First Nations to sell timber sales outside of "normal" operating areas without revising FDU boundaries with an FSP amendment for each agreement. We will be able to more efficiently take part in trade agreements between other licensees, as well as ensure a common set of standards throughout all of our operations for our licensees and contractors.

Where road construction or timber harvesting are considered or planned outside of an agreed to TOC operating area, the agreement holder will enter into consultation, with the respective licence or FSP agreement holder in advance and provide a written referral (either mailed or sent electronically), including a paper map or a link to the associated map.

Appendix A also contains FDU maps identifying the features required by the FPPR (Section 14), where applicable and in effect at the time of FSP submission, as well as other resource and topographic features. Information contained on the FDU maps includes:

- Communities
- Community Forests
- Community Watersheds
- Highways and Major Roads
- Indian Reserves
- Large Lakes, Rivers and Major Streams
- Parks and Protected Areas
- Recreation Sites & Trails
- Private Land
- Scenic Areas and Visual Quality Objectives (VQOs)
- Ungulate Winter Range

- Wildlife Habitat Areas
- Woodlots

2.8 Collaboration within Shared Management Units

A “Shared Management Unit” means a portion of a timber supply area that is shared by more than 1 agreement holders where the responsibility to achieve “results” is proportional to each FSP or agreement holder’s respective operating areas located within the “shared management unit”. Where BCTS or agreement holders under this FSP are operating within the same management unit as other forest licence or agreement holders, to ensure that the potential cumulative impact and consistency of results and strategies are considered, the following strategy will be used.

1. As a strategy, within shared management units, where timber harvesting is planned, the agreement holder will on a yearly basis or as operational plans develop provide planning information, offer to exchange information, collaborate and coordinate with each licence or agreement holder, in relation to the following applicable values, to ensure that the objectives set by government for the area will be achieved:
 - a) Old Growth Management Areas
 - b) Visual Quality Objectives
 - c) Connectivity Corridors (Grizzly Revelstoke and Golden).
 - d) Landscape level Patch size Distribution
 - e) Ungulate Winter range
 - f) Fish Habitat in Fisheries Sensitive Watersheds
 - g) Water in Community Watersheds.
 - h) Other *Cumulative effects* on the landscape

2.9 Engagement Strategy

Beyond the legally required FSP, an agreement holder will prepare annual referral packages identifying proposed timber harvesting and road construction plans. The annual referral package is the agreement holder’s means of engaging with FN, stakeholders and the public at the operational level. The annual referral package spatially shows the agreement holder’s proposed roads and blocks and usually is what most stakeholders and FNs are interested in learning more about. FNs are info-shared/consulted with on all proposed timber development, road construction or deactivation and silviculture treatments which overlap their asserted traditional territory as shown in the Consultative Area Database. Stakeholders are sent referral letters identifying the proposed activities which overlap their areas of interest. The public will be notified of the annual referral package through an advertisement placed in local newspapers. The advertisement will direct interested parties to a web location where they can review the referral package. Interested parties will be given a reasonable amount of time for review and comment. This will be at least thirty days under normal circumstances, or a shorter period for emergency situations such as salvage. Additionally, annual referral packages will be available continuously on the BCTS web address: [BCTS TOC Annual Referrals](#) . Annual plans for OKIB and CCF can be obtained by contacting these organizations individually.

The agreement holders of this FSP completed a public review and comment period and those efforts have been documented in a report prepared and submitted in accordance with Section 22(2) of the *Forest Planning and Practices Regulation*. **Appendix B** contains the public review and comment report.

3.0 Protection of Cut blocks, Forest Service Roads, Road Permits, and Declared Areas

1. Protection under FRPA Section 196

Under Section 196 of FRPA blocks and roads approved as category “a” under the Forest Practice Code are not subject to further review under this plan.

2. Timber Sale Licences (TSL’s), Cutting Permit (CP), Forest Service Roads (FSR) and Road Permits (RP’s) in effect (FRPA Section 19, and FPPR Section 14).

This FSP does not apply to TSL’s, CPs, FSR’s, and RP’s issued, granted, or entered into by the agreements holder to this FSP prior to the effective date of this FSP being put into effect. This includes but is not limited to blocks and roads listed in in Appendix C.

3. Declared Cutblocks and Roads FPPR Section 14

Under Section 14 of the FPPR, cutblocks and roads can be declared if all the assessments are complete. Declared cutblocks and roads are listed in Appendix D.

4.0 Results and Strategies

4.1 Soils

Legal Reference: FPPR Section 5
Objective: <i>“Without unduly reducing the supply of timber from British Columbia’s forests, to conserve the productivity and the hydrologic function of soils.”</i>
Applicable FDU’s: All FDU’s

Results and Strategies

The agreement holder will comply with the practice requirements for FPPR Sections 35 and 36.

4.2 Wildlife

FPPR Section 7 Species at Risk, Regionally Important Wildlife, Ungulate Winter Range and Wildlife Habitat Areas

4.2.1 Species at Risk

Legal Reference: FPPR section 7 Wildlife, triggered by a notice provided under FPPR 7(2)
Objective: <i>“Without unduly reducing the supply of timber from British Columbia’s forests, to conserve sufficient wildlife habitat in terms of amounts of area, distribution of areas and attributes of those areas, for the survival of species at risk, the survival of regionally important wildlife, and the winter survival of specified ungulate species.”</i>
Applicable FDU’s: Any FDU where suitable habitat is encountered

Definitions

For the purpose of this strategy:

“occurrence site” means the mapped location of an occurrence of one of the section 7 SAR in the Okanagan-Shuswap District that includes but is not limited to the BC Conservation Data Center (CDC) data sets, Federal and Provincial Species at Risk Recovery Efforts data sets, Species at Risk Critical Habitat data sets, EcoCat Ecological Reports Catalogue, and Efauna data sets.

Information

Notices given under FPPR Section 7(2) specify the amount, distribution and attributes of wildlife habitat required for identified species at risk (SAR), regionally important wildlife, and ungulate species. Orders under the GAR Sections 9 to 13 establish WHA’s UWR’s and specify GWM’s for specific species. In many cases the newer GAR orders establishing WHA’s and Government Wildlife Measures (GWM’s) have addressed and replaced the requirements of earlier FPPR Section 7(2) notices.

Pursuant to FPPR section 7 (3), the license holder is exempt from the obligation to prepare results or strategies in relation to the objective set out in Section 7 (1) of the FPPR once the established Wildlife Habitat Areas address the amount of area required to meet habitat requirements and specifies GWM’s to maintain the identified wildlife within those areas. The species listed in **Table 1** below show the amount of hectares required in order to meet the amount of hectares set out in the Section 7 notice. The interior Western Screech Owl, Lewis’s Woodpecker and the Coeur d’Alene Salamander are species where the habitat requirements have been met; therefore, they do not show in the table.

Results and Strategies

The Agreement holder will:

1. During the planning and development stage of a cutblock, *occurrence sites* of any section 7 species will be identified.
2. Where field staff/contractors identify habitat with the attributes described in the section 7 notice, or *occurrence sites* which are outside of the section 7 species WHA's but within the holders FDU, and are likely to be impacted by primary forest activities, at least one of the following options will be followed:
 - a) Reserve the area from harvesting.
 - b) The habitat will be assessed by a *QP* to determine whether it is considered "suitable habitat" and the *QP*'s recommendations will be considered.
3. SAR awareness training will be conducted for new BCTS field staff within 1 year of the start of employment and for all field staff every five years, documented in a training record, and include information regarding species identification, management strategies and reporting and, where new information regarding SAR becomes available, field staff will receive awareness training regarding the new information within 1 year;
4. Contractors and agreement holders who conduct activities in the field will be provided with an information package regarding the identification and notification requirements for SAR and, through pre-work meetings, site plans and/or support documents, will be advised of:
 - i. the results of any stand level assessment for SAR;
 - ii. the measures or requirements for any applicable SAR, UWRs and WHAs; and
 - iii. how planned primary forest activities will be consistent with the above requirements;

Section 7 Species at Risk:

Table 1

Section 7 Species at Risk in the Okanagan-Shuswap District	Suitable Habitat	WHA Remaining (hectares) Ha's remaining to meet the amount of ha's included in the section 7 notice.
Flammulated Owl	Found between 500-1000m in elevation, Mature Douglas-fir forest with scattered large Ponderosa pine, grassy openings, thickets of young trees, snags with woodpecker cavities and large old trees.	540
Fringed Myotis	Caves, mines, rock crevices and cliffs, wildlife trees and buildings. Associated with arid grasslands and ponderosa pine-fire forests.	12
Great Basin Gopher Snake	Prefers open areas, bunch grass, sagebrush and open Ponderosa Forests. Rock and sparsely vegetated rock.	6250
Great Basin Spadefoot	Mainly sagebrush flats, semi-desert shrub-lands, pinyon-juniper woodland. Digs its' own burrow in loose soil or uses those of small mammals. Breeds in temporary or permanent water, including rain pools, pools in intermittent streams, and flooded areas along streams.	200
Spotted Bat	Open and dense conifer forests, deciduous habitats, hay fields, marshes, riparian areas and dry shrub grasslands. Roost in crevices of cliffs or canyon walls. Proximity of roosts to feeding areas and source of water is important.	8
Tiger Salamander (Renamed the Blotched Tiger Salamander)	Inhabit almost any terrestrial habitat as long as it includes the required aquatic breeding habitat, such as a lake, reservoir, permanent and ephemeral pond, or stream pool. They range from warm lowlands to high mountains and spend much of their lives in rodent burrows.	320

4.2.2 KBHLPO and RHLPO Wildlife Objectives

Grizzly Bear Habitat and Connectivity Corridors and Management

Legal Reference: FPPR Section 7 KBHLPO (October 26, 2002) Objective 5 for Grizzly Bear Habitat and Connectivity Corridor within the Golden Resource Management zone, RHLPO (March 25, 2002) Objective 4 regarding grizzly bear management within the Revelstoke Resource Management Zone.
Objective: <i>“Without unduly reducing the supply of timber from British Columbia’s forests, to conserve sufficient wildlife habitat in terms of amounts of area, distribution of areas and attributes of those areas, for the survival of species at risk, the survival of regionally important wildlife, and the winter survival of specified ungulate species.”</i>
Applicable FDU’s: all FDU’s in the Selkirk Natural Resource District

Results and Strategies

The Agreement holder will:

1. Adopt as a result and strategy Objective 4 - Grizzly Bear Management of the RHLPO for the Revelstoke Resource Management zone.
2. Adopt the Objective 4 - Grizzly Bear Management of the RHLPO for the Golden Resource Management zone, using the BCTS avalanche chute mapping for the Golden TSA. Mapping of important grizzly bear habitat has not been completed; therefore objective 5(1) has not taken effect.
3. Adopt as a result and strategy for connectivity corridors Objective 5 (3) from the KBHLPO.

4.2.3 Ungulate Winter Range Rocky Mountain Elk, Mule Deer, White Tailed-Deer, Moose, Bighorn Sheep and Mountain Goat.

Legal Reference: FPPR Section 7 and Draft Golden Ungulate Winter Range order U-4-007
Objective: <i>“Without unduly reducing the supply of timber from British Columbia’s forests, to conserve sufficient wildlife habitat in terms of amounts of area, distribution of areas and attributes of those areas, for the survival of species at risk, the survival of regionally important wildlife, and the winter survival of specified ungulate species.”</i>
Applicable FDU’s: all FDU’s in the Golden TSA

Results and Strategies

The agreement holder will:

1. In relation to the objectives set by government for *Ungulate Winter Range Rocky Mountain Elk, Mule Deer, White Tailed-Deer, Moose, Bighorn Sheep and Mountain Goat*, where the agreement holder harvests a *cutblock*, constructs a road or conducts silviculture treatments within these Ungulate Winter Range Areas will achieve the General Wildlife Measures under Draft U-4-007 Ungulate Winter Range (Golden TSA).

Wildlife-OSLRMP LUO Wildlife Objectives

4.2.4 OSLRMP LUO Elk Areas

Legal Reference: OSLRMP LUO Objective 6
Objective: <i>To maintain congregation areas as shown on Map 6 of the Order and movement corridors between summer and winter ranges for elk.</i>
Applicable FDU's: Naramata, TFL 59-BCTS, Okanagan

Definitions

For the purpose of this strategy:

“elk corridor” means an area identified as Elk Habitat Corridor on the map titled Wildlife-Elk Habitat RMZ Corridor (Appendix E), on page WILDLIFE_ELK 4-6 of the OSLRMP. (Interpreted as corridors that Elk travel between summer and winter habitats).

“elk congregation area” means an area identified as an Elk Congregation Area on the map titled Wildlife-Elk Congregation Areas (Appendix E), on page WILDLIFE_ELK 4-7 of the OSLRMP. (Interpreted as Winter areas according to spatial mapping)

“elk areas” means the areas identified as Elk Areas on LUO Map 6 (Appendix E) . (interpreted as Summer areas according to spatial mapping)

“mule deer winter range” means the ungulate winter range identified in GAR Order Ungulate Winter Range #U-8-001-Okanagan TSA.

“suitable snow interception cover” or **“SIC”** means:

- a) a VRI polygon that:
 - (i) is greater than 0.25 hectares in size;
 - (ii) is Douglas-fir leading;
 - (iii) is age class 8 or older; and
 - (iv) has a crown closure class of 4 or greater.

contributing snow interception cover means an area in an elk congregation area that is:

- a) SIC and not in an established cutblock;
- b) not in an established cutblock and was SIC immediately prior to being harvested;
- c) SIC and is in an established cutblock where harvest is complete; or in an established cutblock that is planned to be harvested in a manner that will provide SIC upon conclusion of harvesting.

Results and Strategies

The agreement holder will:

1. Within Elk Corridors (also referred to as movement corridors and inside the Naramata FDU), the agreement holder will ensure that:
 - a) Timber harvesting will not result in more than 30% of the corridor area being occupied by VRI polygons with a height of less than 3m at any one time.
 - b) Timber harvesting will not result in more than 70 % of the corridor area being occupied by VRI polygons with a height of less than 16 meters at any one time.
 - c) Timber harvesting will not result in a clearcut being greater than 300 meters on any one side (measured from one outside edge to another). Any subsequent blocks will not be placed any

nearer than 300 meters from the original block unless the regen on the original block has attained an average height of 3 meters.

- d) To maintain the use of elk movement corridors between summer and winter ranges, active road densities should be minimized. Rehabilitate unused roads that are inside the elk corridors. Where practicable, active roads should be a minimum of 500m from the elk corridors. Visual screening of at least 3m tall vegetation should be maintained along active roads.
2. Within congregation areas (TFL 59 only and in Winter habitat), that are located outside of the mapped Mule Deer Winter Range do the following:
 - a) Will adhere to the measures specified in the GAR order for Mule Deer Winter Range.
 - b) Where practicable and where suitable stands exist the agreement holder will ensure that Wildlife Tree Retention Areas will be located on rutting areas and wallows that have been identified and mapped and made known to the agreement holder in advance of planned activities.
 - c) Will accomplish, visual screening along main haul roads by;
 - (i) Retaining non-merchantable and non-commercial vegetation, except where removal is necessary to address safety concerns, or where terrain limitations require roadside logging/decking to be conducted on the main haul road.
 - d) To maintain the use of elk congregation areas, active road density should be minimized. Rehabilitate unused roads that are within 100m of a congregation area. Where practicable active roads should be a minimum of 500m from the congregation areas. Visual screening of at least 3m tall vegetation should be maintained along active roads.
3. Where the forest cover conditions described in (1) do not exist within an Elk Corridor or Elk Congregation Area located outside of Mule Deer Winter Range:
 - a) Prior to harvesting a cutblock or constructing a road within the Elk Areas, ensure a *QP* completed an Elk Area Habitat Suitability Assessment within the Elk Corridor or Elk Congregation Area; and,
 - b) Where an assessment identifies an opportunity to harvest timber while continuing to maintain sufficient congregation areas and movement corridors between summer and winter ranges for Elk, conduct primary forest activities consistent with the recommendations of the assessment

4.2.5 OSLRMP LUO Marten

Legal Reference: OSLRMP LUO Objective 7
Objective: <i>The objective for Marten areas shown on Map 7 of the order is to maintain forage, cover, and connectivity for Marten.</i>
Applicable FDU's: Adelphi, Anstey, Banting-Kettle, Barton, Blais, Bolean, Branchflower, Celistia, Chase Harper, Cooke, Crazy, Currie, Glen Lake, Graystokes, Harris, Hudson Bay, Hunter Blurton, Ireland, Jackpine, Kal Slopes, Kwikwit, Lamberton, Long Ridge, Mara-Sicamous, Mellin Windy, Mission, Mugford, Naramata, Old Dave, Paxton, Priest Creek, Ratchford, Ross, Skaha, Skimikin, Smokeyhouse, Stuart Terrace, TFL 33-BCTS, TFL 49, TFL 59-BCTS, Wetask Lake, White Lake, Whitehead, Yard Creek, Okanagan.

Definitions

For the purpose of this strategy:

“marten areas” means the areas identified as Marten Areas on LUO Map 7 (Appendix E).

“Fly Hills Marten RMZ” means the area identified as Marten Habitat on the map (Appendix E) displayed on OSLRMP page WILDLIFE_MARTEN 4-4.

“Fly Hills Marten RMZ sub-units” means the five mapped sub-units which, when combined together comprise the Fly Hills Marten RMZ, as indicated on the map displayed in Appendix E of this FSP.

“marten corridors” means areas of retention established within the Fly Hills Marten RMZ, consisting of OGMA, Enhanced Riparian Reserve and wildlife tree retention, and managed internally by the agreement holder.

“habitat pile” means an accumulation of woody debris mechanically piled to a height of 2-5m a diameter of 2-5, and includes windrows that are 2-5m tall and not exceeding 50m in length, and are left on site at the conclusion of harvesting or site preparation activities.

Results and Strategies

The agreement holder will:

1. If the cutblock is within a marten area, meet the following requirements:
 - a) prior to harvesting the *cutblock*, establish *wildlife tree retention* areas where *practicable* and consistent with section 4.9 within:
 - i. *enhanced riparian reserves*; as defined in section 4.4
 - ii. *riparian management areas*; or
 - iii. *very xeric to xeric sites within or adjacent to the cutblock or*
 - iv. *adjacent to OGMA's*.
 - b) at the conclusion of harvesting and silviculture treatments, retain basic and enhanced levels of coarse woody debris consistent with section 4.12
2. If the *cutblock* is within the *Fly Hills Marten RMZ (Skimiken, White lake, and Branch Flower FDU's)* meet all of the following requirements at the conclusion of harvesting and silviculture treatments:
 - a) not cause there to be less than 2300 hectares of marten corridors;

- b) not cause there to be less than 33% of the *forested area* that is within at least 4 of the 5 *Fly Hills RMZ sub-units* to be 19 metres or greater in *height*; or
- c) Where practicable, maintain enhanced levels of CWD in riparian management areas of S5 streams and any S6 streams consistent with section 4.12.
- d) In cutblocks that are greater than 20 hectares located on slopes less than 35%, establish where practicable, for every 20 hectares (NAR) of the cutblock size, no less than 3 habitat piles within 20 meters of the cutblock edge or a riparian management zone.
- e) Where marten corridors have been identified limit new permanent road crossing to 1 crossing per km of corridor and minimize the construction of temporary access structures.
- f) After juvenile spacing or thinning retain at least 10% of the gross area of each treatment unit in a randomly distributed, untreated condition.
- g) Where the forest cover conditions described in (2b) above do not exist within the Fly Hills Marten RMZ:
 - (i) Prior to harvesting a cut block or construction road within the fly hills Marten RMZ, ensure a *QP* completed a Fly Hills Marten RMZ Habitat Suitability Assessment; and
 - (ii) Where the assessment identifies an opportunity to harvest timber while not causing there to be insufficient forest cover suitable for providing for the habitat requirements of Marten, conduct primary forest activities consistent with the recommendations of the assessment.

4.2.6 OSLRMP LUO Fisher Areas

Legal Reference: OSLRMP LUO Objective 8
Objective: <i>The objective for Fisher areas as shown on Map 8 of the order is to maintain forage, cover and connectivity for Fisher.</i>
Applicable FDU's: Anstey, Bolean, Branchflower, Chase Harper, Chum, Coldstream, Cooke, Crazy, Currie, Eagle River, Hlina, Hunter Blurton, Ireland, Kwikoit, Lamberton, Long Ridge, Mara-Sicamous, Mt. Ida, Paxton, Ratchford, Rose-Swanson, Ross, Sicamous North, Skimikin, Smokeyhouse, TFL 33-BCTS, TFL 49, Wall Creek, White Lake, Yard Creek, Okanagan.

Definitions

For the purpose of this strategy:

“**fisher areas**” means the areas identified as Fisher Areas on LUO Map 8 (Appendix E)

Results and Strategies

The Agreement Holder will:

1. Ensure that, to the extent practicable, basic and enhanced coarse woody debris (CWD) requirements are met within the RMA of each S5 or S6 as per section 4.12.

2. On ground skidded areas and to the extent practicable, retain all cottonwoods 75 cm or greater in DBH upon the completion of harvesting. If Cottonwoods are less than 75cm then retain all cottonwoods in the next closest 5cm incremental diameter class to a minimum size of 30cm at stump height.
3. To the extent practicable, retain all stands of mature trees of at least 1 ha in area in which greater than 80% of the trees of merchantable size are cottonwood.
4. Upon the completion of harvesting and to the extent practicable, retain all deciduous trees of merchantable size (except for Paper Birch species as it seeds prolifically) in the riparian management zones of S1, S2 and S3 streams on each cutblock.
5. Where the foregoing of cottonwood and deciduous retention requirements must be supplemented in order to meet minimum wildlife tree retention requirements described elsewhere in this plan, the agreement holder will, to the extent practicable, focus retention on one or more of the following attributes:
 - a) decay class 2 or greater spruce, Douglas fir and cottonwood snags;
 - b) live cottonwoods; and
 - c) riparian management areas.
6. In order to retain overhead cover for fisher, the agreement holder will not conduct broadcast brushing or pruning activities in stream riparian management zones unless required to meet regeneration or free growing obligations.

4.2.7 OSLRMP LUO Bighorn Sheep Areas

Legal Reference: OSLRMP LUO Objective 9
Objective: <i>The objective for areas shown on Map 9 (of the Order), is, for the purposes of conserving the suitability of Bighorn Sheep habitat that is not in established deer winter ranges, to retain sufficient forest cover during primary forest activities, including sanitation and salvage activities, to provide for the thermal, snow interception and security requirements of Bighorn Sheep.</i>
Applicable FDU's: Chum, Naramata, Skaha, Skimikin, Stuart Terrace, TFL49, TFL 59-BCTS, White Lake, Okanagan

Definitions

For the purpose of this strategy:

“bighorn sheep areas” means the areas identified on LUO Map 9 (Appendix E) of the OSLRMP.

“special features” means open grasslands, mineral licks, rutting areas, lambing areas and loafing sites identified by the ministry responsible for wildlife.

“bighorn sheep planning cell” means each spatially separate and distinct portion of the bighorn sheep areas identified on LUO Map 9.

“crown closure” means the percentage of ground area covered by the vertically projected crowns of the tree cover for each tree layer within the polygon and provides an estimate of the vertical projection of tree crowns upon the ground, as confirmed by:

- (i) VRI attribute CROWN_CLOSURE; or

- (ii) a survey of the forested area within the bighorn sheep planning cell that is available to or completed by the agreement holder.

“**Derenzy Sheep zone 2**” means the area shown on the Derenzy Bighorn Sheep areas on Derenzy Bighorn Sheep Habitat map (Appendix E) of the OSLRMP.

Results and Strategies

The Agreement Holder will:

1. Prior to initiation of planned activities on a road or cutblock within Bighorn Sheep areas;
 - a) refer a proposed *cutblock* to the ministry responsible for wildlife, requesting that *special features* located within or *adjacent* to the *cutblock* be identified;
 - b) Within a 50m radius of a *special feature* harvesting will be avoided.
2. Where *practicable*, maintain 33% of the Bighorn sheep polygon area which lies within FDU’s containing BCTS operating area in stands greater than 16meters in height with a crown closure class of 3 or greater.
3. Where the forest cover conditions described in (2) above, do not exist within a Bighorn Sheep Planning Cell:
 - a) Prior to harvesting a cutblock or constructing a road within a Bighorn Sheep Planning Cell, ensure a *QP* completes a Bighorn Sheep Habitat Suitability Assessment within the Bighorn Sheep Planning Cell; and
 - b) Where the assessment identifies an opportunity to harvest timber while not causing there to be insufficient forest cover suitable for providing for the habitat requirements of Bighorn Sheep, conduct *primary forest activities* consistent with the recommendations of the assessment.
4. Subject to the results and strategies found in section within *Derenzy sheep zone 2*:
 - a) Maintain 33% of the *Derenzy Sheep Zone 2* polygon to a height of 16 meters or greater and a crown closure class of 3 or greater.
 - b) In lodgepole pine dominated stands, utilize a clear-cut with reserves silviculture system with opening sizes of 5 to 20 hectares as per table 1 on page Wildlife Derenzy 4-6 of the OSLRMP, unless the timber harvesting to be carried out is to recover timber damaged by fire, insect, wind or other natural events.
 - c) In Douglas-fir and spruce dominated stands, restrict silviculture systems to small patch cuts or partial retention systems as per table 1 on page Wildlife Derenzy 4-6 of OSLRMP, unless the timber harvesting to be carried out is to recover timber damaged by fire, insect infestation, wind other natural events.

4.2.8 OSLRMP LUO Williamson's Sapsucker

Legal Reference: OSLRMP LUO Objective 11
Objective: <i>To conserve critical breeding habitat.</i>
Applicable FDU's: Skaha, TFL 59-BCTS, Okanagan

Definitions

For the purpose of this strategy:

"Williamson's Sapsucker area of occupation" means an area:

- a. identified in Figure 2, page 6 of "B.C. Ministry of Forests, Lands and Natural Resource Operations. 2014. Best management practices for timber harvesting, roads, and silviculture for Williamson's Sapsucker in British Columbia: Okanagan-Boundary Area of Occupancy. B.C. Ministry of Forests, Lands and Natural Resource Operations, Nelson, BC. 15 pp";
- b. within a 500 meter radius (slope distance) of a Williamson's Sapsucker breeding location, identified by the BC Conservation Data Centre not less than 12 months prior to cutting authority application or amendment; or
- c. proposed by the ministry responsible for Environment as a Williamson's Sapsucker wildlife habitat area, not less than 12 months prior to cutting authority application or amendment, which is located outside of an established cutblock or established road.

"Williamson's Sapsucker primary forest activity design" means a design of primary forest activities, developed by a *QP* that provides for the conservation of Williamson's Sapsucker critical breeding habitat during harvesting, road construction and maintenance, and silviculture treatments by considering:

- a) pre-harvest stand condition;
- b) forest health factors such as insect infestation, root disease, blowdown, and wildfire;
- c) site conditions that may affect worker or public safety;
- d) activity timing windows;
- e) critical breeding habitat suitability;
- f) forest stand management practices and
- g) Williamson's Sapsucker critical breeding habitat requirements, including:
 - (i) nest tree retention and recruitment;
 - (ii) live tree retention targets;
 - (iii) sap tree habitat targets; and
 - (iv) coarse woody debris retention.

Results and Strategies

The Agreement Holder will:

1. Prior to initiation of planned activities on a road or cutblock within a *Williamson's Sapsucker area of occupation*, ensure a *Williamson's Sapsucker primary forest activity design* is completed by a *QP* and the design and recommendations are followed.
2. If in the opinion of the *QP* carrying out the *Williamson's Sapsucker primary forest activity design* that the primary forest activity is likely to have an impact on that habitat, the bird, or nest site, then only carry out primary forestry activities that are consistent with the direction provided by the "Best Management Practices for Timber Harvesting, Roads, and Silviculture for Williamson's Sapsucker in British Columbia (February 2014)".

<http://a100.gov.bc.ca/pub/eirs/lookupDocument.do?fromStatic=true&repository=BDP&documentId=11942>.

4.2.9 Wildlife-OSLRMP LUO Road construction (Grizzly Bear, Moose, Mountain Goat, Mule Deer, NDT4 Areas, and Walk-in Lakes)

Legal Reference: OSLRMP LUO Objective 10b, Map 10 (Appendix E)
Objective: <i>The objective is to limit the adverse impacts of Forest Road Construction on the habitat values of Grizzly Bear, Moose, Mountain Goat, Mule Deer, grasslands and low elevation forests (Ecosystem-Natural Disturbance Type 4).</i>
Applicable FDU's: Grizzly Bear: <i>Adelphi, Anstey, Banting-Kettle, Barton, Big White, Blais, Bolean, Branchflower, Celista, Chase Harper, Chum, Cooke, Crazy, Currie, Eagle River, Echo, Glen Lake, Graystokes, Harris, Hlina, Hudson Bay, Hunter Blurton, Ireland, Jackpine, Kal Slopes, Kwikwit, Lamberton, Long Ridge, Mara-Sicamous, Mellin Windy, Mission, Mugford, Naramata, Old Dave, Paxton, Priest creek, Ratchford, Ross, Sicamous North, Skaha, Skimikin, Smokeyhouse, Stuart Terrace, TFL33 BCTS, TFL 49, TFL59-BCTS, White Lake, Whitehead, Yard Creek, Okanagan.</i> Moose: <i>Adelphi, Barton, Blais, Celista, Chase Harper, Crazy, Harris, Hlina, Ireland, Jackpine, Long Ridge, Mellin Windy, Mt. Ida, Mugford, Old Dave, Paxton, Ratchford, Sicamous North, Skaha, Skimikin, Smokeyhouse, Stuart Terrace, TFL 49, TFL 59-BCTS, Wall Creek, White Lake, Okanagan.</i> Mountain Goat: <i>Crazy, Currie, Skaha, TFL49, TFL59-BCTS, Okanagan.</i> Mule Deer: <i>Adelphi, Bolean, Branchflower, Chase Harper, Chum, Coldstream, Cook, Crazy, Currie, Eagle River, Echo, Glen Lake, Harris, Hlina, Hunter Blurton, Ireland, Kal slopes, Lamberton, Mara-Sicamous, Mission, Mt. Ida, Mugford, Naramata, Paxton, Priest Creek, Rose-Swanson, Ross, Sicamous North, Skaha, Skimikin, TFL 33-BCTS, TFL 49, TFL59-BCTS, Wall Creek, White Lake, Okanagan.</i> NDT4- <i>Adelphi, Barton, Bolean, Branchflower, Chase Harper, Coldstream, Currie, Echo, Glen Lake, Harris, Hlina, Hunter Blurton, Ireland, Kal Slopes, Mission, Mt. Ida, Naramata, Paxton, Rose-Swanson, Skaha, Skimikin, TFL 49, TFL59-BCTS, Wall Creek, White Lake, Whitehead, Okanagan.</i> Walk-in Lakes: <i>Chase Harper, Currie, Graystokes, Harris, Ireland, Kal Slopes, Long Ridge, Mellin Windy, Mission, Old Dave, Skaha, Skimikin, Smokeyhouse, TFL 49, Okanagan.</i>

Definitions

For the purposes of this strategy:

“Grizzly Bear Habitat RMZ” means the specified area shown in the map set out in Schedule A of GAR ORDER – Grizzly Bear Specified Area # 8-232.

“critical grizzly bear habitat” means areas within the Grizzly Bear Habitat RMZ that include:

- a) avalanche tracks;
- b) glacier lily complexes;
- c) meadow/wetland complexes;
- d) riparian site series as per “OSLRMP Table 2 Riparian Site Series”, page “Wildlife_Grizzly 4-13”;or
- e) burn areas that no longer contribute to the THLB and are dominated by *Vaccinium* species.

“grizzly bear suitability areas” means those areas within the Grizzly Bear Habitat RMZ that:

- a) North of Highway 6, are identified on the map on page “Wildlife_Grizzly 4-15” (Appendix E) of the OSLRMP as “High-Moderate” or “High” grizzly habitat suitability
- b) South of highway 6, are identified on the map on page “Wildlife_Grizzly 4-15” of the OSLRMP as “Moderate”, “High-Moderate” or “High” grizzly habitat suitability.

“critical moose winter habitat” means, within those specified areas shown in the map set out in Schedule A of GAR ORDER – Ungulate Winter Range #U-8-006 – Okanagan TSA, a zone extending 200 metres (slope distance) from the outer edge of a W1 wetland, a W3 wetland in the MSdm2 or MSxk BEC, or a W5 wetland.

“mountain goat plateau habitat” means the specified areas shown in the map set out in Schedule A of GAR ORDER – Ungulate Winter Range #U-8-005 – Okanagan TSA, as well as a zone extending 200 metres (slope distance) from the edge those areas.

“mule deer winter range” means the specified areas shown in the map set out in Schedule A of GAR ORDER - Ungulate Winter Range #U-8-001 – Okanagan TSA.

“NDT4 areas” means ecosystems with frequent stand-maintaining fires located within the Ecosystem Management – NDT4 RMZ Map (Appendix E)

area, and identified as the following BEC's:

- a) *Bunchgrass (all variants);*
- b) *Ponderosa Pine (all variants); and*
- c) *Interior Douglas-fir xh1 and xh2 variants.*

“walk-in lakes” means the lakes listed in the OSLRMP LUO Schedule.

Results and Strategies

The Agreement Holder will:

1. Not construct new permanent *road* unless no other practicable option exists:

- a) *critical grizzly bear habitat;*
- b) *grizzly bear suitability areas;*
- c) *critical moose winter habitat;*
- d) *mule deer winter range; or*
- e) *NDT 4 areas;*

2. While constructing a new road within:

- a) *critical grizzly bear habitat;*
- b) *grizzly bear suitability areas; or*
- c) *critical moose winter habitat,*
- d) *mule deer winter range; or*
- e) *NDT 4 areas;*

Restrict access to the road so that it is non-passable to a four wheel drive pickup truck within one year of completing initial silviculture activities, and where the use of that road is not necessary to access future timber opportunities.

3. If constructing a new road within mountain goat plateau habitat:

- a) a. Restrict access to the road so that it is non-passable to a four wheel drive pickup truck within 6 months of harvesting completion, and where the use of that road is not necessary on an on-going basis.
- b) Should that road be reactivated on a short term basis for initial silviculture activities, restrict access within 3 months of the conclusion of the silviculture activity.

4. For *walk-in lakes*;

- a) within 500meters of a walk-in lake, not construct a permanent road except where no other practicable option exists.
- b) where construction of a permanent road or a temporary access structure does occur within 500meters of a walk-in lake, minimize the amount of construction to the greatest extent practicable and;
 - (i) not restrict walk-in access to the lake except during temporary closures for road maintenance or repairs.

- (ii) So long as the road is not required to provide access to future *cutblocks*, rehabilitate the temporary access structure or deactivate the permanent road as soon as practicable after the completion of *initial silviculture activities*.
- (iii) Wherever *practicable* locate the road described in (section b) above away from an established trail leading into the walk-in lake.
- (iv) Any *primary forest activities* along a portion of trail that accesses a walk-in lake will ensure that the trail is re-established and clearly marked where *practicable* within 6 months after completion of harvesting or road construction.

4.3 Water, Fish, Wildlife and Biodiversity within Riparian Areas

Legal Reference: FPPR section 8 and 12.1(6)
Objective: <i>“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.”</i>
Applicable FDU's: All FDU's

For the purpose of this strategy:

“**large S6 stream**” means an S6 stream that is greater than 1.5m but less than 3.0m in width.

“**small S6 stream**” means an S6 stream that is less than 1.5m in width

“**Stub**” means mature trees that are either mechanically felled or broken off at least 3-5 m above the ground

“**Alluvial Fan**” means cone-shaped depositional landforms that occur where a stream emerges from the confines of a mountain, or “loses confinement.” Sediment is delivered to the channel from erosion within the watershed and transported to the fan by hydro-geomorphic processes (floods, debris floods, and debris flows).

“**Machine Free Zone (MFZ)**” means a defined area where tracks or wheels of ground based machinery are not permitted except for the purpose of addressing a safety hazard, at a designated stream crossing, or where it is not practicable. The width is to be determined from the edge of the stream bank along both sides of the stream. The purpose of the MFZ is to avoid as much as is practicable machine traffic in order to maintain stream side soil stability and also to minimize impact to the understory vegetation in the riparian area.

Results and Strategies

The Agreement Holder will:

1. Apply retention strategies within RMZ for streams, wetlands and lakes as outlined in **Table 2** below. The retention targets may be reduced if necessary as determined by a QRP for the following situations:
 - a) Trees that have been wind thrown or have been damaged by fire, insects or disease; or,
 - b) Danger trees; or,
 - c) Trees located within 5 m of either side of a skid crossing; or, within a stream crossing right of way.

Table 2: Riparian Classes and Basal Area % Retention

Riparian Class	Riparian Reserve Zone (m)	Riparian Management Zone (m)	Percent Basal Area Retention (%) within the RMZ
S1-A stream	0	100	≥20
S1-B stream	50	20	≥20
S2 stream	30	20	≥20
S3 stream	20	20	≥20
S4 stream (fish and non-fish bearing)	0	30	>20
S5 stream	0	30	≥10
Large S6 stream (≥1.5 m wide)	0	20	≥10
Small S6 stream (<1.5 m wide)*	0	20	≥0
L1-A (L1-B)	0 (10)	0 (10)	≥10
L2	10	20	≥10
L3	0	30	≥10
L4	0	30	≥10
W1	10	40	≥10
W2	10	20	≥10
W3	0	30	≥10
W4	0	30	≥10
W5	10	40	≥10

*The 100 m of the first reach of a small S6 streams immediately upstream of a fish bearing stream or proximate to a domestic water intake will be managed as a S4 stream with regard to streamside retention.

2. During the establishment of the RMZ, retention levels may not be uniformly distributed throughout the RMZ within the cut block, provided that the total retention of the RMZ within the cut-block area is equivalent to that which would have been established using the percent retention specified in Table 2. The intent of this flexibility is to match site specific conditions to provide for the best management of the riparian area whether that be biodiversity objectives, shading, wind-throw or topography.
3. To avoid damage to the stream banks and minimize harvesting debris introduced inadvertently into streams, wetlands or lakes, falling, skidding or yarding direction will be away from streams, wetlands and lakes, or parallel to streams, unless unsafe or not practicable to do so. Where falling and yarding away is not practicable, streambank damage will be minimized by following the General Guidelines for “Falling and Yarding” in the Riparian Management Area Guidebook. If a QP determines that excessive harvesting debris accumulations are unduly impeding stream flow and function, debris will be removed from the stream while disturbance to naturally occurring embedded woody material will be minimized.
4. Maintain stream bank and stream channel integrity on all streams (excluding NCD’s) that do not have a riparian reserve zone by establishing a 5m machine free zone along both sides of streams within harvest areas where ground-based equipment will operate, with the exception of designated stream crossings for skid trails or roads. For winter harvested blocks where a *QP* determines that there is sufficient compressible snowpack to mitigate damage to the stream bank and riparian area, no MFZ will be required.
5. Advanced regeneration and understory vegetation, will be retained within the MFZ. For blocks with a ground based harvest system, deciduous trees will also be retained. On blocks using a cable harvesting system where it is not practicable or safe to retain all understorey and advanced regeneration, the agreement holder will minimize damage to understory vegetation and advanced regeneration by following the General Guidelines for Falling and Yarding detailed in the Riparian Management Area Guidebook or through winter harvest where possible. For safety reasons, winter harvest will not occur in avalanche prone terrain.
6. Maintain the function of alluvial fans by;
 - a) constructing roads above or below an alluvial fan where practicable. Where roads must be placed on an alluvial fan a *QP* will be engaged with the road design, and their recommendations will be considered for implementation.
7. Comply with the practice requirements for stream, wetland, and lake riparian classes as listed in the FPPR 47 (4) to (8) and to 51, 52 (2) and 53 of the FPPR.
 - a) reservoirs: as stated in FRPA section 180 (h) and 181, the Arrow, Revelstoke, Kinbasket reservoirs are greater than 1,000 ha in size and therefore do not require Riparian Reserve Zones.

8. Selkirk Natural Resource District

The following lakes (within this plan's FDU's) are less than 5 hectares in size but have been designated as L1 by the District Manager. All L1 lakes inclusive of those listed on the following table are assigned a 10m riparian reserve zone and 100m lakeshore management zone.

Table 3 Riparian Reserve and Management Zone for Lakes <5 ha.

Lake Name	RRZ (m)	LMZ (m)	LMA (m)
Echo Lake	10	100	110
Beaver Lake	10	100	110
Begbie Lake	10	100	110
Cranberry Lake	10	100	110
Wetask Lake	10	100	110
Pingston Lake	10	100	110
Jeb Lake	10	100	110
Moose Lake	10	100	110
Dainard Lake	10	100	110

Unless indicated in the preceding table, all L1 lakes in the Selkirk Natural Resource District >5ha <1000ha will utilize a 10m riparian reserve zone and a 100m lakeshore management zone.

For all other classifications of lakes, the riparian zones listed in **table 2** above apply.

4.4 OSLRMP LUO Enhanced Riparian Reserves

Legal Reference: OSLRMP LUO objective 10c, Map 10 (Appendix E)
<p>Objective: <i>During primary forest activities, including sanitation and salvage activities, to provide for the conservation of water, fish, wildlife, and biodiversity associated within streams by maintaining enhanced riparian reserves over a total of 10,000 hectares of timber harvesting land base.</i></p>
<p>Applicable FDU's: All FDU's within the Okanagan Shuswap Natural Resource District</p>

Definitions

For the purpose of this strategy:

“**enhanced riparian reserve**” or “**ERR**”, means a minimum 0.1 hectare reserve within the THLB, identified and tracked internally by the agreement holders, and supplemental to the statutory reserves specified under FPPR, that:

- a) is within the riparian management zone of a stream; or
- b) is contiguous with a riparian management zone of a stream.

Results and Strategies

The Agreement Holder will:

1. Not cause there to be less than a total of 1861 hectares of enhanced riparian reserve zones inside of TOC Forest Development Units which are designated BCTS operating areas located within the Okanagan Timber Supply Area, and 114 hectares of enhanced riparian reserve zones inside TOC Forest Development Units located within TFL 49.
2. Be in communication with other major license holders within the Okanagan TSA to maintain their set ERR targets when operating outside of BCTS operating areas but within the Okanagan FDU.
3. Maintain levels of the RMZ basal area retention as specified in Table 2 in Section 4.3 of this FSP

4.5 Water in Community Watersheds

Legal Reference: FPPR section 8.2, 59, 60, 61

Objective:

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 that it does not unduly reduce the supply of timber from British Columbia's forests 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*
 - i. An enactment, or*
 - ii. The licence pertaining to the waterworks.*

Applicable FDU's: Bolean, Branchflower, Coldstream, Drimmie Creek, Glen Lake, Harris, Hunter Blurton, Jackpine, Kal Slopes, Long Ridge, Mara-Sicamous, Mellin Windy, Mission, Mt. Ida, Mt. Rev Prov. Park, Mugford, Naramata, Priest Creek, Ross, Skaha, Stuart Terrace, TFL 49, TFL 59 BCTS, Wetask Lake, Whitelake, Whitehead, Okanagan, Revelstoke.

Definitions

For the purpose of this strategy:

"community watershed" has the meaning given to it in FPPR section 8.2(1)

"hydrologic assessment" means a QP assesses the existing and potential landscape level disturbances related effects on water and water related resources conducted at the site or watershed level which will include:

- a) An overview assessment including creek morphology
- b) Cumulative effects of past and proposed activities
- c) Hydrologic risks of proposed development
- d) Specific recommendations for hazard mitigation
- e) Specific recommendations to conserve the natural hydrologic conditions, natural stream bed dynamics and integrity of stream channels in the watershed.

- f) Specific recommendations to conserve the quality, quantity and timing of water flows.
- g) Specific recommendations to prevent the cumulative hydrological effects of primary forest activities in the watershed resulting in a material adverse impact.

Results and Strategies

The agreement holder will comply with sections 59, 60, 61 of the FPPR and will implement the following;

1. For the portion of an FDU that overlaps a *Community Watershed*, where the holder of the plan intends to conduct primary forest activities, a *QP* will assess the risk for those activities potentially causing:
 - a) Material that is harmful to human health to be deposited in or transported from water diverted for human consumption by licensed waterworks; and/or,
 - b) An increase in sediment delivery to the intake or causing sediment that is harmful to human health to enter a stream, lake or wetland for which the water is being diverted for human consumption.

A *QP* under this section is considered to be a forest professional in charge of timber development with knowledge of the area being considered or access to that knowledge (peers, supervisor).

2. If the *QP*'s assessed risk in a community watershed is low based on a review of the scope of the proposed primary forest activity, relevant and available site specific hydrologic information including terrain stability, number of creeks flowing into the stream with the "point of diversion", and the proximity to the RMA, the commitments in (3) below are not required.
3. If the risk is moderate or high, based on the same criteria used in (2) above the agreement holder will;
 - a) Ensure that a current *hydrologic assessment* has been or is carried out by a *QP*.
 - b) Ensure the primary forest activities are planned and conducted with due consideration to the recommendations of the *hydrologic assessment*.

Generally, a hydrologic assessment will be deemed current if it has been completed within 5 years of the primary forest activities being planned or implemented. An assessment older than 5 years will also be considered current if the primary forest activities being planned or implemented or equivalent were assessed in that hydrologic assessment and no known additional landscape level disturbances that could adversely impact the water resource have occurred in the watershed.

4. At the planning and design stage for timber harvesting and road construction, the agreement holder will provide a referral letter to the water licensee, which includes a description of the planned activities and provides a reasonable opportunity for review and comment.
5. At least 48 hours before the commencement of any road construction or deactivation in a community watershed, written notification will be provided to the water licensee.

4.6 Fisheries Sensitive Watersheds

Legal Reference: Section 14(1) and 14 (2) of the Government Actions Regulations :
Order-Fisheries Sensitive Watersheds-Thompson Region dated March 28th, 2007
Order-Fisheries Sensitive Watersheds-Okanagan Region dated March 28th, 2007

Objective:

For each Fisheries Sensitive Watershed identified by the Orders, the objective set by government is to:

- (i) Conserve the natural hydrologic conditions, natural stream bed dynamics and integrity of stream channels in the Fisheries Sensitive Watershed,*
- (ii) Conserve the quality, quantity and timing of water flows required by fish in the Fisheries Sensitive Watershed, and*
- (iii) Prevent the cumulative hydrological effects of primary forest activities in the Fisheries Sensitive Watershed from resulting in a material impact on the fish habitat in the watershed.*

Applicable FDU's: Anstey, Barton, Blais, Cascadia, Celistia, Coldstream, Crazy, Currie, Echo, Harris, Hlina, Hudson Bay, Kwikwit, Lamberton, Long Ridge, Mara-Sicamous, Ratchford, Skaha, Smokeyhouse, Stuart Terrace, TFL 49, TFL 59-BCTS, Wetask Lake, Yard Creek, Okanagan.

Results and Strategies

The Agreement Holder will:

1. Ensure a *QP* will assess the risk of those activities to ensure that:
 - a) the natural hydrological conditions, natural stream bed dynamics, and integrity of stream channels are conserved.
 - b) the quantity, quality, and timing of water flow required by fish are conserved.
 - c) The cumulative hydrological effects of primary forest activities do not result in material adverse impact on the fish habitat in the watershed.
2. If the *QP* determines the risk is low based on a review of the relevant and available site specific hydrologic information and criteria including terrain stability and the proximity to the RMA, the commitments in 3 are not required.
3. If a *QP* determines the risk is high or moderate based on the same criteria used in 2 (above), the holder of this plan will:
 - a) Ensure that a fisheries sensitive hydrologic assessment has been or is carried out by a *QP*.
 - b) Ensure the design of cutblocks and roads is consistent with the recommendations of the hydrologic assessment.

4.7 KBHLP Consumptive Use Streams

Legal Reference: Objective 6 of the Kootenay Boundary Higher Level Plan Order
Objective: <i>Objective 6 of the KBHLP is to reduce the impacts of forest development on streams licensed for human consumption.</i>
Applicable FDU's: Esplanade, Mount Seven, and Golden FDU

Results and Strategies

The Agreement Holder will:

1. Comply with objective 6 of the KBHLP. For each S5 and S6 stream where the specified streamside management zone applies, the agreement holder will plan and implement primary forest activities only if a *QP* determines that implementing the plan:
 - a) will 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; and
 - b) will not damage a licensed waterworks.
 - c) will result in locating stream crossings greater than 100 metres (slope distance) upslope of known intakes,
 - d) will result in the revegetation of cut banks and fill slopes in the management zone where exposed soil exceeds 0.01ha in a contiguous at the earliest opportunity following completion of primary harvesting and no later than one year afterwards.
2. At the planning and design stage for timber harvesting and road construction, the agreement holder will provide a referral letter to the licensed domestic water users or their designated group representative, which includes a description of the planned activities and provides a reasonable opportunity for review and comment.

4.8 Wildlife and Biodiversity-Landscape Level

Legal Reference: FPPR Section 9
Objective: <i>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 harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.</i>
Legal Reference: KBHLP Order (Oct, 26, 2002)
Objective: <i>To provide for more cost-effective timber harvesting based on Section 68(4) of the Operational Planning Regulation (OPR), establish the green-up height as 2.5 metres for areas adequately stocked and 3.0 metres for areas not adequately stocked, based on the criteria in the regulations, except in:</i> <ul style="list-style-type: none"><i>i. community watersheds;</i><i>ii. visually sensitive areas to be defined and determined by the District Manager, Ministry of Forests (MOF), within known scenic areas as identified in objective 9;</i><i>iii. Enhanced Resource Development Zones - Timber as identified in objective 7 and</i><i>iv. the specified fire-maintained ecosystems as identified in objective 8(d) and.</i> <i>To support intensive forest management for the purpose of increasing volumes of merchantable timber and to reduce industry costs while maintaining adequate environmental stewardship Enhanced Resource Development Zones – Timber (ERDZ-T) emphasis is assigned as outlined on map 7.1.</i>

Results and Strategies

The Agreement Holder will:

1. For all FDU's comply with the practice requirements of Sections 64, and 65, of the FPPR, except for Section 65(3) (a) and (b) (ii) where the agreement holder will comply with the following:
 - a) For all other FDUs covered by Kootenay-Boundary Higher Level Plan Order, and those portions of the above FDUs that are either not within Enhanced Resource Development Zones-Timber as per KBHLP Map 7.1, or are within connectivity corridors, a height of 2.5 metres. For those areas of Esplanade, Blackwater Ridge, Bluewater and Goodfellow FDUs within Golden RMZ Enhanced Resource Development Zones-Timber as per KBHLP Map 7.1, the KBHLP Order objective 7(2) is the result and strategy that applies;
 - b) For all FDUs covered by the Revelstoke Higher Level Plan Order, a height of 2.0 metres, as per DCO FSP Stocking Standards Version 3.
 - c) For all FDUs within the Okanagan-Shuswap Natural Resource District a height of 2.0 metres. This is consistent (for the Okanagan-Shuswap District) with the District Manager policy letter dated September 26th 2001, which states that "Under the Operational Planning Regulation, Section 68(1), and 68(8), the average height that is required to meet the green-up definition within the Salmon Arm, Vernon, and Penticton Forest Districts is 2.0 meters."
3. In the Okanagan Shuswap Natural Resource District we are managing landscape level biodiversity by managing for OGMA Section 4.10 and ERR's Section 4.4. In the Selkirk Natural Resource District, we are managing landscape level biodiversity by managing for OGMA Section 4.10.

4.9 Wildlife and Biodiversity-Stand Level

Legal Reference: FPPR Section 9.1
Objective: <i>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.</i>
Applicable FDU's: All FDU's

For the purpose of this strategy:

“Render ineffective” means, in the opinion of a QRP, as documented in a Site Plan or Support Document, damaged to a degree that the WTRA or WTP no longer has attributes consistent with a mature or old seral condition and considering the original intent of the WTRA or WTP (if known).

“Highly susceptible” means a susceptibility hazard class of high or very high as indicated by a field assessment or on MFLNRO susceptibility mapping and/or as defined within a MFLNRO Forest Health Strategy and where the timber is within 2 kilometres of a currently infested area.

Results and Strategies

Upon completion of harvest the Agreement Holder will:

1. For all FDUs within the Selkirk Natural Resource District comply with the practice requirements for *Wildlife Tree Retention (WTR)* listed in the FPPR section 66.
2. For all FDUs within the Okanagan Shuswap Natural Resource District comply with the WTRA requirements set out in **Table 4** (below) which is consistent with the OSLRMP and the wildlife retention targets in the letter from the Okanagan Shuswap District Manager, dated June 20th, 2005. **See Appendix F.**
3. For any cutblock covered by this FSP in the Okanagan Shuswap Natural Resource District, and harvested during any 12 month period beginning on April 1st of any calendar year ensure that at the end of that 12 month period, the total area covered by wildlife tree retention areas that relate to the cutblocks meets or exceeds the requirements set out in **Table 4** (below) for the total gross area of all the cutblocks.
4. For any cutblock described in #3 (above), ensure the total amount of wildlife tree retention area that relates to the cutblock is a minimum of 50% of the targets in **Table 4** (below). A wildlife tree retention area may relate to more than one cutblock if all the cutblocks that relate to the wildlife tree retention area collectively meet the applicable requirements of #3 (above).
5. As a strategy, in the Selkirk and Okanagan Shuswap Natural Resource Districts, where timber is harvested in a *WTRA* 's or *WTP* and the harvest area is mappable, (greater than 0.25 hectares), and

the total area that remains in *WTRA*'s following harvest is less than originally reported size or number of trees of the *WTRA* or *WTP* or the % required in section 1 and 2 (above) or is less than the % required by a former FSP that applied to the *WTRA* or is less than the % required in *WTP*'s as prescribed in a site plan or silviculture prescription under the FPC.

- a) then a *QP* will identify one or more replacement *WTRA*'s that provide an area, number of trees or habitat that is at least equivalent or better to the portion of the *WTRA* or *WTP* from which timber is being harvested. The *WTRA* or *WTP* replacement area or trees will be assessed for equivalency based on area or number of trees, species composition and mature or old seral attributes. The *QP* will document and map the replacement area in a site plan or support document.
- b) A *WTRA* or *WTP* may be reduced in size or number of trees only if there was an over allocation of *WTRA* or *WTP* above the % required in section 1 and 2 (above) or the % required by a former FSP that applied to the *WTRA* or the % required in *WTP*'s as prescribed in a site plan or silviculture prescription under the FPC when reported to Results. The *WTRA* or *WTP* can only be reduced in size or number of trees if it can be shown that the *WTRA* or *WTP* was originally recorded incorrectly. The reasons for an over allocated *WTRA* might include other non-wildlife related reasons such as visuals, ECA's, etc. A rationale for reducing the *WTRA* or *WTP* size or number of trees will be included in the amended site plan or support document.
- c) Situations when *WTRA*/ Wildlife Tree Patch (*WTP*) or portions of a *WTRA*/*WTP* will be harvested, will only include one or more of the following conditions:
 - a) to facilitate harvesting of a cutblock - for tail holds, guy line tiebacks, designated skid trails or yarding corridors;
 - b) to address safety hazards;
 - c) where timber is damaged as a result of wind, fire or forest health factors and, in the opinion of a QRP, the *WTRA* or *WTP* is rendered ineffective;
 - d) where timber is highly susceptible to insect damage; and/or
 - e) to facilitate road construction or address operational constraints to cable yarding, where there is no other practicable option, or where another option would result in greater risk to one or more FRPA Values.

6. For FDU's within the Okanagan Shuswap Natural Resource District, establish *WTRA*'s that are spatially distributed, no more than 500 meters distance from any other established *WTRA*'s or standing timber

Table 4: Wildlife Tree Retention % by LU and BEC subzones in the Okanagan Shuswap District

Wildlife Tree Retention % by LU and BEC subzones in the Okanagan Shuswap District								
LU Name	BEC SubZone	Retention %	LU Name	BEC SubZone	Retention %	LU Name	BEC SubZone	Retention %
Anstey	ESSFwc	5	Kettle	IDFdm	8	Harris	ESSFdc	7
Anstey	ICHmw	3	Kettle	MSdm	11	Harris	ESSFxc	6
Anstey	ICHvk	7	Penask	ESSFdc	10	Harris	ICHmk	9
Anstey	ICHwk	7	Penask	ESSFxc	9	Harris	IDFmw	7
Anstey TFL	ESSFwc	9	Penask	IDFdk	8	Harris	IDFxb	7
Anstey TFL	ICHmw	8	Penask	MSdm	9	Harris	MSdm	10
Anstey TFL	ICHwk	10	Penask	MSxk	7	Mabel	ESSFdc	10
Crowfoot	ESSFwc	10	Trepanier	ESSFxc	10	Mabel	ESSFwc	8
Crowfoot	ICHmw	9	Trepanier	IDFdk	5	Mabel	ICHmw	8
Crowfoot	ICHwk	11	Trepanier	IDFmw	7	Mabel	ICHwk	9
Crowfoot	IDFmw	4	Trepanier	IDFxb	4	Mabel	IDFmw	6
Kingfisher	ESSFvc	7	Trepanier	MSdm	6	UpperKettle	ESSFdc	8
Kingfisher	ESSFwc	7	Trepanier	MSxk	4	UpperKettle	ESSFwc	8
Kingfisher	ICHmk	4	Trepanier	PPxb	2	UpperKettle	ICHmk	10
Kingfisher	ICHmw	8	Trout	ESSFxc	6	UpperKettle	ICHmw	8
Kingfisher	ICHvk	6	Trout	IDFdk	7	Vernon	ESSFdc	0
Kingfisher	ICHwk	7	Trout	IDFxb	3	Vernon	ESSFxc	9
Kingfisher	IDFmw	4	Trout	MSdm	8	Vernon	ICHmk	8
Eagle	ESSFvc	4	Trout	MSxk	7	Vernon	ICHmw	7
Eagle	ESSFwc	9	Trout	PPxb	3	Vernon	IDFmw	6
Eagle	ICHmw	6	Penticton	BGxb	0	Vernon	IDFxb	2
Eagle	ICHvk	7	Penticton	ESSFdc	8	Vernon	MSdm	10
Eagle	ICHwk	7	Penticton	IDFdm	7	Vernon	PPxb	0
Pukeashun	ESSFwc	8	Penticton	IDFxb	4	UpperSalmon	ESSFdc	9
Pukeashun	ICHmk	7	Penticton	MSdm	9	UpperSalmon	ESSFxc	8
Pukeashun	ICHmw	7	Penticton	PPxb	3	UpperSalmon	ICHmk	6
Pukeashun	ICHwk	10	Mission	ESSFdc	8	UpperSalmon	IDFdk	6
Pukeashun	IDFmw	5	Mission	ESSFxc	4	UpperSalmon	IDFmw	4
Salmon Arm	ESSFdc	11	Mission	ICHmk	8	UpperSalmon	IDFxb	3
Salmon Arm	ICHmk	7	Mission	IDFmw	7	UpperSalmon	MSdm	7
Salmon Arm	ICHmw	7	Mission	IDFxb	2	UpperSalmon	MSxk	7
Salmon Arm	IDFdk	7	Mission	MSdm	10	UpperShuswap	ESSFwc	5
Salmon Arm	IDFmw	7	Mission	PPxb	4	UpperShuswap	ICHmw	7
Salmon Arm	IDFxb	6	White	ESSFwc	9	UpperShuswap	ICHvk	1
Salmon Arm	MSdm	8	White	ICHmw	7	UpperShuswap	ICHwk	4
Seymour	ESSFvc	4	White	ICHwk	9	Okanagan Westside	ESSFdc	12
Seymour	ESSFwc	7	White	IDFmw	4	Okanagan Westside	ESSFxc	12
Seymour	ICHmw	7	Cherryville	ESSFdc	6	Okanagan Westside	ICHmk	7
Seymour	ICHvk	6	Cherryville	ESSFwc	5	Okanagan Westside	IDFdk	6
Seymour	ICHwk	8	Cherryville	ESSFxc	8	Okanagan Westside	IDFmw	5
Kettle	ESSFdc	8	Cherryville	ICHmk	8	Okanagan Westside	IDFxb	6
Kettle	ESSFxc	8	Cherryville	ICHmw	6	Okanagan Westside	MSdm	10
Kettle	ICHmk	10	Cherryville	IDFmw	6	Okanagan Westside	MSxk	5

4.10 Old Growth Management

Legal Reference: Forest Practice Code of BC Act. Order establishing provincial non-spatial Old Growth Objectives (June 30 th , 2004).
Objective: <i>The objective set by government for Wildlife and Biodiversity is to contribute to the conservation of biodiversity by maintaining old forest by biogeoclimatic (BEC) variant within each landscape unit according to the age of forest and the percent of old forest retention specified in the tables within the order.</i>
Legal Reference: KBHLP Order (Oct, 26, 2002)
Objective: <i>The objective set by government for Wildlife and Biodiversity is to contribute to the conservation of biodiversity, maintain mature forests in those areas identified in objective 2 (2) and old forests to the level indicated in tables 2.1 to 2.5 to all landscapes units and associated biodiversity emphasis as defined in objective 1”.</i>
Legal Reference: RHLP Order (March 25, 2005), RHLP Order Amendment 2 (December 16 th , 2011)
Objective: <i>The objective set by government for Wildlife and Biodiversity is to contribute to the conservation of biodiversity, maintain old seral forests to the levels indicated in tables 2.1, 2.2, and as specified in subsection (b). Requirement levels are to be met at the biogeoclimatic subzone variant level using the variants mapped on page 2.1.</i>

Results and Strategies

The Agreement Holder will:

1. Adopt the spatially identified non-legal *OGMA*'s as per the order establishing provincial non spatial Old Growth Objectives (June 30th, 2004) for all FDU's as *OGMA*'s under this FSP.
2. For all FDU's within the Okanagan Shuswap Natural Resource District, the Establishing Provincial Non-spatial Old Growth Objectives Order objectives 1 - 3 are the results and strategies that apply prior to harvesting.
3. For all FDU's within the Golden TSA, the KBHLP Order objectives 1 and 2 are the results and strategies that apply prior to harvesting.
4. For all FDU's contained within the Revelstoke TSA, Cascadia, TFL 55 and TFL 56, the RHLP Order objectives 1 and 2 are the results and strategies that apply prior to harvesting.
5. Not construct road or harvest timber in an *OGMA* except where the incursion is to:
 - a) adjust for mapping areas so that the functional boundaries of the *OGMA* better reflects the physical features intended as the boundaries for the area such that the remaining area reflects wind firmness;
 - b) improve harvest boundary alignment in a way that contributes to the maintenance of the *OGMA*;
 - c) shift the location of the contiguous area of the *OGMA* to improve the retention of old forest attributes as identified through field assessment;
 - d) relocating the *OGMA* to capture old growth and/or biodiversity values (e.g. where old seral or biodiversity values outside of an *OGMA* are found to exceed old seral or biodiversity values inside);

- e) where there exists a compelling rationale to harvest and the incursion is minimal or an ecologically equivalent (equal or better old seral and biodiversity values) replacement opportunity exists;
 - f) address a substantiated forest health factor within an *OGMA*, where this poses a significant and substantiated forest health risk to forests outside the *OGMA* and where harvesting constitutes an appropriate and effective control action;
 - g) address a public or industrial safety concern or an environmental hazard, where no alternative exists; and,
 - h) allow for road development and maintenance where there are no other practicable options
6. For all FDU's, if the area of disturbance caused by (5) above, should exceed 10% of the *OGMA*'s area or 10 hectares, whichever is less, a *QP* will prepare a rationale prior to constructing road or harvesting timber that:
- a) describes the reason for the incursion, and
 - b) identifies and reserves from harvest an alternate area (or areas) that is
 - (i) equal or greater in total size to the area(s) being disturbed
 - (ii) equal or has greater retention of the key old forest attributes that are understood to be important for biodiversity conservation than the *OGMA* area(s) being replaced.
 - (iii) For all FDU's in the Golden TSA, also considers the factors identified in KBHLP Footnote k.
 - (iv) either within the proponent licensee's operating area, or within another licensee's operating area where agreeable to the other licensee;
7. For FDU's, if the area of disturbance caused by (5) above, should not exceed 10% of the *OGMA*'s area or 10 hectares, whichever is less:
- a) maintain a record of the area of disturbance, and
 - b) prior constructing road or harvesting timber, identify and reserve from harvest an alternate area (or areas) that is
 - (i) equal or greater in total size to the area(s) being disturbed
 - (ii) equal or greater retention of the key old forest attributes that are understood to be important for biodiversity conservation than the *OGMA* area(s) being replaced.
 - (iii) For all FDU's in the Golden TSA, also considers the factors identified in KBHLP Footnote k.
 - (iv) either within the proponent licensee's operating areas, within a protected area or within another licensee's operating area where agreeable to the other licensee.
8. For all FDU's within the Selkirk and Okanagan Shuswap Natural Resource Districts, use the following criteria set out in the Old Growth Management Area Guidance for the Thompson Okanagan (August 2007) when selecting a replacement *OGMA*: **(See Appendix G).**

- a) is equal in size, shape, age, connectivity and interior habitat should approximate or be an improvement upon the original *OGMA*;
- b) replacement *OGMA* 's should provide equivalent biogeoclimatic representation to the subzone level as the original *OGMA*;
- c) the site units of the replacement *OGMA* (e.g. moist to dry, slope, aspects and tree species) should be similar to the original *OGMA*.
- d) present and future forest health conditions should be considered when selecting replacement areas. Avoid stands that have or are likely to have forest health problems.
- e) transfers should not result in new *OGMA* 's in areas with higher levels of human disturbance;
- f) For all FDU's within the Golden TSA, also considers the factors identified in KBHLP Footnote k.

Transfers should be made within landscape unit or between adjacent landscape units. Overall targets across the planning area should be maintained. Distance between the original and replacement *OGMA* should be minimized.

- 9. Annually (by December 31st) save file(s) containing only the modified *OGMA* portions within the Okanagan TSA to the DOS FTP site. The file(s) will contain only the relevant added or deleted areas along with the appropriate attribute data.
- 10. For all *OGMA* boundary and location changes within the Selkirk Natural Resource District, maintain a digital file tracking changes and, upon request, digital information will be provided to the MFLNRORD.

KBHLP Footnote "k": Where a registered professional forester determines that a forest stand has sufficient biological value to be a mature or old considering the stand age, successional status, presence of old growth attributes, size of stand (ha), the amount of human impact, dispersion/connectivity of the stand and rarity of the stand; that stand may be used in meeting the targets as opposed to solely using age.

4.11 Basic Coarse Woody Debris

Legal Reference: Section 93.4 of the <i>Land Act</i> , OSLRMP LUO Objective 1, FPPR section 68
Objective: <i>The objective for areas shown on Map 1 (of the Order)(Appendix E), is for the purposes of conserving soil, wildlife habitat and biodiversity at the stand level, to retain basic levels of coarse woody debris, including but not limited to: stub trees, standing trees, firmwood reject logs, and poor quality grade 4 logs across sites subject to timber harvesting.</i>
Applicable FDU's: Adelphi, Banting-Kettle, Barton, Big White, Bolean, Branchflower, Celista, Chase Harper, Chum, Coldstream, Currie, Echo, Glen Lake, Graystokes, Harris, Hudson Bay, Hunter Blurton, Ireland, Kal Slopes, Mara-Sicamous, Mellin Windy, Mission, Mugford, Naramata, Old Dave, Paxton, Priest Creek, Rose Swanson, Skaha, Stuart Terrace, TFL 33-BCTS, TFL 49, TFL 59-BCTS, White Lake, Whitehead, Yard Creek, Okanagan.

Definitions

For the purpose of this strategy:

“mature tree” is a lodgepole pine tree greater or equal to 12.5cm dbh, or another trees species greater or equal to 17.5cm dbh that is either dead or alive

Results and Strategies

The Agreement Holder will at the completion of harvest:

1. If conducting ground based harvesting on a cutblock with an average slope of less than 35% on which a broadcast burn is not carried out:
 - a) retain any combination averaging at least 2 per hectare of:
 - (i) stubs that include any species, other than spruce or fir, that are mechanically felled or broken off 3-5m above the ground.
 - (ii) any standing mature live or dead tree species
 - (iii) tree pieces consisting of portions of mature trees at least 3m long and at least 12.5cm diameter. (OSLRMP indicates 25cm DBH, yet some BCTS operating areas have timber types where the average DBH is 15cm or less)
 - b) Within IDF (Interior Douglas Fir), PP (Ponderosa Pine), and BG (Bunch grass) Biogeoclimatic zones (BEC) retain at least 10m³/ha (targeting larger diameter classes), where suitable material exists, dispersed across the block with any combination of:
 - (i) stubs that include any species, other than spruce or fir, that are mechanically felled or broken off 3-5m above the ground.
 - (ii) any standing mature live or dead tree species
 - (iii) tree pieces consisting of portions of mature trees at least 3m long and at least 12.5cm diameter.
2. Not apply this Result and Strategy in the event that a broadcast burn is prescribed for a cutblock.
3. If conducting ground or cable based harvesting on a cutblock with an average slope greater than 35%, the agreement holder will:

- a) Retain any combination (either 10m³/ha or 2 stems per ha targeting larger diameter classes) in clumps or evenly distributed across the block of the following when the equipment operators safe work procedures determine that it is safe to do so;
 - (i) stubs that include any species, other than spruce or fir, that are mechanically felled or broken off 3-5m above the ground.
 - (ii) any standing mature live or dead tree species.
 - (iii) tree pieces consisting of portions of mature live or dead trees at least 3m long and at least 12.5cm diameter.
4. When operating in the Selkirk Natural Resource District follow FPPR section 68.

4.12 Basic and Enhanced Coarse Woody Debris

Legal Reference: Section 93.4 of the <i>Land Act</i> , OSLRMP LUO Objective 2
Objective: <i>The objective for areas shown on Map 2 (of the Order)(Appendix E), is, for the purposes of conserving the suitability of Grizzly Bear, Marten and Fisher habitat at the stand level, and within landscape units of higher biodiversity emphasis, to retain basic and enhanced levels of coarse woody debris, including but not limited to, standing trees, stub trees, tree pieces across sites subject to timber harvesting.</i>
Applicable FDU's: Adelphi, Anstey, Banting-Kettle, Barton, Blais, Bolean, Branchflower, Celistia, Chase Harper, Chum, Coldstream, Cooke, Crazy, Currie, Eagle River, Glen Lake, Graystokes, Harris, Hlina, Hudson Bay, Hunter Blurton, Ireland, Jackpine, Kal Slopes, Kwikoit, Lamberton, Long Ridge, Mara-Sicamous, Mellin Windy, Mission, Mt. Ida, Mugford, Naramata, Old Dave, Paxton, Priest Creek, Ratchford, Rose Swanson, Ross, Sicamous North, Skaha, Skimikin, Smokeyhouse, Stuart Terrace, TFL 33-BCTS, TFL 49, TFL 59-BCTS, Wall Creek, White Lake, Whitehead, Yard Creek, Okanagan.

Definitions

For the purpose of this strategy:

“mature tree” is a lodgepole pine tree greater or equal to 12.5cm dbh, or another trees species greater or equal to 17.5cm dbh that is either dead or alive

Results and Strategies

The Agreement Holder will at the completion of harvest:

1. Conduct ground based harvesting on a cutblock with an average slope of less than 35% on which a broadcast burn is not carried out:
 - a) retain any combination averaging at least 10 (ten) per hectare dispersed throughout the block of:
 - (i) stubs that include any species, other than spruce or fir, that are mechanically felled or broken off 3-5m above the ground.
 - (ii) any standing mature live or dead tree species
 - (iii) tree pieces (targeting larger diameter classes) consisting of portions of mature trees at least 3m long and at least 12.5cm diameter (OSLRMP indicates 25cm DBH, yet some BCTS operating areas have timber types where the average DBH is 15cm or less).

- b) within IDF (Interior Douglas Fir), PP (Ponderosa Pine), and BG (Bunch grass) Biogeoclimatic zones (BEC) retain atleast 10m³/ha, where suitable material exists, dispersed across the block with any combination of:
 - (i) stubs that include any species, other than spruce or fir, that are mechanically felled or broken off 3-5m above the ground.
 - (ii) any standing mature live or dead tree species
 - (iii) tree pieces consisting of portions of mature trees at least 3m long and at least 12.5cm diameter.
2. Not apply this result and strategy in the event that a broadcast burn is prescribed for a cutblock.
3. Conduct ground or cable based harvesting on a cutblock with an average slope greater than 35%, the agreement holders will:
- a) Retain any combination (either 10m³/ha or 10 per ha targeting larger diameter classes) in clumps or evenly distributed clumped across the block when the equipment operators safe work procedures determine that it is safe to do so;
 - (i) stubs that include any species, other than spruce or fir, that are mechanically felled or broken off 3-5m above the ground.
 - (ii) any standing mature live or dead tree species
 - (iii) tree pieces consisting of portions of mature trees at least 3m long and at least 12.5cm diameter

4.13 Visual Quality-Scenic Areas and Visual Quality Objectives

Legal Reference: FRPA Section 181 and FPPR 1.1
Objective: <i>The objective set by government for Visual Quality in scenic areas are the established Visual Quality Objectives, applied in accordance with FPPR section 1.1 (Categories of visually altered forest landscapes).</i>
HLP Objective or GAR Objective: The Selkirk Natural Resource District <i>The District Manager has made a declaration under the FPC to establish either visual quality objectives or visual scenic classes. These Declarations are grandfathered objectives under Section 181 of the Act as well as under GAR section 7 notice “Establishment of Scenic Areas and Visual Quality Objectives within the Columbia Forest District (January 31, 2007)” and 17 “ Visual Quality Objective Order (November 20, 2014)”.</i> Okanagan TSA <i>The Okanagan Shuswap Land and Resource Management Plan (April 11, 2001 non HLP) defines “Zone 1” areas. These areas have been declared as “scenic areas” with established VQO’s under the FPC and are grand parented as objectives by government.</i>
Applicable FDU’s: Adelphi, Anstey, Banting-Kettle, Barton, Big White, Blackwater Ridge, Bluewater, Bolean, Branchflower, Cascadia, Celistia, Chase Harper, Chum, Coldstream, Cooke, Crazy, Currie, Drimmie Creek, Eagle River, Echo, Esplanade, Frisby Ridge, Glen Lake, Graystokes, Harris, Hlina, Hunter Blurton, Ireland, Jackpine, Jumping Creek, Kal Slopes, Kwikwit, Lamberton, Long Ridge, Mara-Sicamous, Mellin Windy, Mission, Mt. Ida, Mt. Rev Prov, Park, Mt. Seven, Mugford, Naramata, Old Dave, Paxton, Priest Creek, Rose-Swanson, Ross, Sicamous North, Skaha, Skimikin, Smokeyhouse, Stuart Terrace, TFL 33-BCTS, TFL 49, TFL 56, TFL 59-BCTS, Wall Creek, Wetask Lake, White Lake, Whitehead, Yard Creek, Okanagan, Revelstoke, Golden. (All FDU’s where scenic areas apply).
Applicable FDU’s for 2021 Fire Salvage within the Okanagan Shuswap District: Adelphi, Mara-Sicamous, Paxton, Skaha, TFL 49. (All FDU’s where scenic areas apply within 2021 fires in Okanagan TSA and TFL 49 where development will meet VQO’s to the extent practicable in respect to the VLI polygons listed in Table 4.13.1).

Results and Strategies

When constructing a road or when exercising timber harvesting rights under this FSP within areas having established Visual Quality Objectives (VQO), the agreement holder will meet the VQO at the completion of harvesting or road building by implementing the following strategies:

1. Prior to authorization of primary forest activities, ensure a *QP* carries out a Visual Impact Assessment (VIA), and designs cutblocks and roads such that the visual alteration on the ground is consistent with the applicable category that corresponds to the VQO described in FPPR sec 1.1 Categories of Visually Altered Forest Landscapes, by
 - a) assessing the proposed visual alteration from one or more significant public viewpoints, located on water or land, that provides a viewing opportunity and has relevance to the landscape being assessed; and
 - b) utilizing the guidance for predicting VQOs in:

- i. FRPA Visual Impact Assessment Handbook, May 2022 including Table 2 and 6; and/or
 - ii. the Protocol for Visual Quality Effectiveness Evaluation Procedures and Standards, FREP, 2008; and estimating the likely resulting VQO using the descriptive categories of visually altered forest landscape as defined in FPPR Section 1.1.
2. Where road construction and/or timber harvesting is planned and may not fully meet the established VQO given the specific circumstances or conditions of a particular area, prior to entering into an agreement that authorizes the timber harvesting or road construction, the agreement holder will submit an amendment for visual results and strategies for these specific situations as appropriate, not withstanding the following section that applies to 2021 wildfires.
3. Within scenic areas where cutblock and road construction is proposed to recover timber that has been damaged, or threatened, significantly reduced in value, lost or destroyed due to the effects of the 2021 White Rock Lake Fire (K61884), Thomas Creek Fire (K51794), Two-Mile Creek Fire (K42078), or other future large scale fires the FSP holder will:
 - a) Follow section 1 to the extent practicable by ensuring a *QP* carries out a Visual Impact Assessment of the altered forest landscape that will result from the cutblock harvesting or road construction, while considering the circumstances or conditions brought on by the wildfire that have impacted or damaged or threatened the timber in the scenic area; and
 - b) Where a *QP* determines that it is not practicable to be consistent with scale and acuity attributes of the established VQOs when recovering the damaged timber, the *QP* is to ensure to the extent practicable, within each VLI polygon, that the altered forest landscape that results from the cutblock harvesting or road construction:
 - i. Is natural in appearance, and not rectilinear or geometric in shape, and
 - ii. Does not exceed the levels of scale and acuity that are specified in Table 4.13.1.
 - iii. Additional FDUs, wildfires and VLI polygons may be added to table 4.13.1 may be added to Table 4.13.1 as a minor amendment for approved TOC FDU's located within the Okanagan Shuswap District (Not available for the Selkirk District);
 - iv. Additions to Table 4.13.1 are restricted in respect to scale and acuity allowable extents of a one level increase to FPPR 1.1 categories of visually altered forest landscape as a minor amendment.

Table 4.13.1 *** Note additional FDU's , wildfires and VLI polygons may be added to this table as a minor amendment within the Okanagan Shuswap District. (This option is not available for the Selkirk District)

FDU/ Operating Area/ TFL	Wildfire Identification	VLI Polygon	Established VQO	Scale (allowable extent)	Acuity (allowable extent)
Adelphi/ TFL 49	K61884	1606	Retention	Medium in scale	Easy to see
TFL 49	K61884	1863	Retention	Medium in scale	Easy to see
TFL 49	K61884	1675	Partial Retention	Large in scale	Very easy to see
Mara- Sicamous	K42078	2931	Partial Retention	Large in scale	Very easy to see
Mara- Sicamous	K42078	2939	Partial Retention	Large in scale	Very easy to see
Paxton	K61884	1597	Partial Retention	Medium to Large in scale	Very easy to see
Paxton	K61884	1599	Partial Retention	Large in scale	Very easy to see
Paxton	K61884	1613	Partial Retention	Large in scale	Very easy to see
Skaha	K51794	794	Retention	Large in scale	Very easy to see
Skaha	K51794	749	Partial Retention	Large in scale	Very easy to see

4.14 OSLRMP LUO Community Crown Interface and Scenic areas

Source of Objective: Okanagan-Shuswap LRMP LUO Objective 10a, Map 10
Objective: <i>The objective for areas shown on LUO map 10 (Appendix E) is to maintain resources and values associated with Community Crown Interface areas and scenic areas when planning and implementing forest health operations.</i>
Applicable FDU's: Adelphi, Bolean, Branchflower, Celista, Chase Harper, Chum, Coldstream, Cooke, Currie, Eagle River, Echo, Harris, Hlina, Hunter Blurton, Ireland, Kal Slopes, Lamberton, Long Ridge, Mara-Sicamous, Mission, Mt. Ida, Paxton, Priest Creek, Rose-Swanson, Ross, Sicamous North, Skaha, Skimikin, TFL 33-BCTS, TFL 49, TFL 59-BCTS, Wall Creek, White Lake, Okanagan.

Definitions

For the purpose of this result or strategy:

“Community/Crown Interface Area” means an area identified as Community/Crown Interface on the map titled Community/Crown Interface RMZ, on page CCI 4-9 of the OSLRMP.

“Local government” means a local government as that term is defined in the Local Government Act, Chapter #323 (RSBC 1996), representing a regional district within a Community/Crown Interface Area.

Results and Strategies

The Agreement Holder will:

1. Within Scenic Areas, follow the strategy described in Visual Quality Section 4.13 (above);
2. Within Community/Crown Interface areas, and prior to harvesting a cutblock or constructing a road:
 - a) Provide notice of the proposed harvesting or road construction activity to the Local government within that portion of the Community/Crown Interface area, requesting the identification of concerns it may have related to the activity;
 - b) If the local government responds in writing to the notice within the timelines specified in the notice and identifies a concern, a *QP* will develop a strategy to mitigate the concern where it is practicable to do so.
 - c) Respond to the Local government, indicating how the concern has been addressed; and
3. Mitigate the concern to the extent practicable when a mitigation strategy has been developed, and conduct harvesting or road construction consistent with the strategy.

4.15 Cultural Heritage Resources

Legal Reference: FPPR section 10
Objective: <i>“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, Not regulated under the Heritage Conservation Act.”</i>
Applicable FDU’s: All FDU’s

Definitions

For the purpose of this strategy:

“cultural heritage resource” or **“CHR”** means an object, a site or the location of a traditional societal practice that is of historical, cultural or archaeological significance to British Columbia, a community or an aboriginal people, that is the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and that is not regulated under the Heritage Conservation Act.

“Potentially affected First Nations” means the First Nations within the asserted traditional territory defined in the Consultative Area Database or equivalent database that is maintained by the provincial government overlaps where the potential timber harvesting and road construction will take place. This could also include the known First Nation local history of an area and/or includes the advice given from the Provincial Government to include a First Nation that may be affected in which the primary forest activity takes place.

“CHR assessment” means a field and/or office review:

- a) Conducted by a member of a potentially affected First Nation
- b) Where the potentially affected First Nations have shared information with the FSP holder regarding the presence, relative value and abundance of a CHR;
- c) In order to:
 - (i) Assess the potential direct impact of primary forest activities on a CHR; and
 - (ii) Provide site information or recommendations for the development of strategies to mitigate the potential direct impact of primary forest activities on a CHR

Results and Strategies

The Agreement Holder will:

1. Conserve or if necessary protect a cultural heritage resource (CHR) by not carrying out or not authorizing a person to carry out a primary forest activity that would damage or render ineffective the cultural heritage resources unless authorized to do so by the minister or a person authorized by the minister.
2. At least 30 days before the agreement holder constructs a road or enters into an agreement that authorizes timber harvesting or road construction within the asserted traditional territory of a First Nation, the agreement holder will provide information to the First Nation and/or follow the protocol of any current government / First Nations consultation agreements. A written request to share information will provide an opportunity of at least 30 days, unless otherwise agreed to, for review and comment on proposed road construction or timber harvesting, and include: an overview map, a description of planned forest development activities, request to share information respecting CHR’s within the identified areas, and offer to meet with the First Nation.
3. Evaluate the recommendations or comments that come from First Nations during the consultation process and from CHR assessments and implement those where there is a mutual agreement and where practicable. Maintain information confidential if requested by First Nation. Notify the First Nation who made the recommendation in writing prior to auction of a Timber Sale License taking

place describing how the recommendation will or will not be implemented and a map (if available) will be attached to the notification.

4. Meet with First Nations if requested, and the purpose of the meeting will be to:
 - a) Jointly review the available information from BCTS and the First Nation.
 - b) Determine areas of concern with regard to First Nation interests or activities that may result from forest management activities.
 - c) Identify if an assessment (e.g. CHR Assessment or Archaeological Impact Assessment (AIA)) is warranted;
 - d) Identify management activities and measures meeting the needs of both BCTS and the First Nation; and
 - e) Evaluate the potential for impacts to CHRs considering the factors listed under FPPR Schedule 1, Section 4.
5. Prior to harvesting or road building communicate in writing the outcome including a map (if available), of the evaluation that includes those applicable steps in strategy 4 (above) to the First Nation that provided a comment if a meeting does not take place.
6. Curtail all primary forestry activities if an unidentified cultural heritage resource is encountered while conducting a primary forestry activity to the extent necessary to protect it. Potentially affected First Nations will be notified within 5 business days of the location and nature of the cultural heritage resource encountered and the First Nation and agreement holder will work together to develop a work plan to address the finding.

4.16 Recreation Features for the Okanagan

Legal Reference: FRPA Sec. 56, Sec. 180 & 181 FPPR Sec.70 (1), FRR Sec. 16

The Minister may establish an area as an interpretive forest site, a recreation site or a recreation trail and establish objectives for these. In addition, every area established or continued as an interpretive forest site, a recreation site or a recreation trail under the FPC is continued under FRPA Section 180 and 181, including the objectives established for them.

Applicable FDU's: All FDU's within the Okanagan TSA

Results and Strategies

The Agreement Holder will:

1. Conduct industrial activities in a recreation site, in an interpretive forest, or over or beside a recreation trail only when authorization under Section 16 of the Forest Recreation Regulation has been granted by the District Recreation Officer. The conditions set forth in the District Recreation Officer's letter of authorization will be considered as strategies specific to the Recreation Site or Trail described in the holder of the FSP's authorization letter.
2. Where an agreement or tenure exists with respect to a site or trail, at the planning and design stage for timber harvesting and road construction or deactivation, the agreement holder will provide a notice of the proposed activity to the District Recreation Officer, requesting the identification of concerns they may have related to the activity, and to determine the existing recreational use (s) of the area
 - a) Once the District Recreation Officer identifies the recreation user groups with an interest in the area, provide notice of the proposed harvesting and road construction to the identified recreation user groups, requesting the identification of concerns the groups may have related to the harvesting and road construction.
 - b) If the District Recreation Officer or recreational group has responded in writing to the notice within the timelines specified in the notice, and identifies a concern that causes a material adverse impact, on the recreational experiences that exist immediately before the activity.
 - (i) A strategy to mitigate the concern identified in 1b will be developed in coordination with the District Recreation Officer.
 - ii) Respond to the recreational group and to the District Recreational Officer indicating how the concern has been addressed; and
 - c) Where a mitigation strategy has been developed, conduct harvesting or road construction consistent with the strategy.
 - d) Provide a 2 week notification prior to commencement of road and cutblock activities to the identified recreational users that the district recreation officer has indicated in 1b of this result and strategy.

4.17 Recreation Features for Golden and Revelstoke

Legal Reference: FRPA Sec. 56, Sec, 180 & 181 FPPR Sec.70 (1), FRR Sec. 16
Objective: <i>Objectives set by government for recreation sites and recreation trails and interpretive sites established under the FPC with objectives grand parented under FRPA sec.181 and located within FDU's established under this Plan are listed in Appendix H, Table H1 of this FSP.</i>
Applicable FDU's: R&S 1 & 2: Golden TSA: Blackwater Ridge, Goodfellow, Swan, Esplanade, Mt. Seven Revelstoke TSA: Wetask, Cascadia, Frisby Ridge, Red Rock Harbour R&S 3 & 4 : All FDU's within the Selkirk Natural Resource District

Results and Strategies

The Agreement Holder will:

1. When harvesting in or near a Recreation sites listed in **Appendix I**, (Table I1), will adhere to the site specific objectives, where applicable and receive a Section 16 of the Forest Recreation Regulation authorization letter.
2. If, as a result of harvesting timber or road construction under paragraph (1) above, damages occur to existing infrastructure within a recreation site, trail or interpretive site, the holder of the FSP will repair or mitigate the damage, to preharvest condition or to a mutually agreeable condition and timing of required work as determined by the holder of the FSP and the District Recreation Officer,
3. For Recreation sites not listed in **Appendix I** (Table I1), harvesting will only occur within a recreation site only when authorization under Section 16 of the Forest Recreation Regulation has been granted by the District Recreation Officer. The conditions set forth in the District Recreation Officer's letter of authorization will be considered as strategies specific to the Recreation site or trail described in the agreement holder's authorization letter.
4. Notify the District Recreation Officer prior to active industrial hauling through a recreation site or along a forestry road that crosses recreation trails and recreation sites. The holder of the FSP will also post signage indicating duration of and daily timing of industrial activity.
5. Where an agreement or tenure exists with respect to a site or trail, at the planning and design stage for timber harvesting and road construction or deactivation, the agreement holder will provide a referral to the tenure or agreement holder, describing the planned activities and allowing a reasonable opportunity for review and comment.

4.18 Intensive Recreation Areas

Legal Reference: Section 93.4 of the <i>Land Act</i>
Objective: <i>The objective for areas shown on LUO Map 3 (of the Order)(Appendix E) is that primary forest activities including sanitation and salvage activities will not have a material adverse impact on the potential for a diverse range of quality recreational experiences that exist immediately before the activity.</i>
Applicable FDU's: Shared Use All Season (Graystokes, Harris, Mission, Naramata, Okanagan, Priest Creek, Big White, Wall Creek, Mt IDA, Kal Slopes and Mugford), Shared Use Summer (Coldstream and Okanagan), Cross Country Skiing/Non-Motorized (Skaha, TFL 49, Okanagan), Snowmobile (Banting Kettle, Lamberton, Hunter Blurton, TFL 33 BCTS, Yard Creek, Mara Sicamous, Okanagan, Skimikin, Bolean, TFL 49, Ireland), Summer Motorized (Glenn Lake and Okanagan), Summer Non-Motorized (Smokeyhouse, Blais, TFL 49, Currie, Echo and Okanagan)

Results and Strategies

The Agreement Holder will:

1. Prior to harvesting a cutblock or constructing a road within Intensive Recreation Areas as shown on LUO Map 3:
 - a) Provide notice of the proposed harvesting or road construction to the district recreation officer, requesting the identification of concerns he/she may have related to the activity, and to determine the existing recreational use (s) of the area
 - b) Once the district recreation officer identifies the recreation user groups with an interest in the area, provide notice of the proposed harvesting and road construction to the identified recreation user groups, requesting the identification of concerns the groups may have related to the harvesting and road construction.
 - c) If the district recreation officer or recreational group has responded in writing to the notice within the timelines specified in the notice and identifies a concern that causes a material adverse impact, to what it has on the recreational experiences that exist immediately before the activity.
 - (i) a strategy to mitigate the concern identified in 1b will be developed in coordination with the district recreation officer.
 - (ii) Respond to the Recreational group and to the district recreational officer indicating how the concern has been addressed; and
 - d) Where a mitigation strategy has been developed, conduct harvesting or road construction consistent with the strategy.
 - e) Provide a 2-week notification prior to commencement of road and cutblock activities to the identified recreational users that the district recreation officer has indicated in 1b of this result and strategy.

4.19 Regionally Significant Trail Corridors

Source of Objective – Okanagan-Shuswap LRMP LUO Objective 4 Map 4
Objective: <i>The objective for areas shown on LUO Map 4 (of the Order)(Appendix E) is that primary forest activities including sanitation and salvage activities will not have a material adverse impact on the potential for a diverse range of quality recreational experiences that exist immediately before the activity.</i>
Applicable FDUs: Jack pine, Kal slopes, Mara-Sicamous, Mission, Priest Creek, TFL 49, Whitehead, Greystokes, Okanagan

Definitions

For the purpose of this strategy:

“**Patch cuts**” means for the 10% of the trail with patches having less than 3m tall regeneration may be dispersed along the length of the trail or concentrated in one area. The minimum distance between patches should be equal to the size of the adjoining patch. Patch cuts within the trail corridors may join up with larger clearcut openings that are located outside of, but contiguous with, the corridor.

Results and Strategies

The Agreement Holder will:

1. Where harvesting or road construction overlaps with a clearly identified regionally significant trail in the OSLRMP (Recreation RMZ, REC 4-5, or Map REC 4-21) the holder will:
 - a) For **Category A** trails: a 100m management zone will be established on each side of the trail (200m total width).
 - b) For **Category B** trails: a 25m management zone will be established on each side of the trail (50m total width).
2. If there are no significant forest health factors, harvesting under this FSP within the trail management zone will consist of either:
 - a) Single tree/group selection harvesting(>66% basal area retention), or
 - b) *Patch cuts* (each less than 1.0 ha in area) to the extent that not more than 10% of the trail management zone consisting of patches less than 3m tall.
3. If timber is damaged by a significant forest health factor, timber harvesting within the management zone will be limited to the extent required to harvest the affected timber.
4. Unless no practicable alternative exists, no new permanent roads will be constructed across a Category A or B trail.
5. Nothing in this result or strategy precludes the use of a Category A or B trail as an industrial road if the Category A or B trail is located on an existing road.

4.20 Tourism Areas

Legal Reference: Section 93.4 of the <i>Land Act</i>
Objective: <i>The objective for areas shown on LUO Map 5 (of the Order)(Appendix E) is to maintain foreground visual quality from viewpoints on existing tourism areas, facilities, trails and natural features important for tourism.</i>
Applicable FDU's: Adelphi, Anstey, Big White, Blais, Bolean, Celistia, Coldstream, Crazy, Currie, Echo, Glen Lake, Ireland, Jackpine, Kal slopes, Long Ridge, Mara-Sicamous, Mellin Windy, Mugford, Naramata, Okanagan, Paxton, Priest Creek, Ross, Sicamous-North, Skaha, TFL 33-BCTS, TFL 49, TFL 59-BCTS, Wetask Lake

The Agreement Holder will:

1. Where harvesting or road construction overlaps an OSLRMP Zone 1 Scenic Area, follow the strategy described in Visual Quality Section 4.13.
2. Prior to harvesting a cutblock or constructing a road within Tourism Areas located outside of the Scenic Areas described in Section 4.13 as shown on LUO Map 5:
 - a) Where the harvesting or road construction is located outside a Scenic Area:
 - (i) Prior to harvesting a cutblock or constructing a road, determine if the foreground visual alteration related to the harvesting or road construction is potentially visible from viewpoints on existing tourism areas, facilities, legally designated trails and natural features important for tourism;
 - (ii) If the foreground visual alteration is potentially visible, ensure a qualified professional designs the harvesting and road construction such that the foreground visual alteration mimics natural landscape characteristics and incorporates in-block single or grouped tree retention, to provide foreground screening and increase visual variety; and
3. Conduct road construction and harvesting consistent with the professional design.

5.0 Measures

5.1 Measures to mitigate the spread of Invasive Plants

Legal Reference: FRPA Section 47, FPPR section 17
Applicable FDU's: All

Measures

The agreement holder will ensure the following measures are taken to mitigate the introduction or spread of Invasive Plants:

1. Prior to harvesting operations the MFLNRORD Invasive Alien Plant Program (IAPP) database will be used to identify the locations of known invasive plant infestations. Where invasive plant infestations are found to be located inside or within 100m of proposed areas for timber harvesting and road building activities site-specific measures to minimize the establishment and/or spread of invasive plants will be incorporated into site plans and tenure agreements.
2. Invasive plant awareness training, developed by a QP, is conducted for new BCTS field staff within 1 year of the start of employment, and for all field staff a maximum of every five years, and is to be documented in a training record.
3. Invasive plant awareness training is mandatory for all staff and contract personnel carrying out development activities and/or performance monitoring of third parties engaged in primary forest activities.
4. Where field staff and other key personnel identify new invasive plant infestations outside of known infestation areas, those are to be entered into the MFLNRORD report-a-weed reporting system within 30 days of discovery; and
5. Contractors engaged in road building activities and agreement holders are provided with an information package regarding the identification and reporting of invasive plants. Where applicable based on measure (1) above, measures to minimize the establishment and spread of invasive plants are requirements within contracts and agreements.
6. Based on the review described in measure (1) above or if found inside or within 100m of block/road at any time, where road construction or any agreement that authorized timber harvesting occurs, the following measures will be implemented, and are a requirement that applies to each holder of an agreement under Section 12 (2) of the Forest Act and each holder of a contract to construct a road entered into by an agreement holder of this FSP:
 - a) vehicles, mechanized equipment, culverts, bridges, and cattle-guards are to be inspected for the presence of soil or plant material, including documentation on inspection forms, prior to being transported to or from work sites, and, if present plant and soil materials are to be removed.
 - b) grass seed exposed mineral soils where exposed soil exceeds 0.01 ha in a contiguous area on cut and fill slopes of new roads and trails during the first available spring or fall and not more than 12 months following construction; and

- c) grass seed exposed soils where exposed soil exceeds 0.01ha in a contiguous area on all new landings, and rehabilitated areas during the first available spring or fall, and not more than 12 months following the time of mineral soil exposure, except if the rehabilitated areas are to be revegetated through the planting of trees; and
- d) where grass seeding is undertaken, utilize high quality seed (a mix recommended by a MFLNRORD range specialist, if available; otherwise Canada Common #1 Forage Mix or better grade) to ensure introduction of invasive plant seed is minimized. Request and check the certificate of seed analysis for each lot of each species in your mix to check for invasive plants and report any seed lots with BC Noxious weeds or species of potential concern to the Invasive Plant Program of the FLNRORD.
- e) Limit soil disturbance where known invasive plant infestations are located and avoid log decks on or near infestation areas.

5.2 Natural Range Barriers

Legal Reference: FRPA Section 48 and 51, FPPR Section 18
Applicable FDU's: All

Measures

The agreement holder will ensure that the following measures are taken to mitigate the effect of removing or rendering ineffective natural range barriers in all FDU's that contain, or are adjacent to range tenures:

1. During the planning and development of timber harvesting conduct primary forest activities in a manner that will minimize impacts to natural range barriers, to the extent practicable while considering impacts to other FRPA values.
2. At the planning and design stage of timber harvesting and/or road building activities provide a referral to the Natural Resource District Range Officer, and to the holder of the range tenure agreement regarding the details of the planned forest development, including the location of proposed cutblocks and roads, and provide a reasonable opportunity for review and comment.
3. If the holder of the range tenure agreement indicates in writing (within the time frame specified within the referral letter) that a proposed cutblock or road will remove or render ineffective a natural range barrier for livestock authorized to be within a range tenure area:
 - a) the person initiating the referral will consult with the holder of the range tenure on:
 - (i) the location of the natural range barrier in question and the potential impacts
 - (ii) preferred mitigation actions, and
 - (iii) the timing of post-operations follow-up, and mitigation actions.
 - a) if there is a solution on mitigation measures the holder will ensure those measures are incorporated within the requirements of any agreement entered into under section 12(2) of the Forest Act or any road construction contract, or within another time period if agreed to with the holder of the range tenure agreement; and
 - b) where mitigative measures include the installation of a range development, any ongoing maintenance of the development, if required, will be the responsibility of the holder of the range tenure agreement, as authorized by the District Manager.
4. Where the agreement holder becomes aware that a proposed cutblock or road will remove or render ineffective a natural range barrier for livestock authorized to be in an area, but the holder of the range agreement does not respond to the notification or the holder is unable to come to an agreement with the holder of the range tenure agreement on measures to mitigate negative effects, the agreement holder will consult with the District Range Officer to implement reasonable measures, and formulate a plan to assess post-implementation to verify that measures were successful or not. The agreement holder will notify the holder of the range tenure agreement in writing at least 30 days prior undertaking the measures.

6.0 Stocking standards

Legal Reference: FPPR section 16
Applicable Exemptions: FPPR 44(3) (a)-(i)
Applicable FDU's: All

Information

See **Appendix J and K** for Stocking Standards tables and accompanying information. These stocking standards, as previously approved, will remain in effect until changes are made to implement updated BEC and associated Land Management Handbook information. It is expected updates to the standards will occur periodically, will be iterative and will continue to evolve to reflect the collective desired future landscape conditions. After updated stocking standards have been completed and approved by the Chief Forester, an FSP amendment will be made to adopt the new stocking standards and variations in partnership with Ministry Staff, Indigenous communities and tenure holders who have adopted the stocking standards into their FSPs. BCTS Okanagan Columbia intends to amend the revised stocking standards for the Selkirk Natural Resource District into the FSP once the remaining Golden and Revelstoke Timber Supply Area standards have been fully approved.

Measures

Specifying Stocking Standards for the Forest Stewardship Plan:

For the purposes of *FPPR* 16(1), sec.44 (1) of the *FPPR* applies to all FDU's where the agreement holder is required to establish a free growing stand.

For the purposes of *FPPR* 16(3), the agreement holder has ensured that this plan specifies:

- a) the applicable stocking standards and applicable regeneration date referred to in sec. 44(1)(a) of the *FPPR*, and
- b) the applicable stocking standards and free growing height referred to in sec. 44(1)(b) of the *FPPR*.

These stocking standards are subject to the special circumstances and variations which the agreement holder has identified below and as set out in **Appendix J and K**.

For the purposes of *FPPR* 16(4), the agreement holder will, prior to commencement of timber harvesting of an area for reasons that are referred to in sec. 44(4) of the *FPPR*, specify stocking standards for the area and the situations or circumstances that determine when the stocking standards will be applied.

Basis for Stocking Standards

6.1 Stocking Standards within the Okanagan Shuswap Natural Resource District (including Okanagan Timber Supply Area, TFL 33, TFL 49 and TFL 59)

Stocking standards reference tables for all FDUs located within the Okanagan Shuswap Natural Resource District are based on the Chief Forester's Thompson Okanagan Regional (TOR) Stocking Standards and variances, dated December 9th, 2021.

TOR stocking standards tables for even-aged stands, uneven-aged stands and footnotes for the Okanagan Shuswap Natural Resource District are listed in **Appendix J-1 and J-2**.

6.1.1 Special Circumstances referred to above include, without limitation, the following General Standards and Variances, approved as an integral part of the TOR stocking standards:

Section 44(1) of the Forest Planning and Practices Regulation (FPPR) apply to all areas harvested under the Forest Stewardship Plan (FSP) except where exempted from the requirement of Section 29(1) or (2) of the Forest and Range Practices Act.

The stocking standards detailed in **Appendix J-1 and J-2** shall apply to areas harvested under FSP or Woodlot License Plan (WLP). As per Section 197(5) of the Forest and Range Practices Act, these stocking standards may also be applied to areas previously harvested under a Forest Development Plan or FSP.

Definitions

“Broadleaf or Broadleaves” – means balsam poplar, black cottonwood, trembling aspen, and paper birch.

“Management Unit” – means any one of the Kamloops, Lillooet, Merritt, and Okanagan Timber Supply Areas and Tree Farm Licenses 18, 33, 35, 49, and 59.

“Sub-Hygic” – means a soil moisture regime in which water is removed slowly enough to keep the soil wet for a significant part of the growing season. There may be some temporary seepage and possibly mottling below 20 cm (from Field Manual for Describing Terrestrial Ecosystems, Land Management Handbook 25, 2010).

General Standards

G-1 Crop Tree Assessment

Regeneration and free growing surveys will be conducted under the oversight of a Forest Professional and/or Accredited Surveyor. Survey methodologies and tree acceptability criteria are as specified in the *Resource Practices Branch, Silviculture Survey Procedures Manual-May 1, 2020* and the *FS660- Silviculture Survey Reference* field card, as amended from time to time, unless specified or varied through provisions of this FSP.

G-2 Stocking Standards for Areas of Intermediate Cutting or Harvesting of Special Forest Products

Where a stand is harvested consistent with FPPR section 44 (4), other than harvesting for the purpose of uneven-aged management, it shall be deemed an intermediate harvest where the harvested stand complies with the conditions specified below for a minimum period of 12 months following the completion of harvesting.

- a) greater than 20 m² average basal must be retained in trees with a diameter at breast height of ≥ 12.5 cm; and
- b) Trees contributing to the retained basal area comply with the attributes defined in the *Silviculture Surveys Procedures Manual* “Free growing damage criteria for single entry dispersed retention stocking standard (SEDRESS) managed stands in Interior Deviation from Potential (DFP) and Layered Surveys”; and
- c) trees contributing to the retained basal area must be the species identified as preferred and acceptable in the Thompson Okanagan Regional Stocking Standards; and

If during the 12 months period following the completion of harvesting the conditions specified above are not maintained, the licensee shall hold a free growing obligation on the harvested area and the appropriate stocking standards in the Thompson Okanagan Regional Stocking Standards shall be applied.

G-3 Brush Competition

Residual layer one and two broadleaf trees remaining post-harvest will not be considered competing at the time of the free growing evaluation.

Where a brushing treatment has been undertaken, and a no treatment buffer was retained, as visual screening required on Moose Winter Range identified in the Kamloops Land and Resource Management Plan (LRMP) or, within early seral openings > 40 ha within Moose Winter Range identified in the Okanagan Shuswap LRMP; or, within Moose Management Units identified in the Okanagan Shuswap LRMP; or, other Site Level Plan to achieve an objective set by Government, broadleaves and shrubs will not be considered competing brush when conducting a free growing survey where survey plots fall within the buffer.

Broadleaves and shrubs are not considered competing brush when conducting a free growing survey within the Riparian Management Zone of:

- An S4, S5, or S6 stream or;
- A temperature sensitive stream or;
- Wetlands > 0.25 ha

For the purposes of free growing assessments in the SBPS Biogeoclimatic (BEC) zone, scrub birch (*Betula glandulosa*) which provides frost protection, will be considered non-competing when assessing the free growing status of spruce crop trees.

G-4 Maximum Density

The maximum stocking density for Free Growing obligations for even-aged stands has been removed for all FDUs covered by this FSP as recommended by the Chief Forester’s updated guidance on maximum density for free growing obligations memo (June 15th, 2022).

G-5 Minimum Inter-Tree Distance (MITD)

The Default Free Growing MITD's for each BEC/Site Series covered under the FSP are listed in **Appendix J-1 and J-2**. The MITD that may be used at the regeneration establishment phase is also identified in **Appendix J-1**.

G-6 Uneven-Aged Stocking Standards

Uneven-aged stocking standards and multi-story survey procedures will be applied consistent with the current Silviculture Surveys Procedures Manual 2020, or as amended from time to time.

Appendix J-2 includes the stocking standards where uneven-aged Douglas-fir management is prescribed in the IDFd, IDFm, IDFW, IDFx, MSd, MSx, and PPx subzones to maintain or enhance Douglas-fir in Douglas-fir leading stands. Uneven-aged standards are also included for the ICHxm1 and ICHmk1 as these subzones are transitional to the IDF and uneven-aged management may be required to achieve an objective set by Government.

G-7 Fire Management Stocking Standards

Fire management stocking standards will be developed where Fuel Management Prescriptions are required. The Fire Management Stocking Standards may be developed in the following circumstances:

- a) Within 2 km of high value infrastructure or resource values on the land base as identified in an approved Natural Resource District Management Plan or;
- b) As directed by the District Manager.

G-8 Deviation from Potential (DFP) Survey Methodology to Assess Stocking Levels

Where harvesting on a Standard Unit (SU) with even aged stocking standards has resulted in partial cutting as a result of

- a) forest health management, or
- b) where retention of crop trees is required to achieve a result or strategy in the FSP, the deviation from potential (DFP) survey methodology may be used to assess compliance with stocking standards provided:
 - i. the stratum contains between five (5) and twenty (20) m²/ha of residual basal area in stems $\geq$ 12.5 cm dbh, of preferred and/or acceptable species listed in **Appendix J-1**; and
 - ii. the stratum is > 1 ha in size; and
 - iii. the SU is not being managed to uneven-aged standards.

G-9 Conversion of Multi-Story Stand to Even-Aged Management Following a Disturbance

Where an SU or a portion thereof is impacted by a disturbance to the extent that the stand is no longer suitable for surveying under the multi-storey survey methodology (as delineated in Section 9.2.11 of the Silviculture Surveys Procedures Manual 2018 or as amended from time to time), the impacted portion shall be defined as a separate SU and even-aged stocking standards shall be applied to the area.

Variations from General Standards

The Holder of the FSP may vary stocking standard listed in **Appendix J-1 and J-2** as defined in the following situations and circumstances:

V-1 Multiple Harvest Entries

Where harvesting occurs over multiple years on SUs with a 4-year regeneration delay, regeneration delay may be extended by 4 years after the start of the last harvest entry.

V-2 Seven Year Regeneration Delay

Within two years of harvest completion, and following a post-harvest assessment, if an SU with a 4-year regeneration delay is prescribed for natural regeneration or direct seeding, the regeneration delay may be varied to 7 years.

V-3 Changes to Milestones Due to Damage Caused by Wildfire

Where any portion of a standards unit larger than the minimum free growing stratum size for that SU is damaged by wildfire such that the SU is left Not Satisfactorily Restocked (NSR) according to the currently approved stocking standard, then:

- a) a new disturbance shall be reported for that opening;
- b) the NSR portion of the original standards unit may be defined as a new SU; and
- c) the appropriate stocking standards from **Appendix J-1** shall apply with the exception that;
 - i. if the Regeneration Delay period has not elapsed, then Regeneration Delay and Late Free Growing shall be calculated from the new disturbance date, or
 - ii. if the Regeneration Delay period has elapsed, then a new Regeneration Delay period will not apply and only Late Free Growing shall be calculated from the new disturbance date.

V-4 Reduced Minimum Inter-Tree Distance (MITD)

Special Circumstances: As outlined in the Establishment to Free Growing Guidebook, Kamloops Forest Region, there are situations where a reduced MITD is appropriate (Page 19 of the Establishment to Free Growing Guidebook: Kamloops Forest Region, Version 2.2/May 2000). Consistent with the Guidebook, the following reduced MITD's will apply:

- A. **Rocky Sites** – The MITD may be reduced to 1.0 m on rocky sites where:
 - a. There are insufficient plantable spots to meet current target stocking standards and/or >25% exposed rock and/or the soil depth is < 10 cm
- B. **Obstacle Planting for Cattle Management** – The MITD may be reduced to 1.6 m where there is evidence of cattle and/or horse use and the site is to be planted utilizing obstacles to prevent seedling damage. Where there is heavy cattle or horse use and obstacle planting is to be used, the MITD may be reduced to 1.0 m on SUs within these cutblocks. Heavy cattle use cutblocks are defined as those which:
 - a. Have well established cattle trails, salt block, or a cattle watering hole within it or within 100 m of its boundary and/or;
 - b. Have been broadcast seeded for cattle forage purposes and/or;
 - c. Are covered by a Grazing Lease

- C. **Riparian Management Zone** – Within a Riparian Management Zone where a significant number of trees have been retained (> 5 m² of basal area), the MITD may be reduced to 1.0 m to assist in the achievement of the desired stocking level.
- D. **Risk of Snow Creep** – On slopes exceeding 40% where obstacle planting to prevent snow creep damage will be undertaken, the MITD may be reduced to 1.0 m.
- E. **Areas of Heavy, Untreatable Slash** – On slopes exceeding 35%, where heavy slash accumulations impede the ability to meet the target stocking, and site preparation is not practicable, the MITD for planting may be reduced to 1.6 m to provide opportunities for better planting microsite selection.
- F. **Mechanically Site Prepared Areas** – where the default MITD is 2.0 m, the MITD for planting on mechanically site prepared areas shall be 1.6 m.
- G. **Replant Areas** – where a previously planted area is replanted, the MITD may be reduced to 1.0 m.

V-5 Variation to Preferred and/or Acceptable Species

Where 20% or greater of the pre-harvest merchantable volume (as defined in the cruise information) is of a conifer species not identified as a preferred species in the approved stocking standards, that species may be considered as a preferred species up to a maximum of 30% of the well-spaced stems per ha, where it is expected to form a merchantable tree.

V-6 Mule Deer Winter Range

Within all mule deer winter range GAR Order units to which this FSP applies (U-3-003, U-5-003, and U-8-001), Douglas-fir will be considered a preferred species for the purposes of the stocking standards in addition to the species listed in **Appendix J-1**.

V-7 Standard for the Reduction of Weevil Damage

If,

- a. there is an active white pine weevil (*Pissodes strobi*) population on the block or an adjacent managed opening as evidenced by the presence of weevil damaged trees, and
- b. the spruce trees being assessed are of acceptable form and vigour and meet all other acceptability criteria (i.e., preferred or acceptable species, minimum height, MITD),

then for the purpose of assessing the free growing status of spruce crop trees, all broadleaf vegetation shall be assessed as non-competing brush.

V-8 Management of Root Disease Sites

A. Where Stumping is Not Practicable:

There are a number of operational restrictions for stumping that render it an impracticable treatment option. These restrictions include:

- Continuous slopes > 30%
- Soil textures that are susceptible to compaction
- Soil depths that are shallow over bedrock
- Soil moisture regimes that are sub-hygic or wetter
- Being within a Riparian Reserve Zone, fish bearing streams or wetlands
- Where stumping will negatively affect reserve trees, reserved areas, or reserved standard units
- Where the stumps cannot be safely removed

For SUs where Laminated Root Disease (*Phellinus sulphurascens*) has been identified and mapped during pre-harvest field surveys at the planning stage of block development, alternate coniferous species as specified in Managing Root Disease in British Columbia - April 2018 (Table 2: The Relative Susceptibility of host tree species to the major root diseases in BC) , for the relevant site series (Appendix 3 of the Guide) intermediately susceptible, tolerant or resistant may be specified as preferred to maximize species diversity, survival, and productivity on site at the time of planting.

For SUs where Armillaria Root Disease (DRA; *Armillaria ostoyae*) has been identified and mapped during pre-harvest field surveys at the planning stage of block development, tolerant or intermediately susceptible coniferous species, as specified in Managing Root Disease in British Columbia - April 2018 and listed in Appendix 3 of the Guide for the relevant site series, may be specified as preferred to maximize species diversity, survival, and productivity on site at the time of planting.

B. Brushing on *Armillaria* Sites:

Where DRA has been identified and mapped in a High Hazard Subzone in the TO Region during pre-harvest field surveys at the planning stage of block development and no brushing treatments are conducted due to the risk of increased DRA inoculum levels in an SU, for the purpose of assessing the free growing status of conifer crop trees, all broadleaf vegetation shall be assessed as non-competing brush.

V-9 Planting of Western Larch (Lw)

In areas of use within the Lw1 and Lw2 tested parent tree seed planning zones as identified in the Chief Forester's Standards for Seed Use, Western Larch (*Larix occidentalis*) may comprise up to 10% of the combined total of the number of seedlings and the number of cuttings that are planted during each calendar year, in a single Management Unit.

The areas where seed orchard Lw seed may be planted are as per Appendix 4 (Larch Seed Zones Projected to 2030 LW1, LW2, May 26, 2014 Map).

Where Lw has been added as an acceptable species in **Appendix J-1** as per the Chief Forester's Standards for Seed Use (Section 8.11) the minimum free growing height listed for Lw will be the equivalent to that listed for Pl in the applicable subzone/site series.

V-10 GAR Consistency

The stocking standards will be varied to the extent required such that they are consistent with identified management objectives of the applicable GAR order.

V-11 Retention of Pre-Harvest Residual Stems

Pre-harvest residual stems retained within a Riparian Management Zone identified in a Site Level Plan to achieve an objective set by Government may be considered as well spaced and/or free growing at the time of the Free Growing survey providing they meet the Free Growing Damage criteria and are listed as a preferred or acceptable species in **Appendix J-1**.

V-12 Intermediate Cutting

As approved by a District Manager at the site level, where a stand is harvested consistent with FPPR section 44 (4), other than harvesting for the purpose of uneven-aged management, it shall be deemed an intermediate harvest where the harvested stand complies with the conditions specified below for a minimum period of 12 months following the completion of harvesting.

- a) greater than 15 m² average basal must be retained in trees with a diameter at breast high of ≥ 7.5 cm; and
- b) Trees contributing to the retained basal area comply with the attributes defined in the *Silviculture Surveys Procedures Manual* "Free growing damage criteria for single entry dispersed retention stocking standard (SEDRESS) managed stands in Interior Deviation from Potential (DFP) and Layered Surveys"; and
- c) trees contributing to the retained basal area must be the species identified as preferred and acceptable in the Thompson Okanagan Regional Stocking Standards.

If during the 12 months period following the completion of harvesting the conditions specified above are not maintained, the licensee shall hold a free growing obligation on the harvested area and the appropriate stocking standards in the Thompson Okanagan Regional Stocking Standards shall be applied.

V-13) Enhanced Standards may be developed through the Thompson Okanagan Stocking Standards Working Group in the following circumstances:

- To address areas identified in a District Manager approved natural resource management plan or strategy

or

- As directed/requested by the District Manager

6.2 Stocking Standards within the Selkirk Natural Resource District (including Cascadia, Golden & Revelstoke Timber Supply Areas, TFL 55 and TFL 56)

Stocking standards reference tables for even-aged stands, uneven-aged stands and footnotes for all FDUs located within the Selkirk Natural Resource District are listed in **Appendix K**. These standards are based on the FSP Stocking Standards, Columbia Forest District, Version 3.0, dated April 13, 2010. Where a BEC unit is listed twice in the Table, "Columbia" applies to FDUs located within Cascadia TSA, Golden TSA, Revelstoke TSA, TFL 55, and TFL 56. "Okanagan" applies only to Harvest Authority areas within the Okanagan Shuswap Natural Resource District that were approved prior to the effective date of FSP Amendment #6.

6.2.1 Special Circumstances referred to above include, without limitation:

1. *Upper Density Limit*

The maximum stocking density for Free Growing obligations for even-aged stands has been removed for all FDUs covered by the FSP as recommended by the Chief Forester's updated guidance on maximum density for free growing obligations memo (dated June 15th, 2022).

2. *Minimum Inter-tree Distance*

Trees must be the greater than or equal to the minimum inter-tree distance (MITD) to be considered well-spaced. The default MITD is 2.0 metres. The MITD will be reduced under the following special circumstances defined in Table 5 where, in the opinion of a professional forester employed or retained by the agreement holder and considering the factors relating to stocking specifications as per 6(3)(a)(ii) of Schedule 1 of the *FPPR*.

Table 5: Minimum Inter Tree Distances

Minimum inter-tree distance (m)	Location/Condition
Columbia	
1.0	Planting on mechanically mounded sites
1.3	Planting on sites with elevated microsites (natural hummocks and mounds), sites involving a species with a footnote #1 restriction, problem vegetation areas (woody brush - Douglas maple, willow, alder), very rocky sites and planting on hygric or wetter sites.
1.5	Fill plants, areas with a significant number of advanced regen, and areas with significant accumulations of untreatable slash.
1.7	Planting in ICHwk1, ICHvk1, ICHmw1, ICHmw2, ICHmw3, ESSFvc, ESSFwc1, ESSFwc2, and ESSFwc4
2.0	All other areas
Okanagan (applies only to Harvest Authority areas within the Okanagan Shuswap Natural Resource District that were approved prior to the effective date of FSP Amendment #6)	
2.0	Default MITD
1.0	Planting on mechanically mounded sites; and on important berry producing site series within Grizzly Bear Specified Area 8-232 as specified in the GAR Order to maintain berry resources.
1.5	Planting on hygric or subhydryc sites ¹ ; planting on sites with elevated microsites (natural hummocks and mounds) to address frost and/or cold soil concerns; obstacle planting for cattle damage management ^{2,3} or shade planting for survival on severe drought-prone sites ³ ; planting on rocky and/or thin soiled sites (less than 15 cm of mineral soil) ³ ; areas with significant numbers of residual trees left to meet specific management objectives and/or specific results & strategies ³ ; and areas with significant accumulations of untreatable slash ³ . Footnotes: 1- As per the Reference Guide for FDP Stocking Standards, dated September 2, 2016, for the former Kamloops Forest Region 2- As per the Okanagan Shuswap District Forage Strategy , dated March 2011. 3- It is the intent of the agreement holder to apply these reduced MITD only where necessary to meet the stocking requirements on difficult to manage sites.

2. Height of Trees Relative to Competing Vegetation

In addition to meeting the minimum height, tree height must be greater than the specified percentage relative to competing vegetation within a one metre radius of the trunk as defined in table 6.

Table 6: Tree Height Relative to Competing Vegetation.

% Ht Above Competing Vegetation.	Location/condition
125	ESSF, IDF, MS, PP
150	ICH

For the purposes of assessing height of trees relative to competing vegetation,

- Mature broadleaf trees that are retained for wildlife tree retention purposes,
- Mature broadleaf trees that are retained for riparian management zone basal area requirement purposes, and/or
- Any broadleaf trees that are retained as preferred or acceptable tree species as per the specified stocking standards

shall not be considered as competing vegetation for purposes of assessing height of trees relative to competing vegetation.

3. **Regeneration Date:**

The regeneration date applicable to an area will be 7 years where natural regeneration or uneven-aged single tree selection system is used in the whole of the standards unit.

4. **Free Growing Date:**

The free growing date for even aged stands is the date (20 years from commencement date of harvest) specified in FPPR 44(1)(b). For uneven aged stands (12 months after the completion of harvest (and meets the Free growing stocking standards)) specified in FPPR section 44(4) and FPPR section 97 (3).

5. **Free Growing Surveys:**

Free growing status will be evaluated using the FLNRO Silviculture Survey Procedures Manual, dated April 1, 2016 except where broadleaf tree species are to be retained as a component of stands to address the immediate and long-term forest health risks, specifically *Armillaria* and (to a lesser extent) *Phellinus* root disease, associated with the Okanagan ICHmk1, ICHmw2, ICHmw3, IDFmw1 and IDFmw2 BEC variants. Within these BEC variants, vegetation competition and free growing status will be evaluated using the revised criteria specified in part 18a of the Silviculture Survey Reference FS660.

6. **M Value for stocking and free growing surveys:**

The maximum number of healthy, well-spaced trees that may be tallied in a single plot is calculated by dividing the target stocking standard for the BGC variant by the plot multiplier, and is rounded off to the nearest higher whole number if necessary.

7. **Minimum Leave Tree Characteristics:**

Advanced regeneration must meet the requirements of the FLNRO Silviculture Survey Procedures Manual, dated April 1, 2016, and as updated from time to time, to be acceptable.

8. **Dispersed Strata:**

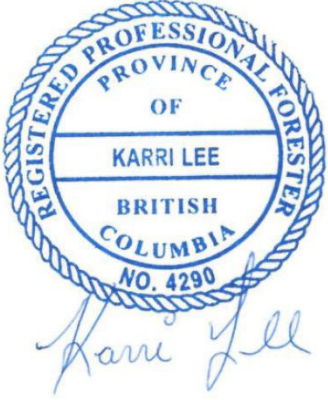
On standards units where dispersed, non-mappable complexes of differing site series are noted, the preferred and acceptable species for the applicable dominant site series (as per **Appendix K**) shall apply. The target and minimum stocking standards shall be based on the dominant site series.

9. **Ungulate Winter Range within Golden TSA:**

Target and minimum stocking specified within Table 1: Forest Cover Requirements for Ungulate Winter Range of the Draft Golden UWR U-4-007 for forest practices carried out within the boundaries of ungulate winter range polygons contained within the Golden TSA will supersede those contained in **Appendix K**.

7.0 Signatures of the Preparing Forester and the person required to prepare the FSP

7.1 Signature of Preparing Forester

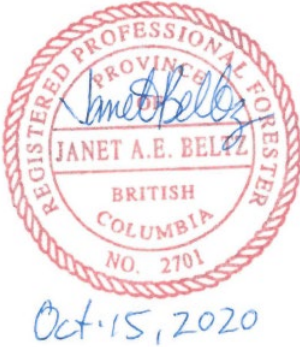
	<p>Preparing Forester</p> <p>"I Certify that I have determined that this work was performed to an acceptable standard."</p>
<p>Karri Lee, RPF Planning Forester Okanagan Columbia Business Area</p>	<p>Aug. 24th, 2018</p>

7.2 Signature of Person required to prepare the FSP

	<p>Signature of the Person Required to Prepare this FSP</p>
<p>Colin Johnston RPF Timber Sales Manager Okanagan Columbia Business Area</p>	<p>Aug. 24th, 2018</p>

8.0 Signatures of the Preparing Forester and the person required to prepare Major Amendment #2 to FSP ID#771, adding the CFA K3T

8.1 Signature of Preparing Forester

	<p>Preparing Forester</p> <p>"I Certify that I have determined that this work was performed to an acceptable standard."</p>
<p>Janet Beltz, RPF Planning Forester Okanagan Columbia Business Area</p>	<p>October 15, 2020</p>

8.2 Signature of Person required to prepare the FSP

	
<p>Colin Johnston RPF, Timber Sales Manager Okanagan Columbia Business Area</p>	<p>October 15, 2020</p>

9.0 Signatures of the Preparing Forester and the person required to prepare Minor Amendment #3 to FSP ID#771, Paxton A70816 Visuals Amendment

9.1 Signature of Preparing Forester

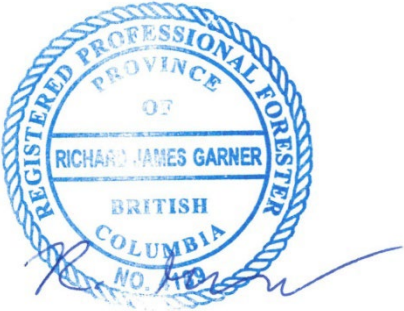
	<p>Preparing Forester</p> <p>"I Certify that I have determined that this work was performed to an acceptable standard."</p>
<p>Dieter Offermann, RPF Practices Forester Okanagan Columbia Business Area</p>	<p>October 20, 2021</p>

9.2 Signature of Person required to prepare the FSP

	
<p>Colin Johnston RPF, Timber Sales Manager Okanagan Columbia Business Area</p>	<p>October 20, 2021</p>

10.0 Signatures of the Preparing Forester and the person required to prepare Major Amendment #4 to FSP ID#771, Visual Quality-Scenic Areas and Visual Quality Objectives

10.1 Signature of Preparing Forester

	<p>Preparing Forester</p> <p>"I Certify that I have determined that this work was performed to an acceptable standard."</p>
<p>Richard Garner, RPF Planning Officer Okanagan Columbia Business Area</p>	<p>Aug. 30, 2022</p>

10.2 Signature of Person required to prepare the FSP

	
<p>Colin Johnston RPF, Timber Sales Manager Okanagan Columbia Business Area</p>	<p>Aug. 30, 2022</p>

11.0 Signatures of the Preparing Forester and the person required to prepare Minor Amendment #5 to FSP ID#771, Visual Quality-Scenic Areas and Visual Quality Objectives, update table 4.13.1 with an additional VLI polygon 2939

11.1 Signature of Preparing Forester

	<p>Preparing Forester</p> <p>"I Certify that I have determined that this work was performed to an acceptable standard."</p>
<p>Richard Garner, RPF Planning Officer Okanagan Columbia Business Area</p>	<p>September 13, 2022</p>

11.2 Signature of Person required to prepare the FSP

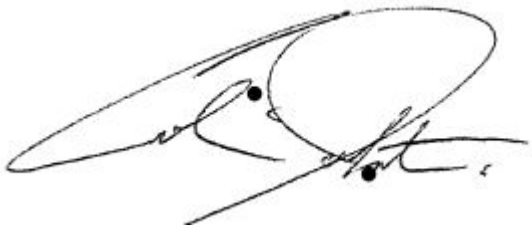
	
<p>Colin Johnston RPF, Timber Sales Manager Okanagan Columbia Business Area</p>	<p>September 13, 2022</p>

12.0 Signatures of the Preparing Forester and the person required to prepare Major Amendment #6 to FSP ID#771, incorporation of Thompson Okanagan Regional Stocking Standards and Removal of Maximum Density for Free Growing Obligations

12.1 Signature of Preparing Forester

	<p>Preparing Forester</p> <p>"I Certify that I have determined that this work was performed to an acceptable standard."</p>
<p>Michael Kyler, RPF Planning Officer Okanagan Columbia Business Area</p>	<p>February 17, 2022</p>

12.2 Signature of Person required to prepare the FSP

	
<p>Colin Johnston RPF, Timber Sales Manager Okanagan Columbia Business Area</p>	<p>February 21, 2022</p>

Appendices

Appendix A: BCTS FDU Locations within the Okanagan-Shuswap and Selkirk Natural Resource Districts

The following FDU maps have been submitted as accompanying documents and are a legal component of the FSP.

BCTS FDU Locations within Okanagan Shuswap and Selkirk Natural Resource Districts ([Link](#))

Okanagan Shuswap Natural Resource District Forest Development Unit Map ([Link](#))

Selkirk Natural Resource District Forest Development Unit Map ([Link](#))

Appendix B: FSP Review and Comment

- Okanagan-Shuswap and Selkirk Natural Resources District review and comment tracker
- Public review and comment summary report

The above noted documents have been submitted as accompanying documents and are a legal component of the FSP.

Appendix C: Timber Sale Licences, Forest Service Roads, and Road Permits in Effect

In accordance with FPPR section 14, the following are the TSL's, FSR's and RP's granted or entered into by the agreement holder.

Timber Sale Licences

FDU	Licence
Anstey	A92776
Banting/Kettle	A93605
Banting/Kettle	A93847
Banting/Kettle	A94413
Bigmouth	A79361
Bigmouth	A93026
Blackwater Rdige	A89950
Blackwater Ridge	A88176
Blackwater Ridge	A94445
Blackwater Ridge	A94448
BMX-Bigfish	A84024
Cascadia	A92778
Cascadia	A93266
Cascadia	A93765
Cascadia	A93944
Cascadia	A93945
Cascadia	A94567
Cascadia	A94927
Cascadia	A95692
Coldstream	A93415
Coldstream	A94411
Cooke	A91748

FDU	Licence
Echo	A94402
Esplanade	A93296
Frisby Ridge	A91998
Glen Lake	A92103
Golden	A81014
Graystokes	A93602
Graystokes	A93603
Graystokes	A93604
Graystokes	A94455
Graystokes	A94460
Graystokes	A94461
Graystokes	A94580
Graystokes	A95884
Ireland	A87954
Ireland	A89876
Ireland	A90635
Ireland	A93414
Lamberton	A89882
Mara-Sicamous	A86893
Mara-Sicamous	A93641
Mara-Sicamous	A93642
Mission	A91816

FDU	Licence
Mission	A94458
Mt. Seven	A45873
Mt. Seven	A94446
Mt. Seven	A95909
Naramata	A83282
Okanagan	A85292
Okanagan	A87652
Okanagan	A94389
Paxton	A93599
Skaha	A89396
Skaha	A90125
Skaha	A93010
Skaha	A93880
Skaha	A94454
Skaha	A94459
Skaha	A94810
Skaha	A95238
Smokeyhouse	A91999
Stitt-Normanwood	A95230
Swm	A76823
TFL 56 - BCTS	A91987
TFL 56-BCTS	A93767

Crazy	A94442
Currie	A91219
Currie	A93431
Drimmie	A92777
Drimmie	A92427

Mission	A93003
Mission	A93005
Mission	A93598
Mission	A93600
Mission	A93606

Wetask Lake	A90921
Wetask Lake	A95116
Wetask Lake	A95825
White Lake	A92440
White Lake	A93430
White Lake	A94684

Forest Service Roads (FSRs)			
FDU	FSR	FDU	FSR
Bigmouth	C 7764.05 (BIGMOUTH - BRANCH 20.5)	Skaha	S 7654.145 [JILLIAN]
Cascadia	C 9679.07 (KILLEEN)	Skaha	S 7654.146 [GABBY]
Coldstream	N K0XZ.01 (SLICK)	Skaha	S 7654.147 [NOAH]
Echo	N 1109.03 (CLIER LK)	Skaha	S 7654.148 [COUGAR]
Echo	N K5C4.01 (DAY)	Skaha	S 7654.149 [COUGAR 100]
Echo	N K763.01 (HAZEE)	Skaha	S 7654.150 [K705.02]
Graystokes	S 7654.136 [WEST MOORE]	Skaha	S 7654.151 [STAR]
Graystokes	S 7654.153 [SWAY]	Skaha	S 7654.152 [ROCK]
Graystokes	S 7654.154 [OUTLAW]	Skaha	S 7654.158 [ROCK 100]
Harris	N 1031.35 [H300]	Skaha	S 7654.88 (EASY)
Mission	S 8692.32 [RAWLINGS]	White Lake	N 5653.20 [WHITELAKE SOUTH]
Mission	S 8692.34 [SHADY]	White Lake	N 5653.37 (ROSSOUW)
Mt. Seven	C 9092.01 (HORSE CREEK)	White Lake	N 5653.38 (LOWE)
Paxton	S 4076.11 [SHADOW]	White Lake	N 5653.39 (BARVIRE)
Skaha	S 7654.139 [MEURIG]	White Lake	N 5653.40 (WHILO)
Skaha	S 7654.144 [SCHOCHTER]		

Road Permits (RPs)				
FDU	RP		FDU	RP
Banting/Kettle	S 10924.05 [K6R3-01]		Kwikoit	N RP 88950-K5DD.01/R20548
Banting/Kettle	S 10924.06 [K6QM 01]		Kwikoit	N RP 88950-K5DD.02
Banting/Kettle	S RP 93004-K70U.01/R21196		Kwikoit	N RP 88950-K5DE0.1/R20548
Banting/Kettle	S RP 93605-K5QF.01/R21275		Kwikoit	N RP 88950-K6SF.01/R20548
Banting/Kettle	S RP 91813-K6R0-ECE-01/R20575		Mara-Sicamous	N 8255.03 [CAMBIE 100]
Barton	S RP 91808-K71D.01/R20875		Mara-Sicamous	N RP 91750-K6E4.00 / R19677
Bolean	S RP 93001-K6W7-01 /R20643		Mara-Sicamous	N RP 91750-K6E4.00 / R19677
Bolean	S RP 93001-K6WB-03 /R20643		Mara-Sicamous	N RP 91750-K6E4.01 / R19677
Chum	N RP 92449-K6XY.01/R20712		Mara-Sicamous	N RP 91750-K6E4.06 / R19677
Chum	N RP 92449-K6XY.02/R20712		Mara-Sicamous	N RP 91750-K6PZ.01 / R19677
Chum	N RP 92449-K6XZ.01/R20712		Mara-Sicamous	N RP 91750-K6R2.00 / R19677
Chum	N RP 92449-K6XZ.02/R20712		Mara-Sicamous	N RP 91752-K2TX-00 /R20531
Coldstream	N RP 93415-K1YR.01/R21376		Mara-Sicamous	N RP 91752-K6TB-00 /R20531
Coldstream	N RP 93415-K24U.01/R21376		Mara-Sicamous	N RP 93641-K6UW.01/R21451
Coldstream	N RP 93415-K5BP.01/R21376		Mission	S 8692.28 [ECOLA]
Cooke	N RP 91748- K67A.01/ R21118		Mission	S RP 91815-K6NL-01/R20461
Echo	N RP 91749-K5C5.01 / R20495		Mission	S RP 91815-K6SG-01/R20461
Echo	N RP 91749-K5C6-5.01 / R20495		Mission	S RP 93881-K6US.01/R21101
Echo	N RP 91749-K5C6-5.01 / R20495		Okanagan	N RP 91753-K6VE.01 / R20046
Glen Lake	S RP 92103-K6SY.01A/R20797		Paxton	S RP 64447 K4LE-01/R20439
Graystokes	S 7654.137 (K6T0.ECE.01)		Paxton	S RP 64447-K4LE-02/R20439
Graystokes	S 7654.138 (K6T0-01.01)		Paxton	S RP 93599-K6UR-01ECE/R20961
Graystokes	S RP 92102-K5T2-01/R20583		Paxton	S RP 93599-K6V8-03 ECE/R20961
Graystokes	S RP 92102-K6T1-02/R20583		Ross	N RP 93643-K3BL.01/R21143
Graystokes	S RP 92102-K6T1-03/R20583		Ross	N RP 93643-K3BL.01/R21143
Graystokes	S RP 92102-K6T2-02/R20583		Ross	N RP 93643-K3BL.02/R21143
Graystokes	S RP 93602-K6ZN.01/R21265		Ross	N RP 93643-K3BN.01/R21143
Harris	N RP 92442 -K5ZF.01\R20568		Skaha	S 7654.155 [SWITCH]
Harris	N RP 92442 -K5ZF.02\R20568		Skaha	S 7654.156 [FLY]
Harris	N RP 92442 -K5ZF.03\R20568		Skaha	S 8717.03 (PEAT BOG RD)
Harris	N RP 92442-K5ZG-01\R20568		Skaha	S 8717.03 (PEAT BOG RD)
Harris	N RP 92446-K5T8.01/R20706		Skaha	S 8717.04 (K6PF)
Harris	N RP 92446-K5T8.02/R20706		Skaha	S 8717.05 (K6SP-M2)
Harris	N RP 92446-K6VS.02/R20706		Skaha	S 8717.05 (K6SP-M2)
Harris	N RP 93410-K5SG.01/R21069		Skaha	S 8717.06 (K6SP-07A)
Harris	N RP 93410-K70X.01/R21069		Skaha	S 8717.07 (K6SP-05A)
Harris	N RP 93410-K70Y.01/R21069		Skaha	S 8717.07 (K6SP-05A)
Harris	N RP 93410-K710.01/R21069		Skaha	S RP 90125 K6K7-01A/R20755
Harris	N RP 93410-K710.03/R21069		Skaha	S RP 90125 K6K7-02A/R20755
Harris	N RP 93410-K710.04/R21069		Skaha	S RP 92100-K6V5.02/R20983
Harris	N RP 93410-K710.05/R21069		Skaha	S RP 93006 K709.01/R20833
Harris	N RP 93419-K72G.03/R21254		Skaha	S RP 93006 K70A.01/R20833
Harris	N RP 93433-K70V.01/R20954		Skaha	S RP 93007 K6Z8.01/R20756
Hlina	N RP 92448-K5D6.01\R20614		Skaha	S RP 93007 K6ZE.01/R20756
Ireland	N RP 93414-K6XQ.01/R21563		Skaha	S RP 93007 K6ZE.02/R20756
Kal Slopes	N RP 93411- K5B7.01/R21117		Skaha	S RP 93007 K71L.01/R20756
Kal Slopes	N RP 93411- K5BE.01/R21117		Skaha	S RP 93007 K71L.02/R20756
Kal Slopes	N RP 93411-K5XZ.01/R21117		Skaha	S RP 93007 K71L.03/R20756
Kal Slopes	N RP 93411-K5XZ.02/R21117		White Lake	N RP 92441-K5EU.1 / R21303

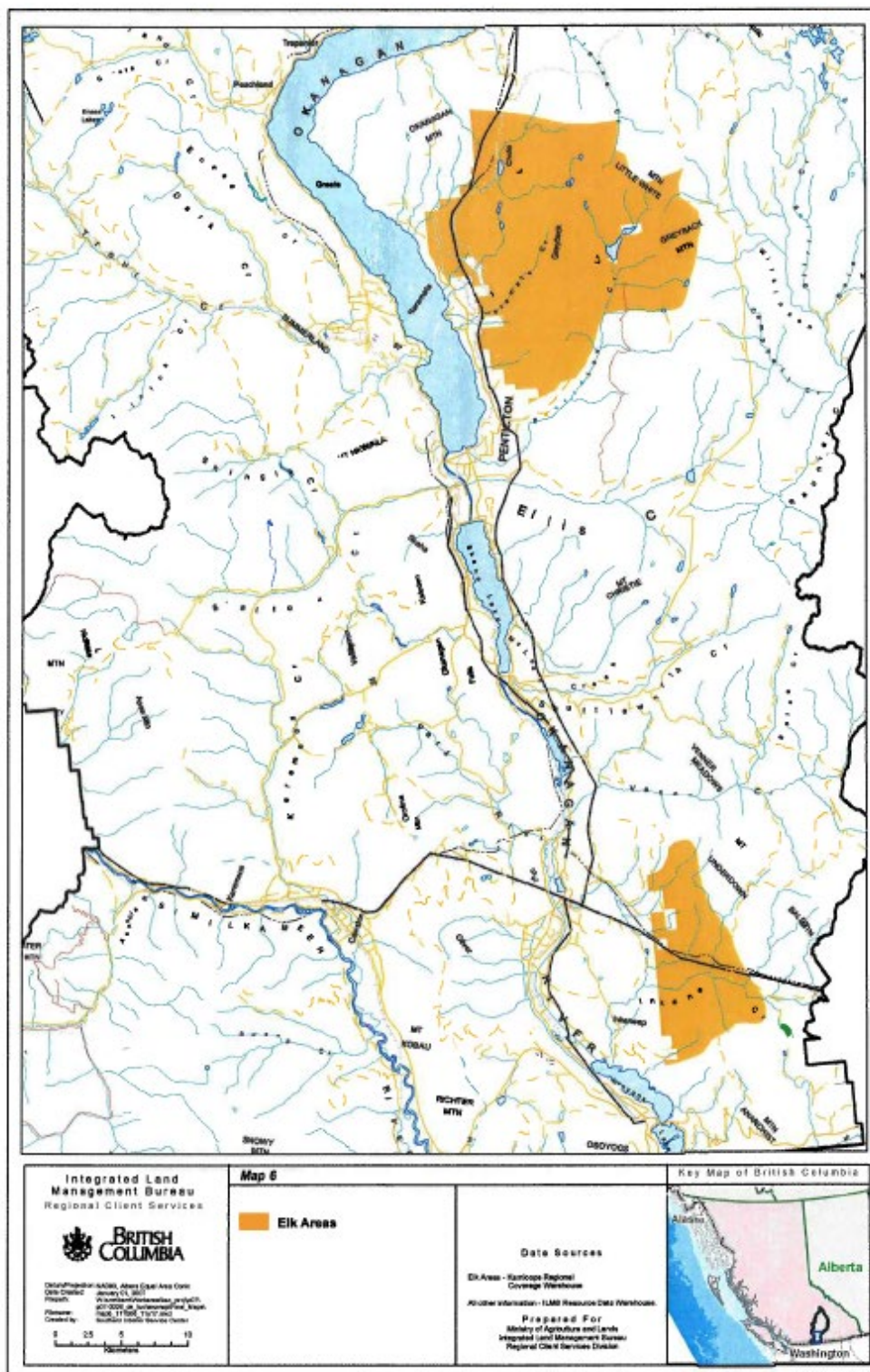
Appendix D: Declared Cutblocks and roads

In accordance with FPPR section 14 (4)(b) the following are the cutblocks and roads where all activities and evaluations that are necessary in relation to inclusion of cutblocks and roads in the area have been completed.

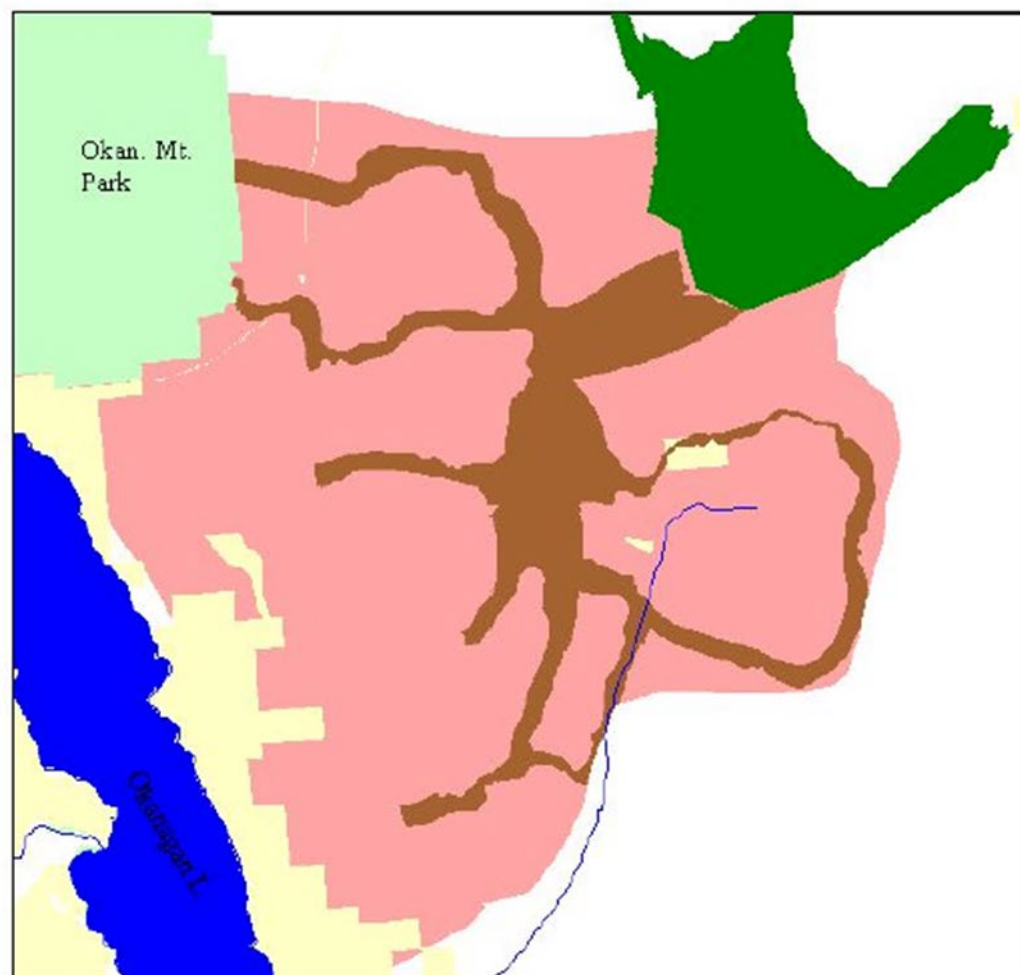
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A94456 - K6EZ, K6HT, K6HU, K772	Skaha	Skaha
A95163 - K7FR, K7KX, K68S	Barton	Barton
A89044 - K6F4, K6F5	Graystokes	Graystokes
A94689 - K6QD, K6R7	Kettle	Banting Kettle
A93601-K6ZK, K6ZM, K6ZL	Graystokes	Graystokes
A92097-K4LF, K6UX	Paxton	Paxton
A95047-K0X8, K1YX, KSCH, K78D, K78E, K7KD	Currie	Currie
A93849-K0KM, K72X	Ross	Ross
A95050- K4LM, K5BW, K62T, K5C1	Coldstream	Coldstream
A93420-K71W, K71X, K71Y, K72F, K72J	Harris	Harris
A94403-K6UZ, K6W2, K6W3	Skimikin	Skimikin
K5C4, K71P, K762, K763	Echo	Echo
A95228-K55R, K739	Shelter Bay	Cascadia
A94920-K6F1, K6F3, K6RJ, K78U	Swan	Swan
A95227-K1VE, K5TB	Nagle	Nagle
A94443-K6MR, K72K	Bluewater	Bluewater
A94443 - K6YQ, K6YZ	Blackwater Ridge	Blackwater Ridge
A94449 - K6MK, K6ML, K668, K666, K6RG, K65W, K6MM,	Esplanade	Esplanade
TA0137-K73C	Shelter Bay	Cascadia
TA0236-K776	Shelter Bay	Cascadia
TA0229-K73L, K73H, K73J	Shelter Bay	Cascadia
A84538-K68Q	Bigmouth	Bigmouth
K5TR, K62Y	Stitt Norman wood	Stitt Norman wood
A95940-K730 K73P	Kettle	Banting Kettle
A94380-K7HS	White Lake	White Lake
Forest Service Roads and Road Permits	FDU (FSP #54)	FDU (FSP 771)
S 7654.144 [SCHOCHTER]	Skaha	Skaha
S 7654.145 [JILLIAN]	Skaha	Skaha
S 7654.88 [EASY]	Skaha	Skaha

S 8435.34 [ASPEN]	Graystokes	Graystokes
S 8435.35 [POPLAR]	Graystokes	Graystokes
S K6R7.01	Kettle	Banting Kettle
S K6QD.01	Kettle	Banting Kettle
S K6QD.02	Kettle	Banting Kettle
S 8787.02 (Naramata Canyon)	Naramata	Naramata
S K6ZK.02 (strahl)	Graystokes	Graystokes
S K6ZK.01 (Strahl)	Graystokes	Graystokes
A94641 K7L8 RW-Argont	Bigmouth	Bigmouth

Appendix E: Maps from Okanagan Shuswap Land Use Order and Plan



Wildlife - Elk Habitat RMZ Corridor



Base Information

- LRMP Boundary
- Private, Federal, or First Nation's (IR) Land
- Major Water Features
- Existing Protected Areas

LRMP Information

- Elk Habitat Corridor
- Elk Habitat
- Proposed Protected Area Package

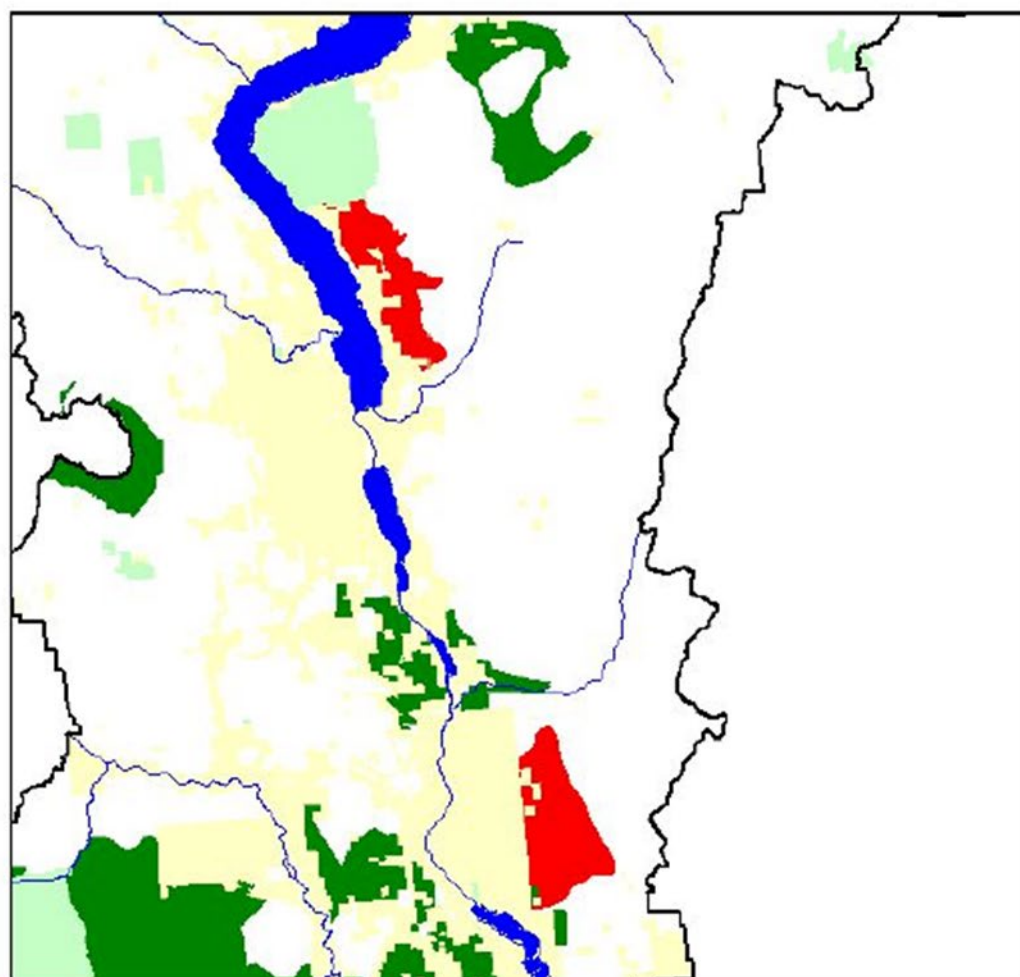


2 0 2 Kilometers

Created by the LRMP
DATA MANAGEMENT
TEAM - March 2001
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WILDLIFE_ELK 4-6

Wildlife - Elk Congregation Areas

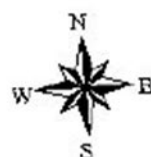


Base Information

-  LRMP Boundary
-  Private, Federal, or First Nation's (IR) Land
-  Major Water Features
-  Existing Protected Areas

LRMP Information

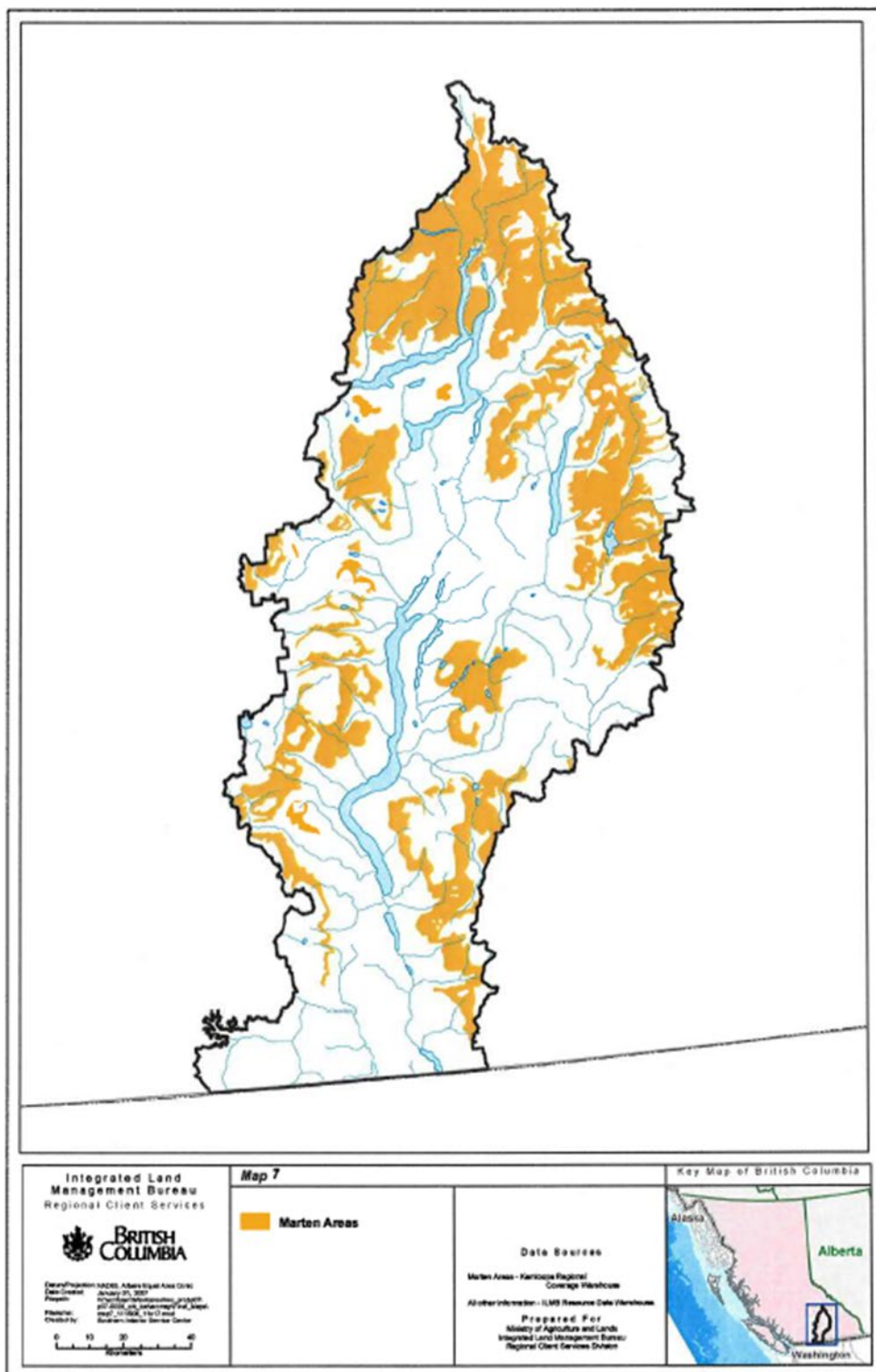
-  Elk Congregation Areas
-  Proposed Protected Area Package



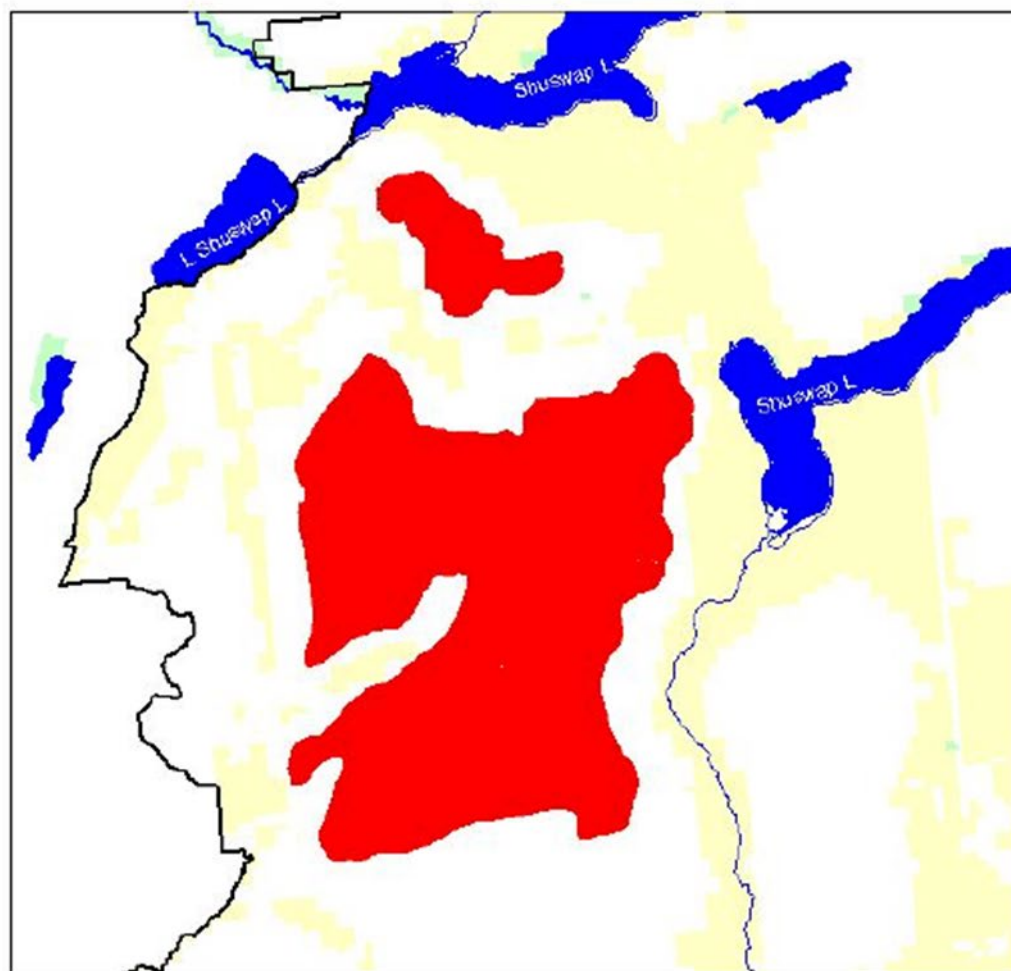
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Created by the LMRP
DATA MANAGEMENT
TEAM - March 2001
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WILDLIFE_ELK 4-7



Wildlife - Marten Habitat (Fly Hills) RMZ



Base Information

- ▬ LRMP Boundary
- Private, Federal, or First Nation's (IR) Land
- Major Water Features
- Existing Protected Areas

LRMP Information

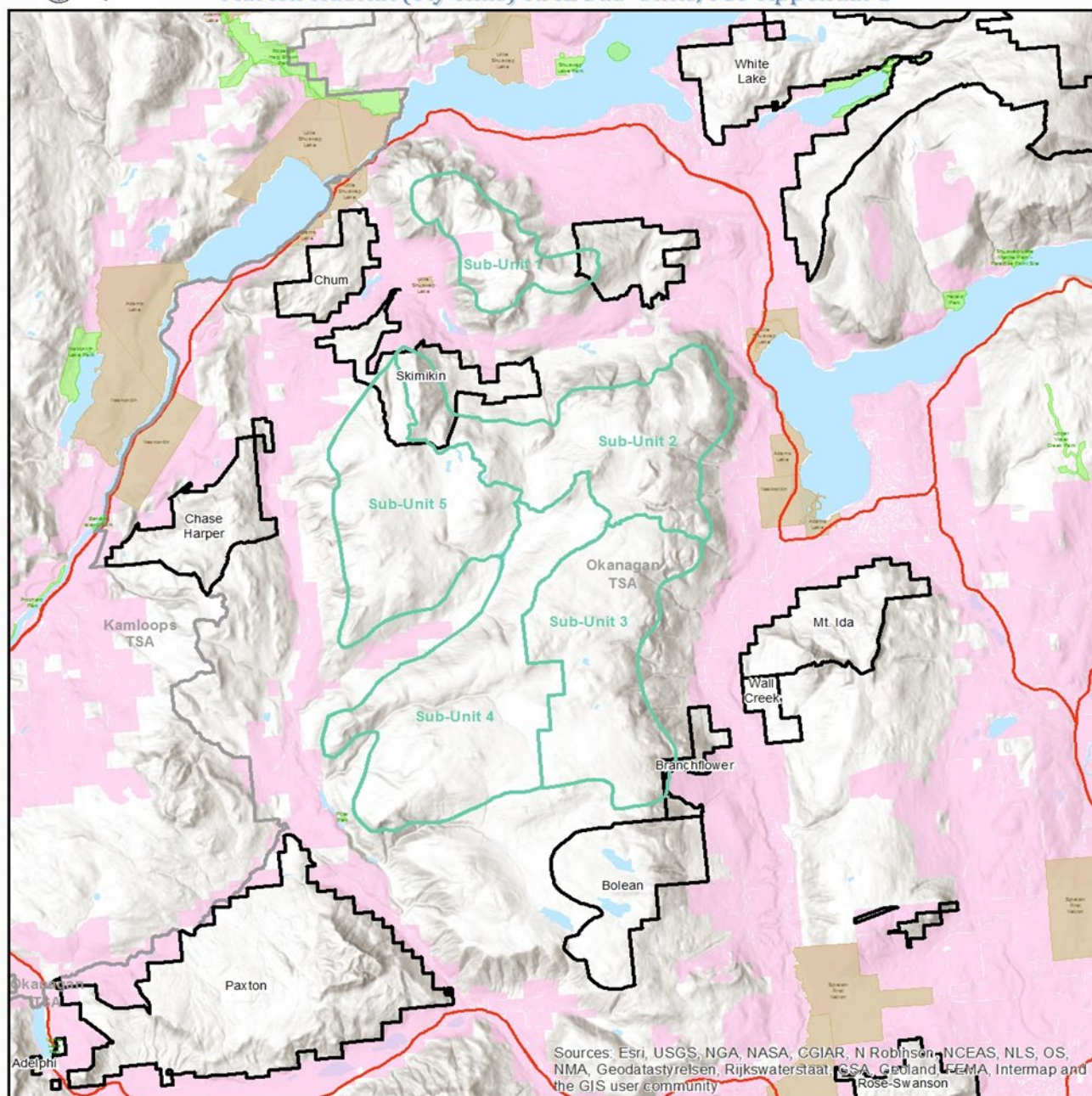
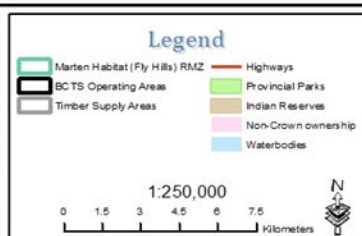
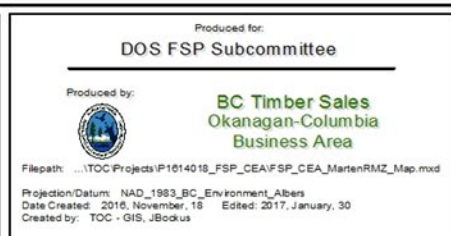
- Marten Habitat
- Proposed Protected Area Package

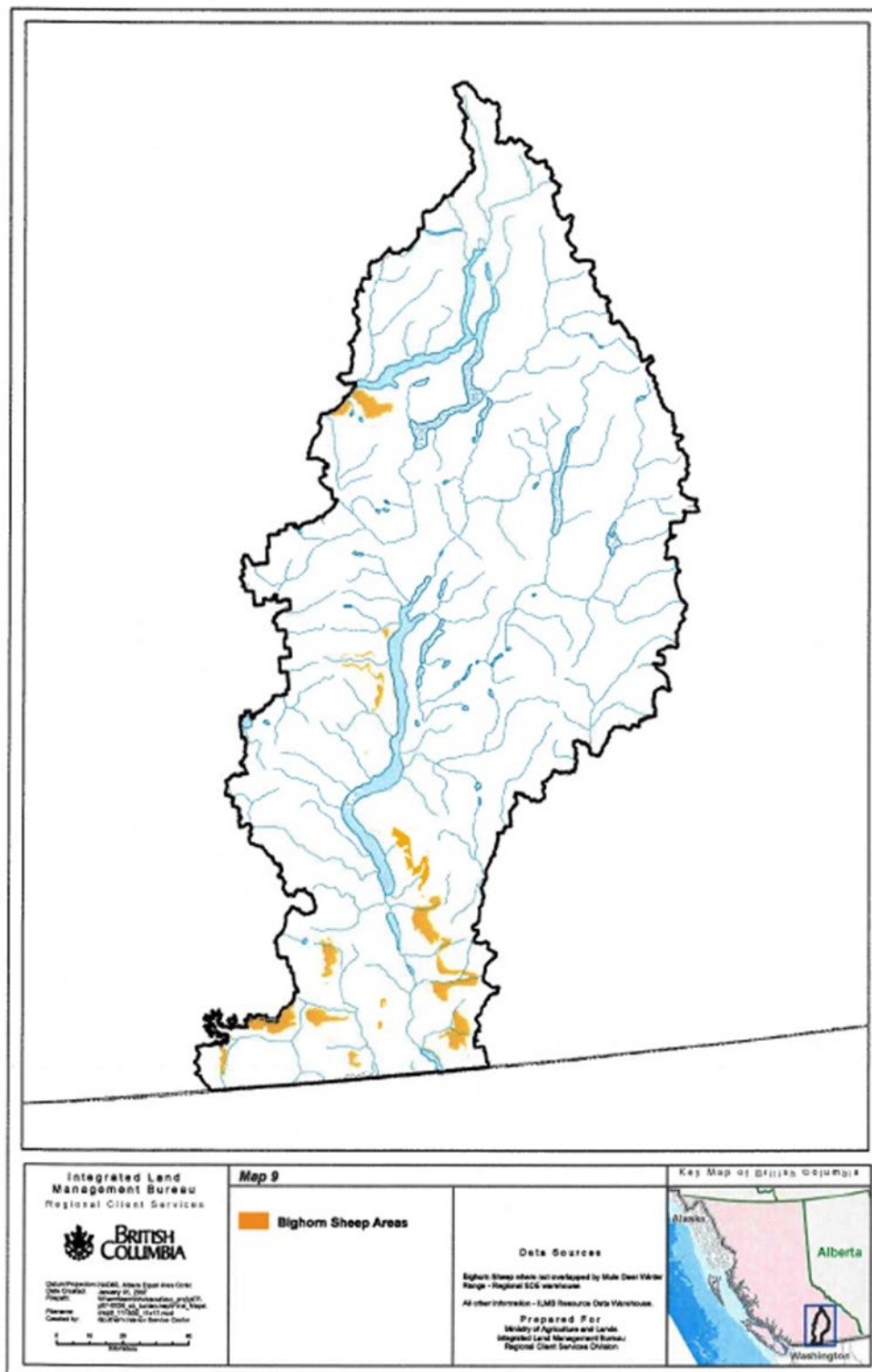


2 0 2 4 Kilometers

Created by the LRMP
DATA MANAGEMENT
TEAM - March 2001
File name: mar_fly_hills_2.jpg

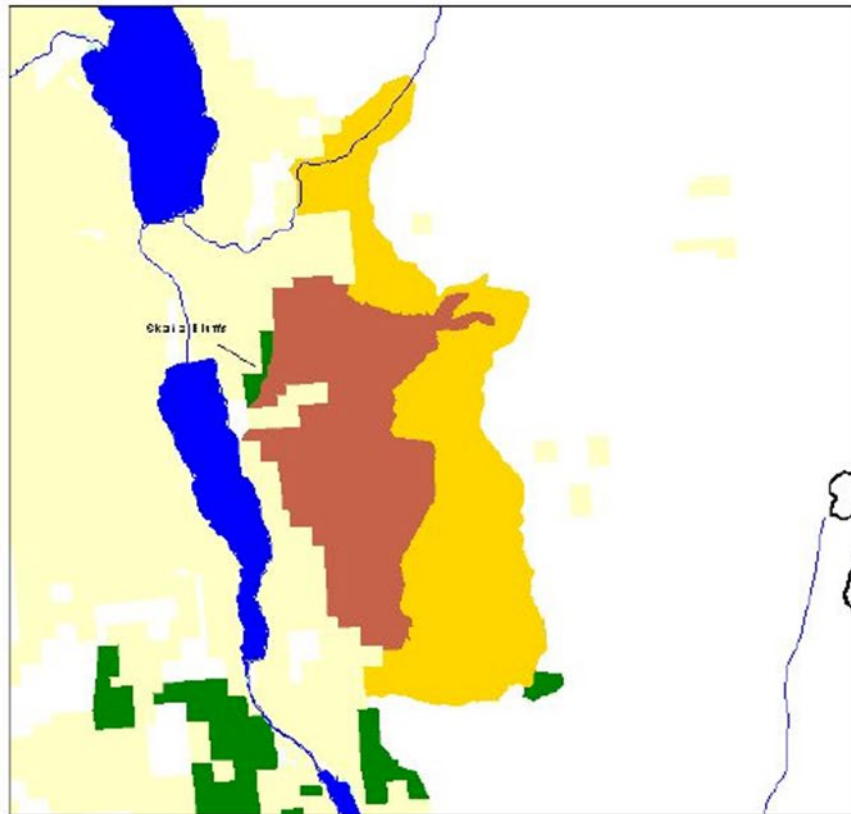
WILDLIFE_MARTEN 4-4





Okanagan - Shuswap LRMP Approved Plan

Wildlife - Derenzy Bighorn Sheep Habitat

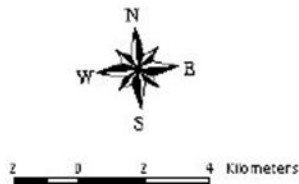


Base Information

- LRMP Boundary
- Private, Federal, or First Nation's (IR) Land
- Major Water Features
- Existing Protected Areas

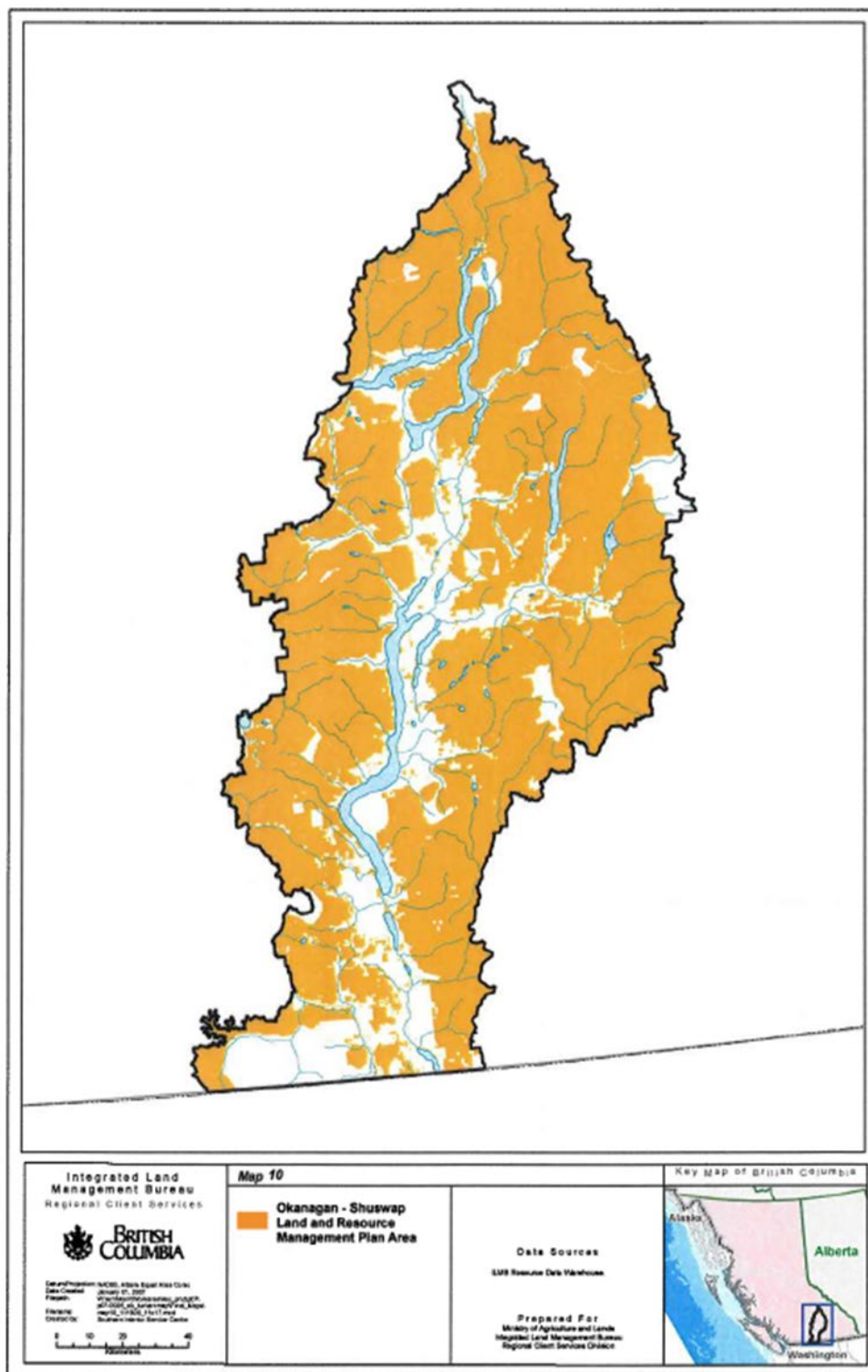
LRMP Information

- Zone 1 / Wildlife Management Area (WMA)
- Zone 2
- Proposed Protected Area Package



Created by the LRMP
DATA MANAGEMENT
TEAM - March 2001
File name: sheep_derenzy_2.jpg

WILDLIFE_DERENZY 4-7



Okanagan - Shuswap LRMP Approved Plan

Wildlife - Grizzly Bear Habitat RMZ

Base Information

-  LRMP Boundary
-  Private, Federal, or First Nation's (IR) Land
-  Major Water Features
-  Existing Protected Areas

Population Units

-  Grizzly Habitat
- 1 Seymour
- 2 Monashee
- 3 Granby
- 4 Cathedral

Note: The four population units comprised make up the RMZ.

Grizzly Suitability

-  High
-  High - Moderate
-  Moderate
-  Proposed Protected Area Package



10 0 10 20 30 40 Kilometers

Created by the LMRP
DATA MANAGEMENT
TEAM - March 2001
File name: grizzly_3.jpg

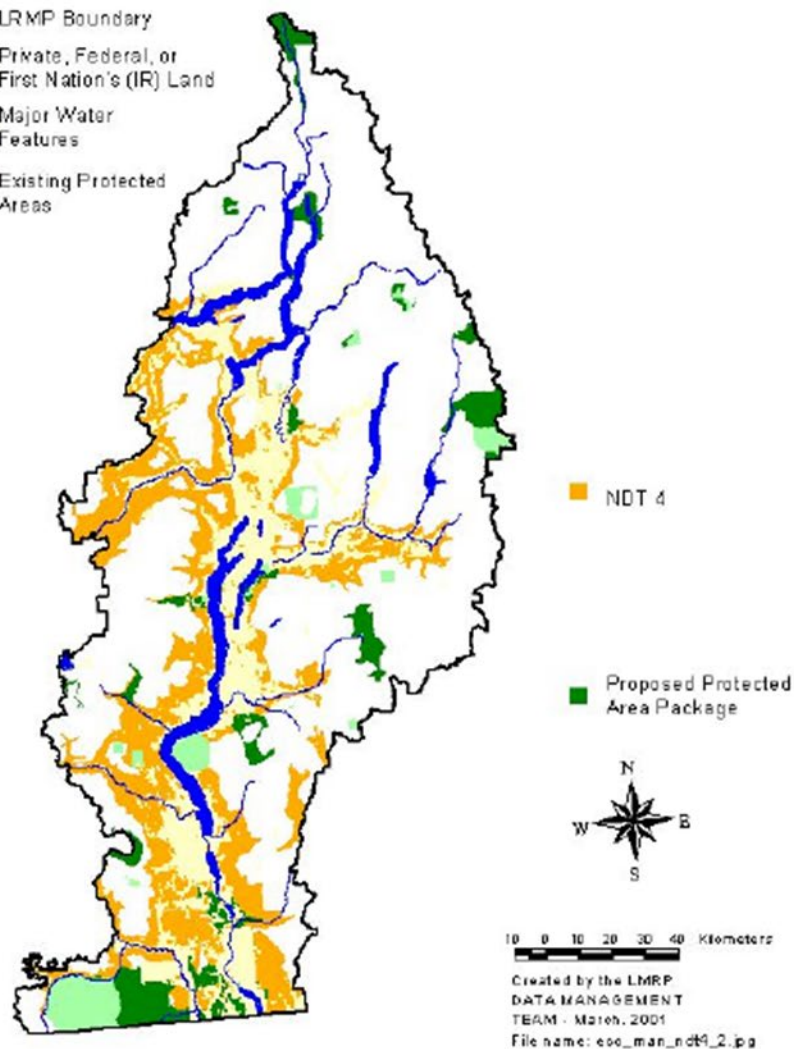
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Okanagan - Shuswap LRMP Approved Plan

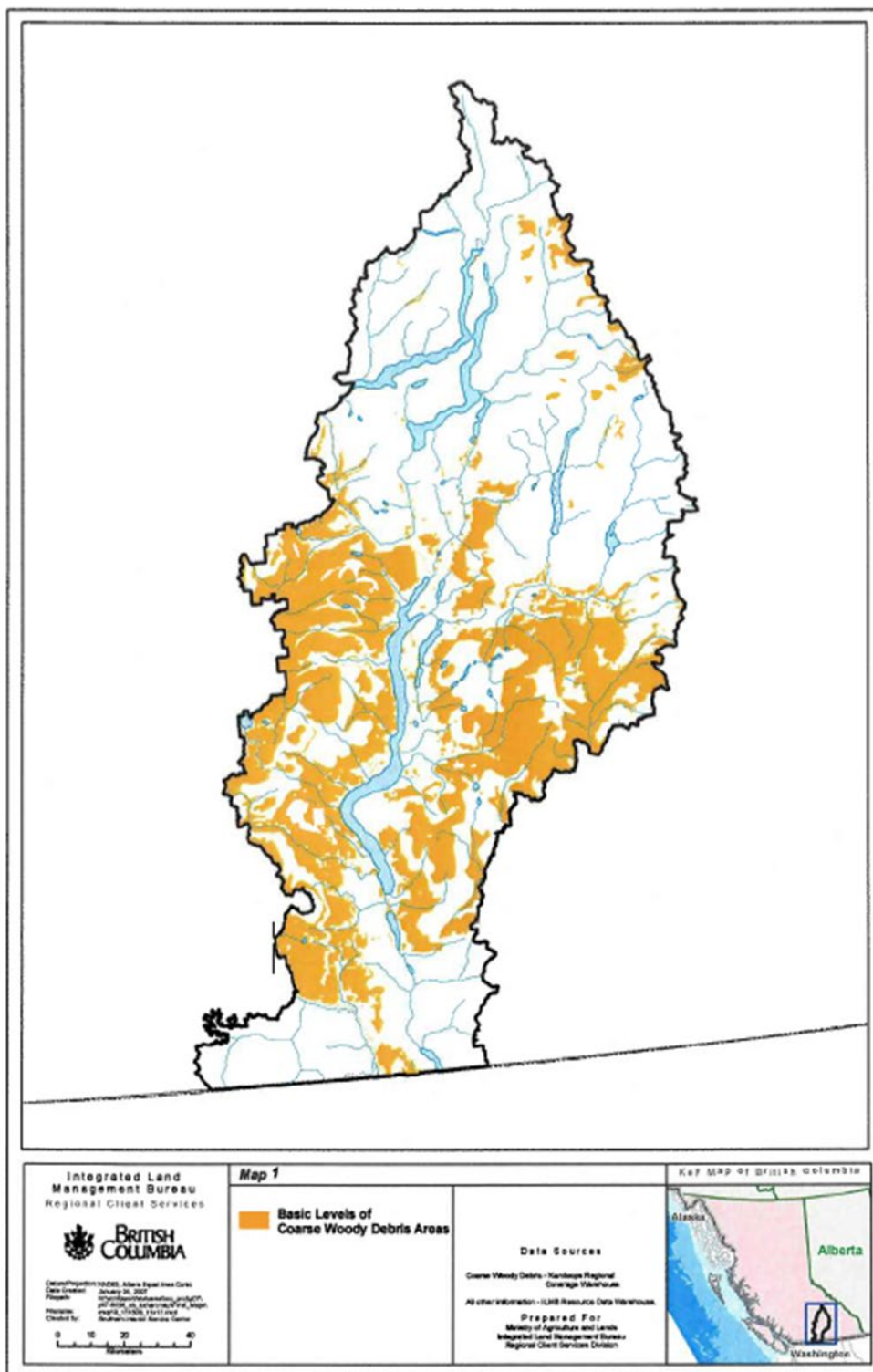
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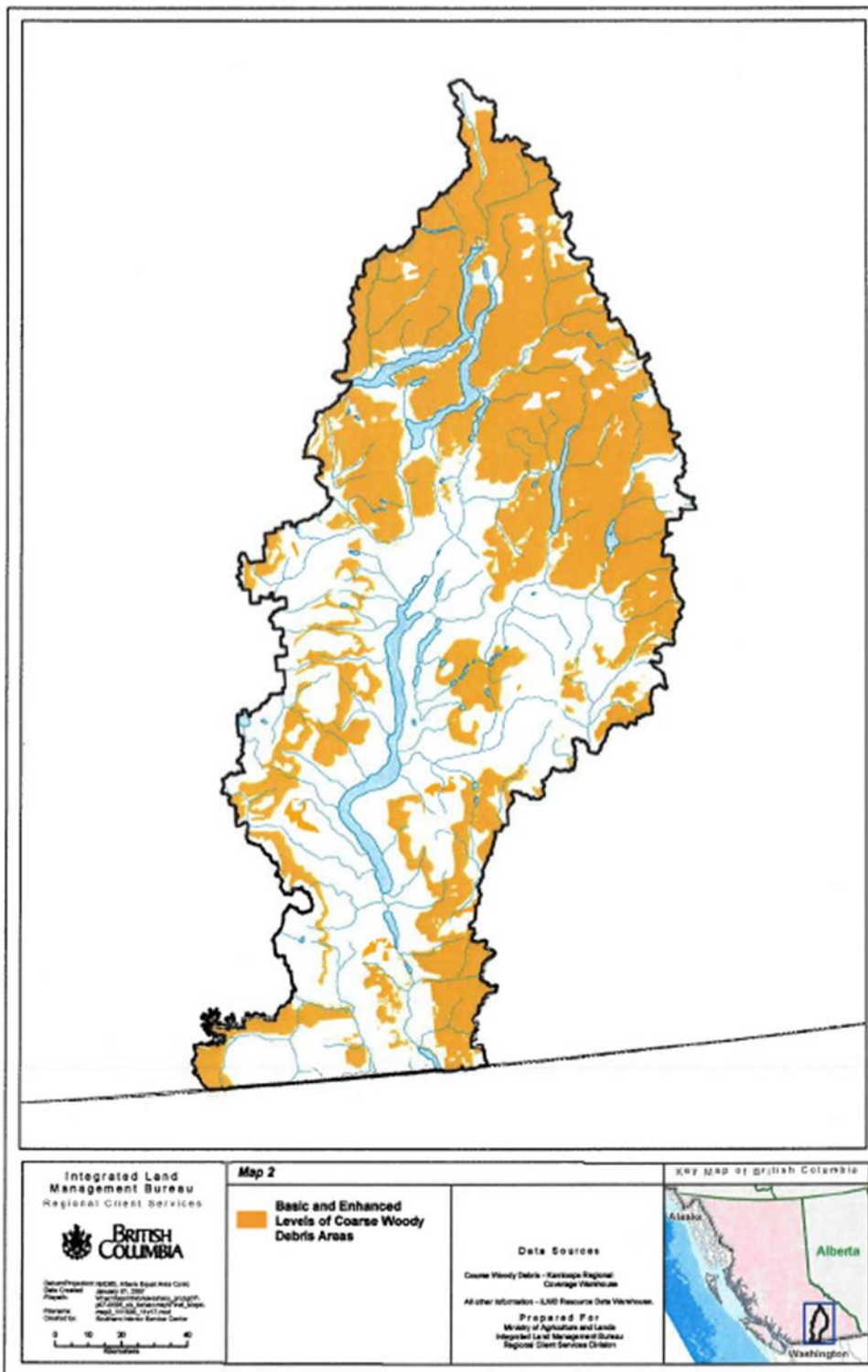
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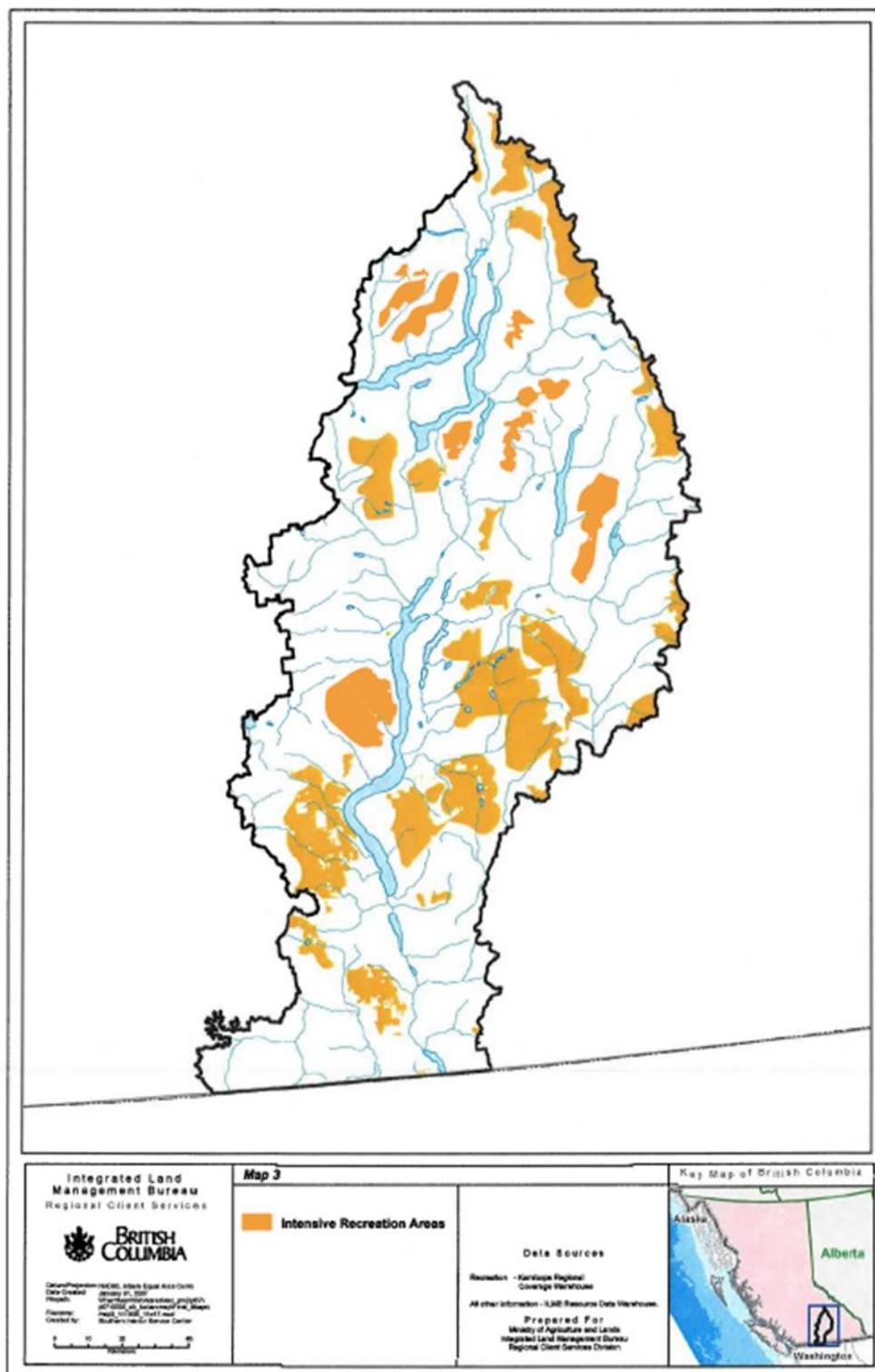
- ✓ LRMP Boundary
- Private, Federal, or First Nation's (IR) Land
- Major Water Features
- Existing Protected Areas



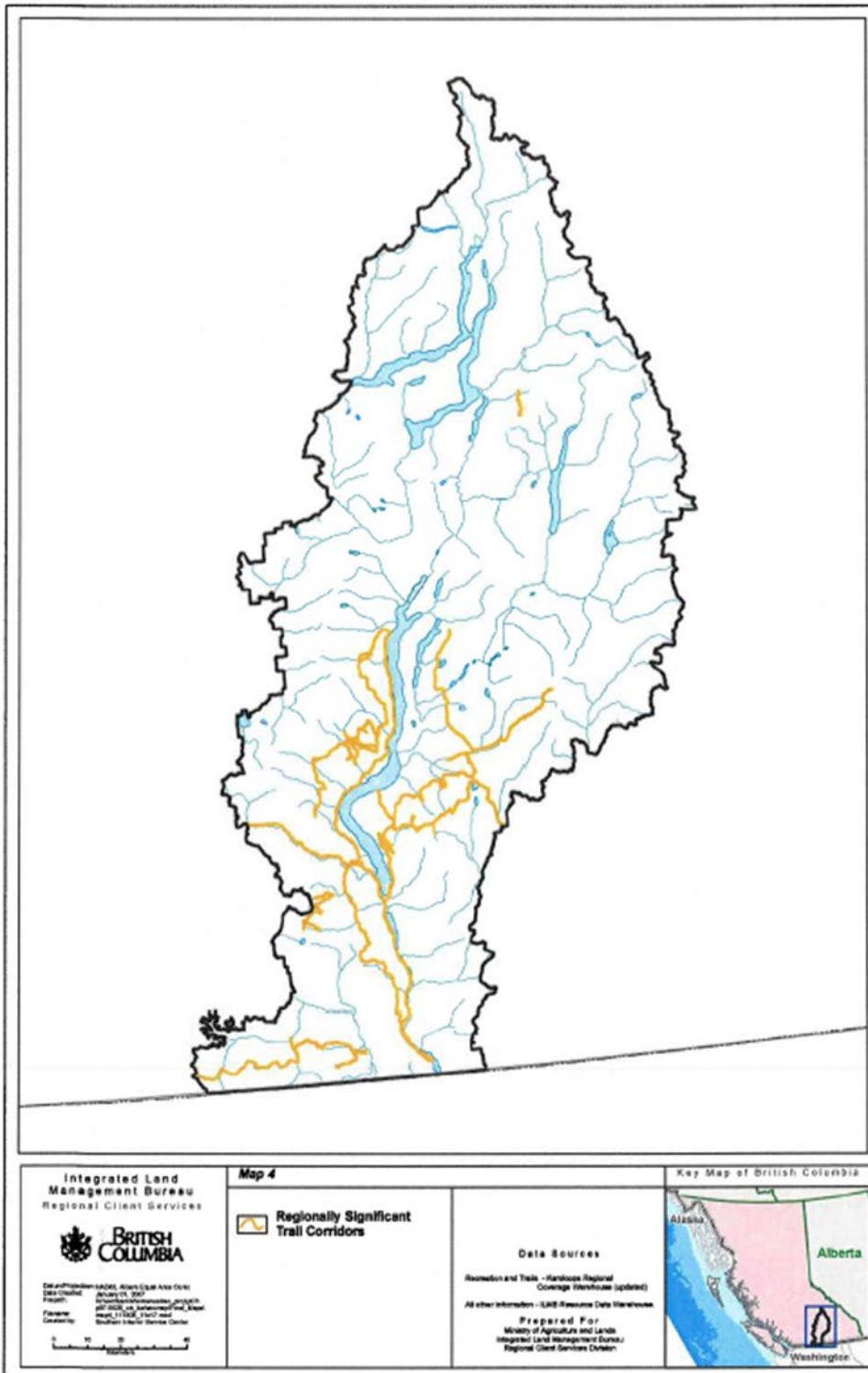
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SE



Appendix F: The OSLRMP and the Wildlife Retention Targets Letter from District Manager



File: 10194-60

June 20, 2005

To: All Major Licensees in the Okanagan Shuswap Forest District (OSFD)
and the Okanagan-Columbia Timber Sales Office

Dear Sir / Madame:

Re: Wildlife Tree Patches (WTP)

In 1996 and 1997 the 3 former Okanagan Shuswap Forest Districts had separate DM policy letters all targeting 9% WTP retention at the stand level. This 9% figure came from interpolating from table 20(b) of the Biodiversity guidebook (% of cut block area required as wildlife tree patches when landscape units have not been designated) and from Appendix D of the OK TSA AAC Analysis document which estimated that 70% of the productive area was available for harvest and of that 20% had been harvested. The intent was to use the 9% target until such time as Landscape Units and Objectives were established for the Okanagan Shuswap Land Resource Management Plan (OSLRMP).

The Ministry of Sustainable and Resource Management (MSRM) has been working to have landscape units declared. They have also prepared draft wildlife tree retention targets consistent with table 20(a) of the biodiversity guidebook for BEC subzones within these landscape units.

For landscape unit BEC subzones that MSRM has prepared draft wildlife tree retention targets licensees are to switch from the 9% default to the new draft retention targets. For landscape unit BEC subzones that do not as yet have draft wildlife tree retention targets licensees are to continue using 9%. As MSRM recommends new draft wildlife tree retention targets for other landscape unit BEC subzones licensees are to plan for the new targets.

The wildlife tree patches will continue to be tracked by the Licensee.

WTP placement will take direction from the latest provincial WTP policy as agreed upon in the LRMP. The current policy is dated February 2000. A new policy is in draft form and should be out soon.

Accounting guidance: (using a 9% target as an example). If the NAR in a proposed block is 10-hectares then 0.9 hectares is to be added to it as a WTP.



Page 1 of 2

Ministry of
Forests

Okanagan Shuswap Forest District

Location:
2501 14th Ave, Vernon

Mailing Address:
2501 - 14th Avenue
Vernon, BC V1T 8Z1

Tel: (250) 558-1700
Fax: (250) 549-5485

The attached spreadsheet shows the current WTP patch targets for the 17 Landscape Units that have been signed off under the section 8 non-spatial order. The spreadsheet will be updated as other Landscape Units are signed off.

If you have any questions on the above, please contact Eric Goodman at 558-1700 or Frank Rowe from the Ministry of Sustainable and Resource Management (MSRM) at 371-6222.

Yours truly,

Ron Racine
District Manager
Okanagan Shuswap Forest District

Dated

Note MSRM is no longer a Ministry and be an agency of the Ministry of Agriculture and Lands.

Attachment.

Appendix G: Old Growth Management Area Guidance Thompson Okanagan (ILMB)

Old Growth Management Area Guidance Thompson Okanagan August 2007

Intent of this document

This document is intended to serve as guidance for managing areas identified as contributing to old growth and biodiversity objectives within the Kamloops, Okanagan, Merritt and Lillooet timber supply areas. Where non-legal spatially identified old growth management areas (OGMAs) are used to achieve old growth retention goals, it is appropriate to provide operational flexibility while assuring that the overall effectiveness of old forest conservation and biodiversity in the area is not diminished. This document identifies a permissible amount of disturbance that can occur within an OGMA without losing significant old growth and biodiversity values and suggests the conditions under which this can occur. This document also proposes situations when it may be appropriate to have replacement areas identified and outlines criteria for such areas.

Reasons why harvesting might occur in an OGMA

Notwithstanding that the overall goal is to retain original OGMAs as much as possible, there are circumstances where harvesting might be justifiable and the location of OGMAs may be amended. These include: o changing the boundary to improve OGMA and timber management or to better reflect logical, on the ground boundaries (e.g., use physical features such as roads, streams, old block boundaries or timber types); o improving harvest boundary alignment in a way that will contribute to the maintenance of the OGMA (e.g., to secure a more wind-firm boundary); o shifting the location of the contiguous area of the OGMA to improve the retention of old forest attributes as identified through a field assessment; o relocating the OGMA to capture old growth and/or biodiversity values better (e.g., where old seral or biodiversity values outside of an OGMA are found to exceed old seral or biodiversity values inside); o where there exists a compelling rationale to harvest and the incursion is minimal or an ecologically equivalent (equal or better old seral and biodiversity values) replacement opportunity exists; and, o where the incursion is significant, but there exists a compelling rationale and activities demonstrate reasonable consistency with the desired old seral conditions and will maintain biodiversity values.

What to consider prior to harvesting in an OGMA

To ensure that the overall effectiveness of old forest conservation and biodiversity is not diminished, ILMB recommends that the following best practices be considered prior to harvesting: o minimize long-term site disturbance and/or detrimental impacts to site productivity; o maintain, restore, or enhance old seral forest attributes; o retain relatively old, large, live and/or dead trees, and large pieces of coarse woody debris; o avoid compromising rare ecosystems; o avoid compromising forest interior habitat conditions; o where appropriate, restock openings created with climax tree species suited to the site; and, o plan activities so the OGMA is not unnecessarily predisposed to increased risk of wind-throw or forest health problems.

OGMA amendment scenarios: OGMAs are retained or replaced

1. Timber harvesting is within limited incursion thresholds – OGMA is retained Within the mapped areas of an OGMA, up to 10 hectares or 10% of the area of the OGMA, whichever is less, may be disturbed by timber harvesting for one or more of the following purposes: a) to enhance or maintain an interpretive forest site, recreation site, recreation facility or recreation trail, where there are no other practicable options; b) to facilitate range development, maintenance and related activities where there are no other practicable options; c) to allow road construction and maintenance where there are no other practicable options; d) to manage for forest health where trees within the old

growth management area pose a significant forest health risk to forests outside the old growth management area and where harvesting constitutes an appropriate and effective control action; e) to address a public or industrial safety hazard where no practicable alternative exists (e.g., danger tree or fire hazard); f) where the incursion is limited to 50 metres and the purpose is to establish a logical boundary for timber harvesting operations, and where the intent is to use physical or administrative features that will not compromise the long term management of the old growth management area; or

Old Growth Management Area Guidance Thompson Okanagan August 2007 g) to improve harvest boundary alignment in a way that will contribute to the maintenance of the OGMA (e.g., to secure a more wind-firm boundary). Activities conducted under these items should demonstrate consideration of desired old seral conditions and biodiversity values. OGMA is retained; no replacement is necessary.

2. Timber harvesting exceeds limited incursion threshold and consistency with desired old seral conditions can be demonstrated – OGMA is retained Within the mapped area of an OGMA, timber harvesting that exceeds the limited incursion threshold may occur if a compelling rationale exists and activities can demonstrate consideration of desired old seral conditions and biodiversity values. OGMA is retained; no replacement is necessary. Plans to selectively harvest within an OGMA in order to reduce a fire hazard would be a reasonable scenario under this item. Removing only the dead and dying trees, keeping ground disturbance to a minimum and retaining all other tree species would demonstrate consideration of the old seral conditions and biodiversity values.

3. Timber harvesting exceeds limited incursion and consistency with desired old seral conditions cannot be demonstrated – OGMA is replaced. Within the mapped area of an OGMA, if timber harvesting exceeds a limited incursion and cannot demonstrate reasonable consistency with the desired old seral conditions and maintain biodiversity values, the forest agreement holder should identify and reserve from harvest an alternative area (or areas) as a replacement OGMA. See replacement criteria for more detail.

4. Amendment to an OGMA location where biodiversity values can be improved – OGMA is replaced Amendments to the location of an OGMA to improve the retention of old forest attributes and biodiversity values can be made if the new location can be demonstrated as being biologically better (i.e., an improvement in location, size, age, tree species and wildlife habitat value). See replacement criteria for more detail. For example, OGMA locations may be amended where biodiversity values and caribou habitat values (as per Kamloops Land and Resource Management Plan: Appendix 10) are maintained or improved and where timber supply impacts can be mitigated.

How to select a replacement OGMA

Replacement OGMAs should meet the replacement criteria outlined below:

- o Size, shape, age, connectivity and interior habitat should approximate or be an improvement upon the original OGMA;
- o Replacement OGMAs should provide equivalent biogeoclimatic representation to the subzone level as the original OGMA;
- o The site units of the replacement OGMA (e.g. moist to dry, slope, aspects and tree species) should approximate the original OGMA;
- o Consider present and future forest health conditions when selecting replacement areas. Avoid stands that have or are likely to have forest health problems;
- o Transfers should not result in new OGMAs in areas with higher levels of human disturbance; and,
- o Transfers should only be made within landscape unit or between adjacent landscape units. Overall targets across the planning area should be maintained. Distance between the original and replacement OGMA should be minimized. Note: Original OGMAs with high wildlife habitat values, rare or uncommon forest types, and/or riparian habitat values, are not considered preferred candidates for removal.

Definitions

In this document:

- o biodiversity is “the diversity of plants, animals and other living organisms in all their forms and levels of organization, and includes the diversity of genes, species and ecosystems, as well as the evolutionary and functional processes that link them” (FPC Biodiversity Guidebook, 1995).
- o desired old seral conditions are those ecological conditions that are characteristic of old seral forests – i.e. “old seral is a forest that contains live and dead trees of various sizes, species, composition, and age class structure. Old seral forests, as part of a slowly changing but dynamic ecosystem, include climax forests but not sub-climax or mid-seral forest” (FPC Biodiversity Guidebook, 1995).
- o limited incursion means up to 10 hectares or 10% of the mapped area of the OGMA, whichever is less, may be disturbed by timber harvesting over a 5 year period without the need for the identification of a replacement area. The accumulation of harvesting over a 5 year period within the same OGMA must be taken into account.
- o old growth management areas are “areas that contain or are managed to replace specific structural old-growth attributes, and that are mapped out and treated as special management areas” (FPC Biodiversity Guidebook, 1995).

Old Growth Management Area Guidance Thompson Okanagan August 2007

- o practicable includes consideration for being both practical and reasonably economically feasible.
- o proposed replacement old growth management areas are those areas proposed to replace an established old growth management area and will be set aside from harvesting.
- o recreation includes commercial and non-commercial related developments, including ski or snowmobile trails and associated infrastructure.

Or significant forest health risk in an OGMA is where the forest health problem within the OGMA poses a significant forest health risk to forests outside the old growth management area.

Appendix H: Visuals Results and Strategies Support Information

FSP# 771 Amendment #4 rationale

Rationale for alternate strategy in wildfire damaged scenic areas Section 4.13 (3.)

Extensive wildfires in the summer of 2021 within BCTS Okanagan-Columbia operating areas caused extensive damage to timber within scenic areas in the following FDU's: Adelphi, Mara-Sicamous, Paxton, Skaha and TFL 49. Consistent with section 25.1(1) of the Forest Planning and Practices Regulation (FPPR), it is not practicable under the circumstances or conditions applicable to the area to fully meet each of the established VQO attributes regarding scale, shape and acuity in some of the scenic areas in carrying out timber salvage harvesting objectives. This amendment proposes an alternate strategy for VQOs that will allow harvesting of wildfire damaged timber within specified scenic areas (VLI polygons) while varying the visually altered condition to increase the scale and acuity of the development while continuing to use design principles which include natural design elements that are not linear or geometric in shape. This amendment commits to achieving a maximum of large-scale alterations or alterations that are in most cases one level above (two instances of a two level increase) the scale and acuity levels are consistent with FPPR 1.1 categories of visually altered forest landscape and as described in 4.13 (3) and Table 4.13.1.

Example Table 4.13.1 *** Note additional FDU's, wildfires and VLI polygons may be added to this table as a minor amendment within the Okanagan Shuswap District.

FDU/ Operating Area	Wildfire Identification	VLI Polygon	Established VQO	Scale (allowable extent)	Acuity (allowable extent)
Adelphi/ TFL 49	K61884	1606	Retention	Medium in scale	Easy to see

Background:

The objectives set by government for visual quality in scenic areas are the established Visual Quality Objectives, applied in accordance with FPPR section 1.1 (Categories of visually altered landscapes).

VQOs in FDU's including operating areas; Adelphi, Mara-Sicamous, Paxton, Skaha and TFL 49 were established under the Okanagan Shuswap Land and Resource Management Plan (April 11, 2001 non HLP) defined as "Zone 1" areas. These areas were declared as scenic areas with established VQOs under the Forest Practices Code and carried forward as objectives by government.

Definitions

FPPR “**scenic area**” means a scenic area

- a) continued under section 180 (c) [Grandparenting specified designations] of the Act, or
- b) established under the Government Actions Regulation.

Scenic Area – Is any visually sensitive area or scenic landscape that is identified through a visual landscape inventory or planning process carried out or approved by the district manager. The procedures for managing visual or scenic values in these areas will depend on whether formally established visual quality objectives exist or not as defined in the Visual Assessment Guidebook.

FPPR “**visual quality objective**” means

- a) an objective continued, in respect of a scenic area, under section 181 of the Act,
- b) an objective established for a scenic area under the Government Actions Regulation, or
- c) a visual quality class continued, for a scenic area, under section 17 of the Government Action Regulation.

Visual Quality Objectives – Is a resource management objective that reflects the desired level of visual quality based on the physical characteristics and social concern for the area. These objectives are established by the district manager or are contained in a higher-level plan as defined in the Visual Assessment Guidebook.

FPPR “**altered forest landscape**” means a forest landscape that

- a) is viewable from a significant public viewpoint,
- b) contains cutblocks or roads, and
- c) is in one of the categories prescribed under section 1.1.

An altered forest landscape is generally evaluated at the landscape level and may involve multiple cutblocks, viewpoints and different licensees. Examples of evaluation areas of an altered forest landscape may be a long stretch of highway corridor, and entire valley, a lakeshore, etc.

“**Categories of visually altered forest landscape**” are defined under FPPR section 1.1 and are defined by measures of attributes including:

- a) Scale (or size);
- b) Ease of seeing (visibility, acuity); and
- c) Shape (appearance or design).

Alteration Category	FPPR 1.1 (See FPPR 1.1 for exact definition)	<u>Non-legal</u> Percent Alteration Perspective View* Guidelines from Table 3 FREP visual quality protocol and Visual assessment guidebook.
<i>Preservation</i>	<i>Very small in scale, and not easily distinguishable from the pre-harvest landscape.</i>	0
<i>Retention</i>	<i>Difficult to see, small in scale, and natural in appearance.</i>	0 – 1.5
<i>Partial Retention</i>	<i>Easy to see, small to medium in scale and natural and not rectilinear or geometric in shape.</i>	1.6 – 7.0
<i>Modification</i>	<i>Very easy to see, large in scale, and natural in its appearance, or small to medium in scale but with some angular characteristics.</i>	7.1 – 18.0
<i>Maximum Modification</i>	<i>Very easy to see, very large in scale, rectilinear and geometric in shape, or both.</i>	18.1 – 30.0

**the specified values are not hard numerical limits, upper numerical limit can be exceeded with good design and rationale.*

Visual Guidance to QP's for additional information for Scale

Alteration Category	FPPR Scale or Size
<i>Preservation</i>	<i>Very small in scale</i>
<i>Retention</i>	<i>Small in scale</i>
<i>Partial Retention</i>	<i>Small to medium in scale</i>
<i>Modification</i>	<i>Large in scale</i>
<i>Maximum Modification</i>	<i>Very large in scale.</i>

Visual Guidance to QP's for additional information for visual acuity

Alteration Category	FPPR "ease of seeing"	VIA Guidebook "what can be seen"	Visual Landscape Design Training
<i>Preservation</i>	<i>Not easily distinguishable from the pre-harvest landscape</i>	<i>Non-visible</i>	<i>Not visually apparent</i>
<i>Retention</i>	<i>Difficult to see</i>	<i>Not visually evident</i>	<i>Requires much effort or skill to discern visually</i>
<i>Partial Retention</i>	<i>Easy to see</i>	<i>Visible but subordinate</i>	<i>Able to discern visually without great effort or difficulty</i>
<i>Modification</i>	<i>Very easy to see</i>	<i>Visually dominant</i>	<i>Able to discern visually with little effort or difficulty</i>
<i>Maximum Modification</i>	<i>Very easy to see</i>	<i>Visually dominant</i>	<i>Able to discern visually without any effort</i>

Fire salvage blocks and roads will have visual evaluations and/or visual impact assessments completed by a Qualified Professional similar to development proposed in non-fire impacted scenic areas for the resultant visually altered landscape and the assessments will include design elements from the 1994, Visual Landscape Design Training Manual incorporating design principles such as:

- Landform and land feature analysis;
- Follow natural boundaries with harvest design while avoiding straight or rectilinear shapes;
- Rounded, curvilinear shapes in rounded landforms;
- Irregular boundaries;
- Organic interlocking shapes;
- Retention of single trees and patches of various sizes within the blocks including live and dead trees to aid in and provide screening opportunities and visual structure.

Due to the extent and conditions of the extreme summer 2021 fire events to timber in BCTS operating areas in the Okanagan-Shuswap BCTS is not able to commit to meeting the scale and acuity requirements for the VLI polygons. Landscape level timber damage caused by the 2021 wildfires and when combined in some instances with pre-existing alterations that were a result of past harvesting, it is not practicable for BCTS to achieve the scale or acuity attributes of the established VQOs. In most instances BCTS has alternately proposed and commits to be one level above the recommended scale and acuity requirements (i.e. going from small to medium in scale or medium to large in scale) for allowable extent and for acuity (i.e. going from difficult to see to easy to see, or easy to see to very easy to see) while still meeting requirements for development design of having natural in appearance boundaries. In two instances in VLI polygon 794 located in the Skaha FDU and VLI polygon 1863 in TFI 49 FDU BCTS is proposing to go from small in scale and difficult to see to Large in Scale and very easy to see due to the severe and extensive size of the fire in these polygons. In these two instances BCTS commits to leaving of patches of live and dead timber to help meet the established VQO objective to the extent practicable. BCTS is committed to mitigating visual impact in these fire-salvage units as a priority, and the increase in scale will be balanced by other measures such as committing to natural design and retaining patches of dead and live timber for structural diversity compensating for the increase in scale and softening the visual impact. Larger harvest units designed carefully will reduce fragmentation within VLI polygons and result in more rapid green up with prompt reforestation improving longer term visual impacts. BCTS also is working in collaboration with First Nations on retention strategies within the blocks which will in turn mitigate visual impacts and protect other values such as wildlife and water.

BCTS intends to use section 3 results and strategies for any additional future large scale fires, or for potential purchase volume from fires and other VLI polygons that have sustained fire damage and are determined to not fully meet the VQO objectives. BCTS will add any relevant information for these instances to table 4.13.1 as a minor amendment within the Okanagan Shuswap District.

BCTS FSP utilizes guidance for predicting VQO's and references Tables 2 and 6 of the Visual Impact Assessment Handbook, Forest and Range Practices Act, May 2022; and/or the Protocol for Visual Quality Effectiveness Evaluation Procedures and Standards, FREP, 2008 (tables referenced below); and estimating the likely resulting VQO using the descriptive categories of visually altered forest landscape as defined in FPPR Section 1.1.

Table 2. RELATIONSHIP BETWEEN VQO, SCALE, AND PERCENT ALTERATION

VQO	SCALE (FPPR S. 1.1)	MOST PROBABLE % LANDFORM ALTERATION
Preservation	Very small	0%
Retention	Small	0-1.5%
Partial retention	Small to medium	1.6-7%
Modification	Large	7.1-18%
Maximum modification	Very large	18.1-30%

Table 6. VISUAL EQUIVALENT TO CLEARCUT PERCENT ALTERATION FACTORS FOR PARTIAL-CUT ALTERATIONS

MEAN HEIGHT (M) OF RESIDUAL TREES											
Volume removed (%)		5	10	15	20	25	30	35	40	45	50
	10	0.1	0.2	0.4	0.6	0.7	0.8	1.0	1.2	1.8	2.2
	20	0.3	0.4	0.7	1.0	1.2	1.4	1.8	2.2	3.3	4.4
	30	0.7	0.9	1.2	1.4	2.0	2.4	3.3	4.2	5.0	6.5
	40	1.2	1.4	2.0	2.4	3.4	4.3	5.2	6.1	6.7	7.8
	50	1.8	2.3	3.4	4.3	5.2	6.2	6.8	7.7	8.4	9.0
	60	3.5	4.3	5.0	6.2	6.7	7.7	8.4	9.2	10.0	11.5
	70	4.9	5.5	6.5	7.7	8.4	9.2	10.0	11.4	12.7	14.0
	80	6.0	6.6	8.3	9.2	10.0	11.0	12.0	13.2	14.4	15.5
	90	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0

Note: The shading in Table 6 highlights VQC classes, with the unshaded portion representing expected achievement of retention (R), the mid-shade representing achievement of partial retention (PR), and the dark shade representing expected achievement of modification (M). Since there is a 50% confidence level in the visual equivalent to clearcut alteration numbers, results near the VQC boundaries will have considerable uncertainty attached to them.

Appendix I: Recreation Features and Objectives

Table I1: Recreation Sites & Trails with Objectives within FDUs under this FSP.

Proj No.	Project Name	Type	Estab. (yr/m/d)	Dist.	Map (NTS)	Size (ha)	Length (km.)	GPS (Plot)	Lands (File)	Parks (File)	Objectives	FDU	TSA
2056	Bluewater Bridge	Site	97/01/02	DCO	82N11	68	-		240305	1-3-3-016	1998/01/30. The objective is to manage the Bluewater Bridge recreation site for a moving water recreation experience. The campsite will be maintained; the river shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, and river boating will be available at the site	Blackwater Ridge	Golden
2060	Susan Lake	Site	00/09/29	DCO	82N11	133.5	-		320811	1-3-3-045	1998/01/30. The objective is to manage the Susan Lake recreation site for a roaded recreation experience. The campsite will be maintained; the lake shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, and boating will be available at the site.	Blackwater Ridge	Golden
2068	Jeb Lake	Site	97/01/02	DCO	82N11	52.6	-		332406		1998/01/30. The objective is to manage the Jeb Lake recreation site for a roaded recreation experience. The campsite will be maintained; the lake shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, and boating will be available at the site.	Blackwater Ridge	Golden
2081	Blackwater Lakes	Site	00/04/20	DCO	82N11	789	-		240304	1-3-3-028	2001/03/22 The objective is to manage the Blackwater Lakes Recreation Site for a roaded recreation experience. The campsites will be maintained; the creeks and lakes shorelines and natural vegetation will be conserved. Opportunities for camping, picnicking, boating, and swimming will be available at the site.	Blackwater Ridge	Golden
2082	Esplanade Bay	Site	00/04/20	DCO	82N12	14.7	-		295868		2001/03/22 The objective is to manage the Esplanade Bay Recreation Site for a lakeside roaded recreation experience. The campsite will be maintained; the lakeshore vegetation will be conserved. Opportunities for camping, picnicking, and boat launching will be available.	Blackwater Ridge	Golden
2299	Bush Valenciennes	Site	97/01/02	DCO	82N14	241	-		325050		98/01/30. The objective is to manage the Bush Valenciennes recreation site for a roaded recreation experience. The campsite will be maintained; the lake shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, and boating will be available at the site.	Goodfellow	Golden
2398	Swan Creek	Trail	97/01/02	DCO	82N13	-	5.4				98/01/30. The objective is to manage the Swan Creek recreation trail for a semi primitive non motorized recreation experience. The trail will be maintained and adjacent vegetation conserved. Opportunities for hiking are available, no mechanized uses permitted.	Swan	Golden

2462	Mount MacPherson	Site	93/02/18	DCO	82L16	355	25				97/01/21. The objectives are to manage the Mount MacPherson recreation site for a roaded resource recreation experience. The all season multi-use trail system, Ole Sandbert Hut and Beaver Lake picnic site will be maintained and the shoreline vegetation at Beaver Lake will be retained. Opportunities for hiking, horseback riding, mountain bike riding, cross country skiing, viewing and nature study will be available at the site. Motorized use of the trails will not be allowed. Rough road access to the site will be maintained for two wheel drive vehicles from late April to late October. Off highway parking will be provided for winter users. Forest interpretation and educational opportunities will be provided through brochures, self guided interpretation trails and kiosks. Biodiversity and Forest Ecosystems are the primary interpretation themes.	Wetask and Shelter Bay	Revelstoke and Cascadia
2474	Pingston Lake Trail	Trail	91/08/01	DCO	82L09	0.8	0.4				98/01/30. The objective is to manage the Pingston Lake recreation trail for a semi primitive non motorized recreation experience. The trail will be maintained and adjacent vegetation conserved. Opportunities for hiking and equestrian uses are available, no mechanized uses permitted.	Shelter Bay	Cascadia
2475	Mt. Begbie Trail	Trail	92/06/11	DCO	82L16	-	5.8				98/01/30. The objective is to manage the Mt. Begbie recreation trail for a semi primitive non motorized recreation experience. The trail will be maintained and adjacent vegetation conserved. Opportunities for hiking are available, no mechanized uses permitted.	Shelter Bay	Cascadia
5015	Begbie Falls	Site	88/12/15	DCO	82L16	0.1	1	228290		1-3-3-060, 1-2-2-100	96/12/20. The objectives are to manage the Begbie Falls recreation site for a roaded resource recreation experience. The waterfall, creek and rock climbing bluffs will be protected. Over/understory vegetation, shoreline of the Upper Arrow Reservoir and creek bank below the falls will be retained and the trails, picnic site and viewing platform will be maintained. Opportunities will be available for viewing, picnicking, camping, rock climbing and hiking. Rough road access to the site will be maintained for two wheel drive vehicles from April to late October.	Wetask	Revelstoke
5058	Bluewater Creek	Site	96/12/16	DCO	82N11	21	-				98/01/30. The objective is to manage the Blue Water Creek recreation site for a roaded recreation experience. The campsite will be maintained; the creek shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking and river boating will be available at the site.	Blackwater Ridge	Golden
5060	Wisted Creek	Map	96/12/16	DCO	82N11	33	-				98/01/30. The objective is to manage the Wisted Creek recreation site for a roaded recreation experience. The campsite will be maintained; the creek shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking and boating will be available at the site	Esplanade	Golden
5067	Blackwater Creek	Site	96/12/16	DCO	82N11	4					98/01/30. The objective is to manage the Blackwater Creek recreation site for a roaded recreation experience. The campsite will be maintained; the creek shoreline and natural vegetation will be conserved. Opportunities for camping and picnicking will be available at the site.	Blackwater Ridge	Golden

5068	Mt. Seven 7 North Ridge	Map	00/04/20	DCO	82N07 82N02	1084	-				2001/03/22 In the summer, during the snow free season, the Mt. 7, North Ridge Recreation Site will be managed for separated semi primitive non-motorized, semi primitive motorized, and roaded recreation experiences. In winter, when snow is on the ground the site will be managed for a separated semi primitive motorized and semi primitive non- motorized recreation experiences. The launch site area and day use facilities will be maintained, and the natural vegetation will be conserved. No overnight camping is permitted at the launch site. In the summer, opportunities for hang gliding, paragliding, mountain biking, scenic viewing, picnicking and hiking will be available. In the winter, opportunities for ski touring and snowmobiling will be available.	Mt Seven	Golden
5112	Giant Cedars	Site	96/12/16	DCO	82N11	47	1.7				98/01/30. The objective is to manage the Giant Cedars recreation site for a day use, roaded recreation experience. Day use facilities will be maintained and natural vegetation will be conserved. Opportunities for picnicking will be available at the site. No overnight camping.	Blackwater Ridge	Golden
5118	Mt. Begbie	Map	00/04/20	DCO	82L16	4994	-				2001/03/22 In the summer, during the snow free season, the objective is to manage the Mt. Begbie Recreation Site for a semi primitive non motorized recreation experience; in the winter, when snow is on the ground, the objective is to manage the site for separated semi-primitive motorized and semi-primitive non motorized recreation experiences. The campsite and trail will be maintained, and the natural vegetation will be conserved. In summer, opportunities for dispersed camping, hiking and mountaineering will be available; in winter, opportunities for ski touring, mountaineering and snowmobiling will be available.	Shelter Bay	Cascadia
5120	Frisby Ridge	Map		DCO	82M01	2914	-				96/12/20. The objectives are to manage Frisby Ridge recreation site for a semi primitive motorized recreation experience in the winter months when snow is on the ground and a semi primitive non-motorized experience in the summer when the area is snow free. The wildlife, primarily mountain caribou, will be protected and the sub alpine/alpine flora and fauna will be retained. Opportunities for snowmobiling, mountain biking, hiking and viewing will be available. Access to the site is via Ministry of Forests trail.	Frisby Ridge	Revelstoke
5638	Coursier Lake	Site	92/06/11	DCO	82L09	3	-				98/01/30. The objective is to manage the Coursier Lake recreation site for a roaded recreation experience. The campsite will be maintained; the lake shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, and boating will be available at the site.	Shelter Bay	Cascadia

5943	Begbie Falls Trails	Trail		DCO	82L16	-	5.3				97/01/21. The objectives are to manage the Begbie Creek Trails for a roaded resource recreation experience. The multi-use trails and parking areas will be maintained. Opportunities for hiking, viewing, horse back riding and mountain bike riding will be available on these trails. Motorized use will not be allowed. Rough road access to the trails will be maintained for two wheel drive vehicles from April to late October.	Wetask	Revelstoke
6062	Sprague Bay	Site	96/12/16	DCO	83D01	29.1	-				98/01/30. The objective is to manage the Sprague Bay recreation site for a roaded recreation experience. The campsite will be maintained; the lake shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, and boating will be available at the site.	Red Rock Harbour	Revelstoke
6054 or 6504	Begbie Lake	Site		DCO							96/12/20. The objectives are to manage the Begbie Lake recreation site for a roaded resource recreation experience. The recreation site will be maintained, the shoreline and adjacent vegetation will be retained and opportunities will be available for fishing, nature study and viewing. Access to the site is via paved public road maintained by the Ministry of Transportation and Highways.	Shelter Bay	Cascadia

Appendix J: Stocking Standard Reference Tables for the Okanagan Shuswap Natural Resource District (including Okanagan TSA, TFL 33, TFL 49 and TFL 59)

Appendix J-1: Thompson Okanagan Regional Stocking Standards for Even-Aged Stands (Dec 9, 2021)											
BGC Classification		Regeneration and Free Growing Stocking Standard									
Zone/SZ	Site Series	Stocking Standards ID	Preferred (p) Species	Acceptable (a) Species	Density			Regen. Delay (max yrs)	Free Growing Date Latest (yrs)	MITD	Minimum Height at Free Growing Species-Height (m)
					Target	MIN pa	MIN p				
					(well-spaced/ha)		(ha)				
BGxh1	102	1068548	Py ²⁷	Fd ²⁷	400	200	200	7	20	1.0	All-0.60
BGxh1	103	1069884	Py ²⁷ Fd ²⁷		400	200	200	7	20	1.0	All-0.60
BGxh1	110	1068549	Py ²⁷ Fd ²⁷		400	200	200	7	20	2.0	All-0.60
BGxh2	102	1069712	Py ²⁷ Fd ²⁷		400	200	200	7	20	1.0	All-0.60
BGxh2	110	1069885	Fd ²⁷	Py ²⁷	400	200	200	7	20	2.0	All-0.60
BGxw1	102	1069886	Py ²⁷	Fd ²⁷	400	200	200	7	20	1.0	All-0.60
BGxw1	110	1069887	Py ²⁷ Fd ²⁷		400	200	200	7	20	2.0	All-0.60
BGxw1	111	1069888	Fd		1000	500	400	7	20	2.0	All-0.60
CWHds1 ⁴⁷	01	1069901	Fd	Cw Pw ³¹	900	500	400	3	20	2.0	Pw-2.5, Fd-2.25, Cw-1.5
CWHds1 ⁴⁷	02*	1069902	Pl Fd		400	200	200	3	20	1.0	Fd-1.5, Pl-1.25
CWHds1 ⁴⁷	03	1069903	Fd Pl ^{6,60}	Py ^{7,18,23} Cw	800	400	400	3	20	2.0	Fd-1.5, Pl-1.25, Py-1.0, Cw-1.0
CWHds1 ⁴⁷	04	1069904	Fd	Cw Pw ³¹	800	400	400	3	20	2.0	Pw-2.5, Fd-2.25, Cw-1.5
CWHds1 ⁴⁷	05	1069905	Fd Se ^{13,18}	Cw Pw ^{13,31}	900	500	400	3	20	2.0	Pw-2.5, Fd-2.25, Cw-1.5, Se-1.0
CWHds1 ⁴⁷	06	1069906	Hw Fd	Cw	900	500	400	6	20	2.0	Fd-2.25, Cw-1.5, Hw-1.0
CWHds1 ⁴⁷	07	1069907	Cw Fd	Bg Hw	900	500	400	3	20	2.0	Fd-3.0, Bg-2.0, Cw-2.0, Hw-1.25
CWHds1 ⁴⁷	08	1069908	Cw	Ss ³⁵ Bg	900	500	400	3	20	2.0	Ss-3.0, Others-2.0
CWHds1 ⁴⁷	09	1069909	Cw ¹	Bg ¹	900	500	400	3	20	2.0	All-2.0
CWHds1 ⁴⁷	10		no conifers		-	-	-	-	20	-	-
CWHds1 ⁴⁷	11*	1069910	Pl ¹	Cw ¹	400	200	200	3	20	1.0	Pl-1.25, Cw-1.0
CWHds1 ⁴⁷	12	1069911	Cw ¹	Pl ⁷	800	400	400	3	20	1.0	Pl-1.25, Cw-1.0
CWHms1 ⁴⁷	01	1069912	Cw Fd Se ^{13,18} Hw ^{10,13} Ba ^{10,13}	Yc ⁶⁰	900	500	400	3	20	2.0	Fd-2.25, Cw-1.5, Hw-1.5, Yc-1.5, Se-1.0, Ba-0.75
CWHms1 ⁴⁷	02*	1069913	Pl Fd		400	200	200	3	20	1.0	Fd-1.5, Pl-1.25
CWHms1 ⁴⁷	03	1069914	Cw Fd Se ^{13,18}	Ba ¹⁰	800	400	400	3	20	2.0	Fd-2.25, Cw-1.5, Se-1.0, Ba-0.75
CWHms1 ⁴⁷	04	1069915	Cw Fd Se ^{13,18} Ba ^{10,13}	Hw ^{10,13} Pw ³¹	900	500	400	3	20	2.0	Fd-3.0, Pw-2.5, Cw-2.0, Hw-2.0, Se-1.25, Ba-1.0

CWHms1 ⁴⁷	05	1069916	Cw Hw Yc ^{13,17} Ba ^{10,13}		900	500	400	6	20	2.0	Ba-0.75, Others-1.5
CWHms1 ⁴⁷	06	1069917	Cw Fd Yc ^{13,17} Se ¹³	Ba ¹³ Bg ^{14,17}	900	500	400	3	20	2.0	Fd-3.0, Bg-2.5, Cw-2.0, Yc-2.0, Se-1.25, Ba-1.0
CWHms1 ⁴⁷	07	1069918	Ba ¹³ Cw Ss ³⁵	Fd ¹ Se ¹⁸	900	500	400	3	20	2.0	Ss-4.0, Fd-3.0, Cw-2.0, Se, 1.25, Ba-1.0
CWHms1 ⁴⁷	08	1069919	Cw ²	Ba ¹	900	500	400	3	20	2.0	Cw-2.0, Ba-1.0
CWHms1 ⁴⁷	09		no conifers		-	-	-	-	-	-	
CWHms1 ⁴⁷	10*	1069920	Pl ¹	Cw ¹	400	200	200	3	20	1.0	Pl-1.25, Cw-1.0
CWHms1 ⁴⁷	11	1069921	Cw ¹ Yc ^{13,17}	Pw ³¹ Se ¹	800	400	400	3	20	1.0	Pw-2.5, Cw-1.0, Yc-1.0, Se- 0.75
ESSFdc1	101	1065442	Bl ^{201,208} Sx	Pl	1200	700	600	4	20	2.0	Pl-1.6, Others-0.8
ESSFdc1	102	1065434	Sx Pl Pa ^{13,201}	Bl ²⁰⁸	1000	500	400	7	20	2.0	Pl-1.2, Others-0.6
ESSFdc1	103	1065439	Sx Pl Pa ^{13,201}	Bl ²⁰⁸	1200	700	600	7	20	2.0	Pl-1.6, Others-0.8
ESSFdc1	104	1065441	Pl Sx	Bl ²⁰⁸	1200	700	600	4	20	2.0	Pl-1.6, Others-0.8
ESSFdc1	110	1065443	Bl ²⁰⁸ Sx		1200	700	600	4	20	2.0	All-0.8
ESSFdc1	111	1065444	Bl ^{32,208} Sx ³²		1200	700	600	4	20	2.0	All-0.8
ESSFdc1	112	1065446	Bl ^{1,32,208} Sx ^{1,32}		1000	500	400	4	20	2.0	All-0.6
ESSFdc2	101	1065452	Sx Bl ^{201,208}	Pl ²⁰⁰	1200	700	600	4	20	2.0	Pl-1.6, Others-0.8
ESSFdc2	102	1065447	Pl Pa ³¹	Fd ^{14,32} Bl ^{28,208} Sx ²⁸	1000	500	400	4	20	1.0	Pl-1.2, Others-0.6
ESSFdc2	103	1065448	Pl Sx ²⁸ Fd ^{14,32}	Bl ²⁰⁸	1000	500	400	7	20	2.0	Pl-1.2, Others-0.6
ESSFdc2	104	1065449	Pl Sx Bl ^{201,208}		1000	500	400	7	20	2.0	Pl-1.2, Others-0.6
ESSFdc2	110	1065453	Bl ^{201,208} Sx	Pl ²⁰⁰	1200	700	600	4	20	2.0	Pl-1.6, Others-0.6
ESSFdc2	111	1068155	Bl ^{201,208} Sx	Pl ²⁰⁰	1200	700	600	4	20	2.0	Pl-1.6, Others-0.6
ESSFdc2	112	1065454	Bl ^{1,208} Sx ^{1,32}		1000	500	400	4	20	1.0	All-0.6
ESSFdc3 (use classification for ESSFdc2 in LMH23)	01	1065458	Se Bl ^{201,208} Pl ²⁰¹		1200	700	600	4	20	2.0	Pl-1.6, Others-0.8
ESSFdc3 (use classification for ESSFdc2 in LMH23)	02	1065455	Pl	Bl ^{28,208} Se ²⁸	1000	500	400	4	20	1.0	Pl-1.2, Others-0.6
ESSFdc3 (use classification for ESSFdc2 in LMH23)	03	1065456	Pl Se Bl ^{201,208}		1000	500	400	7	20	2.0	Pl-1.2, Others-0.6
ESSFdc3 (use classification for ESSFdc2 in LMH23)	04		does not occur in areas mapped as ESSFdc3	does not occur in areas mapped as ESSFdc3						-	
ESSFdc3 (use classification for ESSFdc2 in LMH23)	05	1065457	Se Bl ^{201,208} Pl ²⁰¹		1000	500	400	7	20	2.0	Pl-1.2, Others-0.6
ESSFdc3 (use classification for ESSFdc2 in LMH23)	06	1065460	Bl ²⁰⁸ Se	Pl ²⁰⁰	1200	700	600	4	20	2.0	Pl-1.6, Others-0.8
ESSFdc3 (use classification for ESSFdc2 in LMH23)	07	1065461	Bl ²⁰⁸ Se	Pl ²⁰⁰	1200	700	600	4	20	2.0	Pl-1.6, Others-0.8
ESSFdc3 (use classification for ESSFdc2 in LMH23)	08	1065462	Bl ^{1,208} Se ^{1,32}		1000	500	400	4	20	1.0	All-0.6
ESSFdc3 (use classification for ESSFdc2 in LMH23)	09		nonforest	nonforest						-	
ESSFdcw	101	1065465	Bl ²⁰⁸ Sx		1200	700	600	4	20	2.0	All-0.8
ESSFdcw	102	1065463	Bl ²⁰⁸ Sx Pa ²⁰¹	Pl ³⁴	1000	500	400	7	20	2.0	Pl-1.2, Others-0.6
ESSFdcw	103	1065464	Bl ²⁰⁸ Sx	Pa	1200	700	600	7	20	2.0	All-0.8
ESSFdcw	110	1065466	Bl ²⁰⁸ Sx		1000	500	400	4	20	2.0	All-0.6
ESSFdh1	101	1065470	Pl ^{34,201} Bl ^{201,208} Ba ^{201,202} Sx	Pw ³¹ Hw Cw ³² Fd ^{32,34} Lw ^{32,203}	1200	700	600	4	20	2.0	Pl-2.0, Lw-2.0, Others-1.0
ESSFdh1	102	1065467	Pl ³⁴ Fd ^{9,14}	Bl ²⁰⁸ Sx ¹³ Pw ^{31,34}	1000	500	400	4	20	1.0	Pl-1.4, Others-0.8
ESSFdh1	103	1065468	Pl ³⁴ Sx ²⁸	Bl ^{28,208} Fd ^{9,32,34} Pw ³¹ Lw ^{9,32,203}	1000	500	400	7	20	2.0	Pl-1.4, Others-0.8
ESSFdh1	104	1065469	Fd ^{14,32} Pl ³⁴ Bl ^{201,208} Sx	Pw ³¹ Ba ^{10,28,202} Cw ^{10,28} Hw ^{10,28} Lw ^{14,32,203}	1000	500	400	7	20	2.0	Pl-1.4, Others-0.8
ESSFdh1	110	1065671	Sx Bl ^{201,208} Ba ^{201,202}	Hw ³² Fd ³² Pl ³⁴ Cw ³² Lw	1200	700	600	4	20	2.0	Pl-2.0, Lw-2.0, Others-1.0
ESSFdh1	111	1065672	Sx ¹ Bl ^{1,201,208} Pl ^{1,34,201}	Hw ^{1,32} Cw ^{1,32} Ba ^{1,32,202}	1000	500	400	4	20	2.0	Pl-1.4, Others-0.8
ESSFdh2 (use classification for ESSFmw)	01	1065721	Sx Bl ^{201,208} Ba ^{13,201,202}	Hw ^{14,32} Cw ³¹ Pw ³¹	1200	700	600	4	20	2.0	All-1.0
ESSFdh2 (use classification for ESSFmw)	02	1065673	Pl ^{34,201} Fd ^{9,14}	Bl ^{28,208} Sx ¹³ Pw ³¹	1000	500	400	4	20	1.0	Pl-1.4, Others-0.8

ESSFdh2 (use classification for ESSFmfw)	03	1065719	PI ^{34 201} Fd ³²	Sx ²⁸ BI ^{28 208} PW ³¹ Lw ^{32 203}	1000	500	400	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
ESSFdh2 (use classification for ESSFmfw)	04	1065720	Fd ^{14 32} PI ^{34 201} BI ^{13 201 208} Sx ¹³	Pw ³¹ Lw ^{14 32 203}	1000	500	400	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
ESSFdh2 (use classification for ESSFmfw)	05	1069889	Sx BI ^{201 208} Ba ^{13 201 202}	Hw ^{14 32} Cw ^{14 32} PW ³¹	1200	700	600	4	20	2.0	All-1.0
ESSFdh2 (use classification for ESSFmfw)	06	1065722	BI ^{201 208} Sx	Ba ^{32 202} Cw ³² Hw ³²	1200	700	600	4	20	2.0	All-1.0
ESSFdh2 (use classification for ESSFmfw)	07	1065723	BI ^{201 208} Cw ³² Sx Ba ^{32 202}	Hw ³² Fd ³² PW ¹⁷	1200	700	600	4	20	2.0	All-1.0
ESSFdh2 (use classification for ESSFmfw)	08	1065724	Sx ¹ BI ^{1 201 208} PI ^{1 34 201}	Hw ^{1 32} Cw ^{1 32}	1000	500	400	4	20	1.0	All-0.8
ESSFdv1 (use classification for ESSFdv)	01	1065756	Sx BI ^{201 208}	PI Pa ³¹	1200	700	600	4	20	2.0	PI-1.6, Others-0.8
ESSFdv1 (use classification for ESSFdv)	02	1065725	PI Pa ³¹	BI ^{28 208} Sx ²⁸	1000	500	400	4	20	1.0	PI-1.2, Others-0.6
ESSFdv1 (use classification for ESSFdv)	03	1065726	PI Fd ^{14 32} Pa ³¹	BI ^{28 208} Sx ²⁸ Lw ^{14 32 203}	1000	500	400	7	20	1.0	PI-1.2, Others-0.6
ESSFdv1 (use classification for ESSFdv)	04	1065727	BI ^{201 208} Sx Pa ³¹	PI Fd ^{14 32} Lw ^{14 32 203}	1000	500	400	7	20	2.0	PI-1.2, Others-0.6
ESSFdv1 (use classification for ESSFdv)	05	1065757	Sx BI ^{201 208}	Pa ^{13 31}	1200	700	600	4	20	2.0	All-0.8
ESSFdv1 (use classification for ESSFdv)	06	1065758	Sx ¹ BI ^{1 201 208}	PI ¹	1000	500	400	4	20	1.0	PI-1.2, Others-0.6
ESSFdv2 (use classification for ESSFdv)	01	1065762	Sx BI ^{201 208} Pa ³¹	PI ²⁰⁰	1200	700	600	4	20	2.0	PI-1.6, Others-0.8
ESSFdv2 (use classification for ESSFdv)	02	1065759	PI Pa ³¹	Se ²⁸ BI ^{28 208}	1000	500	400	4	20	1.0	PI-1.2, Others-0.6
ESSFdv2 (use classification for ESSFdv)	03	1065760	PI Pa ³¹	BI ²⁰⁸ Sx	1000	500	400	7	20	1.0	PI-1.2, Others-0.6
ESSFdv2 (use classification for ESSFdv)	04	1065761	PI ²⁰¹ Pa ³¹ BI ^{201 208}	Sx	1200	700	600	4	20	2.0	PI-1.2, Others-0.6
ESSFdv2 (use classification for ESSFdv)	05	1065763	Sx BI ^{201 208}	Pa ^{13 31} PI	1200	700	600	4	20	2.0	PI-1.6, Others-0.8
ESSFdv2 (use classification for ESSFdv)	06	1065764	Sx ¹ BI ^{1 201 208}	PI ¹	1000	500	400	4	20	1.0	PI-1.2, Others-0.6
ESSFmh	101	1065781	Cw ^{14, 34, 203} BI ²⁰⁸ Lw ^{9,14,34} Sx	PI ³⁴ Hw ^{9,14} Fd ^{9,14} PW ^{9,14,31}	1200	700	600	4	20	2.0	Lw-2.0, Pw-2.0, PI-2.0, Fd-1.4, Others-1.0
ESSFmh	102	1065769	Fd ⁹ Lw ⁹ PI	Sx BI ²⁰⁸ Pa ¹³	1000	500	400	7	20	2.0	Lw-1.6, PI-1.6, Fd-1.2, Others-0.8
ESSFmh	103	1065772	Fd Lw PI ³⁴ Sx	Cw BI PW ^{14,31}	1200	700	600	7	20	2.0	Lw-2.0, Pw-2.0, PI-2.0, Fd-1.4, Others-1.0
ESSFmh	104	1065777	Sx PI ³⁴	BI ²⁰⁸	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFmh	105	1065779	Fd ⁹ Lw ⁹ PI ³⁴ Sx	Cw ⁹ BI ²⁰⁸ PW ³¹	1200	700	600	4	20	2.0	Lw-2.0, Pw-2.0, PI-2.0, Fd-1.4, Others-1.0
ESSFmh	110	1065784	BI ²⁰⁸ Sx	Hw ^{14,32} Cw ^{14,32}	1200	700	600	4	20	2.0	All-1.0
ESSFmh	111	1065785	BI ²⁰⁸ Sx	Cw ^{14,32} Hw ^{14,32}	1200	700	600	4	20	2.0	All-1.0
ESSFmh	112	1065786	BI ^{1,32,208} Sx ^{1,32}		1000	500	400	4	20	2.0	All-0.8
ESSFmm1	01	1065825	BI Sx	PI	1200	700	600	4	20	2.0	PI-1.6, Others-0.8
ESSFmm1	02	1065787	BI ²⁸ PI Sx ²⁸		1000	500	400	7	20	1.0	PI-1.2, Others-0.6
ESSFmm1	03	1065823	PI Sx ²⁸	BI ²⁸	1000	500	400	4	20	2.0	PI-1.2, Others-0.6
ESSFmm1	04	1065824	BI Sx	PI	1200	700	600	4	20	2.0	PI-1.6, Others-0.8
ESSFmm1	05	1065826	BI Sx	PI	1200	700	600	4	20	2.0	PI-1.6, Others-0.8
ESSFmm1	06	1065827	BI Sx	PI	1200	700	600	4	20	1.0	PI-1.6, Others-0.8
ESSFmm1	07*	1065828	BI ^{1,32} Sx ^{1,32}	PI ¹	400	200	200	4	20	1.0	PI-1.2, Others-0.6
ESSFmw1	101	1065834	Sx BI ^{201 208} Ba ^{201 202}	PI ^{34 200} Cw ^{14 32} Hw ^{10 14} PW ^{14 31} Fd ⁹ Hm ^{10 13 28}	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFmw1	102	1065829	PI BI ^{13 201 208} Sx ¹³ Pa ^{13 31 201}	Fd ¹⁴	1000	500	400	4	20	1.0	PI-1.4, Others-0.8
ESSFmw1	103	1065831	PI ^{34 201} Sx BI ^{201 208} Pa ^{13 31 201}	Ba ³² Fd ^{9,14,32,34} Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
ESSFmw1	104	1065832	PI Fd ¹⁴ Sx ²⁸	BI ^{28 208} Ba ^{28 202} Pa ^{13,31} Lw ^{14 203}	1000	500	400	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8

ESSFmw1	105	1065833	Sx BI ^{201 208} Ba ^{201 202}	PI ^{34 200} Fd ^{14 32} Hm ^{13 28} Cw ¹⁴ Hw ^{10 28} Pw ^{14 31}	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFmw1	110	1065836	BI ^{201 208} Sx	PI ³⁴	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFmw1	111	1065837	BI ^{1 201 208} Sx ¹	PI ^{1,34} Pw ^{1 31}	1000	500	400	4	20	1.0	PI-1.4, Others-0.8
ESSFmw2 (use classification for ESSFmw)	01	1065841	Sx BI ^{201 208} Ba ^{201 202}	PI ³⁴ Hm Hw ^{14 32} Pw ^{14 31}	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFmw2 (use classification for ESSFmw)	02	1065838	PI BI ^{201 208} Pa ^{13 31 201}	Sx	1000	500	400	4	20	1.0	PI-1.4, Others-0.8
ESSFmw2 (use classification for ESSFmw)	03	1065839	Fd ^{14,32 34} Sx PI ³⁴ 201 BI ^{201 208}	Ba ^{32 202} Lw ^{14 32 203}	1000	500	400	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
ESSFmw2 (use classification for ESSFmw)	04	1065840	PI ^{34 201} BI ^{201 208} Sx Pa ^{13 31 201}	Ba ^{32 202}	1200	700	600	7	20	2.0	PI-2.0, Others-1.0
ESSFmw2 (use classification for ESSFmw)	05	1065842	Sx BI ^{201 208} Ba ^{201 202}	PI ³⁴ Hm Pw ³¹ Hw ^{14 32} Cw ^{14 32} Fd ^{9 32}	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFmw2 (use classification for ESSFmw)	06	1065843	Sx BI ^{201 208}	Hm Hw ³² Ba ^{32 202}	1200	700	600	4	20	2.0	All-1.0
ESSFmw2 (use classification for ESSFmw)	07	1065844	Sx BI ^{201 208} Ba ^{201 202}	Hm Hw ³² Cw ³²	1200	700	600	4	20	2.0	All-0.8
ESSFmw2 (use classification for ESSFmw)	08	1065845	BI ^{1 201 208} Sx ¹	PI ^{1 34} Ba ^{1 32} Pw ²¹	1000	500	400	4	20	1.0	PI-1.4, Others-0.8
ESSFwc2	01	1065847	BI ²⁰⁸ Sx		1200	700	600	4	20	2.0	All-0.8
ESSFwc2	02	1065846	Sx PI ³⁴ BI ^{201 208}		1000	500	400	4	20	1.0	PI-1.2, Others-0.6
ESSFwc2	03	1068544	BI ²⁰⁸ Sx	PI ³⁴	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFwc2	04	1068545	BI ²⁰⁸ Sx	PI ³⁴	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFwc2	05	1068546	BI ²⁰⁸ Sx	PI ³⁴	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
ESSFwc2	06	1065848	Sx ³² BI ²⁰⁸		1200	700	600	4	20	2.0	All-0.8
ESSFwc2	07	1065849	BI ²⁰⁸ Sx		1200	700	600	4	20	2.0	All-0.8
ESSFwc2	08	1065850	BI ^{1 208} Sx ^{1 32}		1000	500	400	4	20	2.0	All-0.8
ESSFwc2	09	1065851	PI ¹ Sx ^{1 32} BI ^{201 208}		400	200	200	4	20	1.0	PI-1.2, Others-0.6
ESSFwc2	10		nonforest	nonforest						-	
ESSFwc3	01	1065853	BI Sx	PI	1200	700	600	4	20	2.0	PI-1.6,Others-0.8
ESSFwc3	02	1065852	BI Sx PI		1000	500	400	7	20	2.0	PI-1.2,Others-0.6
ESSFwc3	03*	1065854	BI Sx		600	400	400	7	20	1.6	All-0.6
ESSFwc4	101	1065857	BI ^{201,208} Se		1200	700	600	4	20	2.0	All-0.8
ESSFwc4	102	1065855	Sx Pa ²⁰¹	PI ^{16,34} BI ²⁰⁸	1000	500	400	7	20	1.0	PI-1.2, Others-0.6
ESSFwc4	103	1065856	BI ²⁰⁸ Sx	PI ^{16,34,200} Pa	1200	700	600	7	20	2.0	PI-1.6, Others-0.8
ESSFwc4	110	1065858	BI ²⁰⁸ Sx		1200	700	600	4	20	2.0	All-0.8
ESSFwc4	111	1065859	BI ^{1,32,208} Sx ^{1,32}		1200	700	600	4	20	2.0	All-0.8
ESSFwc4	112	1065860	BI ^{1,32,208} Sx ^{1,32}		1000	500	400	4	20	1.0	All-0.6
ESSFwcw	101	1065864	BI ²⁰⁸ Sx		1200	700	600	4	20	2.0	All-0.8
ESSFwcw	102	1065861	BI ²⁰⁸ Sx Pa ²⁰¹	PI ³⁴	1000	500	400	7	20	1.0	PI-1.2, Others-0.6
ESSFwcw	103	1065862	BI ²⁰⁸ Sx Pa ²⁰¹		1200	700	600	7	20	2.0	All-0.8
ESSFwcw	104	1065863	BI ²⁰⁸ Sx	La ¹⁶	1200	700	600	4	20	2.0	All-0.8
ESSFwcw	110	1065865	BI ²⁰⁸ Sx		1000	500	400	4	20	2.0	All-0.6
ESSFwh1	101	1065869	BI ^{201,208} Hw ^{14,201} Sx Cw ^{14,34,203}	PI ^{16,34} Fd ^{9,14,16} Lw ^{9,14,16} Pw ³¹	1200	700	600	4	20	2.0	Lw-2.0, PI-2.0, Fd-1.4, Others-1.0
ESSFwh1	102	1065866	Fd PI Se	BI ²⁰⁸ Pa ¹³	1000	500	400	7	20	1.0	PI-1.6, Fd-1.2, Others-0.8

ESSFwh1	103	1065867	Sx Fd ^{14,34} Lw ^{14,34}	Pl ^{16,34,200} Bl ²⁰⁸ Pw ^{14,31} Pa ¹³	1200	700	600	7	20	2.0	Lw-2.0, Pw-2.0, Pl-2.0, Fd-1.4, Others-1.0
ESSFwh1	104	1065868	Sx Cw ^{14,201} Fd ^{9,14,201} Lw ^{9,14,201}	Pl ³⁴ Bl ²⁰² Hw ^{9,14} Pw ^{9,14,31}	1200	700	600	7	20	2.0	Lw-2.0, Pw-2.0, Pl-2.0, Fd-1.4, Others-1.0
ESSFwh1	110	1065870	Bl ²⁰⁸ Sx	Cw ^{14,32} Hw ^{14,32}	1200	700	600	4	20	2.0	All-1.0
ESSFwh1	111	1065871	Bl ^{1,32,208} Sx ^{1,32}	Hw ^{1,32}	1000	500	400	4	20	1.0	All-0.8
ESSFwk1	01	1065875	Bl Sx Pl		1200	700	600	4	20	2.0	Pl-2,Others-1
ESSFwk1	02*	1065872	Bl Pl Sx	Lw	1000	500	400	7	20	1.0	Lw-2,Pl-1.4,Others-0.8
ESSFwk1	03	1065873	Pl Sx Bl	Lw	1200	700	600	4	20	2.0	Pl, Lw-2,Others-1
ESSFwk1	04	1065874	Bl Sx	Pl	1200	700	600	4	20	2.0	Pl-2,Others-1
ESSFwk1	05	1065876	Bl Sx	Pl	1200	700	600	4	20	2.0	Pl-2,Others-1
ESSFwk1	06	1065877	Bl Sx		1000	500	400	4	20	1.6	All-0.8
ESSFwk1	07	1065878	Bl Sx		1000	500	400	4	20	1.6	All-0.8
ESSFxc1	101	1065883	Pl Se Bl ^{201 208}		1200	700	600	7	20	2.0	Pl-1.6, Others-0.8
ESSFxc1	102	1065879	Pl Pa ¹³	Bl ^{13 28 208} Se ¹⁰ 13 28 Fd ^{9 14 32} Lw ^{9 14 32 203}	600	400	400	7	20	1.0	Pl-1.2, Lw-1.2, Others-0.6
ESSFxc1	103	1065880	Pl	Bl ^{13 208} Se ¹³ Fd ⁹ 14 Pa ^{13 17} Lw ^{9 14} 203	1000	500	400	7	20	2.0	Pl-1.2, Lw-1.2, Others-0.6
ESSFxc1	104	1065881	Pl	Bl ^{13 208} Se ¹³ Fd ^{9 14 32} Lw ^{9 14 203}	1000	500	400	7	20	2.0	Pl-1.2, Lw-1.2, Others-0.6
ESSFxc1	105	1065882	Pl Se	Bl ^{10 208}	1200	700	600	7	20	2.0	Pl-1.2, Others-0.6
ESSFxc1	110	1065884	Pl Se Bl ^{13 201 208}		1200	700	600	7	20	2.0	Pl-1.6, Others-0.8
ESSFxc1	111	1065885	Pl Se ³² Bl ^{32 201 208}		1200	700	600	7	20	2.0	Pl-1.6, Others-0.8
ESSFxc1	112	1065886	Pl ¹ Se ^{1 32} Bl ^{1 32 201 208}		1000	500	400	4	20	1.0	Pl-1.2, Others-0.6
ESSFxc1	113	1065887	Pl ¹ Se ^{1, 32}	Bl ^{1 32 208}	1000	500	400	4	20	1.0	Pl-1.2, Others-0.6
ESSFxc2	101	1065890	Pl Se Bl ^{201 208}		1200	700	600	7	20	2.0	Pl-1.6, Others-0.8
ESSFxc2	102	1065888	Pl	Bl ^{13 208} Se ^{10 13} 28 Fd ^{9 14 32} Lw ^{9 14 32 203}	600	400	400	7	20	1.0	Pl-1.2, Lw-1.2, Others-0.6
ESSFxc2	103	1065889	Pl Se ^{10 13 28} Bl ^{201 208}		1000	500	400	7	20	2.0	Pl-1.2, Others-0.6
ESSFxc2	110	1065891	Se Bl ^{13 201 208}	Pl ²⁰⁰	1200	700	600	7	20	2.0	Pl-1.6, Others-0.8
ESSFxc2	111	1065892	Se ³² Bl ^{201 208}	Pl ²⁰⁰	1200	700	600	4	20	2.0	Pl-1.6, Others-0.8
ESSFxc2	112	1065893	Pl ¹ Se ^{1 32} Bl ^{1 201 208}		1000	500	400	4	20	1.0	Pl-1.2, Others-0.6
ESSFxc3 (use classification for ESSFxc)	01	1065896	Pl Se ³² Bl ^{201 208}		1200	700	600	7	20	2.0	Pl-1.6, Others-0.8
ESSFxc3 (use classification for ESSFxc)	02	1065894	Pl Pa ^{13 201}	Bl ^{13,28,208} Se ^{10,13,28} Fd ^{9,14,3} 2 Lw ^{9,14,32}	600	400	400	7	20	1.0	Pl-1.2, Lw-1.2, Others-0.6
ESSFxc3 (use classification for ESSFxc)	03		nonforest	nonforest						2.0	
ESSFxc3 (use classification for ESSFxc)	04		nonforest	nonforest						-	
ESSFxc3 (use classification for ESSFxc)	05	1065895	Pl Pa ^{13 201}	Bl ^{13 208} Se ¹³ Fd ^{9 14} Lw ^{9 14 203}	1000	500	400	7	20	2.0	Pl-1.2, Lw-1.2, Others-0.6
ESSFxc3 (use classification for ESSFxc)	06	1065897	Pl Se Bl ^{201 208}	Pa ¹³	1200	700	600	7	20	2.0	Pl-1.6, Others-0.8
ESSFxc3 (use classification for ESSFxc)	07	1065898	Se ³² Bl ^{201 208}	Pl ²⁰⁰	1200	700	600	4	20	2.0	Pl-1.6, Others-0.8
ESSFxc3 (use classification for ESSFxc)	08	1065899	Se ^{1 32} Bl ^{1 201 208}	Pl ²⁰⁰	1000	500	400	4	20	1.0	Pl-1.2, Others-0.6
ESSFxc3 (use classification for ESSFxc)	09		nonforest	nonforest						-	
ESSFxc3 (use classification for ESSFxc)	10		nonforest	nonforest						-	
ESSFvx1	01	1065905	Pl Sx Bl ²⁰¹	Pa	1200	700	600	7	20	2.0	Pl-1,Others-0.8
ESSFvx1	02*	1065900	Pl Pa	Bl	800	500	400	7	20	1.6	Pl-0.8,Others-0.6

ESSFvx1	03*	1065901	PI Pa		800	500	400	7	20	2.0	PI-0.8,Pa-0.6
ESSFvx1	04	1065902	PI Pa	BI Sx	1000	600	500	7	20	2.0	PI-0.8,Others-0.6
ESSFvx1	05	1065903	PI Pa	BI Sx	1200	700	600	7	20	2.0	PI-1,Others-0.8
ESSFvx1	06	1065904	PI Sx	BI	1200	700	600	7	20	2.0	PI-1,Others-0.8
ESSFvx1	07	1065906	PI Sx BI ²⁰¹		1200	700	600	4	20	2.0	PI-1,Others-0.8
ESSFvx1	08	1065907	PI Sx BI ²⁰¹		600	400	300	4	20	1.6	PI-0.8,Others-0.6
ESSFvx1	09	1065908	Sx BI	PI	800	500	400	4	20	1.6	PI-0.8,Others-0.6
ESSFvx2	01	1065914	PI Sx	BI Pa	1200	700	600	7	20	2.0	PI-1,Others-0.8
ESSFvx2	02*	1065909	PI Pa	BI	800	500	400	7	20	1.6	PI-0.8,Others-0.6
ESSFvx2	03*	1065910	PI	Pa	600	400	300	7	20	2.0	PI-0.8,Pa-0.6
ESSFvx2	04	1065911	PI	BI Pa	1200	700	600	7	20	2.0	PI-1,Others-0.8
ESSFvx2	05	1065912	PI Sx	Pa BI	1200	700	600	7	20	2.0	PI-1,Others-0.8
ESSFvx2	06	1065913	PI Sx	BI	1200	700	600	7	20	2.0	PI-1,Others-0.8
ESSFvx2	07	1065915	PI Sx	BI	1200	700	600	4	20	2.0	PI-1,Others-0.8
ESSFvx2	08	1065916	Sx BI	PI	600	400	300	4	20	1.6	PI-0.8,Others-0.6
ESSFvx2	09	1065917	Sx BI ²⁰¹	PI	600	400	300	4	20	1.6	PI-0.8,Others-0.6
ESSFvx2	10	1065918	Sx BI ²⁰¹	PI	600	400	300	4	20	1.6	PI-0.8,Others-0.6
ICHdk	01	1065922	Fd PI Sx	BI Cw Pw Lw	1200	700	600	4	20	2.0	PI, Pw, Lw-2,Fd-1.4,Others-1
ICHdk	02	1065919	Fd PI	Cw Sx	1000	500	400	7	20	1.6	PI-1.4,Fd-1,Others -0.8
ICHdk	03	1065920	Fd PI	Cw Sx	1200	700	600	7	20	2.0	PI-2,Fd-1.4,Others-1
ICHdk	04	1065921	Fd PI Sx	Cw BI Pw Lw	1200	700	600	4	20	2.0	PI, Pw, Lw-2,Fd-1.4,Others-1
ICHdk	05	1065923	Fd PI Sx	BI Cw Pw	1200	700	600	4	20	2.0	PI, Pw-2,Fd-1.4,Others-1
ICHdk	06	1065924	Fd PI Sx	BI Cw Pw	1200	700	600	4	20	2.0	PI, Pw-2,Fd-1.4,Others-1
ICHdk	07	1065925	Fd PI Sx	BI Pw	1200	700	600	4	20	2.0	PI, Pw-2,Fd-1.4,Others-1
ICHdk	08	1065926	Fd Sx BI	Cw PI Pw	1000	500	400	4	20	1.6	PI, Pw-1.4,Fd-1,Others-0.8
ICHdk	09	1065927	Sx	BI PI	1000	500	400	4	20	1.6	PI-1.4,Others-0.8
ICHdw3 (use classification for ICHmw3)	01	1065932	Fd ⁵⁸ , Cw, Sx ¹⁰ Pw ³¹	Lw ²⁰³ BI ²⁰⁸ PI Hw	1200	700	600	4	20	2.0	PI-2.0, Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHdw3 (use classification for ICHmw3)	02	1065928	Fd PI	Py ²⁰³ Pw ³¹ Lw ²⁰³	1000	500	400	4	20	1.0	PI-1.4, Pw-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHdw3 (use classification for ICHmw3)	03	1065929	Fd PI ²⁰¹	Lw ²⁰³ Pw ³¹ Py ²⁰³	1000	500	400	7	20	2.0	PI-1.4, Pw-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHdw3 (use classification for ICHmw3)	04	1065930	Fd PI ²⁰¹	Pw ³¹ Cw ²⁸ Lw ²⁰³ Sxw ²⁸	1200	700	600	7	20	2.0	PI-2.0, Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHdw3 (use classification for ICHmw3)	05	1065931	Fd ⁵⁸ Cw	Pw ³¹ Lw ²⁰³ Sxw ²⁸ PI	1200	700	600	7	20	2.0	PI-2.0, Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHdw3 (use classification for ICHmw3)	06 (Cw present)	1065933	Cw Hw ²⁰¹ Sx Pw ³¹	Fd Lw ²⁰³	1200	700	600	4	20	2.0	Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHdw3 (use classification for ICHmw3)	06 (Sx present)	1065934	Sx BI ^{201 208}	Pw ³¹ Cw ^{1 32} Lw ^{1 32 203} Hw ^{1 32} Fd ^{1 32}	1200	700	600	4	20	2.0	Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHdw3 (use classification for ICHmw3)	07	1065935	Cw Sx	Hw ³² Fd ³² Pw ³¹ Lw ^{32 203} BI ²⁰⁸	1200	700	600	4	20	2.0	Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHdw3 (use classification for ICHmw3)	08 (mineral soils with horsetail)	1065936	Cw ^{1,32} Hw ^{1,32} Sx ¹	BI ^{1 208}	1000	500	400	4	20	1.0	All-0.8
ICHdw3 (use classification for ICHmw3)	08 (organic soils with skunk cabbage)	1065937	Cw ^{1,32} Hw ^{1,32} Sx ¹	BI ^{1 208}	1000	500	400	4	20	1.0	All-0.8
ICHdw3 (use classification for ICHmw3)	09		nonforested	nonforested						-	
ICHdw4	101	1065941	Cw Fd Lw Pw ³¹	PI ¹³ Hw Py ^{3,14}	1200	700	600	7	20	2.0	Lw-2.0, Pw-2.0, PI-2.0, Fd-1.4, Others-1.0
ICHdw4	102	1065938	Fd Py ²⁰³	Lw PI ¹³	600	400	400	7		1.0	PI-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHdw4	103	1065939	Fd Lw Py ²⁰³	PI ¹³ Pw ³¹	1000	500	400	7	20	2.0	PI-1.4, Pw-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHdw4	104	1065940	Fd ⁵⁸ Lw Pw ³¹	PI Py ^{3,203} Cw ¹⁰	1200	700	600	7		2.0	Lw-2.0, Pw-2.0, PI-2.0, Fd-1.4, Others-1.0
ICHdw4	110	1065942	Cw Pw ^{1,31} Sx	Fd ^{1,32} Hw Lw ^{1,32}	1200	700	600	4	20	2.0	Lw-2.0, Pw-2.0, PI-2.0, Fd-1.4, Others-1.0
ICHdw4	111	1065943	Sx ¹ Cw ^{1,32}	Hw ^{1,32} Pw ³¹	1000	500	400	4		2.0	Pw-1.4, Others-0.8
ICHdw4	112	1065944	Sx ¹ Cw ^{1,32}	Hw ^{1,32} Pw ³¹	1000	500	400	4		2.0	Pw-1.4, Others-0.8
ICHmk1	101	1069820	Cw Fd ⁵⁸ Lw Sx	BI ^{10,13,28,208} PI	1200	700	600	7	20	2.0	PI-2.0, Lw-2.0 FD 1.4 CW 1.0 SX 1.0 BL 1.0
ICHmk1	102	1069821	Fd Py ^{14,203}	Lw PI ¹³	600	400	400	7	20	2.0	PL 1.4 FD 1.0 PY 0.8 LW 1.4
ICHmk1	103	1069822	Fd Lw	PI Py ^{3,14,203}	1000	500	400	7	20	2.0	PL 1.4 LW 1.4 FD 1.0 PY 0.8
ICHmk1	104	1069823	Fd ^{32,58} Lw ³² PI Sx	BI ²⁰⁸	1200	700	600	7	20	2.0	PL 2.0 LW 2.0 FD 1.4 SX 1.0 BL 1.0
ICHmk1	105	1069824	Fd ⁵⁸ Lw PI ²⁰¹ Sx ^{10,28,201}	BI ^{13,204,208} Cw ^{10,28,32}	1200	700	600	7	20	2.0	PL 2.0 LW 2.0 FD 1.4 SX 1.0 BL 1.0 CW 1.0
ICHmk1	110	1069825	Cw Fd ^{32,58} Lw ³² Sx	BI ²⁰⁸	1200	700	600	4	20	2.0	LW 2.0 FD 1.4 CW 0.8 SX 0.8 BL 0.8
ICHmk1	111	1069826	Cw ³² Sx	BI ²⁰⁸	1200	700	600	4	20	2.0	CW 0.8 SX 0.8 BL 0.8
ICHmk1	112	1069827	Cw ^{1,32} Sx ¹	BI ^{1,208}	1000	500	400	4	20	2.0	CW 0.8 SX 0.8 BL 0.8
ICHmk2	01	1066286	Sx Cw Fd ^{32 58} PI ²⁰¹	BI ²⁰⁸ Lw ^{32 203}	1200	700	600	7	20	2.0	PI-2.0, Lw-2.0, Fd-1.4, Sx-0.8, Others-1.0
ICHmk2	02	1066283	Fd PI	Lw ²⁰³ Sx ^{10,13}	600	400	400	4	20	1.0	PI-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHmk2	03	1066284	Fd	PI ²⁰⁰ Sx ^{13 28} BI ^{13 28 208} Lw ²⁰³	1000	500	400	7	20	2.0	PI-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHmk2	04	1066285	Fd ⁵⁸ Sx ^{13 28} PI	Cw BI ^{13 28 208} Lw ²⁰³	1200	700	600	7	20	2.0	PI-2.0, Lw-2.0, Fd-1.4, Sx-0.8, Others-1.0

ICHmk2	05 (Sx-dominant)	1066287	Sx Fd ^{32,58} Cw ^{14,32} Bl ^{201,208}	Pl Lw ²⁰³	1200	700	600	4	20	2.0	Pl-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHmk2	05 (Cw-dominant)	1066288	Sx Cw Fd ^{32,58} Bl ^{201,208}	Pl Lw ²⁰³	1200	700	600	4	20	2.0	Pl-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHmk2	06	1066289	Sx ¹ Cw ^{1,32}	Pl ¹ Bl ^{1,208}	1000	500	400	4	20	1.0	Pl-1.4, Others-0.8
ICHmk3	01	1065947	Fd Pl Sx	Bl Cw Lw Pw	1200	700	600	4	20	2.0	Pl, Lw, Pw-2,Fd-1.4,Others-1
ICHmk3	02*	1065945	Fd Pl	Sx Lw	1000	500	400	7	20	2.0	Pl-1.4,Fd-1,Others-0.8
ICHmk3	03	1065946	Fd Pl	Cw Sx Lw	1000	500	400	7	20	2.0	Pl, Lw-1.4,Fd-1,Others-0.8
ICHmk3	04	1065948	Fd Sx	Bl Cw Pl Pw	1200	700	600	4	20	2.0	Pl, Pw-2,Fd-1.4,Others-1
ICHmk3	05	1065949	Sx Pl	Cw Bl Pw	1200	700	600	4	20	2.0	Pl, Pw-2,Others-1
ICHmk3	06	1065950	Fd Sx Cw	Bl Pl Pw	1200	700	600	4	20	2.0	Pl, Pw-2,Fd-1.4,Others-1
ICHmk3	07	1065951	Sx Cw	Bl Pl Pw	1000	500	400	4	20	1.6	Pl, Pw-1.4,Others-0.8
ICHmm	01	1065954	Fd Pl Sx ³⁵ Cw	Bl ²⁹ Hw	1200	700	600	4	20	2.0	Pl-2.0, Fd-1.4, Others-1.0
ICHmm	02	1065952	Fd Pl	Hw Cw Sx	1000	500	400	4	20	1.0	Pl-1.4, Fd-1.4, Others-0.8
ICHmm	03	1065953	Fd Hw Pl Sx	Bl ²⁹ Cw	1200	700	600	4	20	2.0	Pl-2.0, Fd-1.4, Others-1.0
ICHmm	04	1065955	Cw ³² Hw ³² Sx ³⁵ Fd ²	Bl ²⁹ Pl Pw ³¹	1200	700	600	4	20	2.0	Pl-2.0, Pw-2.0, Fd-1.4, Others-1.0
ICHmm	05	1065956	Cw ³² Hw ³² Sx ³⁵ Fd ^{1,32}	Bl ²⁹ Pl ¹	1200	700	600	4	20	2.0	Pl-2.0, Fd-1.4, Others-1.0
ICHmm	06	1065957	Cw ^{1,32} Hw ^{1,32} Pl ¹ Sx ^{1,32,35}	Bl ^{1,29}	1000	500	400	4	20	1.0	Pl-1.4, Others-0.8
ICHmm	07*	1065958	Pl ¹ Sb ¹ Sx ^{1,32,35}		400	200	200	4	20	1.0	Pl-1.4, Others-0.8
ICHmm	08*	1065959	Cw ^{1,32} Hw ^{1,32} Sx ^{1,32,35}	Bl ^{1,29,32} Pl ¹	400	200	200	4	20	1.0	Pl-1.4, Others-0.8
ICHmw2	101	1065963	Fd ⁵⁸ Lw Cw Hw ²⁰¹ Pw ³¹	Bl ^{10,13,208} Sx ^{10,13}	1200	700	600	4		2.0	Lw-2.0, Pw-2.0, Fd-1.4, Others-1.0
ICHmw2	102	1065960	Fd Pl	Lw Py ^{9,14,203}	1000	500	400	7	20	1.0	Pl-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHmw2	103	1065961	Fd Lw	Pl ²⁰⁰ Pw ³¹ Cw ¹³ Py ^{9,14,203}	1000	500	400	7		2.0	Lw-2.0, Pw-2.0, Pl-2.0, Fd-1.4, Others-1.0
ICHmw2	104	1065962	Cw ^{10,201} Fd ⁵⁸ Lw Pw ³¹	Pl Hw Py ^{9,14,203} Sx ^{10,13}	1200	700	600	7	20	2.0	Lw-2.0, Pw-2.0, Pl-2.0, Fd-1.4, Others-1.0
ICHmw2	110	1065964	Cw Hw ²⁰¹ Fd ^{1,14,32,58} Lw ^{1,14,32} Pw ³¹ Sx ^{10,13,201}		1200	700	600	4		2.0	Lw-2.0, Pw-2.0, Fd-1.4, Others-1.0
ICHmw2	111	1065965	Cw ³² Pw ^{1,31} Sx ^{14,32,58} Hw ³² Lw ^{1,14,32}		1200	700	600	4	20	2.0	Lw-2.0, Pw-2.0, Fd-1.4, Others-1.0
ICHmw2	112	1065966	Sx Cw ^{1,32}	Hw ^{1,32} Bl ²⁰⁸	1200	700	600	4		2.0	All-1.0
ICHmw2	113	1065967	Cw ^{1,32} Sx ¹	Bl ^{1,208} Hw ^{1,32}	1000	500	400	4		1.0	All-0.8
ICHmw2	114	1065968	Cw ^{1,32} Sx ¹	Bl ^{1,208} Hw ^{1,32}	1000	500	400	4		1.0	All-0.8
ICHmw3	01	1065974	Fd ⁵⁸ Cw Sx ¹⁰ Pw ³¹	Lw ²⁰³ Pl Bl ²⁰⁸ Hw	1200	700	600	4	20	2.0	Pl-2.0, Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHmw3	02	1065969	Fd Pl	Py ²⁰³ Pw ³¹ Lw ²⁰³	1000	500	400	4	20	1.0	Pl-1.4, Pw-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHmw3	03	1065971	Fd Pl	Lw ²⁰³ Pw ³¹ Py ²⁰³	1000	500	400	7	20	2.0	Pl-1.4, Pw-1.4, Lw-1.4, Fd-1.0, Others-0.8
ICHmw3	04	1065972	Fd ⁵⁸ Pl Cw ²⁸ Pw ³¹	Lw ²⁰³ Sx ²⁸	1200	700	600	7	20	2.0	Pl-2.0, Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHmw3	05	1065973	Fd ⁵⁸ Cw ²⁸ Pw ³¹	Lw ²⁰³ Sx ²⁸ Pl	1200	700	600	7	20	2.0	Pl-2.0, Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHmw3	06	1065975	Cw Hw ²⁰¹ Sx ¹³	Fd ⁵⁸ Pw ³¹ Lw ²⁰³ Bl ^{13,208}	1200	700	600	4	20	2.0	Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHmw3	07	1065976	Cw Hw ²⁰¹ Sx	Fd ³² Pw ³¹ Lw ^{32,203} Bl ²⁰⁸	1200	700	600	4	20	2.0	Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHmw3	08 (mineral soils with horsetail)	1065977	Cw ^{1,32} Hw ^{1,32} Sx ¹	Bl ^{1,208}	1000	500	400	4	20	1.0	All-0.8
ICHmw3	08 (organic soils with skunk cabbage)	1065978	Cw ^{1,32} Hw ^{1,32} Sx ¹	Bl ^{1,208}	1000	500	400	4	20	1.0	All-0.8
ICHmw5	101	1065982	Cw Fd ⁵⁸ Hw ²⁰¹ Lw Pw ³¹ Sx ^{10,13}	Bg ^{14,16} Pl	1200	700	600	4		2.0	Lw-2.0, Pw-2.0, Pl-2.0, Fd-1.4, Others-1.0
ICHmw5	102	1065979	Fd Pl	Py ^{9,14,16,203} Lw	1000	500	400	7	20	2.0	Lw-1.4, Pl-1.4, Pw-1.4, Fd-1.0, Others-0.8
ICHmw5	103	1065980	Fd Lw	Pl ²⁰⁰ Pw ³¹ Py ^{9,14,16,203}	1000	500	400	7		2.0	Lw-2.0, Pw-2.0, Pl-2.0, Fd-1.4, Others-1.0
ICHmw5	104	1065981	Fd ⁵⁸ Lw Pw ³¹ Cw ²⁰¹	Bg ^{14,16} Hw Pl ²⁰⁰ Py ^{9,14,16} Sx ^{10,13}	1200	700	600	7	20	2.0	Lw-2.0, Pw-2.0, Pl-2.0, Fd-1.4, Others-1.0
ICHmw5	110	1065983	Cw Hw Fd ^{1,14,32,58} Lw ^{1,14,32} Sx	Bl ²⁰² Pw ³¹	1200	700	600	4		2.0	Lw-2.0, Pw-2.0, Pl-2.0, Fd-1.4, Others-1.0
ICHmw5	111	1065984	Cw ³² Sx	Bl ²⁰⁸ Fd ^{1,32} Hw ³² Lw ^{1,32} Pw ³¹	1200	700	600	4	20	2.0	Lw-2.0, Pw-2.0, Fd-1.4, Others-1.0
ICHmw5	112	1065985	Bl ^{1,201,208} Sx ¹	Hw ^{1,32} Cw ^{1,32}	1200	700	600	4		2.0	All-1.0
ICHmw5	113	1065986	Cw ^{1,32} Sx ¹	Bl ^{1,208} Hw ^{1,32}	1000	500	400	4		2.0	All-0.8
ICHvk1	01	1065990	Cw Hw ²⁰¹	Pw ³¹ Sx ^{10,13}	1200	700	600	4	20	2.0	Pw-2.0, Others-1.0
ICHvk1	02	1065987	Cw Hw ²⁰¹ Fd	Sx Bl ²⁰⁸	1000	500	400	4	20	1.0	Fd-1.4, Others-1.0
ICHvk1	03	1065988	Cw Hw ²⁰¹	Fd ⁵⁸ Pw ³¹ Sx ^{10,13,204}	1200	700	600	4	20	2.0	Pw-2.0, Fd-1.4, Others-1.0
ICHvk1	04	1065989	Cw Hw ²⁰¹	Pw ³¹ Sx	1200	700	600	4	20	2.0	Pw-2.0, Others-1.0
ICHvk1	05	1065991	Bl ^{201,208} Cw ³² Sx	Hw ³²	1000	500	400	4	20	2.0	All-0.8
ICHvk1	06	1065992	Cw ^{1,32} Hw ^{1,32} Sx ¹	Bl ^{1,208}	1000	500	400	4	20	1.0	All-0.8

ICHwk1	01	1066001	Cw Hw ²⁰¹ Pw ³¹	Sx ^{10 13} Fd ^{9 14 32} Lw ^{9 14 32}	1200	700	600	4	20	2.0	Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHwk1	02	1065993	Fd ⁵⁸ Pl ²⁰¹ Cw ²⁸	Pw ³¹ Lw ²⁰³ Sxw ²⁸ Hw ²⁸	1000	500	400	7	20	1.0	Fd-1.0, Others-0.8
ICHwk1	03	1065999	Cw ²⁸ Hw ^{28 201} Fd ⁵⁸ Pw ³¹	Lw ²⁰³	1200	700	600	4	20	2.0	Lw-2.0, Fd-1.4, Others-1.0
ICHwk1	04	1066000	Cw Fd ⁵⁸ Pw ³¹	Hw Lw ²⁰³ Sx ^{10 13 204}	1200	700	600	4	20	2.0	Pw-2.0, Lw-2.0, Fd-1.4, Others-1.0
ICHwk1	05	1066002	Cw ³² Sx ²⁰¹ Hw ²⁰¹	Bl ²⁰⁸ Pw ³¹	1200	700	600	4	20	2.0	All-1.0
ICHwk1	05 (cold air with Bl)	1066003	Bl ^{201 208} Cw ³² Sx	Hw ³²	1000	500	400	4	20	2.0	All-0.8
ICHwk1	06	1066004	Cw ^{1 32} Sx ¹	Bl ²⁰⁸ Hw ^{1 32}	1000	500	400	4	20	1.0	All-0.8
ICHwk1	07	1066005	Cw ^{1 32} Hw ^{1 32} Sx ¹	Bl ^{1 208}	1000	500	400	4	20	1.0	All-0.8
ICHxm1	101	1069828	Fd ⁵⁸ Lw Pw ³¹	Cw ^{28,204} Pl	1200	700	600	7	20	2.0	PL 2.0 LW 2.0 PW 2.0 FD 1.4 CW 1.0
ICHxm1	102	1069829	Fd ²⁷ Py		600	400	400	7	20	2.0	FD 1.0 PY 0.8
ICHxm1	103	1069830	Fd ²⁷ Py		600	400	400	7	20	2.0	FD 1.0 PY 0.8
ICHxm1	104	1069831	Fd ⁵⁸ Lw Pw ³¹ Py ^{9 14,201,203}	Pl ²⁰⁰	1000	500	400	7	20	2.0	LW 2.0 PL 2.0 PW 2.0 FD 1.4 PY 1.0
ICHxm1	110	1069832	Cw Fd ⁵⁸ Lw Pw ³¹	Sx	1200	700	600	7	20	2.0	LW 2.0 FD 1.4 CW 1.0 PW 2.0 SX 1.0
ICHxm1	111	1069833	Cw ^{1,32} Pw ^{1,31} Sx ^{1,201}	Bl ²⁰⁸ Fd ¹	1200	700	600	4	20	2.0	FD 1.4 CW 1.0 PW 2.0 SX 1.0 BL 1.0
ICHxm1	112	1069834	Cw ^{1,32} Sx ¹		1000	500	400	4	20	2.0	CW 1.0 SX 1.0
IDFdc (use classification for IDFdk2 in LMH23)	01	1066010	Fd	Pl ²⁰⁰ Py ^{14 203} Sx ^{10,13} Lw	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Sx-0.6, Py-0.6
IDFdc (use classification for IDFdk2 in LMH23)	02	1066006	Fd ²⁷ Py		600	400	400	4	20	1.0	Fd-0.8, Py-0.6
IDFdc (use classification for IDFdk2 in LMH23)	03 (very steep slopes with bluebunch wheatgrass)	1066007	Py ^{14,27} Fd ²⁷	Pl ^{1 3 28}	1000	500	400	7	20	2.0	Pl-1.0, Fd-0.8, Py-0.6
IDFdc (use classification for IDFdk2 in LMH23)	03 (shallow soils)	1066008	Fd ²⁷ Py ¹⁴	Pl ²⁰⁰	1000	500	400	7	20	2.0	Pl-1.0, Fd-0.8, Py-0.6
IDFdc (use classification for IDFdk2 in LMH23)	03 (very steep slopes with pinegrass)	1066009	Fd ²⁷ Py ¹⁴	Pl ²⁰⁰	1000	500	400	7	20	2.0	Pl-1.0, Fd-0.8, Py-0.6
IDFdc (use classification for IDFdk2 in LMH23)	04	1066010	Fd	Pl ²⁰⁰ Py ^{14 203} Sx ^{10,13} Lw	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Sx-0.6, Py-0.6
IDFdc (use classification for IDFdk2 in LMH23)	05	1066011	Fd ³² Sx	Pl ^{12 200} Cw ³² Bl ²⁰⁸ Lw	1200	700	600	4	20	2.0	Pl-1.4, Lw-1.4, Fd-1.0, Others-0.8
IDFdc (use classification for IDFdk2 in LMH23)	06	1066012	Pl ^{1 12} Sx ¹ Fd ^{1 32}	Bl ^{1 12 13 208} Cw ³²	1000	500	400	4	20	1.0	Pl-1.0, Fd-0.8, Others-0.6
IDFdc (use classification for IDFdk2 in LMH23)	07		nonforested	nonforested						-	
IDFdc (use classification for IDFdk2 in LMH23)	08		nonforested	nonforested						-	
IDFdk1	101	1066017	Fd Pl ²⁰¹	Py ^{9 14} Sx ^{10 13} Lw ²⁰³	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Py-0.6, Sx-0.6
IDFdk1	102	1066013	Fd ²⁷ Pl	Py ^{9,14}	600	400	400	4	20	1.0	Pl-1.0, Fd-0.8, Py-0.6
IDFdk1	103	1066014	Fd ²⁷ Py ¹⁴	Pl ¹³	600	400	400	7	20	2.0	Pl-1.0, Fd-0.8, Py-0.6
IDFdk1	104	1066015	Fd Pl ²⁰¹	Py ^{9 14} Sx ^{10 13} Lw ²⁰³	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Others-0.6
IDFdk1	105	1066016	Pl Fd ^{27,32}	Bl ^{10 208} Sx ¹⁰ Lw ^{27 32 203}	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Bl-0.6, Sx-0.6
IDFdk1	110	1066018	Fd ³² Sx	Bl ^{10 13 208} Pl Lw ^{32 203}	1000	500	400	4	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Others-0.6
IDFdk1	111	1066019	Pl ^{1,12} Sx ¹	Bl ^{1 12 13 208}	1000	500	400	4	20	1.0	Pl-1.0, Fd-0.8, Others-0.6
IDFdk2	101	1066024	Fd Pl ²⁰¹	Py ^{9 14} Lw ²⁰³ Sx ^{10 13 204}	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Py-0.6, Sx-0.6
IDFdk2	102	1066020	Fd ²⁷ Py ^{9 14} Pl		600	400	400	4	20	1.0	Pl-1.0, Fd-0.8, Py-0.6
IDFdk2	103	1066021	Py ¹⁴ Fd ²⁷		600	400	400	7	20	2.0	Pl-1.0, Fd-0.8, Py-0.6
IDFdk2	104	1066022	Fd ²⁷ Py ¹⁴ Pl ²⁰¹	Lw ^{27 203}	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Py-0.6
IDFdk2	105	1066023	Pl Fd ^{27,32}	Bl ^{10, 204, 208} Sx ^{10, 204} Lw ²⁰³	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Fd-0.8, Sx-0.6, Bl-0.6
IDFdk2	110	1066025	Fd ³² Sx Pl ²⁰¹	Cw ³² Bl ²⁰⁸ Lw ^{32 203}	1200	700	600	4	20	2.0	Pl-1.4, Lw-1.4, Fd-1.0, Others-0.8
IDFdk2	111	1066026	Pl ^{1 12} Sx ¹ Fd ^{1 32}	Bl ^{1 12 13 208}	1000	500	400	4	20	1.0	Pl-1.0, Fd-0.8, Others-0.6
IDFdk3	01	1066032	Fd Pl	Sx Py Lw	1200	700	600	7	20	2.0	Pl,Lw-1.4,Fd-1,Sx,Py-0.8
IDFdk3	02*	1066027	Fd Pl	Py	800	500	400	7	20	2.0	Pl-1,Others-0.8
IDFdk3	03*	1066028	Fd Pl	Py	800	500	400	7	20	2.0	Pl-1,Fd-0.8,Py-0.8
IDFdk3	04	1066029	Fd Pl	Py	1000	500	400	7	20	2.0	Pl, Py-1,Fd-0.8
IDFdk3	05	1066030	Fd Pl	Py	1200	700	600	7	20	2.0	Pl-1.4,Fd-1,Py-0.8
IDFdk3	06	1066031	Fd Pl	Py	1200	700	600	7	20	2.0	Pl-1.4,Fd-1,Py-0.8
IDFdk3	07	1066033	Fd Pl Sx		1200	700	600	4	20	2.0	Pl-1.4,Fd-1,Sx-0.8

IDFdk3	08	1066034	Fd Pl Sx		1200	700	600	4	20	2.0	Pl-1.4,Fd-1,Sx-0.8
IDFdk3	09	1066035	Sx	Pl	1000	500	400	4	20	1.6	Pl-1,Sx-0.6
IDFdm1	101	1069866	Fd Lw	Pl ²⁰⁰ Py ^{9,14}	1000	500	400	7	20	2.0	LW 1.0 PL 1.0 FD 0.8 PY 0.6
IDFdm1	102	1069868	Fd ²⁷ Py	Lw	600	400	400	7	20	2.0	LW 1.0 FD 0.8 PY 0.6
IDFdm1	103	1069869	Fd ²⁷ Py		600	400	400	7	20	2.0	FD 0.8 PY 0.6
IDFdm1	104	1069870	Fd Lw Py ²⁰³	Pl ^{10,13,28,204}	1000	500	400	7	20	2.0	LW 1.0 PY 0.6 FD 0.8 PL 1.0
IDFdm1	110.1	1069871	Fd ³² Lw ³² Sx	Pl	1200	700	600	7	20	2.0	FD 1.0 LW 1.4 SX 0.8 PL 1.4
IDFdm1	110.2	1069872	Cw ³² Fd ³² Lw ³² Sx ^{10,13,201}		1200	700	600	7	20	2.0	CW 0.8 FD 1.0 LW 1.4 SX 0.8 PL 1.4
IDFdm1	111	1069873	Fd ³² Lw ³² Sx	Pl	1000	500	400	4	20	2.0	FD 1.0 LW 1.0 SX 0.8 PL 1.0
IDFdm1	112	1069874	Sx ¹	Cw ^{1,32} Pl ¹	1000	500	400	4	20	2.0	SX 0.6 CW 0.6 PL 1.0
IDFmw2	01	1066044	Fd ⁵⁸ Cw ²⁸ Pw ³¹	Pl ²⁰⁰ Lw ²⁰³ Sx ^{10 28}	1200	700	600	4	20	2.0	Pl-1.6, Lw-1.6, Fd-1.0, Others-0.8
IDFmw2	02	1066042	Fd Pl	Py ²⁰³ Pw ³¹	600	400	400	4	20	1.0	Pl-1.2, Pw-1.2, Fd-0.8, Py-0.6
IDFmw2	03	1066043	Fd	Lw ²⁰³ Pw ³¹ Py ²⁰³ Pl ²⁰⁰	1000	500	400	7	20	2.0	Pl-1.6, Lw-1.6, Fd-1.0, Others-0.8
IDFmw2	04 (lack abundant devil's club)	1066045	Fd ⁵⁸ Cw Sx ^{10 13}	Pw ³¹ Lw ²⁰³ Bl ²⁰⁸ Pl	1200	700	600	4	20	2.0	Pl-1.6, Lw-1.6, Fd-1.0, Others-0.8
IDFmw2	04 (abundant devil's club present)	1066046	Cw Fd ⁵⁸ Sx	Hw Pw ³¹ Lw ^{32 203} Bl ²⁰⁸	1200	700	600	4	20	2.0	Lw-1.6, Fd-1.0, Others-0.8
IDFmw2	05	1069890	Cw ^{1 32} Hw ^{1 32} Sx ¹	Bl ^{1 208}	1000	500	400	4	20	1.0	All-0.6
IDFww	01	1066051	Fd Py	Pw ^{28 31} Lw ²⁰³ Pl ²⁰⁰ Sx ²⁸ Cw ²⁸	600	400	400	4	20	2.0	Pl-1.6, Lw-1.6, Fd-1.0, Others-0.8
IDFww	02	1066048	Fd Py		1200	700	600	7	20	1.0	Fd-1.0, Py-0.8
IDFww	03	1066049	Fd Py ^{9 14}	Pl Sx ^{10 28} Cw ^{10 28} Lw ²⁰³	1200	700	600	7	20	2.0	Pl-1.6, Lw-1.6, Fd-1.0, Others-0.8
IDFww	04	1066050	Fd Py ^{9 14}	Pw ^{28 31} Lw ²⁰³ Pl ²⁰⁰ Sx ²⁸ Cw ²⁸	600	400	400	4	20	2.0	Pl-1.6, Lw-1.6, Fd-1.0, Others-0.8
IDFww	05	1066052	Cw Fd	Pw ³¹ Lw ²⁰³	1200	700	600	4	20	2.0	Lw-1.6, Fd-1.0, Others-0.8
IDFww	06	1066053	Sx Fd	Lw ^{1 203}	1200	700	600	4	20	2.0	Lw-1.6, Fd-1.0, Others-0.8
IDFww	07 (abundant devil's club present)	1066054	Cw Sx ^{1 13}	Fd ^{1 32} Lw ^{1 32 203}	1200	700	600	4	20	2.0	All-0.6
IDFww	07 (abundant horsetail present)	1066055	Cw ¹ Sx ^{1 13}	Bl ^{1 13 208}	400	200	200	4	20	1.0	All-0.6
IDFxc (use classification for IDFxh2 in LMH23)	01	1066060	Fd ²⁷ Py		1000	500	400	7	20	2.0	All-0.6
IDFxc (use classification for IDFxh2 in LMH23)	02	1066056	Py ²⁷ Fd ²⁷		400	200	200	7	20	1.0	All-0.6
IDFxc (use classification for IDFxh2 in LMH23)	03	1066057	Py ²⁷ Fd ²⁷		400	200	200	7	20	2.0	All-0.6
IDFxc (use classification for IDFxh2 in LMH23)	04	1066058	Py Fd ²⁷		600	400	400	7	20	2.0	All-0.6
IDFxc (use classification for IDFxh2 in LMH23)	05	1066059	Fd ²⁷ Py		1000	500	400	7	20	2.0	All-0.6
IDFxc (use classification for IDFxh2 in LMH23)	06	1066061	Fd	Py	1200	700	600	7	20	2.0	All-0.6
IDFxc (use classification for IDFxh2 in LMH23)	07	1066062	Cw ¹⁴ Fd Sx ¹³		1200	700	600	4	20	2.0	All-0.6
IDFxc (use classification for IDFxh2 in LMH23)	08	1066063	Sx ¹ Fd ¹ Cw ^{1 32}		1000	500	400	4	20	1.0	All-0.6
IDFxh1	101	1066069	Fd ²⁷ Py		1000	500	400	7	20	2.0	All-0.6
IDFxh1	102	1066064	Py ²⁷ Fd ²⁷		400	200	200	7	20	1.0	All-0.6
IDFxh1	103	1066065	Py Fd		400	200	200	7	20	1.0	All-0.6
IDFxh1	104	1066066	Py Fd ²⁷		600	400	400	7	20	2.0	All-0.6
IDFxh1	105	1066067	Py Fd ²⁷		600	400	400	7	20	2.0	All-0.6
IDFxh1	106	1066068	Py Fd ²⁷		600	400	400	7	20	2.0	All-0.6
IDFxh1	110	1066070	Fd ²⁷	Py ⁸	1000	500	400	7	20	2.0	All-0.6
IDFxh1	111.1	1066071	Fd ³² Sx ¹³	Pl ¹²	1200	700	600	4	20	2.0	Pl-1.0, Others-0.8
IDFxh1	111.2	1066072	Fd Cw ^{14 32}	Pl ¹²	1200	700	600	4	20	2.0	Pl-1.0, Others-0.8
IDFxh1	112	1066073	Sx ¹ Fd ^{1 32}	Pl ^{1 12 50} Cw ^{1 32 50}	1200	700	600	4	20	1.0	Pl-1.0, Others-0.8
IDFxh2	101	1066077	Fd ²⁷ Py		1000	500	400	7	20	2.0	All-0.6
IDFxh2	102	1066074	Py ²⁷ Fd ²⁷		400	200	200	7	20	1.0	All-0.6
IDFxh2	103	1066075	Py Fd ²⁷		400	200	200	7	20	2.0	All-0.6
IDFxh2	104	1066076	Py Fd ²⁷		600	400	400	7	20	2.0	All-0.6
IDFxh2	110	1066078	Fd	Py	1200	700	600	7	20	2.0	All-0.6
IDFxh2	111	1066079	Fd	Py	1200	700	600	7	20	2.0	All-0.6
IDFxh2	112	1066080	Fd Sx ¹³	Py Cw ^{14 32} Pl ¹²	1200	700	600	4	20	2.0	All-0.6

IDFxb2	113	1066081	Sx ¹ Fd ^{1 32}	Pl ^{1 12 50} Cw ^{1 32 50}	1000	500	400	4	20	1.0	Pl-0.8, Others-0.6
IDFxm	01a	1066086	Fd	Py	1200	700	600	7	20	2.0	All-0.8
IDFxm	01b	1066087	Fd Pl	Py	1200	700	600	7	20	2.0	All-0.8
IDFxm	02*	1066082	Fd	Py	1000	500	400	7	20	2.0	Fd-0.6,Py-0.8
IDFxm	03	1066083	Fd Pl	Py	1000	500	400	7	20	2.0	Pl, Py-0.8,Fd-0.6
IDFxm	04	1066084	Fd	Py	1000	500	400	7	20	2.0	Fd-0.6,Py-0.8
IDFxm	05	1066085	Fd	Py	1200	700	600	7	20	2.0	Fd, Py-0.8
IDFxm	06	1066088	Fd	Pl Py Lw	1200	700	600	7	20	2.0	Fd-0.8,Pl, Py, Lw-1
IDFxm	07	1066089	Fd	Pl	1200	700	600	7	20	2.0	Fd-0.8,Pl-1
IDFxm	08	1066090	Fd Sx	Pl	1200	700	600	4	20	1.6	Pl, Fd, Sx-0.8
IDFxm	09	1066091	Pl Sx		1000	500	400	4	20	1.6	Pl-0.8,Sx-0.6
IDFxb	01	1066096	Fd Py		1200	700	600	7	20	2.0	Fd, Py-0.8
IDFxb	02*	1066092	Fd Py		600	400	300	7	20	2.0	Fd, Py-0.6
IDFxb	03*	1066093	Fd Py		600	400	300	7	20	2.0	Fd, Py-0.6
IDFxb	04	1066094	Fd Py		800	500	400	7	20	2.0	Fd, Py-0.6
IDFxb	05	1066095	Fd		1200	700	600	7	20	2.0	Fd-0.8
IDFxb	06	1066097	Fd Sx		1200	700	600	4	20	2.0	Fd, Sx-0.6
IDFxb	07	1066098	Fd Sx		1000	500	400	4	20	1.6	Fd, Sx-0.6
MHmm2 ⁴⁷	01	1069892	Ba ⁴⁷ Hm Yc ¹⁷ Se		900	500	400	7	20	2.0	Hm-1.0, Yc-1.0, Se-1.0, Ba-0.6
MHmm2 ⁴⁷	01	1069893	Yc ^{13,17}	Bl ^{13,45,47,53} Hm ¹³ Se ¹³ Fd ^{14,23} Hw ^{14,44} Cw ¹⁴	900	500	400	7	20	2.0	Bp-1.25, Hm-1.0, Hw-1.0, Bl-1.0, Yc-1.0, Se-1.0, Fd-1.25, Ba-0.6, Cw-1.0
MHmm2 ⁴⁷	02	1069891	Bl ^{45,47,53} Hm Se Yc ¹⁷	Ba ⁴⁷	440	400	400	4	20	1.0	Bl-0.75, Hm-0.75, Hw-0.75, Yc-0.75, Se-0.75, Ba-0.6
MHmm2 ⁴⁷	03	1069894	Ba ⁴⁷ Hm Se Yc ¹⁷		900	500	400	4	20	2.0	Bp-1.25, Bl-1.0, Hm-1.0, Hw-1.0, Yc-1.0, Se-1.0, Ba-0.6
MHmm2 ⁴⁷	04	1069895	Ba ⁴⁷ Hm Yc ¹⁷		900	500	400	7	20	2.0	Bl-1.0, Hm-1.0, Hw-1.0, Yc-1.0, Ba-0.6
MHmm2 ⁴⁷	05	1069896	Ba ⁴⁷ Se Yc ¹⁷	Hm	900	500	400	4	20	2.0	Bp-1.25, Bl-1.0, Hm-1.0, Hw-1.0, Yc-1.0, Se-1.0, Ba-0.6
MHmm2 ⁴⁷	06	1069897	Hm ¹ Yc ¹⁷	Ba ¹	800	400	400	7	20	2.0	Hm-0.75, Yc-0.75, Ba-0.6
MHmm2 ⁴⁷	07	1069898	Ba ^{1,47} Se ¹ Yc ¹⁷	Hm ¹	900	500	400	4	20	2.0	Hm-0.75, Hw-0.75, Yc-0.75, Se-0.75, Ba-0.6
MHmm2 ⁴⁷	08*	1069899	Hm ¹ Yc ¹⁻¹⁷		400	200	200	4	20	1.0	Hm-0.75, Yc-0.75
MHmm2 ⁴⁷	09	1069900	Hm ¹ Yc ¹⁻¹⁷	Se ¹	800	400	400	4	20	1.0	Hm-0.75, Yc-0.75, Se-0.75
MSdc1 (use classification for MSdc)	01	1066168	Pl ²⁰¹ Sx Bl ²⁰¹ 208 Fd ^{14 32}	Lw ^{14 32 203} Pw ³¹ Pa ³¹	1200	700	600	7	20	2.0	Pl-1.4, Lw-1.4, Others-0.8
MSdc1 (use classification for MSdc)	01 (cold air drainage)	1066169	Sx Bl ^{201 208} Fd ¹⁴	Pl	1200	700	600	7	20	1.0	Pl-1.4, Others-0.8
MSdc1 (use classification for MSdc)	02 (high elevations)	1066165	Pl Fd ¹⁴ Pa ^{13 31}	Py ^{9 14 203}	1000	500	400	4	20	1.0	Pl-1.0, Others-0.6
MSdc1 (use classification for MSdc)	02 (low elevations)	1066166	Pl Fd	Lw ²⁰³ Py ^{9 14 203}	1000	500	400	4	20	1.0	Pl-1.0, Lw-1.1, Others-0.6
MSdc1 (use classification for MSdc)	03	1066167	Pl Fd ^{9 32}	Sx ²⁸ Bl ²⁸ 208 Pw ³¹ Lw ^{9 32} Pa ³¹	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.1, Others-0.6
MSdc1 (use classification for MSdc)	04	1066170	Sx Bl ^{201 208}	Pl	1200	700	600	7	20	2.0	Pl-1.4, Others-0.8
MSdc1 (use classification for MSdc)	05		nonforested	nonforested						-	
MSdc3 (use classification for MSdc)	01	1066173	Pl ²⁰¹ Sx Bl ²⁰¹ 208 Fd ^{14 32}	Lw ^{14 32 203}	1200	700	600	7	20	2.0	Pl-1.4, Lw-1.4, Others-0.8
MSdc3 (use classification for MSdc)	01 (cold air drainage)	1066174	Sx Bl ^{201 208} pl ²⁰¹	Fd ^{14 32}	1200	700	600	7	20	2.0	Pl-1.4, Others-0.8
MSdc3 (use classification for MSdc)	02	1066171	Pl ²⁰¹ Fd ¹⁴ Pa ^{13 31}	Py ^{14 32}	1000	500	400	7	20	1.0	Pl-1.0, Others-0.6
MSdc3 (use classification for MSdc)	03	1066172	Pl Fd ^{9 32}	Sx ²⁸ Bl ^{28 208} Pa ^{13 31} Py ^{9 14} Lw ^{9 32 203}	1000	500	400	7	20	2.0	Pl-1.0, Lw-1.0, Others-0.6
MSdc3 (use classification for MSdc)	04	1066175	Sx Bl ^{201 208} pl ²⁰¹		1200	700	600	4	20	2.0	Pl-1.4, Others-0.8
MSdc3 (use classification for MSdc)	05		nonforested	nonforested						-	
MSdm1	101	1069875	Fd ^{14,32,203} Lw ^{14,32,203} Sx	Bl ^{204,208} pl ²⁰⁰	1200	700	600	7	20	2.0	FD 1.0 LW 1.4 SX 0.8 BL 0.8 PL 1.4
MSdm1	102	1069876	Fd Lw Py ^{9,14,203}	Pl	600	400	400	7	20	2.0	FD 1.0 LW 1.0 PY 0.8 PL 1.0
MSdm1	103	1069877	Fd Lw Py ^{9,14,203}	pl ²⁰⁰	1000	500	400	7	20	2.0	FD 0.8 LW 1.4 PY 0.8 PL 1.4
MSdm1	104	1069878	Pl Fd ³² Lw ³²	Bl ²⁰⁸ Sx ²⁸	1200	700	600	7	20	2.0	PL 1.4 FD 0.8 LW 1.4 BL 0.8 SX 0.8
MSdm1	110	1069879	Pl ²⁰¹ Sx Bl ^{201,208}	Fd ^{14,32} Lw ^{14,32}	1200	700	600	4	20	2.0	PL 1.4 SX 1.0 BL 1.0 FD 1.0 LW 1.4
MSdm1	111.1	1069880	Bl ^{201,208} pl ²⁰¹ Sx	Fd ^{14,32} Lw ^{14,32}	1200	700	600	4	20	2.0	PL 1.4 SX 1.0 BL 1.0 FD 1.0 LW 1.4
MSdm1	111.2	1069881	Cw ³² Lw ³² Sx	Bl ²⁰⁸ Fd ^{14,32} Pl	1200	700	600	4	20	2.0	CW 1.0 LW 1.4 SX 1.0 BL 1.0 FD 1.0 PL 1.4
MSdm1	112	1069882	Bl ^{201,208} Sx	Fd ^{14,32} Lw ^{14,32} Pl	1200	700	600	4	20	2.0	BL 1.0 SX 1.0 FD 1.0 LW 1.4 PL 1.4
MSdm1	113	1069883	Bl ^{1,201,208} Sx ¹	Pl ¹	1000	500	400	4	20	2.0	BL 0.8 SX 0.8 PL 1.0
MSdm2	101	1066198	Bl ^{201 208} Fd ^{9 14 32} Pl Sx	Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	Pl-1.4, Lw-1.4, Others-0.8
MSdm2	102	1066176	Pl Fd ¹⁴	Py ^{14 203} Bl ^{13 204 208}	600	400	400	4	20	1.0	Pl-1.0, Others-0.6

MSdm2	103	1066195	Fd ³² PI	Lw ^{32 203} Py ⁹ 203 BI ^{10 13 204} 208 Sx ^{10,13 204}	1000	500	400	7	20	2.0	PI-1.0, Lw-1.0, Others-0.6
MSdm2	104	1066196	Fd ^{9 14 32} PI Sx ^{10 13 28}	BI ^{10 13 28 208} Lw ^{14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm2	105	1066197	PI Sx BI ^{201 208}	Fd ^{9,14,32} Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm2	110	1066199	PI Sx BI ^{201 208}	Lw ^{9 14 32 203} Fd ^{9 14 32}	1200	700	600	4	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm2	111	1066200	PI Sx BI ^{201 208}	Fd ^{14 32} Lw ^{14 32 203}	1200	700	600	4	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm2	112	1066201	Sx BI ^{201 208}	PI Fd ^{9 14 32} Lw ^{9 14 32 203}	1200	700	600	4	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm2	113	1066202	PI ¹ Sx ¹	BI ^{1 208}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSdm3 (use classification for MSdm2 in LMH23)	01	1066206	PI Sx Fd ^{14 32} BI ^{201 208}	Lw ^{14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm3 (use classification for MSdm2 in LMH23)	02		nonforested	nonforested						-	
MSdm3 (use classification for MSdm2 in LMH23)	03 (shallow soils)	1066203	PI Fd ¹⁴	Py ^{14 203}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSdm3 (use classification for MSdm2 in LMH23)	03 (deep soils)	1066204	Fd ¹⁴ PI	BI ^{10 13 204 208} Sx ^{10 13 204} Lw ^{32 203} Py ^{14 203}	1000	500	400	7	20	2.0	PI-1.0, Lw-1.0, Others-0.6
MSdm3 (use classification for MSdm2 in LMH23)	04	1066205	Fd ^{14 32} PI Sx ¹³	BI ^{13 208} Lw ^{14,32,203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm3 (use classification for MSdm2 in LMH23)	05	1066207	PI Sx BI ^{201 208}	Fd ^{14 32} Lw ^{14 32 203}	1200	700	600	4	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm3 (use classification for MSdm2 in LMH23)	06	1066208	Sx BI ^{201 208}	PI ²⁰⁰ Fd ^{14 32} Lw ^{14 32 203} Cw ³²	1200	700	600	4	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSdm3 (use classification for MSdm2 in LMH23)	07	1066209	Sx ¹ BI ^{1 201 208}	PI ^{1 200}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSxk1	101	1066215	PI Fd ^{9 14 32} Sx ^{10 13}	BI ^{10,13 208} Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSxk1	102	1066210	PI Fd ^{9 14 32}	Py ^{14 203} Lw ^{9 14 32 203}	1000	500	400	4	20	1.0	PI-1.0, Lw-1.0, Others-0.6
MSxk1	103	1066211	PI Fd ^{9 14 32}		1000	500	400	4	20	2.0	PI-1.0, Others-0.6
MSxk1	104	1066213	PI	Sx ¹³ Fd ^{14 32} BI ^{13 208} Lw ^{14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSxk1	105	1066214	PI Sx ^{10 13}	BI ^{10 13 208} Fd ^{9 14 32} Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSxk1	110	1066216	PI Sx	BI ^{10 13 208} Lw ^{9 14 32 203}	1200	700	600	4	20	2.0	PI-1.4, Others-0.8
MSxk1	111	1066217	PI, Sx	BI ²⁰⁸	1200	700	600	4	20	2.0	PI-1.4, Others-0.8
MSxk1	112	1066218	PI ¹ Sx ¹	BI ^{1,208}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSxk1	113	1066219	PI ¹ Sx ¹	BI ^{1,208}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSxk2	101	1066272	PI Fd ^{9 14 32} Sx ^{10 13}	BI ^{10 13 208} Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSxk2	102	1066220	PI Fd ^{9 14 32}	BI ^{13 28 204 208}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSxk2	103	1066245	PI Fd ^{9 14 32}	Sx ^{10 13 28}	1000	500	400	4	20	2.0	PI-1.0, Others-0.6
MSxk2	104	1066246	PI ²⁰¹ Fd ³²	Py ^{14 203} Lw ^{9 14 32 203}	1000	500	400	7	20	2.0	PI-1.0, Lw-1.0, Others-0.6
MSxk2	105	1066247	PI	Sx ^{10 13} Fd ^{9 14 32} Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	PI-1.0, Lw-1.0, Others-0.6
MSxk2	106	1066271	PI Sx ^{10 13}	BI ^{10 13 208} Fd ^{9 14 32} Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSxk2	110	1066273	PI Sx	BI ^{10 13 208} Lw ^{9 14 32 203}	1200	700	600	4	20	2.0	PI-1.4, Others-0.8
MSxk2	111	1066274	PI Sx	BI ²⁰⁸	1200	700	600	4	20	2.0	PI-1.4, Others-0.8
MSxk2	112	1066275	Sx ¹	BI ^{1 208} PI ^{1 200}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSxk3 (use classification for MSxk)	01	1066279	PI Fd ^{9 14 32} Sx ^{10 13 28 204}	BI ^{10 13 204 208} Lw ^{9 14 32 203}	1200	700	600	7	20	2.0	PI-1.4, Lw-1.4, Others-0.8
MSxk3 (use classification for MSxk)	02	1066276	PI Fd ^{9 14}	BI ^{10 13 204 208}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSxk3 (use classification for MSxk)	03		nonforested							2.0	
MSxk3 (use classification for MSxk)	04		nonforested							2.0	
MSxk3 (use classification for MSxk)	05 (steep warm slopes)	1066277	PI Fd ^{9 14 32}	BI ^{10 13 28 204 208} Sx ^{10 13 28 204} Py ^{9 14 32 203} Lw ^{9 14 32 203}	1000	500	400	7	20	2.0	PI-1.0, Lw-1.0, Others-0.6

MSxk3 (use classification for MSxk)	05 (moderate and gentle slopes)	1066278	PI Fd ^{9 14 32}	Bl ^{10 13 28 204 208} Sx ^{10 13 28 204} Py ^{9 14 32 203} Lw ^{9 14 32 203}	1000	500	400	7	20	2.0	PI-1.0, Lw-1.0, Others-0.6
MSxk3 (use classification for MSxk)	06	1066280	PI Sx Bl ^{201 208}	Fd ^{14 32}	1200	700	600	7	20	2.0	PI-1.4, Others-0.8
MSxk3 (use classification for MSxk)	07		not present in MSxk3	not present in MSxk3						-	
MSxk3 (use classification for MSxk)	08	1066281	Sx Bl ^{201 208}	Pl ²⁰⁰	1200	700	600	4	20	2.0	PI-1.4, Others-0.8
MSxk3 (use classification for MSxk)	09	1066282	Sx ¹	Bl ^{1 208} Pl ^{1 200}	1000	500	400	4	20	1.0	PI-1.0, Others-0.6
MSxv	01	1066102	PI Sx	Bl	1200	700	600	7	20	2.0	PI-1,Others-0.8
MSxv	02	1066099	PI		1000	500	400	7	20	2.0	PI-0.8
MSxv	03	1066100	PI		1000	500	400	7	20	2.0	PI-0.8
MSxv	04	1066101	PI Sx	Bl	1200	700	600	7	20	2.0	PI-1,Others-0.8
MSxv	05	1066103	PI Sx	Bl	1200	700	600	7	20	2.0	PI-1,Others-0.8
MSxv	06	1066104	PI Sx	Bl	1200	700	600	7	20	2.0	PI-1,Others-0.8
MSxv	07	1066105	PI Sx	Bl	1000	500	400	4	20	2.0	PI-0.8,Others-0.6
MSxv	08	1066106	Sx	PI Bl	1000	500	400	4	20	1.6	PI-0.8,Others-0.6
MSxv	09	1066107	Sx	PI Bl	400	200	200	4	20	1.6	PI-0.8,Others-0.6
PPxh1	101	1066111	Py Fd ²⁷		400	200	200	7	20	2.0	All-0.6
PPxh1	102	1066108	Py ²⁷	Fd ²⁷	400	200	200	7	20	1.0	All-0.6
PPxh1	103	1066109	Py ²⁷	Fd ²⁷	400	200	200	7	20	2.0	All-0.6
PPxh1	104	1066110	Py ²⁷ Fd ²⁷		400	200	200	7	20	2.0	All-0.6
PPxh1	110	1066112	Fd Py		600	400	400	7	20	2.0	All-0.6
PPxh1	111	1066113	Fd Py		1000	500	400	7	20	2.0	All-0.6
PPxh2	101	1066117	Py Fd ²⁷		400	200	200	7	20	2.0	All-0.6
PPxh2	102	1066114	Py ²⁷ Fd ²⁷		400	200	200	7	20	1.0	All-0.6
PPxh2	103	1066115	Py ²⁷ Fd ²⁷		400	200	200	7	20	2.0	All-0.6
PPxh2	110.1	1066118	Fd	Py	600	400	400	7	20	2.0	All-0.6
PPxh2	110.2	1066308	Fd	Py	600	400	400	7	20	2.0	All-0.6
PPxh2	111	1066119	Fd	Py	600	400	400	4	20	2.0	All-0.6
SBPSmk	01	1066125	Fd PI Sx	Lw	1200	700	600	7	20	2.0	PI, Lw-1.6,Fd-1,Sx-0.8
SBPSmk	02*	1066121	Fd PI	Sx Py	1000	500	400	7	20	2.0	PI, Py-1.2,Fd-0.8,Sx-0.6
SBPSmk	03	1066122	Fd PI		1200	700	600	7	20	2.0	PI-1.6,Fd-1
SBPSmk	04	1066123	Fd PI Sx	Lw	1200	700	600	7	20	2.0	PI, Lw-1.6,Fd-1,Others-0.8
SBPSmk	05	1066124	Fd PI Sx	Lw	1200	700	600	7	20	2.0	PI, Lw-1.6,Fd-1,Sx-0.8
SBPSmk	06	1066126	PI Sx		1200	700	600	4	20	2.0	PI-1.6,Sx-0.8
SBPSmk	07	1066127	Sx	PI Bl	1000	500	400	4	20	1.6	PI-1.2,Others-0.6
SBPSmk	08	1066128	Sx PI	Sb	400	200	150	4	20	1.6	PI-1.2,Others-0.6
SBSdh	01	1066134	Fd PI Sx	Bl ²⁹	1200	700	600	7	20	2.0	PI-2.0, Fd-1.4, Others-1.0
SBSdh	02*	1066129	PI	Sx	1000	500	400	7	20	1.0	PI-1.4, Sx-0.8
SBSdh	03*	1066131	Fd Lw ²³ PI	Pw ^{16,31}	1000	500	400	7	20	2.0	PI-1.4, Pw-1.4, Lw-1.4, Fd-1.0
SBSdh	04	1066132	Fd PI Sx ²⁸		1200	700	600	7	20	2.0	PI-2.0, Fd-1.4, Sx-1.0
SBSdh	05	1066133	PI	Sb Sx ³²	1200	700	600	7	20	2.0	PI-2.0, Others-1.0
SBSdh	06	1066135	Fd Sx	Bl ²⁹ PI	1200	700	600	7	20	2.0	PI-2.0, Fd-1.4, Others-1.0
SBSdh	07	1066136	Fd ^{1,32} Pl ¹ Sx ^{1,32}	Bl ^{1,29,32}	1000	500	400	4	20	2.0	PI-1.4, Fd-1.0, Others-0.8
SBSdh	08*	1066137	Pl ¹ Sb ¹ Sx ^{1,32}		400	200	200	4	20	1.0	PI-1.4, Others-0.8
SBSdw1	01	1066142	Fd PI Sx	Bl Lw	1200	700	600	7	20	2.0	PI, Lw-2,Fd-1.4,Others-1
SBSdw1	02*	1066138	Fd PI	Lw	1000	500	400	7	20	2.0	PI, Lw-1.4,Fd-1
SBSdw1	03	1066139	Fd PI	Lw	1200	700	600	7	20	2.0	PI-2,Fd, Lw-1.4
SBSdw1	04	1066140	Fd PI Sx		1200	700	600	7	20	2.0	PI-2,Fd-1.4,Sx-1
SBSdw1	05	1066141	Fd PI Sx	Lw	1200	700	600	7	20	2.0	PI-2,Fd, Lw-1.4,Sx-1
SBSdw1	06	1066143	Fd PI Sx		1200	700	600	7	20	2.0	PI-2,Fd-1.4,Others-1
SBSdw1	07	1066144	Fd PI Sx	Bl	1200	700	600	4	20	2.0	PI-2,Fd-1.4,Others-1
SBSdw1	08	1066145	Fd PI Sx	Bl	1200	700	600	4	20	2.0	PI-2,Fd-1.4,Others-1
SBSdw1	09	1066146	Sx	Bl PI	1000	500	400	4	20	1.6	PI-1.4,Others-0.8
SBSmc1	01	1066149	Fd PI Sx	Bl Lw	1200	700	600	7	20	2.0	PI, Lw-1.6,Fd-1,Others-0.8
SBSmc1	02*	1066147	PI	Bl Sx Lw	1000	500	400	7	20	2.0	PI, Lw-1.4,Others-0.6
SBSmc1	03	1066148	Fd PI	Sx Lw	1200	700	600	7	20	2.0	PI, Lw-1.4,Fd-1,Sx-0.8
SBSmc1	04	1066150	PI Sx	Bl	1200	700	600	7	20	2.0	PI-1.6,Others-0.8
SBSmc1	05	1066151	PI Sx	Bl	1200	700	600	7	20	2.0	PI-1.6,Others-0.8
SBSmc1	06	1066152	Fd PI Sx	Bl	1200	700	600	4	20	2.0	PI-1.6,Fd-1,Others-0.8
SBSmc1	07	1066153	Fd PI Sx	Bl	1200	700	600	4	20	2.0	PI-1.6,Fd-1,Others-0.8
SBSmc1	08	1066154	Sx	Bl PI	1000	500	400	4	20	1.6	PI-1.2,Others-0.6
SBSmm	01	1066160	Pl ²⁰¹ Sx Bl ^{201 208}	Fd ^{9 14 32}	1200	700	600	7	20	2.0	PI-2.0, Fd-1.4, Others-1.0
SBSmm	02	1066155	PI	Sx Fd ^{3 2} Bl ^{28 208}	1000	500	400	4	20	1.0	PI-1.4, Fd-1.0, Others-0.8
SBSmm	03	1066156	PI Sx	Bl ²⁰⁸ Fd ^{9 14 32}	1000	500	400	7	20	2.0	PI-1.4, Fd-1.0, Others-0.8
SBSmm	04	1066157	PI Sx	Bl ²⁰⁸ Fd ^{9 14 32}	1000	500	400	7	20	2.0	PI-1.4, Fd-1.0, Others-0.8
SBSmm	05	1066158	PI Sx	Bl ²⁰⁸ Fd ^{9 14 32}	1000	500	400	7	20	2.0	PI-1.4, Fd-1.0, Others-0.8
SBSmm	06	1066159	Pl ²⁰¹ Sx Bl ^{201 208}	Fd ^{9 14 32}	1200	700	600	7	20	2.0	PI-2.0, Fd-1.4, Others-1.0
SBSmm	07	1066161	Sx Bl ^{201 208}	Pl ²⁰⁰ Cw ³² Fd ³²	1200	700	600	4	20	2.0	PI-2.0, Fd-1.4, Others-1.0
SBSmm	07 (cold air draiange)	1066162	Sx Bl ^{201 208}	Pl ²⁰⁰	1200	700	600	4	20	2.0	PI-2.0, Others-1.0
SBSmm	08	1066163	Bl ^{1 208} Sx ^{1 32}	Pl ¹	1000	500	400	4	20	1.0	PI-1.4, Others-0.8
SBSmm	09	1066164	Pl ¹	Sx ^{1 32} Bl ^{1 208}	1000	500	400	4	20	1.0	PI-1.4, Others-0.8

Appendix J-2: Thompson Okanagan Regional Stocking Standards for Uneven-Aged Stands (Dec. 9th 2021)

BGC Classification		Regeneration and Free Growing Stocking Standard								
Zone/SZ	Site Series	Stocking Standards ID	Preferred (p) Species	Acceptable (a) Species	Layer**	Target MIN pa MIN p (well-spaced/ha)			MITD	Minimum Height at Free Growing Species Height (m)
ICHmk1	101	1065174	Cw Fd ⁵⁸ Lw Sx Bl ^{10,13,28,208} Pl		1	600	300	250	0.0	Pl Lw 2.0, Fd 1.4, Cw Sx Bl 1.0
			Cw Fd ⁵⁸ Lw Sx Bl ^{10,13,28,208} Pl		2	800	400	300	2.0	
			Cw Fd ⁵⁸ Lw Sx	Bl ^{10,13,28,208} Pl	3	1000	500	400	2.0	
			Cw Fd ⁵⁸ Lw Sx	Bl ^{10,13,28,208} Pl	4	1200	700	600	2.0	
ICHmk1	102	1065171	Fd Py ^{14,203} Lw Pl ¹³		1	300	150	150	0.0	Pl Lw 1.4, Fd 1.0, Py 0.8
			Fd Py ^{14,203} Lw Pl ¹³		2	400	200	200	1.0	
			Fd Py ^{14,203}	Lw Pl ¹³	3	500	300	300	1.0	
			Fd Py ^{14,203}	Lw Pl ¹³	4	600	400	400	1.0	
ICHmk1	103	1065172	Fd Lw Pl Py ^{9,14,203}		1	400	200	200	0.0	Pl Lw 1.4, Fd 1.0, Py 0.8
			Fd Lw Pl Py ^{9,14,203}		2	600	300	250	2.0	
			Fd Lw	Pl Py ^{9,14,203}	3	800	400	300	2.0	
			Fd Lw	Pl Py ^{9,14,203}	4	1000	500	400	2.0	
ICHmk1	104	1065173	Fd ^{32,58} Lw ²² Pl Sx Bl ²⁰⁸		1	600	300	250	0.0	Pl Lw 2.0 Fd 1.4 Sx Bl 1.0
			Fd ^{32,58} Lw ²² Pl Sx Bl ²⁰⁸		2	800	400	300	2.0	
			Fd ^{32,58} Lw ²² Pl Sx	Bl ²⁰⁸	3	1000	500	400	2.0	
			Fd ^{32,58} Lw ²² Pl Sx	Bl ²⁰⁸	4	1200	700	600	2.0	
ICHmk1	105	1065175	Fd ⁵⁸ Lw Pl ²⁰¹ Sx ^{10,28,201} Bl ^{13,204,208} Cw ^{10,28,32}		1	600	300	250	0.0	Pl Lw 2.0, Fd 1.4, Sx Bl Cw 1.0
			Fd ⁵⁸ Lw Pl ²⁰¹ Sx ^{10,28,201} Bl ^{13,204,208} Cw ^{10,28,32}		2	800	400	300	2.0	
			Fd ⁵⁸ Lw Pl ²⁰¹ Sx ^{10,28,201}	Bl ^{13,204,208} Cw ^{10,28,32}	3	1000	500	400	2.0	
			Fd ⁵⁸ Lw Pl ²⁰¹ Sx ^{10,28,201}	Bl ^{13,204,208} Cw ^{10,28,32}	4	1200	700	600	2.0	
ICHmk1	110	1065176	Cw Fd ^{32,58} Lw ³² Sx Bl ²⁰⁸		1	600	300	250	0.0	Lw 2.0 Fd 1.4 Cw Sx Bl 0.8
			Cw Fd ^{32,58} Lw ³² Sx Bl ²⁰⁸		2	800	400	300	2.0	
			Cw Fd ^{32,58} Lw ³² Sx	Bl ²⁰⁸	3	1000	500	400	2.0	
			Cw Fd ^{32,58} Lw ³² Sx	Bl ²⁰⁸	4	1200	700	600	2.0	
ICHmk1	111	1065177	Cw ³² Sx Bl ²⁰⁸		1	600	300	250	0.0	Cw Sx Bl 0.8
			Cw ³² Sx Bl ²⁰⁸		2	800	400	300	2.0	
			Cw ³² Sx	Bl ²⁰⁸	3	1000	500	400	2.0	
			Cw ³² Sx	Bl ²⁰⁸	4	1200	700	600	2.0	
ICHmk1	112	1065178	Cw ^{1,32} Sx ¹ Bl ^{1,208}		1	400	200	200	0.0	Cw 0.8 Sx 0.8 Bl 0.8
			Cw ^{1,32} Sx ¹ Bl ^{1,208}		2	600	300	250	2.0	
			Cw ^{1,32} Sx ¹	Bl ^{1,208}	3	800	400	300	2.0	
			Cw ^{1,32} Sx ¹	Bl ^{1,208}	4	1000	500	400	2.0	
ICHxm1	101	1065263	Fd Lw Cw Pw Pl		1	600	300	250	0.0	Pw Pl Lw(2.0),Fd(1.4),Cw(1.0)
			Fd Lw Cw Pw Pl		2	800	400	300	2.0	
			Fd ⁵⁸ Lw Pw ³¹	Cw ^{28,204} Pl	3	1000	500	400	2.0	
			Fd ⁵⁸ Lw Pw ³¹	Cw ^{28,204} Pl	4	1200	700	600	2.0	
ICHxm1	102	1065259	Fd Py		1	300	150	150	0.0	Fd(0.8), Py(0.6)
			Fd Py		2	400	200	200	1.0	
			Fd Py		3	500	300	300	1.0	
			Fd Py		4	600	400	400	1.0	
ICHxm1	103	1065260	Fd Py		1	300	150	150	0.0	Fd(1.0), Py(0.8)
			Fd Py		2	400	200	200	1.0	
			Fd Py		3	500	300	300	1.0	
			Fd Py		4	600	400	400	1.0	
ICHxm1	104	1065262	Fd Lw Pw Py Pl		1	400	200	200	0.0	Pw Pl Lw(2.0), Fd(1.4), Others(1.0)
			Fd Lw Pw Py Pl		2	600	300	250	2.0	
			Fd ⁵⁸ Lw Pw ³¹ Py ^{9,14,201,203}	Pl ²⁰⁰	3	800	400	300	2.0	
			Fd ⁵⁸ Lw Pw ³¹ Py ^{9,14,201,203}	Pl ²⁰⁰	4	1000	500	400	2.0	
ICHxm1	110	1065264	Fd Cw Sx Lw Pw		1	600	300	250	0.0	Pw Lw(2.0),Fd(1.4),Others(1.0)
			Fd Cw Sx Lw Pw		2	800	400	300	2.0	
			Cw Fd ⁵⁸ Lw Pw ³¹	Sx	3	1000	500	400	2.0	
			Cw Fd ⁵⁸ Lw Pw ³¹	Sx	4	1200	700	600	2.0	
ICHxm1	111	1065265	Cw Sx Pw Fd Bl		1	600	300	250	0.0	Pw(2.0),Fd(1.4),Others(1.0)
			Cw Sx Pw Fd Bl		2	800	400	300	2.0	
			Cw ^{1,32} Pw ^{1,31} Sx ^{1,201}	Bl ²⁰⁸ Fd ¹	3	1000	500	400	2.0	
			Cw ^{1,32} Pw ^{1,31} Sx ^{1,201}	Bl ²⁰⁸ Fd ¹	4	1200	700	600	2.0	
IDFdc (use classification for IDFdK2 in LMH23)	1	1065183	Fd Pl Py Sx Lw		1	400	200	200	0.0	Pl Lw(1.0),Fd(0.4),Sx Py(0.6)
			Fd Pl Py Sx Lw		2	600	300	250	2.0	
			Fd	Pl ²⁰⁰ Py ^{14,203} Sx ^{10,13} Lw	3	800	400	300	2.0	
			Fd	Pl ²⁰⁰ Py ^{14,203} Sx ^{10,13} Lw	4	1000	500	400	2.0	
IDFdc (use classification for IDFdK2 in LMH23)	2	1065179	Fd Py		1	300	150	150	0.0	Fd(0.4), Py(0.6)
			Fd Py		2	400	200	200	1.0	
			Fd ²⁷ Py		3	500	300	300	1.0	
			Fd ²⁷ Py		4	600	400	400	1.0	
IDFdc (use classification for IDFdK2 in LMH23)	03 (very steep slopes with bluebunch wheatgrass)	1065180	Py Fd Pl		1	400	200	200	0.0	Pl(1.0), Fd(0.4), Py(0.6)
			Py Fd Pl		2	600	300	250	2.0	
			Py ^{14,27} Fd ²⁷	Pl ^{13,28}	3	800	400	300	2.0	
			Py ^{14,27} Fd ²⁷	Pl ^{13,28}	4	1000	500	400	2.0	
IDFdc (use classification for IDFdK2 in LMH23)	03 (shallow soils)	1065181	Fd Pl Py		1	400	200	200	0.0	Pl(1.0), Fd(0.4), Py(0.6)
			Fd Pl Py		2	600	300	250	2.0	
			Fd ²⁷ Py ¹⁴	Pl ²⁰⁰	3	800	400	300	2.0	
			Fd ²⁷ Py ¹⁴	Pl ²⁰⁰	4	1000	500	400	2.0	
IDFdc (use classification for IDFdK2 in LMH23)	03 (very steep slopes with pinegrass)	1065182	Fd Pl Py		1	400	200	200	0.0	Pl(1.0), Fd(0.4), Py(0.6)
			Fd Pl Py		2	600	300	250	2.0	
			Fd ²⁷ Py ¹⁴	Pl ²⁰⁰	3	800	400	300	2.0	
			Fd ²⁷ Py ¹⁴	Pl ²⁰⁰	4	1000	500	400	2.0	
IDFdc (use classification for IDFdK2 in LMH23)	5	1065185	Fd Sx Pl Cw Bl Lw		1	600	300	250	0.0	Pl Lw(1.4),Fd(0.4),Others(0.8)
			Fd Sx Pl Cw Bl Lw		2	800	400	300	2.0	
			Fd ³² Sx	Pl ^{12,200} Cw ³² Bl ²⁰⁸ Lw	3	1000	500	400	2.0	
			Fd ³² Sx	Pl ^{12,200} Cw ³² Bl ²⁰⁸ Lw	4	1200	700	600	2.0	

IDFdc (use classification for IDFdk2 in LMH23)	6	1065186	PI Sx Fd BI Cw		1	400	200	200	0.0	PI(1.0),Fd(0.4),Others(0.6)
			PI Sx Fd BI Cw		2	600	300	250	1.0	
			PI ^{1,12} Sx ¹ Fd ^{1,32}	BI ^{1,12,13} Cw ³²	3	800	400	300	1.0	
			PI ^{1,12} Sx ¹ Fd ^{1,32}	BI ^{1,12,13,208} Cw ³²	4	1000	500	400	1.0	
IDFdk1	101	1065191	Fd PI Py Sx Lw		1	400	200	200	0.0	PI Lw(1.0),Fd(0.4),Py Sx(0.6)
			Fd PI Py Sx Lw		2	600	300	250	2.0	
			Fd PI ²⁰¹	Py ^{3,14} Sx ^{10,13} Lw ²⁰³	3	800	400	300	2.0	
			Fd PI ²⁰¹	Py ^{3,14} Sx ^{10,13} Lw ²⁰³	4	1000	500	400	2.0	
IDFdk1	102	1065187	Fd PI Py		1	300	150	150	0.0	PI(1.0),Fd(0.4),Py(0.6)
			Fd PI Py		2	400	200	200	1.0	
			Fd ²⁷ PI	Py ^{3,14}	3	500	300	300	1.0	
			Fd ²⁷ PI	Py ^{3,14}	4	600	400	400	1.0	
IDFdk1	103	1065188	Fd Py PI		1	300	150	150	0.0	PI(1.0),Fd(0.4),Py(0.6)
			Fd Py PI		2	400	200	200	1.0	
			Fd ²⁷ Py ¹⁴	PI ¹³	3	500	300	300	1.0	
			Fd ²⁷ Py ¹⁴	PI ¹³	4	600	400	400	1.0	
IDFdk1	104	1065189	Fd PI Py Sx Lw		1	400	200	200	0.0	PI Lw(1.0),Fd(0.4),Others(0.6)
			Fd PI Py Sx Lw		2	600	300	250	2.0	
			Fd PI ²⁰¹	Py ^{3,14} Sx ^{10,13} Lw ²⁰³	3	800	400	300	2.0	
			Fd PI ²⁰¹	Py ^{3,14} Sx ^{10,13} Lw ²⁰³	4	1000	500	400	2.0	
IDFdk1	105	1065190	PI Fd BI Sx Lw		1	400	200	200	0.0	PI Lw(1.0),Fd(0.4),Sx(0.6)
			PI Fd BI Sx Lw		2	600	300	250	2.0	
			PI Fd ^{27,32}	BI ^{10,208} Sx ¹⁰ Lw ^{27 32 203}	3	800	400	300	2.0	
			PI Fd ^{27,32}	BI ^{10,208} Sx ¹⁰ Lw ^{27 32 203}	4	1000	500	400	2.0	
IDFdk1	111	1065192	Fd Sx BI PI Lw		1	400	200	200	0.0	PI Lw(1.0),Fd(0.4),Others(0.6)
			Fd Sx BI PI Lw		2	600	300	250	2.0	
			Fd ³² Sx	BI ^{10,13,208} PI Lw ^{32 203}	3	800	400	300	2.0	
			Fd ³² Sx	BI ^{10,13,208} PI Lw ^{32 203}	4	1000	500	400	2.0	
IDFdk2	101	1065239	Fd PI Py Sx Lw		1	400	200	200	0.0	PI Lw(1.0),Fd(0.4),Others(0.6)
			Fd PI Py Sx Lw		2	600	300	250	2.0	
			Fd PI ²⁰¹	Py ^{3,14} Sx ^{10,13} Lw ²⁰³	3	800	400	300	2.0	
			Fd PI ²⁰¹	Py ^{3,14} Sx ^{10,13,204} Lw ²⁰³	4	1000	500	400	2.0	
IDFdk2	102	1065194	Fd Py PI		1	300	150	150	0.0	PI(1.0), Fd(0.4), Py(0.6)
			Fd Py PI		2	400	200	200	1.0	
			Fd ²⁷ Py ^{3,14} PI		3	500	300	300	1.0	
			Fd ²⁷ Py ^{3,14} PI		4	600	400	400	1.0	
IDFdk2	103	1065195	Py Fd PI		1	300	150	150	0.0	PI(1.0), Fd(0.4), Py(0.6)
			Py Fd PI		2	400	200	200	1.0	
			Py ^{14,27} Fd ²⁷	PI ^{13 28}	3	500	300	300	1.0	
			Py ^{14,27} Fd ²⁷	PI ^{13 28}	4	600	400	400	1.0	
IDFdk2	104	1065196	Fd PI Py Lw		1	400	200	200	0.0	PI Lw(1.0),Fd(0.4),Py(0.6)
			Fd PI Py Lw		2	600	300	250	2.0	
			Fd ²⁷ PI ²⁰¹	Py ¹⁴ Lw ^{27 203}	3	800	400	300	2.0	
			Fd ²⁷ PI ²⁰¹	Py ¹⁴ Lw ^{27 203}	4	1000	500	400	2.0	
IDFdk2	105	1065197	PI Fd BI Sx Lw		1	400	200	200	0.0	PI Lw(1.0),Fd(0.4),Others(0.6)
			PI Fd BI Sx Lw		2	600	300	250	2.0	
			PI Fd ^{27,32}	BI ^{10,208} Sx ¹⁰ Lw	3	800	400	300	2.0	
			PI Fd ^{27,32}	BI ^{10,204,208} Sx ^{10,204} Lw ²⁰³	4	1000	500	400	2.0	
IDFdk2	110	1065240	Fd Sx PI Cw BI Lw		1	600	300	250	0.0	PI Lw(1.4),Fd(0.4),Others(0.8)
			Fd Sx PI Cw BI Lw		2	800	400	300	2.0	
			Fd ³² Sx PI ²⁰¹	Cw ³² BI ²⁰⁸ Lw ^{32 203}	3	1000	500	400	2.0	
			Fd ³² Sx PI ²⁰¹	Cw ³² BI ²⁰⁸ Lw ^{32 203}	4	1200	700	600	2.0	
IDFdk2	111	1065241	PI Sx Fd BI		1	400	200	200	0.0	PI(1.0),Fd(0.4),Others(0.6)
			PI Sx Fd BI		2	600	300	250	1.0	
			PI ^{1,12} Sx ¹ Fd ^{1,32}	BI ^{1,12,13,208} Cw ³²	3	800	400	300	1.0	
			PI ^{1,12} Sx ¹ Fd ^{1,32}	BI ^{1,12,13,208}	4	1000	500	400	1.0	
IDFdk3	01	1065247	Fd PI Sx		1	600	300	250	0.0	PI(1.4),Fd(0.4),Sx(0.8)
			Fd PI Sx		2	800	400	300	2.0	
			Fd ^{27,32} PI	Sx ^{13,28}	3	1000	500	400	2.0	
			Fd ^{27,32} PI	Sx ^{13,28}	4	1200	700	600	2.0	
IDFdk3	02	1065242	Fd PI		1	300	150	150	0.0	PI(1.0), Fd(0.4)
			Fd PI		2	400	200	200	1.0	
			Fd ²⁷ PI		3	600	300	300	1.0	
			Fd ²⁷ PI		4	800	400	400	1.0	
IDFdk3	03	1065243	Fd PI		1	300	150	150	0.0	PI(1.0), Fd(0.4)
			Fd PI		2	400	200	200	1.0	
			Fd ²⁷ PI		3	600	300	300	1.0	
			Fd ²⁷ PI		4	800	400	400	1.0	
IDFdk3	04	1065244	Fd PI		1	400	200	200	0.0	PI(1.4),Fd(0.4)
			Fd PI		2	600	300	250	2.0	
			Fd ²⁷ PI		3	800	400	300	2.0	
			Fd ²⁷ PI		4	1000	500	400	2.0	
IDFdk3	05	1065245	Fd PI		1	600	300	250	0.0	PI(1.4),Fd(0.4)
			Fd PI		2	800	400	300	2.0	
			Fd ²⁷ PI		3	1000	500	400	2.0	
			Fd ²⁷ PI		4	1200	700	600	2.0	
IDFdk3	06	1065246	Fd PI		1	600	300	250	0.0	PI(1.4),Fd(0.4)
			Fd PI		2	800	400	300	2.0	
			Fd ²⁷ PI		3	1000	500	400	2.0	
			Fd ²⁷ PI		4	1200	700	600	2.0	
IDFdk3	07	1065248	Fd PI Sx		1	600	300	250	0.0	PI(1.0),Fd(0.4),Sx(0.6)
			Fd PI Sx		2	800	400	300	2.0	
			Fd ³² PI Sx		3	1000	500	400	2.0	
			Fd ³² PI Sx		4	1200	700	600	2.0	
IDFdk3	08	1065249	Fd PI Sx		1	600	300	250	0.0	PI(1.0),Fd(0.4),Sx(0.6)
			Fd PI Sx		2	800	400	300	2.0	
			Fd ³² PI Sx		3	1000	500	400	2.0	
			Fd ³² PI Sx		4	1200	700	600	2.0	
IDFdk3	09	1065250	Sx PI		1	400	200	200	0.0	PI(1.0),Sx(0.6)
			Sx PI		2	600	300	250	1.0	
			Sx ^{1,32}	PI ¹	3	800	400	300	1.0	
			Sx ^{1,32}	PI ¹	4	1000	500	400	1.0	

IDFdm1	101	1065254	Fd Lw Pl ²⁰⁰ Py ^{3,14}		1	400	200	200	0.0	Pl Lw(1.0), Fd(0.8), Py(0.6)
			Fd Lw Pl ²⁰⁰ Py ^{3,14}		2	600	300	250	2.0	
			Fd Lw	Pl ²⁰⁰ Py ^{3,14}	3	800	400	300	2.0	
			Fd Lw	Pl ²⁰⁰ Py ^{3,14}	4	1000	500	400	2.0	
IDFdm1	102	1065251	Fd ²⁷ Py Lw		1	300	150	150	0.0	Lw (1.0),Fd(0.8),Py (0.6)
			Fd ²⁷ Py Lw		2	400	200	200	1.0	
			Fd ²⁷ Py	Lw	3	500	300	300	1.0	
			Fd ²⁷ Py	Lw	4	600	400	400	1.0	
IDFdm1	103	1065252	Fd ²⁷ Py		1	300	150	150	0.0	Fd(0.8),Py (0.6)
			Fd ²⁷ Py		2	400	200	200	2.0	
			Fd ²⁷ Py		3	500	300	300	2.0	
			Fd ²⁷ Py		4	600	400	400	2.0	
IDFdm1	104	1065253	Fd Lw Py ²⁰³ Pl ^{10,13,28,204}		1	400	200	200	0.0	Pl Lw(1.0),Fd(0.8), Py (0.6)
			Fd Lw Py ²⁰³ Pl ^{10,13,28,204}		2	600	300	250	2.0	
			Fd Lw Py ²⁰³	Pl ^{10,13,28,204}	3	800	400	300	2.0	
			Fd Lw Py ²⁰³	Pl ^{10,13,28,204}	4	1000	500	400	2.0	
IDFdm1	110.1	1065255	Fd ³² Sx Lw ³² Pl		1	600	300	250	0.0	Pl Lw(1.4),Fd(1.0),Sx(0.8)
			Fd ³² Sx Lw ³² Pl		2	800	400	300	2.0	
			Fd ³² Sx Lw ³²	Pl	3	1000	500	400	2.0	
			Fd ³² Sx Lw ³²	Pl	4	1200	700	600	2.0	
IDFdm1	110.2	1065256	Fd ³² Lw ³² Cw ³² Sx ^{10,13,201}		1	600	300	250	0.0	Cw Sx (0.8),Fd (1.0),Lw (1.4)
			Fd ³² Lw ³² Cw ³² Sx ^{10,13,201}		2	800	400	300	2.0	
			Fd ³² Lw ³² Cw ³² Sx ^{10,13,201}		3	1000	500	400	2.0	
			Fd ³² Lw ³² Cw ³² Sx ^{10,13,201}		4	1200	700	600	2.0	
IDFdm1	111	1065257	Fd ³² Lw ³² Sx Pl		1	400	200	200	0.0	Pl Lw Fd (1.0), Sx (0.8)
			Fd ³² Lw ³² Sx Pl		2	600	300	250	2.0	
			Fd ³² Lw ³² Sx	Pl	3	800	400	300	2.0	
			Fd ³² Lw ³² Sx	Pl	4	1000	500	400	2.0	
IDFdm1	112	1065258	Sx ¹ Cw ¹ 32 Pl ¹		1	400	200	200	0.0	Sx Cw (0.6), Pl 1.0
			Sx ¹ Cw ¹ 32 Pl ¹		2	600	300	250	1.0	
			Sx ¹	Cw ^{1, 32} Pl ¹	3	800	400	300	1.0	
			Sx ¹	Cw ^{1, 32} Pl ¹	4	1000	500	400	1.0	
IDFmw2	1	1065270	Fd Cw Pl Lw Pw Sx		1	600	300	250	0.0	Pl Lw(1.6),Fd(1.0),Others(0.8)
			Fd Cw Pl Lw Pw Sx		2	800	400	300	2.0	
			Fd ⁵⁸ Cw ²⁸ Pw ³¹	Pl ²⁰⁰ Lw ²⁰³ Sx ^{10,28}	3	1000	500	400	2.0	
			Fd ⁵⁸ Cw ²⁸ Pw ³¹	Pl ²⁰⁰ Lw ²⁰³ Sx ^{10,28}	4	1200	700	600	2.0	
IDFmw2	2	1065268	Fd Pl Py Pw		1	300	150	150	0.0	Pl Pw(1.2),Fd(0.8),Py(0.6)
			Fd Pl Py Pw		2	400	200	200	1.0	
			Fd Pl	Py ²⁰³ Pw ³¹	3	500	300	300	1.0	
			Fd Pl	Py ²⁰³ Pw ³¹	4	600	400	400	1.0	
IDFmw2	3	1065269	Fd Lw Pw Py Pl		1	400	200	200	0.0	Pl Pw Lw(1.6),Fd(1.0),Others(0.8)
			Fd Lw Pw Py Pl		2	600	300	250	2.0	
			Fd	Lw ²⁰³ Pw ³¹ Py ²⁰³ Pl ²⁰⁰	3	800	400	300	2.0	
			Fd	Lw ²⁰³ Pw ³¹ Py ²⁰³ Pl ²⁰⁰	4	1000	500	400	2.0	
IDFmw2	04 subhygric, no devil's club	1065271	Fd Cw Sx Pw Lw Bl Pl		1	600	300	250	0.0	Pl Pw Lw(1.6),Fd(1.0),Others(0.8)
			Fd Cw Sx Pw Lw Bl Pl		2	800	400	300	2.0	
			Fd ⁵⁸ Cw Sx	Pw ³¹ Lw ²⁰³ Bl ²⁰⁸ Pl	3	1000	500	400	2.0	
			Fd ⁵⁸ Cw Sx ^{10,13}	Pw ³¹ Lw ²⁰³ Bl ²⁰⁸ Pl	4	1200	700	600	2.0	
IDFmw2	04 moist sites with devil's club	1065272	Cw Fd Sx Hw Pw Lw Bl		1	600	300	250	0.0	Pl Pw Lw(1.6),Fd(1.0),Others(0.8)
			Cw Fd Sx Hw Pw Lw Bl		2	800	400	300	2.0	
			Cw Fd ⁵⁸ Sx	Hw Pw ³¹ Lw ³² 203 Bl ²⁰⁸	3	1000	500	400	2.0	
			Cw Fd ⁵⁸ Sx	Hw Pw ³¹ Lw ³² 203 Bl ²⁰⁸	4	1200	700	600	2.0	
IDFmw2	5	1065273	Cw Hw Sx Bl		1	400	200	200	0.0	All(0.6)
			Cw Hw Sx Bl		2	600	300	250	1.0	
			Cw ^{1,32} Hw ^{1,32} Sx ¹	Bl ¹ 208	3	800	400	300	1.0	
			Cw ^{1,32} Hw ^{1,32} Sx ¹	Bl ¹ 208	4	1000	500	400	1.0	
IDFww	1	1065277	Fd Py Pw Lw Pl Sx Cw		1	300	150	150	0.0	Fd(1.0), Lw, Pw, Pl(1.6),Others(0.8)
			Fd Py Pw Lw Pl Sx Cw		2	400	200	200	2.0	
			Fd Py	Pw ²⁸ 31 Lw ²⁰³ Pl ²⁰⁰ Sx ²⁸ Cw ²⁸	3	500	300	300	2.0	
			Fd Py	Pw ²⁸ 31 Lw ²⁰³ Pl ²⁰⁰ Sx ²⁸ Cw ²⁸	4	600	400	400	2.0	
IDFww	2	1065274	Fd Py		1	600	300	250	0.0	Fd(1.0),Py(0.8)
			Fd Py		2	800	400	300	1.0	
			Fd Py		3	1000	500	400	1.0	
			Fd Py		4	1200	700	600	1.0	
IDFww	3	1065275	Fd Py Lw Cw Sx Pl		1	600	300	250	0.0	Pl Lw(1.6),Fd(1.0),Others(0.8)
			Fd Py Lw Cw Sx Pl		2	800	400	300	2.0	
			Fd Py ^{3,14}	Pl Sx ^{10,28} Cw ^{10,28} Lw ²⁰³	3	1000	500	400	2.0	
			Fd Py ^{3,14}	Pl Sx ^{10,28} Cw ^{10,28} Lw ²⁰³	4	1200	700	600	2.0	
IDFww	4	1065276	Fd Py Pl Sx Cw Lw Pw		1	300	150	150	0.0	Pl Pw Lw(1.6),Fd(1.0),Others(0.8)
			Fd Py Pl Sx Cw Lw Pw		2	400	200	200	2.0	
			Fd Py ^{9,14}	Pw ²⁸ 31 Lw ²⁰³ Pl ²⁰⁰ Sx ²⁸ Cw ²⁸	3	500	300	300	2.0	
			Fd Py ^{9,14}	Pw ²⁸ 31 Lw ²⁰³ Pl ²⁰⁰ Sx ²⁸ Cw ²⁸	4	600	400	400	2.0	
IDFww	5	1065278	Fd Cw Pw Lw Bg		1	600	300	250	0.0	Pw, Lw(1.6),Fd(1.0),Others(0.8)
			Fd Cw Pw Lw Bg		2	800	400	300	2.0	
			Cw Fd	Pw ³¹ Lw ²⁰³	3	1000	500	400	2.0	
			Cw Fd	Pw ³¹ Lw ²⁰³	4	1200	700	600	2.0	
IDFww	6	1065279	Sx Fd Lw		1	600	300	250	0.0	Lw(1.6),Fd(1.0),Others(0.8)
			Sx Fd Lw		2	800	400	300	2.0	
			Sx Fd	Lw ¹ 203	3	1000	500	400	2.0	
			Sx Fd	Lw ¹ 203	4	1200	700	600	2.0	
IDFww	7 abundant devil's club	1065280	Sx Bl Cw		1	600	300	250	0.0	All(0.6)
			Sx Bl Cw		2	800	400	300	2.0	
			Cw Sx ¹³	Fd ¹ 32 Lw ¹ 32 203	3	1000	500	400	2.0	
			Cw Sx ¹³	Fd ¹ 32 Lw ¹ 32 203	4	1200	700	600	2.0	
IDFww	7 abundant horsetail	1065281	Cw Sx Bl		1	200	100	100	0.0	All(0.6)
			Cw Sx Bl		2	300	125	125	1.0	
			Cw ¹ Sx ¹ 13	Bl ¹ 13 208	3	300	150	150	1.0	
			Cw ¹ Sx ¹ 13	Bl ¹ 13 208	4	400	200	200	1.0	
IDFxc (use classification for IDFxh2 in LMH23)	1	1065284	Fd Py		1	400	200	200	0.0	Fd(0.4),Others(0.6)
			Fd Py		2	600	300	250	2.0	
			Fd ²⁷ Py		3	800	400	300	2.0	
			Fd ²⁷ Py		4	1000	500	400	2.0	
IDFxc (use classification for IDFxh2 in LMH23)	2	1065282	Py Fd		1	200	100	100	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	300	125	125	1.0	
			Py ²⁷ Fd ²⁷		3	300	150	150	1.0	
			Py ²⁷ Fd ²⁷		4	400	200	200	1.0	

IDFxc (use classification for IDFxh2 in LMH23)	3	1065283	Py Fd		1	200	100	100	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	300	125	125	2.0	
			Py ²⁷ Fd ²⁷		3	300	150	150	2.0	
			Py ²⁷ Fd ²⁷		4	400	200	200	2.0	
IDFxc (use classification for IDFxh2 in LMH23)	6	1065285	Fd Py		1	600	300	250	0.0	Fd(0.4),Others(0.6)
			Fd Py		2	800	400	300	2.0	
			Fd	Py	3	1000	500	400	2.0	
			Fd	Py	4	1200	700	600	2.0	
IDFxc (use classification for IDFxh2 in LMH23)	7	1065286	Fd Sx Cw		1	600	300	250	0.0	Fd(0.4),Others(0.6)
			Fd Sx Cw		2	800	400	300	2.0	
			Cw ¹⁴ Fd Sx ¹³		3	1000	500	400	2.0	
			Cw ¹⁴ Fd Sx ¹³		4	1200	700	600	2.0	
IDFxc (use classification for IDFxh2 in LMH23)	8	1065287	Sx Fd Cw		1	400	200	200	0.0	Fd(0.4), Others(0.6)
			Sx Fd Cw		2	600	300	250	1.0	
			Sx ¹ Fd ¹ Cw ^{1 32}		3	800	400	300	1.0	
			Sx ¹ Fd ¹ Cw ^{1 32}		4	1000	500	400	1.0	
IDFxh1	101	1065293	Fd Py		1	400	200	200	0.0	Fd(0.4),Others(0.6)
			Fd Py		2	600	300	250	2.0	
			Fd ²⁷ Py		3	800	400	300	2.0	
			Fd ²⁷ Py		4	1000	500	400	2.0	
IDFxh1	102	1065288	Py Fd		1	200	100	100	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	300	125	125	1.0	
			Py ²⁷ Fd ²⁷		3	300	150	150	1.0	
			Py ²⁷ Fd ²⁷		4	400	200	200	1.0	
IDFxh1	103	1065289	Py Fd		1	200	100	100	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	300	125	125	1.0	
			Py Fd		3	300	150	150	1.0	
			Py Fd		4	400	200	200	1.0	
IDFxh1	104	1065290	Py Fd		1	300	150	150	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	400	200	200	2.0	
			Py Fd ²⁷		3	500	300	300	2.0	
			Py Fd ²⁷		4	600	400	400	2.0	
IDFxh1	105	1065291	Py Fd		1	300	150	150	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	400	200	200	2.0	
			Py Fd ²⁷		3	500	300	300	2.0	
			Py Fd ²⁷		4	600	400	400	2.0	
IDFxh1	106	1065292	Py Fd		1	300	150	150	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	400	200	200	2.0	
			Py Fd ²⁷		3	500	300	300	2.0	
			Py Fd ²⁷		4	600	400	400	2.0	
IDFxh1	110	1065294	Fd Py		1	400	200	200	0.0	Fd(0.4),Others(0.6)
			Fd Py		2	600	300	250	2.0	
			Fd ²⁷	Py ⁹	3	800	400	300	2.0	
			Fd ²⁷	Py ⁹	4	1000	500	400	2.0	
IDFxh1	111.1	1065295	Fd Sx Pl		1	600	300	250	0.0	Fd(0.4) Pl(1.0),Others(0.8)
			Fd Sx Pl		2	800	400	300	2.0	
			Fd ³² Sx ¹³	Pl ¹²	3	1000	500	400	2.0	
			Fd ³² Sx ¹³	Pl ¹²	4	1200	700	600	2.0	
IDFxh1	111.2	1065296	Fd Cw Pl		1	600	300	250	0.0	Fd(0.4) Pl(1.0),Others(0.8)
			Fd Cw Pl		2	800	400	300	2.0	
			Fd Cw ^{14 32}	Pl ¹²	3	1000	500	400	2.0	
			Fd Cw ^{14 32}	Pl ¹²	4	1200	700	600	2.0	
IDFxh1	112	1065297	Sx Fd Pl Cw		1	600	300	250	0.0	Fd(0.4) Pl(1.0),Others(0.8)
			Sx Fd Pl Cw		2	800	400	300	1.0	
			Sx ¹ Fd ^{1,32}	Pl ^{1,12,50} Cw ^{1,32,50}	3	1000	500	400	1.0	
			Sx ¹ Fd ^{1,32}	Pl ^{1,12,50} Cw ^{1,32,50}	4	1200	700	600	1.0	
IDFxh2	101	1065301	Fd Py		1	400	200	200	0.0	Fd(0.4),Others(0.6)
			Fd Py		2	600	300	300	2.0	
			Fd ²⁷ Py		3	800	400	400	2.0	
			Fd ²⁷ Py		4	1000	500	500	2.0	
IDFxh2	102	1065298	Py Fd		1	200	100	100	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	300	125	125	1.0	
			Py ²⁷ Fd ²⁷		3	300	150	150	1.0	
			Py ²⁷ Fd ²⁷		4	400	200	200	1.0	
IDFxh2	103	1065299	Py Fd		1	200	100	100	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	300	125	125	2.0	
			Py Fd ²⁷		3	300	150	150	2.0	
			Py Fd ²⁷		4	400	200	200	2.0	
IDFxh2	104	1065300	Py Fd		1	300	150	150	0.0	Fd(0.4),Others(0.6)
			Py Fd		2	400	200	200	2.0	
			Py Fd ²⁷		3	500	300	300	2.0	
			Py Fd ²⁷		4	600	400	400	2.0	
IDFxh2	110	1065302	Fd Py		1	600	300	250	0.0	Fd(0.4),Others(0.6)
			Fd Py		2	800	400	300	2.0	
			Fd	Py	3	1000	500	400	2.0	
			Fd	Py	4	1200	700	600	2.0	
IDFxh2	111	1065303	Fd Py		1	600	300	250	0.0	Fd(0.4),Others(0.6)
			Fd Py		2	800	400	300	2.0	
			Fd	Py	3	1000	500	400	2.0	
			Fd	Py	4	1200	700	600	2.0	
IDFxh2	112	1065304	Fd Sx Py Cw Pl		1	600	300	250	0.0	Fd(0.4),Others(0.6)
			Fd Sx Py Cw Pl		2	800	400	300	2.0	
			Fd Sx ¹³	Py Cw ^{14 32} Pl ¹²	3	1000	500	400	2.0	
			Fd Sx ¹³	Py Cw ^{14 32} Pl ¹²	4	1200	700	600	2.0	
IDFxh2	113	1065305	Sx Fd Pl Cw		1	400	200	200	0.0	Pl(0.8),Fd(0.4), Others (0.6)
			Sx Fd Pl Cw		2	600	300	250	1.0	
			Sx ¹ Fd ^{1,32}	Pl ^{1,12,50} Cw ^{1 32 50}	3	800	400	300	1.0	
			Sx ¹ Fd ^{1,32}	Pl ^{1,12,50} Cw ^{1 32 50}	4	1000	500	400	1.0	
IDFxm	01a	1065310	Fd		1	600	300	250	0.0	Fd(0.4)
			Fd		2	800	400	300	2.0	
			Fd ^{27,28}		3	1000	500	400	2.0	
			Fd ^{27,28}		4	1200	700	600	2.0	
IDFxm	01b	1065311	Fd Pl		1	600	300	250	0.0	Fd(0.4),Others(0.8)
			Fd Pl		2	800	400	300	2.0	
			Fd ^{27,28} Pl		3	1000	500	400	2.0	
			Fd ^{27,28} Pl		4	1200	700	600	2.0	

IDFxm	02	1065306	Fd		1	400	200	200	0.0	Fd(0.4)
			Fd		2	600	300	250	1.0	
			Fd ^{27,28}		3	800	400	300	1.0	
			Fd ^{27,28}		4	1000	500	400	1.0	
IDFxm	03	1065307	Fd Pl		1	400	200	200	0.0	Pl(0.8),Fd(0.4)
			Fd Pl		2	600	300	250	2.0	
			Fd ^{27,28} Pl		3	800	400	300	2.0	
			Fd ^{27,28} Pl		4	1000	500	400	2.0	
IDFxm	04	1065308	Fd		1	400	200	200	0.0	Fd(0.4)
			Fd		2	600	300	250	2.0	
			Fd ^{27,28}		3	800	400	300	2.0	
			Fd ^{27,28}		4	1000	500	400	2.0	
IDFxm	05	1065309	Fd		1	600	300	250	0.0	Fd(0.4)
			Fd		2	800	400	300	2.0	
			Fd ²⁷		3	1000	500	400	2.0	
			Fd ²⁷		4	1200	700	600	2.0	
IDFxm	06	1065312	Fd		1	600	300	250	0.0	Fd(0.4)
			Fd		2	800	400	300	2.0	
			Fd ³²		3	1000	500	400	2.0	
			Fd ³²		4	1200	700	600	2.0	
IDFxm	07	1065313	Fd		1	600	300	250	0.0	Fd(0.4)
			Fd		2	800	400	300	2.0	
			Fd		3	1000	500	400	2.0	
			Fd		4	1200	700	600	2.0	
IDFxm	08	1065314	Fd Sx		1	600	300	250	0.0	Fd(0.4),Others(0.8)
			Fd Sx		2	800	400	300	2.0	
			Fd ³² Sx	Pl	3	1000	500	400	2.0	
			Fd ³² Sx	Pl	4	1200	700	600	2.0	
IDFxm	09	1065315	Pl Sx		1	400	200	200	0.0	Pl(0.8),Sx(0.6)
			Pl Sx		2	600	300	250	1.0	
			Pl ¹ Sx ¹		3	800	400	300	1.0	
			Pl ¹ Sx ¹		4	1000	500	400	1.0	
IDFxm	01	1065320	Fd Py		1	600	300	250	0.0	Fd(0.4) Py(0.8)
			Fd Py		2	800	400	300	2.0	
			Fd ²⁷ Py		3	1000	500	400	2.0	
			Fd ²⁷ Py		4	1200	700	600	2.0	
IDFxm	02	1065316	Fd Py		1	300	150	150	0.0	Fd(0.4) Py(0.6)
			Fd Py		2	400	200	200	1.0	
			Fd ^{27,28} Py ²⁸		3	500	300	300	1.0	
			Fd ^{27,28} Py ²⁸		4	600	400	400	1.0	
IDFxm	03	1065317	Fd Py		1	300	150	150	0.0	Fd(0.4) Py(0.6)
			Fd Py		2	400	200	200	2.0	
			Fd ^{27,28} Py ²⁸		3	500	300	300	2.0	
			Fd ^{27,28} Py ²⁸		4	600	400	400	2.0	
IDFxm	04	1065318	Fd Py		1	300	150	150	0.0	Fd(0.4) Py(0.6)
			Fd Py		2	400	200	200	2.0	
			Fd ^{27,28} Py ²⁸		3	600	300	300	2.0	
			Fd ^{27,28} Py ²⁸		4	800	500	400	2.0	
IDFxm	05	1065319	Fd		1	600	300	250	0.0	Fd(0.4)
			Fd		2	800	400	300	2.0	
			Fd ²⁷		3	1000	500	400	2.0	
			Fd ²⁷		4	1200	700	600	2.0	
IDFxm	06	1065321	Fd Sx		1	600	300	250	0.0	Fd(0.4) Sx(0.6)
			Fd Sx		2	800	400	300	2.0	
			Fd Sx		3	1000	500	400	2.0	
			Fd Sx		4	1200	700	600	2.0	
IDFxm	07	1065322	Fd Sx		1	400	200	200	0.0	Fd(0.4) Sx(0.6)
			Fd Sx		2	600	300	250	1.0	
			Fd Sx		3	800	400	300	1.0	
			Fd Sx		4	1000	500	400	1.0	
MSdm1	101	1065326	Fd ^{14,32,203} Lw ^{14,32,203} Sx BI ^{204,208} Pl ²⁰⁰		1	600	300	250	0.0	Fd (1.0), Lw Pl (1.4), Sx BI (0.8)
			Fd ^{14,32,203} Lw ^{14,32,203} Sx BI ^{204,208} Pl ²⁰⁰		2	800	400	300	2.0	
			Fd ^{14,32,203} Lw ^{14,32,203} Sx	BI ^{204,208} Pl ²⁰⁰	3	1000	500	400	2.0	
			Fd ^{14,32,203} Lw ^{14,32,203} Sx	BI ^{204,208} Pl ²⁰⁰	4	1200	700	600	2.0	
MSdm1	102	1065323	Fd Lw Py ^{9,14,203} Pl		1	300	150	150	0.0	Fd Lw Pl (1.0), Py(0.8)
			Fd Lw Py ^{9,14,203} Pl		2	400	200	200	1.0	
			Fd Lw Py ^{9,14,203}	Pl	3	500	300	300	1.0	
			Fd Lw Py ^{9,14,203}	Pl	4	600	400	400	1.0	
MSdm1	103	1065324	Fd Lw Py ^{9,14,203} Pl ²⁰⁰		1	400	200	200	0.0	Pl Lw(1.4),Fd Py(0.8)
			Fd Lw Py ^{9,14,203} Pl ²⁰⁰		2	600	300	250	2.0	
			Fd Lw Py ^{9,14,203}	Pl ²⁰⁰	3	800	400	300	2.0	
			Fd Lw Py ^{9,14,203}	Pl ²⁰⁰	4	1000	500	400	2.0	
MSdm1	104	1065325	Pl Fd ³² Lw ³² BI ²⁰⁸ Sx ²⁸		1	600	300	250	0.0	Pl Lw(1.4),Fd BI Sx(0.6)
			Pl Fd ³² Lw ³² BI ²⁰⁸ Sx ²⁸		2	800	400	300	2.0	
			Pl Fd ³² Lw ³²	BI ²⁰⁸ Sx ²⁸	3	1000	500	400	2.0	
			Pl Fd ³² Lw ³²	BI ²⁰⁸ Sx ²⁸	4	1200	700	600	2.0	
MSdm1	110	1065327	Pl ²⁰¹ Sx BI ^{201,208} Fd ^{14,32} Lw ^{14,32}		1	600	300	250	0.0	Pl Lw (1.4), Sx BI Fd (1.0)
			Pl ²⁰¹ Sx BI ^{201,208} Fd ^{14,32} Lw ^{14,32}		2	800	400	300	2.0	
			Pl ²⁰¹ Sx BI ^{201,208}	Fd ^{14,32} Lw ^{14,32}	3	1000	500	400	2.0	
			Pl ²⁰¹ Sx BI ^{201,208}	Fd ^{14,32} Lw ^{14,32}	4	1200	700	600	2.0	
MSdm1	111.1	1065328	Pl ²⁰¹ Sx BI ^{201,208} Fd ^{14,32} Lw ^{14,32}		1	600	300	250	0.0	Pl Lw (1.4), Sx BI Fd (0.8)
			Pl ²⁰¹ Sx BI ^{201,208} Fd ^{14,32} Lw ^{14,32}		2	800	400	300	2.0	
			Pl ²⁰¹ Sx BI ^{201,208}	Fd ^{14,32} Lw ^{14,32}	3	1000	500	400	2.0	
			Pl ²⁰¹ Sx BI ^{201,208}	Fd ^{14,32} Lw ^{14,32}	4	1200	700	600	2.0	
MSdm1	111.2	1065329	Cw ³² Lw ³² Sx BI ²⁰⁸ Fd ^{14,32} Pl		1	600	300	250	0.0	Pl Lw (1.4), Cw Sx BI Fd (0.8)
			Cw ³² Lw ³² Sx BI ²⁰⁸ Fd ^{14,32} Pl		2	800	400	300	2.0	
			Cw ³² Lw ³² Sx	BI ²⁰⁸ Fd ^{14,32} Pl	3	1000	500	400	2.0	
			Cw ³² Lw ³² Sx	BI ²⁰⁸ Fd ^{14,32} Pl	4	1200	700	600	2.0	

MSdm1	112	1065330	BI ^{201,208} Sx Fd ^{14,32} Lw ^{14,32} PI		1	600	300	250	0.0	PI, Lw (1.4), BI (1.0), Fd (1.0), Sx (0.8)
			BI ^{201,208} Sx Fd ^{14,32} Lw ^{14,32} PI		2	800	400	300	2.0	
			BI ^{201,208} Sx	Fd ^{14,32} Lw ^{14,32} PI	3	1000	500	400	2.0	
			BI ^{201,208} Sx	Fd ^{14,32} Lw ^{14,32} PI	4	1200	700	600	2.0	
MSdm1	113	1065331	Sx ¹ BI ^{1,201,208} PI ¹		1	400	200	200	0.0	PI (1.0), BI Sx (0.8)
			Sx ¹ BI ^{1,201,208} PI ¹		2	600	300	250	1.0	
			Sx ¹ BI ^{1,201,208}	PI ¹	3	800	400	300	1.0	
			Sx ¹ BI ^{1,201,208}	PI ¹	4	1000	500	400	1.0	
MSdm2	101	1065336	PI Sx Fd BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx Fd BI Lw		2	800	400	300	2.0	
			PI Sx Fd ^{9 14 32} BI ^{201,208}	Lw ^{9 14 32 203}	3	1000	500	400	2.0	
			PI Sx Fd ^{9 14 32} BI ^{201,208}	Lw ^{9 14 32 203}	4	1200	700	600	2.0	
MSdm2	102	1065332	PI Fd BI		1	300	150	150	0.0	PI(1.0),Others(0.6)
			PI Fd BI		2	400	200	200	1.0	
			PI Fd ¹⁴	Py ^{14 203} BI ^{13 204}	3	500	300	300	1.0	
			PI Fd ¹⁴	Py ^{14 203} BI ^{13 204 208}	4	600	400	400	1.0	
MSdm2	103	1065333	Fd PI BI Sx		1	400	200	200	0.0	PI, Lw(1.0),Others(0.6)
			Fd PI BI Sx		2	600	300	250	2.0	
			PI Fd ³²	Lw ^{32 203} Py ^{9 203} BI ^{10,13 204} Sx ^{10 13 204}	3	800	400	300	2.0	
			PI Fd ³²	Lw ^{32 203} Py ^{9 203} BI ^{10 13 204 208} Sx ^{10 13 204}	4	1000	500	400	2.0	
MSdm2	104	1065334	Fd PI Sx BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			Fd PI Sx BI Lw		2	800	400	300	2.0	
			Fd ^{9 14 32} PI Sx ^{10 13 28}	BI ^{10 13 28} Lw ^{14 32 203}	3	1000	500	400	2.0	
			Fd ^{9 14 32} PI Sx ^{10 13 28}	BI ^{10 13 28 208} Lw ^{14 32 203}	4	1200	700	600	2.0	
MSdm2	105	1065335	PI Sx BI Fd Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx BI Fd Lw		2	800	400	300	2.0	
			PI, Sx, BI ^{201,208}	Fd ^{9 14 32} Lw ^{9 14 32 203}	3	1000	500	400	2.0	
			PI, Sx, BI ^{201,208}	Fd ^{9 14 32} Lw ^{9 14 32 203}	4	1200	700	600	2.0	
MSdm2	110	1065337	PI Sx BI Lw Fd		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx BI Lw Fd		2	800	400	300	2.0	
			PI Sx BI ^{201,208}	Lw ^{9 14 32 203} Fd ^{9 14 32}	3	1000	500	400	2.0	
			PI Sx BI ^{201,208}	Lw ^{9 14 32 203} Fd ^{9 14 32}	4	1200	700	600	2.0	
MSdm2	111	1065338	PI Sx BI Fd Lw		1	600	300	250	0.0	PI(1.4), Others(0.8)
			PI Sx BI Fd Lw		2	800	400	300	2.0	
			PI Sx BI ^{201,208}	Fd ^{14,32} Lw ^{14 32 203}	3	1000	500	400	2.0	
			PI Sx BI ^{201,208}	Fd ^{14,32} Lw ^{14 32 203}	4	1200	700	600	2.0	
MSdm2	112	1065339	Sx BI PI Fd Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			Sx BI PI Fd Lw		2	800	400	300	2.0	
			Sx BI ^{201,208}	PI Fd ^{9 14 32} Lw ^{9 14 32 203}	3	1000	500	400	2.0	
			Sx BI ^{201,208}	PI Fd ^{9 14 32} Lw ^{9 14 32 203}	4	1200	700	600	2.0	
MSdm2	113	1065340	PI Sx BI		1	400	200	200	0.0	PI(1.0),Others(0.6)
			PI Sx BI		2	600	300	250	1.0	
			PI ¹ Sx ¹	BI ^{1 208R}	3	800	400	300	1.0	
			PI ¹ Sx ¹	BI ^{1 208R}	4	1000	500	400	1.0	
MSdm3 (use classification for MSdm2 in LMH23)	1	1065344	PI Sx Fd BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx Fd BI Lw		2	800	400	300	2.0	
			PI Sx Fd ^{14 32} BI ^{201,208}	Lw ^{14 32 203}	3	1000	500	400	2.0	
			PI Sx Fd ^{14 32} BI ^{201,208}	Lw ^{14 32 203}	4	1200	700	600	2.0	
MSdm3 (use classification for MSdm2 in LMH23)	3 shallow soils	1065341	PI Fd Py		1	400	200	200	0.0	PI(1.0),Others(0.6)
			PI Fd Py		2	600	300	250	1.0	
			PI Fd ¹⁴	Py ^{14 203}	3	800	400	300	1.0	
			PI Fd ¹⁴	Py ^{14 203}	4	1000	500	400	1.0	
MSdm3 (use classification for MSdm2 in LMH23)	3 deep soils	1065342	Fd PI BI Sx Py Lw		1	400	200	200	0.0	PI Lw(1.0),Others(0.6)
			Fd PI BI Sx Py Lw		2	600	300	250	2.0	
			Fd ¹⁴ PI	BI ^{10 13 204} Sx ^{10 13 204} Lw ^{32 203} Py ^{14 203}	3	800	400	300	2.0	
			Fd ¹⁴ PI	BI ^{10 13 204 208} Sx ^{10 13 204} Lw ^{32 203} Py ^{14 203}	4	1000	500	400	2.0	
MSdm3 (use classification for MSdm2 in LMH23)	4	1065343	Fd PI Sx BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			Fd PI Sx BI Lw		2	800	400	300	2.0	
			Fd ^{14 32} PI Sx ¹³	BI ¹³ Lw ^{14 32 203}	3	1000	500	400	2.0	
			Fd ^{14 32} PI Sx ¹³	BI ¹³ Lw ^{14 32 203 208}	4	1200	700	600	2.0	
MSdm3 (use classification for MSdm2 in LMH23)	5	1065345	PI Sx BI Fd Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx BI Fd Lw		2	800	400	300	2.0	
			PI Sx BI ^{201,208}	Fd ^{14,32} Lw ^{14 32 203}	3	1000	500	400	2.0	
			PI Sx BI ^{201,208}	Fd ^{14,32} Lw ^{14 32 203}	4	1200	700	600	2.0	
MSdm3 (use classification for MSdm2 in LMH23)	6	1065346	Sx BI PI Fd Lw Cw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			Sx BI PI Fd Lw Cw		2	800	400	300	2.0	
			Sx BI ^{201,208}	PI ²⁰⁰ Fd ^{14 32} Lw ^{14 32 203} Cw ³²	3	1000	500	400	2.0	
			Sx BI ^{201,208}	PI ²⁰⁰ Fd ^{14 32} Lw ^{14 32 203} Cw ³²	4	1200	700	600	2.0	
MSdm3 (use classification for MSdm2 in LMH23)	7	1065347	PI Sx BI		1	400	200	200	0.0	PI(1.0),Others(0.6)
			PI Sx BI		2	600	300	250	1.0	
			Sx ¹ BI ^{1,201,208R}	PI ^{1 200}	3	800	400	300	1.0	
			Sx ¹ BI ^{1,201,208R}	PI ^{1 200}	4	1000	500	400	1.0	
MSxk1	101a	1065353	PI Fd Sx BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Fd Sx BI Lw		2	800	400	300	2.0	
			PI Fd ^{9 14 32} Sx ^{10,13}	BI ^{10 13 208} Lw ^{9 14 32 203}	3	1000	500	400	2.0	
			PI Fd ^{9 14 32} Sx ^{10,13}	BI ^{10 13 208} Lw ^{9 14 32 203}	4	1200	700	600	2.0	
MSxk1	101b	1065350	PI Fd Py Lw		1	400	200	200	0.0	PI Lw(1.0),Others(0.6)
			PI Fd Py Lw		2	600	300	250	2.0	
			PI Fd ^{9 14 32}	Py ^{14 32 203} Lw ^{9 14 32 203}	3	800	400	300	2.0	
			PI Fd ^{9 14 32}	Py ^{14 32 203} Lw ^{9 14 32 203}	4	1000	500	400	2.0	
MSxk1	102	1065348	PI Fd Py Lw		1	400	200	200	0.0	PI Lw(1.0),Others(0.6)
			PI Fd Py Lw		2	600	300	250	1.0	
			PI Fd ^{9 14 32}	Py ^{14 203} Lw ^{9 14 32 203}	3	800	400	300	1.0	
			PI Fd ^{9 14 32}	Py ^{14 203} Lw ^{9 14 32 203}	4	1000	500	400	1.0	
MSxk1	103	1065349	PI Fd		1	400	200	200	0.0	PI (1.0),Fd (0.6)
			PI Fd		2	600	300	250	2.0	
			PI Fd ^{9 14 32}		3	800	400	300	2.0	
			PI Fd ^{9 14 32}		4	1000	500	400	2.0	

MSxk1	104	1065351	PI Sx Fd BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx Fd BI Lw		2	800	400	300	2.0	
			PI	Sx ¹³ Fd ^{14 32} BI ^{13 208} Lw ^{14 32 20}	3	1000	500	400	2.0	
			PI	Sx ¹³ Fd ^{14 32} BI ^{13 208} Lw ^{14 32 20}	4	1200	700	600	2.0	
MSxk1	105	1065352	PI Sx Fd BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx Fd BI Lw		2	800	400	300	2.0	
			PI Sx ^{10 13}	BI ^{10 13 208} Fd ^{9 14 32} Lw ^{9 14 32 20}	3	1000	500	400	2.0	
			PI Sx ^{10 13}	BI ^{10 13 208} Fd ^{9 14 32} Lw ^{9 14 32 20}	4	1200	700	600	2.0	
MSxk1	110	1065354	PI Sx BI		1	600	300	250	0.0	PI (1.4), Others(0.8)
			PI Sx BI		2	800	400	300	2.0	
			PI, Sx	BI ^{10 13 208}	3	1000	500	400	2.0	
			PI, Sx	BI ^{10 13 208}	4	1200	700	600	2.0	
MSxk1	111	1065355	PI Sx BI		1	600	300	250	0.0	PI (1.4), Others(0.6)
			PI Sx BI		2	800	400	300	2.0	
			PI, Sx	BI ²⁰⁸	3	1000	500	400	2.0	
			PI, Sx	BI ²⁰⁸	4	1200	700	600	2.0	
MSxk1	112	1065356	PI Sx BI		1	400	200	200	0.0	PI (1.0),Others(0.6)
			PI Sx BI		2	600	300	250	1.0	
			PI ¹ Sx ¹	BI ^{1 208}	3	800	400	300	1.0	
			PI ¹ Sx ¹	BI ^{1 208}	4	1000	500	400	1.0	
MSxk1	113	1065357	PI Sx BI		1	400	200	200	0.0	PI (1.0),Others(0.6)
			PI Sx BI		2	600	300	250	1.0	
			PI ¹ Sx ¹	BI ^{1 208}	3	800	400	300	1.0	
			PI ¹ Sx ¹	BI ^{1 208}	4	1000	500	400	1.0	
MSxk2	101	1065363	PI Fd Sx BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Fd Sx BI Lw		2	800	400	300	2.0	
			PI Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13} Lw ^{9 14, 32 203}	3	1000	500	400	2.0	
			PI Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13} Lw ^{9 14 32 203 208}	4	1200	700	600	2.0	
MSxk2	102	1065358	PI Fd BI		1	400	200	200	0.0	PI(1.0),Others(0.6)
			PI Fd BI		2	600	300	250	1.0	
			PI Fd ^{9,14 32}	BI ^{13 28 208 204}	3	800	400	300	1.0	
			PI Fd ^{9,14 32}	BI ^{13 28 208 204}	4	1000	500	400	1.0	
MSxk2	103	1065359	PI Fd Sx		1	400	200	200	0.0	PI(1.0),Others(0.6)
			PI Fd Sx		2	600	300	250	2.0	
			PI Fd ^{9,14 32}	Sx ^{10,13,28}	3	800	400	300	2.0	
			PI Fd ^{9,14 32}	Sx ^{10,13,28}	4	1000	500	400	2.0	
MSxk2	104	1065360	PI Fd Py Lw		1	400	200	200	0.0	PI Lw(1.0),Others(0.6)
			PI Fd Py Lw		2	600	300	250	2.0	
			PI ²⁰¹ Fd ³²	Py ^{14 203} Lw ^{9 14 32 203}	3	800	400	300	2.0	
			PI ²⁰¹ Fd ³²	Py ^{14 203} Lw ^{9 14 32 203}	4	1000	500	400	2.0	
MSxk2	105	1065361	PI Sx Fd Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx Fd Lw		2	800	400	300	2.0	
			PI	Sx ^{10,13} Fd ^{9,14, 32} Lw ^{9 14 32 203}	3	1000	500	400	2.0	
			PI	Sx ^{10,13} Fd ^{9,14, 32} Lw ^{9 14 32 203}	4	1200	700	600	2.0	
MSxk2	106	1065362	PI Sx BI Fd Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Sx BI Fd Lw		2	800	400	300	2.0	
			PI Sx ^{10, 13}	BI ^{10,13 208} Fd ^{9,14,32} Lw ^{9 14 32 203}	3	1000	500	400	2.0	
			PI Sx ^{10, 13}	BI ^{10,13 208} Fd ^{9,14,32} Lw ^{9 14 32 203}	4	1200	700	600	2.0	
MSxk2	110	1065364	PI Sx BI		1	600	300	250	0.0	PI(1.4), Others(0.8)
			PI Sx BI		2	800	400	300	2.0	
			PI Sx	BI ^{10,13 208}	3	1000	500	400	2.0	
			PI Sx	BI ^{10,13 208}	4	1200	700	600	2.0	
MSxk2	111	1065365	PI Sx BI		1	600	300	250	0.0	PI(1.4), Others(0.8)
			PI Sx BI		2	800	400	300	2.0	
			PI Sx	BI ²⁰⁸	3	1000	500	400	2.0	
			PI Sx	BI ²⁰⁸	4	1200	700	600	2.0	
MSxk2	112	1065366	PI Sx BI		1	400	200	200	0.0	PI(1.0),Others(0.6)
			PI Sx BI		2	600	300	250	1.0	
			Sx ¹	BI ^{1 208} PI ^{1 200}	3	800	400	300	1.0	
			Sx ¹	BI ^{1 208} PI ^{1 200}	4	1000	500	400	1.0	
MSxk3 (use classification for MSxk)	1	1065369	PI Fd Sx BI Lw		1	600	300	250	0.0	PI Lw(1.4), Others(0.8)
			PI Fd Sx BI Lw		2	800	400	300	2.0	
			PI Fd ^{9,14,32} Sx ^{10,13 28 204}	BI ^{10 13 204} Lw ^{9 14 32 203}	3	1000	500	400	2.0	
			PI Fd ^{9,14,32} Sx ^{10,13 28 204}	BI ^{10 13 204 208} Lw ^{9 14 32 203}	4	1200	700	600	2.0	
MSxk3 (use classification for MSxk)	2	1065367	PI Fd BI		1	400	200	200	0.0	PI(1.0),Others(0.6)
			PI Fd BI		2	600	300	250	1.0	
			PI Fd ^{9,14}	BI ^{10 13 208}	3	800	400	300	1.0	
			PI Fd ^{9,14}	BI ^{10 13 204 208}	4	1000	500	400	1.0	
MSxk3 (use classification for MSxk)	5	1065368	PI Fd BI Sx Py Lw		1	400	200	200	0.0	PI Lw(1.0),Others(0.6)
			PI Fd BI Sx Py Lw		2	600	300	250	2.0	
			PI Fd ^{9,14 32}	BI ^{10 13 28 204} Sx ^{10 13 28 204} Py ^{9 14 32 203} Lw ^{9 14 32 203}	3	800	400	300	2.0	
			PI Fd ^{9,14 32}	BI ^{10 13 28 204 208} Sx ^{10 13 28 204} Py ^{9 14 32 203} Lw ^{9 14 32 203}	4	1000	500	400	2.0	
MSxk3 (use classification for MSxk)	6	1065370	PI Sx BI Fd		1	600	300	250	0.0	PI(1.4), Others(0.8)
			PI Sx BI Fd		2	800	400	300	2.0	
			PI, Sx BI ^{201 208}	Fd ^{14,32}	3	1000	500	400	2.0	
			PI, Sx BI ^{201 208}	Fd ^{14,32}	4	1200	700	600	2.0	
MSxk3 (use classification for MSxk)	8	1065371	PI Sx BI		1	600	300	250	0.0	PI(1.4), Others(0.8)
			PI Sx BI		2	800	400	300	2.0	
			Sx BI ^{201 208}	PI ²⁰⁰	3	1000	500	400	2.0	
			Sx BI ^{201 208}	PI ²⁰⁰	4	1200	700	600	2.0	
MSxk3 (use classification for MSxk)	9	1065372	PI Sx BI		1	400	200	200	0.0	PI(1.0),Others(0.6)
			PI Sx BI		2	600	300	250	1.0	
			Sx ¹	BI ^{1 208} PI ^{1 200}	3	800	400	300	1.0	
			Sx ¹	BI ^{1 208} PI ^{1 200}	4	1000	500	400	1.0	
PPxh1	101	1065376	Py Fd		1	200	100	100	0.0	All(0.6)
			Py Fd		2	300	125	125	2.0	
			Py Fd ²⁷		3	300	150	150	2.0	
			Py Fd ²⁷		4	400	200	200	2.0	
PPxh1	102	1065373	Py Fd		1	200	100	100	0.0	All(0.6)
			Py Fd		2	300	125	125	1.0	
			Py ²⁷	Fd ²⁷	3	300	150	150	1.0	
			Py ²⁷	Fd ²⁷	4	400	200	200	1.0	

PPxh1	103	1065374	Py Fd		1	200	100	100	0.0	All(0.6)
			Py Fd		2	300	125	125	2.0	
			Py ²⁷	Fd ²⁷	3	300	150	150	2.0	
			Py ²⁷	Fd ²⁷	4	400	200	200	2.0	
PPxh1	104	1065375	Py Fd		1	200	100	100	0.0	All(0.6)
			Py Fd		2	300	125	125	2.0	
			Py ²⁷ Fd ²⁷		3	300	150	150	2.0	
			Py ²⁷ Fd ²⁷		4	400	200	200	2.0	
PPxh1	110	1065377	Fd Py		1	300	150	150	0.0	All(0.6)
			Fd Py		2	400	200	200	2.0	
			Fd Py		3	500	300	300	2.0	
			Fd Py		4	600	400	400	2.0	
PPxh1	111	1065378	Fd Py		1	400	200	200	0.0	All(0.6)
			Fd Py		2	600	300	250	2.0	
			Fd Py		3	800	400	300	2.0	
			Fd Py		4	1000	500	400	2.0	
PPxh2	101	1065382	Py Fd		1	200	100	100	0.0	All(0.6)
			Py Fd		2	300	125	125	1.0	
			Py Fd ²⁷		3	300	150	150	1.0	
			Py Fd ²⁷		4	400	200	200	1.0	
PPxh2	102	1065379	Py Fd		1	200	100	100	0.0	All(0.6)
			Py Fd		2	300	125	125	1.0	
			Py ²⁷ Fd ²⁷		3	300	150	150	1.0	
			Py ²⁷ Fd ²⁷		4	400	200	200	1.0	
PPxh2	103a, 103b	1065380	Py Fd		1	200	100	100	0.0	All(0.6)
			Py Fd		2	300	125	125	2.0	
			Py ²⁷ Fd ²⁷		3	300	150	150	2.0	
			Py ²⁷ Fd ²⁷		4	400	200	200	2.0	
PPxh2	110.1	1065383	Fd Py		1	300	150	150	0.0	All(0.6)
			Fd Py		2	400	200	200	2.0	
			Fd	Py	3	500	300	300	2.0	
			Fd	Py	4	600	400	400	2.0	
PPxh2	110.2	1065384	Fd Py		1	300	150	150	0.0	All(0.6)
			Fd Py		2	400	200	200	2.0	
			Fd	Py	3	500	300	300	2.0	
			Fd	Py	4	600	400	400	2.0	
PPxh2	111	1065385	Fd Py		1	300	150	150	0.0	All(0.6)
			Fd Py		2	400	200	200	2.0	
			Fd	Py	3	500	300	300	2.0	
			Fd	Py	4	600	400	400	2.0	

Footnotes applicable to Appendix J-1 and J-2 for Okanagan Shuswap Resource District FDUs

Conifer Tree Species	Footnote #	Footnote #	Footnote #	Footnote
"Ba" means amabilis fir;	*	Avoid Logging	49	retired November 2010
"Bg" means grand fir;	1	suitable on elevated microsites	50	restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
"Bl" means subalpine fir;	2	retired July 2017		retired July 2017
"Bp" means noble fir;	3	suitable on coarse-textured soils	51	suitable on sheltered microsites with deep soil
"Cw" means western red cedar;	4	suitable on medium-textured soils	52	minor component
"Fd" means Douglas-fir;	5	footnote retired	53	retired July 2017
"Hm" means mountain hemlock;	6	suitable on nutrient-very-poor sites	54	retired July 2017
"Hw" means western hemlock;	7	suitable on nutrient-medium sites	55	retired July 2017
"Lt" means tamarack;	8	suitable on steep slopes	#	Broadleaf Management Constraints
"Lw" means western larch;	9	suitable on warm aspects	a	productive, reliable, and feasible regeneration option
"Pa" means whitebark pine;	10	suitable on cool aspects	b	limited in productivity, reliability and/or feasibility
"Pl" means lodgepole pine;	11	suitable on crest slope positions	#	Localized Footnotes
"Pw" means white pine;	12	suitable on cold air drainage sites		retired July 2017
"Py" means ponderosa pine;	13	suitable at upper elevations		retired November 2010
"Sb" means black spruce;	14	suitable at lower elevations	56	South Area - Fd limited to a max 50% of preferred and acceptable well-spaced stems in the IDFmw and all subzones of the ICH due to root rot. See Root Rot Handbook for management issues (FLNRORD 2018).
"Se" means Engelmann spruce;	15	suitable in the northern portion of biogeoclimatic unit	57	Prince George region - max 1,400 total sph of aspen and cottonwood. Treat as 'ghost' trees in surveys.
"Ss" means sitka spruce;	16	suitable in the southern portion of biogeoclimatic unit	58	retired July 2017
"Sw" means white spruce;	17	suitable in the western portion of biogeoclimatic unit		retired July 2017
"Sx" means hybrid spruce or interior spruce;	18	suitable in the eastern portion of biogeoclimatic unit		retired November 2010
"Sxs" means hybrid sitka spruce;	19	retired July 2017		retired July 2017
"Sxw" means hybrid white spruce;	20	retired July 2017	59	Mackenzie forest district - may be preferred where risk of snow damage is low or risk of frost damage is excessive on spruce.
"Yc" means yellow cedar.	21	retired July 2017		retired July 2017
Broadleaf Tree Species	22	suitable in the southern Gardner Canal-Kitlope area	60	retired July 2017
"Acb" means balsam poplar;	23	retired July 2017	61	retired July 2017
"Act" means black cottonwood;	24	suitable in wetter portion of biogeoclimatic unit	62	retired November 2010
"At" means trembling aspen;	25	retired July 2017	63	retired July 2017
"Dr" means red alder;	26	suitable minor species on nutrient poor sites	66	
"Ep" means common paper birch;	27	partial high-canopy shade required for successful establishment	67	
"Mb" means bigleaf maple;	28	limited by moisture deficit	68	
"Qg" means garry oak;	29	risk of heavy browsing by moose	69	suitable at upper elevations of the biogeoclimatic unit only when used in the southern portion of the biogeoclimatic unit
"Ra" means arbutus.	30	retired November 2010		retired July 2017
"Biogeoclimatic unit" or "BGC classification"	31	must use of blister rust resistant stock. See BC Journal of Ecosystems and Management 10(1): 97-100 for supplementary information.	70	
means the zone, subzone, variant and site series described in the most recent field guide published by the Ministry of Forests for the identification and interpretation of ecosystems, as applicable to a harvested area.	32	limited by growing-season frosts	200	PI can be moved from Acceptable to Preferred, to the extent specified below, only on sites where there is a low risk of damage from forest health factors:
	33	footnote retired and replaced with footnote 'a'		• where there is > 50% PI in the pre-harvest stand, PI can be moved to preferred;
	34	risk of snow damage		• where there is 25-50% PI in the pre-harvest stand, PI can be moved to preferred to a maximum of 50% well-spaced stems.
	35	use resistant stock to mitigate risk of spruce weevil damage - See Ss Weevil Decision Tool: http://pubs.cif-ifc.org/doi/abs/10.5558/tfc2013-042		For areas with less than 25% PI in the pre-harvest stand, or where risk of damage from forest health factors is moderate or high, PI remains acceptable.
"MIN" or "Min" means minimum.	36	retired July 2017		maximum 50% of preferred and acceptable well-spaced trees
	37	retired November 2010	201	no advance regeneration in even aged stand management
"p" means Preferred, "a" means Acceptable.	38	footnote retired	202	recommended on sites for climate change adaptation
	39	retired July 2017	203	not recommended due to climate change concerns
	40	risk of redheart damage in areas subject to cold winter outflow winds	204	limited by cold temperatures
	41	limited by poorly drained soils	205	plant on exposed mineral soils
	42	suitable on sites with a fresh soil moisture regimes	206	obstacle planting recommended
	43	retired July 2017	207	In addition to the free growing damage criteria, BI advanced regeneration can be counted as well-spaced only where it meets the following criteria at free growing in even aged management:
	44	suitable in areas of the subzone variant with relatively strong maritime influence	208	• apical dominance > 1 (as measured by comparing ratio of leader height to length of most recent branch whorl) at free growing;
	45	suitable in areas of the subzone variant with relatively strong continental influence		• 75% live crown;
	46	use resistant seedlot south of the Dean Channel		• no scars, forks, crooks, or sweeps, and;
	47	risk of balsam wooly adelgid within quarantine area see http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/insects-and-plant-diseases/nursery-and-ornamentals/balsam-woolly-adelgid		• where it is < 1.5 m ht at time of harvest.
	48	risk of browsing by deer		

Appendix K: Stocking Standard Reference Tables for the Selkirk Natural Resource District (including Cascadia TSA, Golden TSA, Revelstoke TSA, TFL 55 and TFL 56)

Even-aged Stocking Standards for the Selkirk Natural Resource District										
Grey shaded cells displaying "Okanagan" in the BGC Classification column apply only to Harvest Authority areas within the Okanagan Shuswap Natural Resource District that were approved prior to the effective date of FSP Amendment #6.										
BGC		ID #	Regeneration					Free Growing		
Classification			Species	Stocking(i)				Height		
Zone/SZ/Variant	Series	ID #	Conifer		Target	MIN pa	MIN p	Regen Date (yrs)	Species	Height (m)
			Preferred (p)	Acceptable (a)						
ESSFdc1 Okanagan	01	1059596	PI Se	BI	1200	700	600	4	PI	1.6
									Others	0.8
	02	1059597	PI	BI ¹³ Se	1000	500	400	7	PI	1.2
									Others	0.6
	03	1059598	PI	BI ¹³ Se	1000	500	400	4	PI	1.2
									Others	0.6
	04	1059599	PI Se	BI	1200	700	600	4	PI	1.6
ESSFdc2 Okanagan									Others	0.8
	05	1059600	PI Se	BI ^{10,13}	1000	500	400	4	PI	1.2
									Others	0.6
	06	1059601	PI ¹ Se ^{1,32}	BI ^{1,32}	1000	500	400	4	PI	1.2
									Others	0.6
	01	1059602	PI Se	BI	1200	700	600	4	PI	1.6
									Others	0.8
ESSFdc2 Okanagan	02*	-	-	-	-	-	-	-	-	-
	03	1059603	PI	BI ¹³ Se	1000	500	400	4	PI	1.2
									Others	0.6
	04	1059604	PI	BI ¹³ Se	1000	500	400	4	PI	1.2
									Others	0.6
	05	1059753	PI Se	BI ^{10,13}	1000	500	400	4	PI	1.2
									Others	0.6
ESSFdc2 Okanagan	06	1059605	PI Se	BI	1200	700	600	4	PI	1.6
									Others	0.8
	07	1059606	PI Se ³²	BI	1200	700	600	4	PI	1.6
									Others	0.8
	08	1059607	PI ¹ Se ^{1,32}	BI ^{1,32}	1000	500	400	4	PI	1.2
									Others	0.6

ESSFdk Columbia	01, 03, 04	1059754	PI Sx Fd ¹⁴ Lw ¹⁴	BI	1200	700	600	4	PI, Lw	1.6
	02	1059755	Fd ^{9,14} Lw ^{9,14} PI	Sx	1000	500	400	4	Fd	1.0
	05, 06	1059756	BI ³² PI Sx ³²		1200	700	600	4	Others	0.8
ESSFvc Okanagan	01	1059608	BI Se	Hm	1200	700	600	4	PI, Lw	1.2
	02	1059609	Se	BI Hm	1000	500	400	4	Fd	0.8
	03	1059610	BI Se	Hm	1000	500	400	4	Others	0.6
	04	1059611	BI Se	Hm	1200	700	600	4	PI	1.6
	05	1059612	BI ^{1,32} Se ^{1,32}	Hm ¹	1000	500	400	4	Others	0.8
ESSFvc Columbia	01, 04	1059757	Sx BI Hm ^{71,34}		1200	700	600	4	All	0.8
	02, 03, 05	1059758	Sx BI Hm ^{71,34}		1000	500	400	4	All	0.6
ESSFvv Okanagan	01	1059613	BI ³² Se ³²	Hm	1200	700	600	4	All	0.8
	02	1059614	BI ³² Se ³²	Hm	600	400	400	7	All	0.6
	03	1059615	BI ³² Se ³²	Hm	1000	500	400	7	All	0.6
	04	1059616	BI ³² Se ³²	Hm	600	400	400	4	All	0.6
ESSFwc1 Columbia	01, 03, 04	1059759	BI Sx PI ^{23,34}	Cw ^{9,32} Hm Hw ^{9,32}	1200	700	600	4	PI	1.6
	02	1059760	PI ³⁴ Sx BI	Cw ⁵⁵ Hm Hw	1000	500	400	4	Others	0.8
ESSFwc2 Okanagan	01	1059617	BI Se		1200	700	600	4	PI	1.2
	02	1059618	Se ^{10,13}	BI ^{10,13,14}	1000	500	400	4	Others	0.6
	03	1059619	Se	BI ^{10,13,14}	1000	500	400	4	PI	1.6
	04	1059620	BI Se		1200	700	600	4	Others	0.6
	05	1059621	BI Se		1200	700	600	4	All	0.8
	06	1059622	BI ³² Se ³²		1200	700	600	4	All	0.8
	07	1059623	BI ³² Se ³²		1200	700	600	4	All	0.8
	08	1059624	BI ^{1,32} Se ^{1,32}		1000	500	400	4	All	0.6
	09	1059625	PI ¹ Se ^{1,32}	BI ^{1,32}	400	200	200	4	All	0.6

ESSFwc2 Columbia	01, 04, 05	1059761	BI Sx	PI ^{23,34} Hm	1200	700	600	4	PI	1.6
									Others	0.8
	02	1059762	PI Sx ^{10,13}	BI ¹⁰ Hm	1000	500	400	4	PI	1.2
									Others	0.6
	03	1059763	BI Sx PI ^{23,34}	Hm	1000	500	400	4	PI	1.2
									Others	0.6
	06, 07	1059764	Sx ³² BI ³² PI ^{23,34}	Hm	1200	700	600	4	PI	1.8
									Others	0.8
	08	1059765	BI ^{1,32} Sx ^{1,32} PI ^{23,34}	Hm	1000	500	400	4	PI	1.2
									Others	0.6
	09*	1059766	PI ¹ Sx ^{1,32}	BI ^{1,32} Hm	400	200	200	4	PI	1.2
									Others	0.6
ESSFwc4 Okanagan	01	1059626	BI Se	PI ³⁴	1200	700	600	4	PI	1.6
									Others	0.8
	02	1059627	Se PI ³⁴	BI	1000	500	400	4	PI	1.2
									Others	0.6
	03	1059628	Se BI	PI ³⁴	1000	500	400	4	PI	1.2
									Others	0.6
	04	1059629	Se BI	PI ³⁴	1200	700	600	4	PI	1.6
									Others	0.8
	05	1059630	BI Se		1200	700	600	4	All	0.8
	06	1059631	BI ^{1,32} Se ^{1,32}		1200	700	600	4	All	0.8
	07	1059632	Se ¹ BI ¹	PI ^{1,34}	1000	500	400	4	PI	1.2
									Others	0.6
ESSFwc4 Columbia	01, 04, 05	1059767	BI Sx PI ^{23,34}	Hm	1200	700	600	4	PI	1.6
									Others	0.8
	02, 03	1059768	Sx PI ^{23,34}	Hm	1000	500	400	4	PI	1.2
			BI ⁵⁴ (02 Only)						Others	0.6
	06	1059769	Sx ^{1,32} BI ^{1,32}	Hm	1200	700	600	4	All	0.8
	07	1059770	Sx ¹ BI ¹	Hm	1000	500	400	4	PI	1.2
			PI ^{1,23,34}						Others	0.6
ESSFwm Columbia	01	1059771	BI Sx Fd ¹⁴ Lw ¹⁴	PI ³⁴	1200	700	600	4	Lw, PI	2.0
									Others	1.0
	02	1059772	Sx PI ³⁴	BI Hw ¹⁴	1200	700	600	4	PI	2.0
									Others	1.0
	03	1059773	Fd ^{9,32} Lw ^{9,32} Sx	BI PI ³⁴ Hw PW ^{9,31,32,57}	1200	700	600	4	Lw, PI, Pw	2.0
									Fd	1.4
									Others	1.0

ESSFwm Columbia (cont'd)	04	1059774	BI Sx	PI ³⁴ Hw ¹⁴	1200	700	600	4	PI	2.0
									Others	1.0
ESSFxc Okanagan	01	1059633	PI Se ³²	BI ^{10,13}	1200	700	600	4	PI	1.6
									Others	0.8
	02	1059634	PI	BI ¹³ Se	600	400	400	7	PI	1.2
									Others	0.6
	05	1059635	PI	BI ¹³ Se	1000	500	400	7	PI	1.2
									Others	0.6
	06	1059636	PI Se	BI ¹³	1200	700	600	7	PI	1.6
									Others	0.8
	07	1059637	PI Se ³²	BI ³²	1200	700	600	4	PI	1.6
									Others	0.8
	08	1059638	PI ¹ Se ^{1,32}	BI ^{1,32}	1000	500	400	4	PI	1.2
									Others	0.6
ICHmk1 Okanagan	01	1059639	Fd ^{14,32} Lw ^{14,32} PI Sx ^{10,13}	BI ^{10,13} Cw ^{10,13,32}	1200	700	600	4	PI, Lw	2.0
									Fd	1.4
									Others	1.0
	02	1059640	Fd PI	BI ^{10,13} Sx ^{10,13}	600	400	400	4	PI	1.4
									Fd	1.0
									Others	0.8
	03	1059641	Fd Lw PI Sx ^{10,13}	BI ^{10,13} Cw ^{10,13}	1000	500	400	4	PI, Lw	1.4
									Fd	1.0
									Others	0.8
	04	1059642	Fd ³² Lw ³² PI Sx ^{10,13}	BI ^{10,13} Cw ^{10,13,32}	1200	700	600	4	PI, Lw	2.0
									Fd	1.4
									Others	1.0
	05	1059643	PI Sx Fd ^{9,14,32} Lw ^{9,14,32}	BI Cw ³²	1200	700	600	4	PI, Lw	2.0
									Fd	1.4
									Others	1.0
	06	1059644	PI Sx Fd ^{9,14,32} Lw ^{9,14,32}	BI Cw ³²	1200	700	600	4	PI, Lw	2.0
									Fd	1.4
									Others	1.0
	07	1059645	PI ¹ Sx ¹ Fd ^{1,32} Lw ^{1,32}	BI ¹ Cw ³²	1000	500	400	4	PI, Lw	1.4
									Fd	1.0
									Others	0.8

ICHmk1 Columbia	01	1059775	Fd ^{9,14,32} Lw ^{9,14,32} PI ^{10,13} Sx ^{10,13}	BI ^{10,13} Cw ^{10,13,32}	1200	700	600	4	PI, Lw 2.0 Fd 1.4 Others 1.0
	02	1059776	Fd PI	Sx ^{10,13} BI ^{10,13} Py ^{9,14}	600	400	400	4	PI 1.4 Fd 1.0 Others 0.8
	03	1059777	Fd Lw PI Sx ^{10,13}	Cw ^{10,13} BI ^{10,13}	1000	500	400	4	PI, Lw 1.4 Fd 1.0 Others 0.8
	04	1059778	Fd ³² Lw ³² PI Sx ^{10,13}	BI ^{10,13} Cw ^{10,13,32}	1200	700	600	4	PI, Lw 2.0 Fd 1.4 Others 1.0
	05, 06	1059779	PI Sx Fd ^{9,14,32}	BI Lw ^{9,14,32} Cw ³²	1200	700	600	4	PI, Lw 2.0 Fd 1.4 Others 1.0
	07	1059780	PI ¹ Sx ¹ Fd ^{1,32}	BI ¹ Cw ³² Lw ^{1,32}	1000	500	400	4	PI, Lw 1.4 Fd 1.0 Others 0.8
ICHmk2 Okanagan	01	1059646	Fd PI Sx Lw ^{9,14,32}	BI ^{10,13} Cw	1200	700	600	4	PI, Lw 2.0 Fd 1.4 Sx 0.8 Others 1.0
	02	1059647	Fd PI	BI ^{10,13}	600	400	400	4	PI 2.0 Fd 1.4 Others 1.0
	03	1059648	Fd PI Sx ^{10,13} Lw	BI ^{10,13} Cw ^{10,13}	1000	500	400	4	PI 2.0 Fd 1.4 Others 1.0
	04	1059649	Fd PI Lw Sx	BI ^{10,13} Cw ^{10,13}	1200	700	600	4	PI, Lw 2.0 Fd 1.4 Sx 0.8 Others 1.0
	05	1059650	Fd ^{9,14,32} PI Sx	BI ¹³ Cw ³²	1200	700	600	4	PI 2.0 Fd 1.4 Others 1.0
	06	1059651	PI ¹ Sx ¹ Fd ^{1,32}	BI ¹ Cw ³²	1000	500	400	4	PI 1.4 Fd 1.0 Others 0.8

ICHmw1 Columbia	01	1059781	Fd PI Cw Sx Lw ²³ Hw ⁷¹	BI Pw ^{31,57}	1200	700	600	4	PI, Lw 2.0 Fd, Pw 1.4 Others 1.0
	02, 04	1059782	Fd PI Lw ²³	Cw ²⁸ Sx ²⁸ BI ²⁸ Hw ²⁸ Pw ^{31,57}	1200	700	600	4	PI, Lw 2.0 Fd, Pw 1.4 Others 1.0
	03	1059783	Fd PI Hw ⁷¹ Sx ^{10,13,28} Lw ²³ Cw ²⁸	BI ²⁸ Pw ^{31,57}	1200	700	600	4	PI, Lw 2.0 Pw, Fd 1.4 Others 1.0
	05	1059784	Cw ³² Fd ^{1,32} Hw ³² Sx Lw ^{9,14,23}	BI PI Pw ^{1,31,57}	1200	700	600	4	PI, Lw 2.0 Fd, Pw 1.4 Others 1.0
	06	1059785	Cw Fd ^{9,14} BI Hw Sx Lw ^{9,14,23}	PI Pw ^{31,57}	1200	700	600	4	PI, Lw, Pw 2.0 Fd 1.4 Others 1.0
	07	1059821	Cw Hw Sx Fd ¹⁴	BI PI	1000	500	400	4	PI 1.4 Fd 1.0 Others 0.8
ICHmw2 Okanagan	01	1059652	Fd Lw Sx ^{10,13} Pw ³¹	Hw Cw PI ⁵¹ Py ^{9,14,23}	1200	700	600	4	PI,Pw,Lw 2.0 Fd 1.4 Others 1.0
	02	1059653	Fd Lw PI ⁵¹ Py ^{9,14,23}	Cw Pw ³¹ Sx ^{10,13}	1200	700	600	4	PI,Pw,Lw 2.0 Fd 1.4 Others 1.0
	03	1059653	Fd Lw PI ⁵¹ Py ^{9,14,23}	Cw Pw ³¹ Sx ^{10,13}	1200	700	600	4	PI, Pw, Lw 2.0 Fd 1.4 Others 1.0
	04	1059654	Cw Fd ¹⁴ Hw Lw ¹⁴ Sx Pw ³¹	BI PI ⁵¹	1200	700	600	4	PI, Pw, Lw 2.0 Fd 1.4 Others 1.0
	05	1059655	Cw ³² Sx Fd ^{1,32} Pw ³¹ Lw ^{1,32}	BI Hw ³² PI ⁵¹	1200	700	600	4	PI, Pw, Lw 2.0 Fd 1.4 Others 1.0
	06	1059656	Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1,32} Pw ^{1,31}	1000	500	400	4	PI, Pw 1.4 Others 0.8
	07	1059657	Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1, 32}	1000	500	400	4	PI 1.4 Others 0.8

ICHmw2 Columbia	01, 04	1059786	Fd Lw Pl ⁷¹ Sx Cw Hw	Pw ^{31,57} Bl ^{10,13} Py ^{9,14,23}	1200	700	600	4	Pl, Lw, Pw 2.0 Fd 1.4 Others 1.0
	03	1059787	Fd Lw Pl Cw	Pw ^{31,57} Bl ^{10,13} Sx ^{10,13} Hw Py ^{9,14,23}	1200	700	600	4	Pl, Lw, Pw 2.0 Fd 1.4 Others 1.0
	05	1059788	Cw Sx Hw Pl ⁷¹ Fd ^{9,14} Lw ^{9,14}	Bl Pw ^{31,57} Py ^{14,23}	1200	700	600	4	Pl, Lw, Pw 2.0 Fd 1.4 Others 1.0
	06	1059789	Cw ³² Sx Pl ⁷¹ Fd ^{1,32} Lw ^{1,32} Hw ³²	Bl Pw ^{31,57} Py ^{14,23}	1200	700	600	4	Pl, Lw, Pw 2.0 Fd 1.4 Others 1.0
	07, 08	1059790	Cw ^{1,32} Hw ^{1,32} Sx ¹ Fd ²³	Bl ¹ Pl ¹ Pw ^{1,31,57}	1000	500	400	4	Pl, Pw 1.4 Others 0.8
ICHmw3 Okanagan	01	1059659	Fd Lw Cw ^{10,13} Sx ^{10,13} Pw ³¹	Hw ^{10,13}	1200	700	600	4	Pl, Pw, Lw 2.0 Fd 1.4 Others 1.0
	02	1059660	Fd Lw	Cw ^{10,13} Pw ³¹ Pl ⁵¹	1000	500	400	4	Lw,Pl,Pw 1.4 Fd 1.0 Py 0.8
	03	1059661	Fd Lw ³²	Cw Bl ^{10,13} Pw ³¹ Pl ⁵¹ Sx ^{10,13}	1000	500	400	4	Pl, Pw, Lw 1.4 Fd 1.0 Others 0.8
	04	1059662	Fd Sx ^{10,13} Lw Pw ³¹	Pl ⁵¹ Cw ^{10,13}	1200	700	600	4	Pl, Pw, Lw 2.0 Fd 1.4 Others 1.0
	05	1059663	Fd Cw ^{10,13} Sx ^{10,13} Pw ³¹		1200	700	600	4	Pl, Pw, Lw 2.0 Fd 1.4 Others 1.0
	06	1059664	Cw Fd ¹⁴ Hw Sx Pw ³¹	Bl	1200	700	600	4	Pl, Pw, Lw 2.0 Fd 1.4 Others 1.0
	07	1059665	Cw ³² Sx Fd ^{1,32} Pw ³¹	Bl Hw ³²	1200	700	600	4	Pl, Pw, Lw 2.0 Fd 1.4 Others 1.0
	08	1059666	Cw ^{1,32} Hw ^{1,32} Sx ¹	Bl Pw ³¹ Pl ^{1,51}	1000	500	400	4	Pl 1.4 Other 0.8

ICHmw3 Columbia	01, 04, 05, 06	1059791	Fd PI ⁷¹ Lw ²³ Cw ^{10,13} Sx ^{10,13} Hw ^{10,13}	Pw ^{31,57} BI	1200	700	600	4	PI, Lw 2.0 Fd, Pw 1.4 Others 1.0
	02	1059792	Fd PI Lw ²³	Py ^{9,14,23} Pw ^{31,57}	1000	500	400	4	PI, Lw, Pw 1.4 Fd 1.0 Py 0.8
	03	1059793	Cc ³² PI Lw ^{23,32} Hw ²³ Cw ^{10,13}	Pw ^{31,57} Sx ^{10,13} BI ^{10,13}	1000	500	400	4	PI, Lw, Pw 1.4 Fd 1.0 Others 0.8
	06	1059794	Fd ¹⁴ PI ⁷¹ Lw ²³ Cw Sx Hw	Pw ^{31,57} BI	1200	700	600	4	PI, Lw, Pw 2.0 Fd 1.4 Others 1.0
	07	1059795	Cw ³² Sx Hw ³² Fd PI ⁷¹	BI Pw ^{31,57} Lw ^{1,23,32}	1200	700	600	4	PI, Lw, PI 2.0 Fd 1.4 Others 1.0
	08	1059796	Cw ^{1,32} Hw ^{1,32} Sx ¹ PI ¹	BI ¹ Pw ⁵⁷	1000	500	400	4	PI, Pw 1.4 Others 0.8
ICHvk1 Okanagan	01	1059667	Cw ³² Sx Pw ³¹	BI Fd ^{1,14,32,34,70} Hw ³²	1200	700	600	4	Pw 2.0 Fd 1.4 Others 1.0
	02	1059668	Cw Fd ⁹ Sx Pw ³¹	BI Hw	1200	700	600	4	Pw 2.0 Fd 1.4 Others 1.0
	03	1059669	Cw Fd ^{9,14,34} Hw Sx Pw ³¹	BI ^{10,13}	1200	700	600	4	Pw 2.0 Fd 1.4 Others 1.0
	04	1059670	Cw Fd ^{14,34,70} Hw Sx Pw ³¹	BI ¹³	1200	700	600	4	Pw 2.0 Fd 1.4 Others 1.0
	05	1059671	Cw ^{1,32} Sx ¹	BI ¹ Pw ^{1,31} Yc ²³ Hw ^{1,32}	1000	500	400	4	Pw 1.4 Others 0.8
	06	1059672	Cw ^{1,32} Hw ^{1,32} Sx ¹	BI ¹ Pw ^{1,31}	1000	500	400	4	PI 1.4 Others 0.8

ICHvk1 Columbia	01, 04	1059797	Cw ³² Sx Hw ³² BI ²³ Fd ^{1,9,14,32,34,71}	Pw ^{31,57} Yc ²³	1200	700	600	4	Lw, Pw 2.0 Fd 1.4 Others 1.0
	03	1059798	Fd ⁹ Cw Sx Hw BI ²³	Pw ^{31,57}	1200	700	600	4	Pw, Lw 2.0 Fd 1.4 Others 1.0
	05, 06	1059799	Cw ^{1,32} Sx ¹ Hw ^{1,32}	BI ¹ Pw ^{1,31,57} Yc ²³	1000	500	400	4	PI 1.4 Others 0.8
ICHwk1 Okanagan	01	1059673	Cw Fd ¹⁴ Hw Sx Pw ³¹	BI ^{10,13} Yc ²³	1200	700	600	4	Pw,Lw 2.0 Fd 1.4 Others 1.0
	02	1059674	Fd PI ⁵¹ Cw ^{10,13}	Sx ^{10,13} Pw ³¹	1000	500	400	4	Pw,Lw 1.4 Fd 1.0 Others 0.8
	03	1059675	Fd Cw ^{10,13} Pw ³¹	Sx ^{10,13} Hw ^{10,13}	1200	700	600	4	Pw 2.0 Fd 1.4 Others 1.0
	04	1059676	Sx ^{10,13} Cw Fd ^{9,14} Pw ³¹	Hw	1200	700	600	4	PI, Pw 2.0 Fd 1.4 Others 1.0
	05	1059677	Cw ³² Sx Pw ³¹	BI Fd ^{1,14,32} Hw ³² Yc ²³	1200	700	600	4	PI, Pw 2.0 Fd 1.4 Others 1.0
	06	1059678	Cw ^{1,32} Sx ¹	BI Hw ^{1,32} Pw ^{1,31}	1000	500	400	4	PI, Pw 1.4 Others 0.8
	07	1059679	Cw ^{1,32} Hw ^{1,32} Sx ¹	BI ¹	1000	500	400	4	PI 1.4 Others 0.8
ICHwk1 Columbia	01, 04	1059800	Cw Fd ^{9,14} Hw Lw ^{9,14,23,32} BI ²³ Sx ^{10,13}	Pw ^{31,57} Yc ²³ PI ²³	1200	700	600	4	PI, Lw, Pw 2.0 Fd 1.4 Others 1.0
	03	1059801	Fd PI	BI Cw Hw Pw ⁵⁷ Sx	1000	500	400	4	PI Pw 1.4 Fd 1.0 Others 0.8
	05	1059802	Sx Cw ³² Hw ³² BI ²³ Fd ^{1,9,14,32} Lw ^{1,14,32,32}	Pw ^{31,57} Yc ²³ PI ²³	1200	700	600	4	PI, Lw, Pw 2.0 Fd 1.4 Others 1.0
	06, 07, 08	1059803	Cw ^{1,32} Sx ¹ Hw ^{1,32} BI ¹²³	Pw ^{1,3157} PI ^{1,23,34}	1000	500	400	4	PI, Pw 1.4 Others 0.8

IDFdk1 Okanagan	01	1059680	PI Fd ³²	Sx ^{10,13} Py ^{9,14}	1000	500	400	7	PI, Lw 1.0 Fd 0.8 Sx, Py 0.6
	02	1059681	Fd ²⁷ Py ^{9,14}		600	400	400	7	Fd 0.8 Py 0.6
	03	1059682	Fd PI	Py ^{9,14,23}	600	400	400	7	PI 1.0 Fd 0.8 Py 0.6
	04	1059683	Fd PI	Sx ^{10,13} Py ^{9,14,23}	1000	500	400	7	PI 1.0 Fd 0.8 Others 0.6
	05	1059684	Fd ^{9,14,32} Sx	Bl ^{10,13} PI	1000	500	400	7	PI, Lw 1.0 Fd 0.8 Others 0.6
	06	1059685	Pl ¹ Sx ¹	Fd ^{1,32} Bl ¹	1000	500	400	4	PI 1.0 Fd 0.8 Others 0.6
IDFdk2 Okanagan	01	1059686	PI Fd ³²	Sx ^{10,13} Py ^{9,14}	1000	500	400	4	PI, Lw 1.0 Fd 0.8 Sx, Py 0.6
	02	1059687	Fd ²⁷ Py ¹⁴		600	400	400	4	Fd 0.8 Py 0.6
	03	1059688	Fd ³² PI	Py ¹⁴	1000	500	400	4	PI 1.0 Fd 0.8 Py 0.6
	04	1059689	Fd ³² PI Sx ^{10,13}	Py ^{9,14}	1200	700	600	4	PI, Lw 1.4 Fd 1.0 Sx, Py 0.8
	05	1059690	Fd ³² Sx PI	Cw ³²	1200	700	600	4	PI, Lw 1.4 Fd 1.0 Others 0.8
	06	1059691	Pl ¹ Sx ¹ Fd ^{1,32}		1000	500	400	4	PI 1.0 Fd 0.8 Others 0.6
	07	1059692	Pl ¹ Sx ¹	Cw ³²	1000	500	400	4	PI 1.0 Others 0.6

IDFdm1 Okanagan	01	1059693	Fd ³² Lw ³² PI	Py ^{9,14} Sx ^{10,13}	1000	500	400	7	PI, Lw 1.0 Fd 0.8 Others 0.6
	03	1059694	Fd ²⁷ Py ^{9,14}	PI	600	400	400	7	PI 1.0 Fd 0.8 Py 0.6
	04	1059695	Fd ³² Lw ³² PI Py ^{9,14}	Sx ^{10,13}	1000	500	400	7	PI, Lw 1.0 Fd 0.8 Others 0.6
	05	1059696	Fd ³² Lw ³² PI Sx ^{10,13}	Py ^{9,14} Cw ³²	1200	700	600	7	PI, Lw 1.4 Fd 1.0 Sx 0.8
	06	1059697	Fd ³² Lw ³² Sx	PI Cw ³²	1200	700	600	4	PI, Lw 1.4 Fd 1.0 Others 0.8
	07	1059698	PI ¹ Sx ¹	Fd ^{1,32} Lw ^{1,32}	1000	500	400	4	PI, Lw 1.0 Fd 0.8 Others 0.6
IDFdm2 Columbia	01	1059804	Fd ³² Lw ³² Py	PI ^{10,13}	1000	500	400	4	PI, Lw 1.0 Fd 0.8 Py 0.6
	03	1059805	Fd ²⁷ Py Lw ^{10,13}		600	400	400	4	Lw 1.0 Fd 0.8 Py 0.6
	04	1059806	Fd ³² Lw ³² PI Sx		1200	700	600	4	PI, Lw 1.4 Fd 1.0 Others 0.8
	05, 07	1059807	PI Sx Fd ^{1,32} Lw ^{1,32}		1000	500	400	4	PI, Lw 1.0 Fd 0.8 Sx 0.6

IDFmw1 Okanagan	01	1059699	Fd ³² Lw ³²	Cw ^{10,13} Sx ^{10,13} Pl, Py ^{9,14}	1200	700	600	4	Pl, Lw 1.6 Fd 1.0 Others 0.8
	02	1059700	Fd ²⁷ Py	Pl	600	400	400	4	Pl 1.2 Fd 0.8 Py 0.6
	03	1059701	Fd ²⁷ Py ^{9,14}	Pl Lw ^{10,13}	600	400	400	4	Pl, Lw 1.2 Fd 0.8 Py 0.6
	04	1059702	Fd Lw Pl	Cw ^{10,13} Sx ^{10,13} Py ^{9,14}	1000	500	400	4	Pl, Lw 1.2 Fd 0.8 Others 0.6
	05	1059703	Sx Fd ³² Lw ³²	Pl Cw	1200	700	600	4	Pl, Lw 1.6 Fd 1.0 Others 0.8
	06	1059704	Sx Fd ^{1,32} Lw ^{1,32}	Cw	1200	700	600	4	Pl, Lw 1.6 Fd 1.0 Others 0.8
IDFmw2 Okanagan	01	1059705	Fd Pl	Cw ^{10,13} Lw ³² Py ^{9,14,23} Sx ^{10,13} Bl ^{10,13}	1200	700	600	4	Pl, Lw 1.6 Fd 1.0 Others 0.8
	02	1059706	Fd ²⁷ Pl	Py ^{9,14}	600	400	400	4	Fd, Pl 0.8 Py 0.6
	03	1059707	Fd ¹⁴ Pl	Py ^{9,14} Cw ^{10,13} Sx ^{10,13} Lw ³²	1000	500	400	4	Pl, Lw 1.6 Fd 1.0 Others 0.8
	04	1059708	Fd ³² Sx Pl	Lw ³² Cw ^{32,37}	1200	700	600	4	Pl, Lw 1.6 Fd 1.0 Others 0.8
	05	1059709	Pl ¹ Sx ¹	Cw ^{1,32}	400	200	200	4	Pl 1.2 Others 0.6

IDFxh1 Okanagan	01	1059711	Fd ²⁷ Py	Lw ^{1,10,13,32}	1000	500	400	7	All	0.6
	02*	1059710	Py Fd ²⁷		400	200	200	7	All	0.6
	03	1059712	Py Fd ²⁷		600	400	400	7	All	0.6
	04	1059713	Py Fd ²⁷		600	400	400	7	All	0.6
	05	1059714	Py Fd ²⁷		600	400	400	7	All	0.6
	06	1059715	Fd ²⁷ Py	Lw ^{1,10,13,32}	1000	500	400	7	All	0.6
	07	1059716	Fd Py	Lw ^{1,10,13,32} Cw ³⁷	1000	500	400	7	All	0.6
	08	1059717	Fd ^{1,32} Sx PI ¹	Cw ³⁷	1200	700	600	4	PI	1.0
									Others	0.8
IDFxh2 Okanagan	01	1059718	Fd ²⁷ Py		1000	500	400	7	All	0.6
	02	1059719	Py ²⁷ Fd ²⁷		400	200	200	7	All	0.6
	03	1059720	Py ²⁷ Fd ²⁷		400	200	200	7	All	0.6
	04	1059721	Py Fd ²⁷		600	400	400	7	All	0.6
	05	1059722	Fd ²⁷ Py		1000	500	400	7	All	0.6
	06	1059723	Fd Py		1200	700	600	7	All	0.6
	07	1059724	Fd ³² Sx	Py ³² Cw ³²	1200	700	600	4	All	0.6
	08	1059725	Sx ¹ Fd ^{1,32}	PI ^{1,23}	1000	500	400	4	PI	0.8
									Others	0.6
MSdk Columbia	01,05	1059808	Fd ³² Lw ³² PI Sx	BI	1200	700	600	4	PI, Lw	1.4
									Others	0.8
	03	1059809	Fd Lw PI	Sx BI	1000	500	400	4	PI, Lw	1.0
	04	1059810	Fd Lw PI	Sx BI	1200	700	600	4	Others	0.6
	06	1059811	Sx Fd ^{1,32} Lw ^{1,32}	PI ¹ BI	1200	700	600		PI, Lw	1.4
									Others	0.8
MSdm1 Okanagan	01	1059726	PI Sx	BI Fd ^{9,14,32}	1200	700	600	7	PI, Lw	1.4
			Lw ^{9,14,32}						Others	0.8
	02	1059727	Fd PI Lw		600	400	400	7	PI, Lw	1.0
									Others	0.6
	03	1059728	PI Fd ³² Lw ³²	Sx ^{10,13}	1000	500	400	7	PI, Lw	1.0
									Others	0.6
	04	1059729	Fd ^{14,32} Lw ^{14,32} PI	Sx ^{10,13}	1200	700	600	7	PI, Lw	1.4
									Others	0.8
	05	1059730	PI Sx	BI ^{10,13} Fd ^{9,14,32}	1200	700	600	4	PI, Lw	1.4
									Others	0.8
	06	1059731	PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	1200	700	600	4	PI, Lw	1.4
									Others	0.8

MSdm1 (cont'd)	07	1059732	PI ¹ Sx ¹	BI ¹	1000	500	400	4	PI	1.0
									Others	0.6
MSdm2 Okanagan	01	1059733	PI Sx Fd ^{9,14,32}	BI ^{10,13} Lw ^{14,32}	1200	700	600	4	PI, Lw	1.4
	03	1059734	Fd ^{9,14} PI	BI ^{10,13} Sx ^{10,13}	1000	500	400	4	PI	1.0
	04	1059735	PI Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13} Lw ^{14,32}	1200	700	600	4	PI, Lw	1.4
	05	1059736	PI Sx Fd ^{9,14,32}	BI Cw ³² Lw ^{14,32}	1200	700	600	4	PI, Lw	1.4
	06	1059737	PI Sx Fd ^{9,14,32}	BI	1200	700	600	4	PI, Lw	1.4
	07	1059738	PI Sx	BI	1000	500	400	4	Others	0.8
									PI	1.4
									Others	0.8
MSxk Okanagan	01	1059739	PI Sx ^{10,13} Fd ^{9,14,32}	BI ^{10,13}	1200	700	600	7	PI	1.4
	02	1059740	PI Fd ^{9,14}	BI ^{10,13}	1000	500	400	7	Others	0.8
	05	1059741	PI Fd ^{9,14}	BI ^{10,13} Sx ^{10,13}	1000	500	400	7	PI	1.0
	06	1059742	PI Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13}	1200	700	600	7	Others	0.6
	07	1059743	PI Sx Fd ^{9,14,32}	BI ^{10,13}	1200	700	600	4	PI, Lw	1.4
	08	1059744	PI Sx Fd ^{9,14,32}	BI	1200	700	600	4	Others	0.8
	09	1059745	PI ¹ Sx ¹	BI ¹	1000	500	400	4	PI	1.4
									Others	0.8
									PI	1.0
									Others	0.6
PPxh1 Okanagan	01	1059746	Py ²⁷ Fd ²⁷		400	200	200	7	All	0.6
	02*	1059747	Py ²⁷ Fd ²⁷		400	200	200	7	All	0.6
	04	1059748	Py ²⁷ Fd ²⁷		400	200	200	7	All	0.6
	05	1059749	Py ²⁷ Fd ²⁷		400	200	200	7	All	0.6
	06	1059750	Fd Py ²⁷		600	400	400	7	All	0.6
	07	1059751	Fd Py		1000	500	400	7	All	0.6
	08	1059752	Fd ¹ Sx ¹	Py ^{1,32}	1000	500	400	4	All	0.6

Uneven-aged Stocking Standards* -- Single-tree selection only¹ (all FDUs) and Intermediate Cutting Stocking Standards (Okanagan)

*Note: This section applies to any Okanagan Harvest Authority areas approved prior to the effective date of FSP amendment #6 and all Columbia FDUs. See **Appendix J-2** for current Okanagan Uneven-aged Stocking Standards.*

Target from Table A standards	Layer**	Stocking***			Target from Table A standards	Layer**	Stocking***		
		Target pa	MIN pa	MIN p			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

*Regeneration date is **seven years**. Regeneration date can be met immediately following harvest if the residual stand has no significant damage or pest problems and meets minimum stocking standards. For intermediate cut, regeneration date is N/A*

Free growing date for uneven aged stocking standards is the default date specified in Forest Planning and Practices Regulation, section 44(4) and section 97 (3)

Preferred and acceptable species, "Target from Table A standards", and minimum height at free growing are as specified in Table A by biogeoclimatic ecosystem classification (BEC) variant and site series.

**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

*** MIN = minimum stocking pa - preferred and acceptable species p - preferred species

¹The practice of Single Tree Selection is as defined in the Silviculture Systems Guidebook (Apr 1995) and the Silviculture Systems Handbook for British Columbia (October 2001)

Intermediate Cut, No Regeneration Objectives-Standards (Columbia)

Minimum Crop Tree Basal Area Retained (M ² /ha)	Standards ID #	Additional Criteria (all areas)
50	1059812	To meet the minimum BA standard - retained crop tree basal area must be comprised of merchantable trees (Pli 12.5 cm DBH, other species 17.5 cm DBH) that meet or exceed the minimum leave tree characteristics outlined below. To qualify as an IC a minimum of 40% of the stand's original BA must be retained or the minimum BA by BEC zone whichever is greater.
45	1059813	
40	1059814	
35	1059815	
30	1059816	
26	1059817	
24 min for all other BEC zones 18 min for the MSdk, IDFdm2, ICHmk1, ICHmw1, ESSFdk BEC zones only	1059818	"No Regen" Obligation Window is early 1 year and late 4 years.
	1059819	
15 min for beetle proofing. HDR does not apply	1059820	When reporting the Forest Cover Inventory for an intermediate Entry report the Total BA retained in the Inventory label and the Crop Tree BA in the Silviculture label

Preferred and acceptable species to be retained are as specified in Appendix A by biogeoclimatic ecosystem classification (BEC) site series.

Minimum leave tree characteristics:

Stands Age Class 6 and Younger:

Crop trees must meet limits defined in the Tree Wounding and Decay guidebook (dated Feb 97)—Long Term Retention Objective to be acceptable.

Crop trees of all species must have a height to diameter ratio (HDR) of 1.0 or less to be acceptable – except Pli which must have a HDR of 1.2 or less.

All trees must meet criteria defined in Appendix 10, Establishment to Free Growing Guidebook: Nelson Region - May 2000.

Stands Age Class 7 and Older:

Crop1 trees must meet the limits defined in the Cruising Manual (effective June 1, 2008) for tree classes 1, 2, 5, and 8.

Crop trees of all species must have a height to diameter ratio (HDR) of 1.0 or less to be acceptable – except Pli which must have a HDR of 1.2 or less.

All trees must meet criteria defined in Appendix 10, Establishment to Free Growing Guidebook: Nelson Region - May 2000.

Minimum Strata Size for Reforestation Obligations:

Any contiguous strata greater than one hectare, that as a result of harvesting have a basal area less than

18 m² per ha for the MSdk, IDFdm2, ICHmk1, ICHmw1 and ESSFdk BEC zones, and 24 m² for all other BEC zones shall be reforested as specified in Appendix A by BEC site series.

Footnotes applicable to Appendix K for Columbia FDU and Okanagan Harvest Authority areas approved prior to the effective date of FSP Amendment #6

Footnote #	Footnote	Footnote #	Footnote
Conifer Tree Species		#	Broadleaf Management Constraints
"Ba" means amabilis fir;	1 elevated microsites are preferred	a	productive, reliable, and feasible regeneration option
"Bl" means subalpine fir;	9 recommended on southerly aspects--SSW to WSW	b	limited in productivity, reliability and/or feasibility
"Cw" means western red cedar;	10 recommended on northerly aspects--NW to ENE		
"Fd" means Douglas-fir;	13 recommended in upper elevations of biogeoclimatic unit		
"Hm" means mountain hemlock;	14 recommended in lower elevations of biogeoclimatic unit		
"Hw" means western hemlock;	23 restricted to max 20% of well-spaced P&A		
"Lw" means western larch;	27 partial canopy cover required for successful establishment		
"Pa" means whitebark pine;	28 limited by moisture deficit		
"Pl" means lodgepole pine;	31 risk of white pine blister rust		
"Pw" means white pine;	32 limited by growing-season frosts		
"Py" means ponderosa pine;	34 risk of snow damage		
"Se" means Engelmann spruce;	37 risk of heart rots		
"Sw" means white spruce;	51 severe risk of needle blight, snow press and bear damage;		
"Sx" means hybrid spruce or interior spruce;	species is restricted to areas with proven PI performance*		
"Sxw" means hybrid white spruce;	55 Columbia - acceptable in sx-sm portions of site series		
"Yc" means yellow cedar.	57 Columbia - Pw rust-resistant stock may be		
	70 preferred to a max 50% of preferred and acceptable ws stems.		
Broadleaf Tree Species	71 Restricted to a maximum of 20% of preferred and acceptable		
"Act" means black cottonwood;	well-spaced stems on northerly aspects.		
acceptable "At" means trembling aspen;	71 Restricted to a maximum of 50% of preferred and		
"Ep" means common paper birch;	well-spaced stems.		
	t only applies to those portions of the site series that are		
	on the toe, depression or level ground (as per blue book)		
"Biogeoclimatic unit" or "BGC classification" means	* "Proven PI performance" means that PI is present in natural stands within 500 m of the site and has		
been planted the zone, subzone, variant and site series described	in a reasonably comparable ecological area (i.e. site series and elevation) and has reached a free growing		
status	with minimal losses from either needle blight, snow press and/or bear damage.		
in the most recent field guide published by the Ministry			
of Forests for the identification and interpretation of			
ecosystems, as applicable to a harvested area.			
Where a Biogeoclimatic unit is listed twice in the			
Table, " Okanagan " applies to Harvest Authority			
areas located within Okanagan TSA, TFL 33, TFL			
49 and TFL 59 that were approved prior to the			
effective date of FSP amendment #6.			
"Columbia" applies to FDU's located within Revelstoke			
TSA, Golden TSA, Cascadia TSA, TFL 55 and TFL 56.			
"MIN" or "Min" means minimum.			
"p" means Preferred, "a" means Acceptable			

