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FOREST STEWARDSHIP PLAN

#

2022-2027

This Forest Stewardship Plan is applicable to LP's operations on
Forest Licenses A17645 & A82664 within the Golden TSA

**LP operates within the traditional territories of the Secwempec,
Ktunaxa, and Syilx Okanagan Nations**

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1. INTERPRETATION

1.1 Definitions

“Agreement holder” for the purposes of this FSP, means Louisiana-Pacific Canada Ltd. for FLs A17645 & A82664 and Shuswap Indian Band for NRFL A92559.

“Cultural Heritage Resource” refers only to those resources that are 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.

“Declared” means a block or road that has required assessments complete and is ready for CP or RP submission;

“Info” means roads and cutblocks that are in the initial stages of the planning and approval process.

“Objective” means an objective set by government for managing and protecting forest and range values. Legally established land use plans, legislation and regulations drive the objectives.

“Result” means a measurable or verifiable outcome for a particular objective. Includes the circumstances or situations that determine where the outcome will apply.

“Measure” means an action or plan to achieve a particular purpose – i.e., measure taken to prevent or limit the spread of invasive plants.

“Minister” means the person who has, on behalf of government, approved this FSP, or such other person as that person may delegate.

1.2 Acronyms used in this FSP:

BEC: Biogeoclimatic Ecosystem Classification

CP: active Cutting Permit

DDM: Delegated Decision Maker

FDU: Forest Development Unit

FPPR: Forest Planning and Practices Regulation

FRPA: Forest and Range Practices Act

FRR: Forest Recreation Regulation

FSP: Forest Stewardship Plan

GAR: Government Actions Regulation(s)

KBHLPO: Kootenay Boundary Higher Level Plan Order

LP: Louisiana-Pacific Canada Ltd.

LU: Landscape Unit

MFLNRO: Ministry of Forests, Lands and Natural Resource Operations

MFZ: Machine Free Zone

MOE: Ministry of Environment

NDT: Natural Disturbance Type.

OGMA: Old Growth Management Area

QP: Qualified Professional – Road or Logging Supervisor, timber cruiser, surveyor, layout person, SFI trained professional logger.

QRP: Qualified Registered Professional – Registered/Certified member of ABCFP, APEG, or COB.

RPF: Registered Professional Forester

RP: active Road Permit

RMZ : Riparian Management Zone

RRZ : Riparian Reserve Zone

SARA: Species at Risk Act

TSA: Timber Supply Area.

UWR: Ungulate Winter Range

WHF: Wildlife Habitat Feature

WTRA: Wildlife Tree Retention Area(s)

VIA: Visual Impact Assessment

VQO: Visual Quality Objective

Where references are made to FRPA, FPPR, GAR, or objectives set by government, those references are applicable to the statute, regulation or objective that was in existence on the submission date of this FSP.

Where references are made to the KBHLPO, those references are applicable to the order that was in existence on the submission date of this FSP.

The purpose of the FSP is to link the government objectives with LP's measures, results and strategies that meet these objectives. The purpose of the FSP is not to detail plans or locations for individual cutblocks and roads.

2. TERM OF THE FOREST STEWARDSHIP PLAN

The term of this FSP is 5 years, commencing on the day the Delegated Decision Maker approves the FSP document.

3. FOREST DEVELOPMENT UNITS

The FDUs under this FSP are contained entirely within the Golden TSA of the Selkirk Resource District. There are two main FDUs, named North and South respectively, which are identified in Appendix A.

The objectives and results & strategies detailed in the FSP document apply to all FDUs defined in this FSP.

The requirements under section 14 (2) and (3) of the FPPR apply to each of the maps (scale 1:50,000) attached to this FSP.

There are no shared Landscape Units (LU) within the Golden TSA. LP, BCTS and the Gorman Group (Downie Timber), operating areas align with individual LUs.

4. RESULTS AND STRATEGIES

4.1 KBHLP Objectives

The results or strategies for the applicable objectives in Part 2 of the KBHLP are set out below in Column 2:

Table 1. KBHLP Objectives

Objective	Result or Strategy Listed in the KBHLP
Objective 1, Biodiversity Emphasis	Map 1.1 (Appendix C)
Objective 2, Old and Mature Forest	Tables 2.1-2.6 and subsections 1-5, and as amended through variance KBHLP-06 subsection 9 effective September 2004
Objective 3, Caribou	This objective has been replaced by GAR orders #U-3-005 and #U-4-010.
Objective 4, Green-up	sub-section 1
Objective 5, Connectivity Corridors	Map 5.2 (Appendix C) and subsections 3-6
Objective 6, Consumptive Use Streams	Map 6.1 (Appendix C) and subsection 1
Objective 7, Enhanced Resource Development Zones - Timber	Map 7.1 (Appendix C) and subsections 1-4
Objective 8, Fire-Maintained Ecosystems	Not applicable
Objective 9, Visuals	This objective has been replaced by GAR order 7.1 and 7.2

Use the following link to access the KBHLP document:

<https://www.for.gov.bc.ca/tasb/slrp/lrmp/cranbrook/kootenay/pdf/KBHLPOrder0925.pdf>

4.1.1 KBHLP Objective 1 - Biodiversity Emphasis

Objective: “To contribute to the conservation of biodiversity, biodiversity emphasis is assigned to each LU defined on Map 1.1 (Appendix C of this FSP).

Practice Requirements – Strategy: LP will comply with Objective 1 of the KBHLP. Section 5.2.7 of this FSP relates to this objective.

4.1.2 KBHLP Objective 2 – Old and Mature Forests

Objective: “To contribute to the conservation of biodiversity, maintain mature forests in those areas identified in KBHLP objective 2 (2) and old forests to the level indicated in KBHLP Tables 2.1 through 2.4 to all landscape units and associated biodiversity emphasis as defined in objective 1 “

Practice Requirements – Strategy:

Old Growth Management Areas (OGMA): The KBHLP specifies target amounts of Old and Mature forests that are required to be maintained to meet landscape level biodiversity objectives. The targets in the HLP are aspatial, meaning that the hectares of Old and Mature are specified, but the spatial location is not. The HLP objectives were applied for both Old and Mature Biodiversity and Caribou objectives spatially throughout the Golden TSA. LP has adopted a spatial allocation of the OGMA's and currently applies these designations in our planning. The procedures used to spatially allocate these resources are detailed in the FSP Background document. The document details not only the Old and Mature Forest allocation, but also the rationale used for recruitment in areas where the Old and Mature Forest is not available.

The locations of OGMA's depicted on the FSP maps are not legal and are subject to relocation from time to time.

All efforts will be made to avoid OGMA's with cutblocks and roads. Examples of conditions where an OGMA may be removed and replaced are as follows:

- a. To allow for road construction and maintenance where no practicable option for avoidance is available.
- b. To allow for harvest to logical/practical boundary – i.e., for cable harvest and a replacement area similar to the original OGMA exists.
- c. Address a significant forest health factor within or adjacent to the OGMA where harvesting is the best option to control/salvage the forest health factor.
- d. To amalgamate small, isolated patches with a larger, more contiguous area.
- e. To replace younger aged OGMA's with appropriately aged timber types. These areas will be verified by a QRP. VRI data, Field data, and/or a written rationale will be used to verify the replacement strategy.
- f. Where a Traditional Use is identified by First Nations and is best captured with an OGMA.

When OGMA's are relocated, a QRP will evaluate a combination of the following factors:

- similar species composition
- stand age
- successional status of the OGMA
- presence of old growth characteristics
- stand size
- the amount of human impact
- rarity of the stand
- dispersion/connectivity of the stand.

The replacement OGMA will be located within the same landscape unit or between adjacent landscape units, within the same Biogeoclimatic subzone. It will be the same size as the original OGMA. The OGMA replacement strategy will be an "equal to or better than" approach.

Spatialized OGMA's that do not capture old growth characteristics may be replaced by areas that capture old growth characteristics. The OGMA will only be replaced if the new area is within the same landscape unit or between adjacent landscape units, and the same Biogeoclimatic subzone. The same factors as listed above will be utilized if a replacement is made.

The updated OGMA shape file will be submitted to the Resource District of the Ministry responsible for forests on an annual basis.

4.1.3 KBHLPO Objective 3 – Caribou

Objective: *(1) To retain seasonal habitats for mountain caribou in order to contribute to maintaining viability of the existing subpopulations according to the forest cover requirements, within the caribou habitat areas."*

Practice Requirements: This objective has been replaced by GAR orders #U-3-005 and #U-4-010.

LP's strategy for Mountain Caribou UWR is to adhere to the requirements detailed in GAR orders #U-3-005 and #U-4-010. See Appendix C for Caribou winter range maps.

http://www.env.gov.bc.ca/wld/documents/uwr/u-3-005_order_09Dec09.pdf and

http://www.env.gov.bc.ca/wld/documents/uwr/u-4-010_order_09Dec09.pdf

LP has created a 'Best Management Practices' document for identified Caribou areas. This document is included in the supplemental FSP background document.

4.1.4 KBHLPO Objective 4 – Green-up

Objective: *“To establish green-up heights”*

Practice Requirements – Strategy: LP will comply with KBHLPO Objective 4.

4.1.5 KBHLPO Objective 5 – Grizzly Bear Habitat and Connectivity Corridors

Objective: *“To maintain mature and/or old forests adjacent to important grizzly bear habitat and within connectivity corridors”*

Practice Requirements – Strategy: LP will comply with KBHLPO Objective 5. Important grizzly bear habitat has yet to be mapped by MOE. If the mapping is complete during the life of this FSP, LP will incorporate the results of the mapping into the FSP. Consideration of the Grizzly Bear section of the “Accounts and Measures for Managing Identified Wildlife – Accounts V. 2004” will occur when undertaking development activities in/adjacent to identified Grizzly Bear habitat. The spatial allocation of Old and Mature forests satisfies connectivity requirements.

LP will work with government, stakeholders, and other licensees, where necessary, to develop an access management plan to reduce the duration of motor vehicle accessible roads and forwarding trails. The goal is to lessen the cumulative affects of resource development in important (field verified) grizzly bear habitat.

4.1.6 KBHLPO Objective 6 – Consumptive Use Streams

Objective: *“To reduce the impacts of forest development on streams licensed for human consumption”*

Practice Requirements – Strategy: LP will comply with KBHLPO Objective 6. LP will apply the stream side management provisions outlined in KBHLPO Objective 6 to S5 and S6 streams. LP adopts sections 59 and 60(1) of the FPPR as part of its consumptive use stream strategy.

4.1.7 KBHLPO Objective 7 – Enhanced Resource Development Zones - Timber

Objective: *“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 – Appendix C.”*

Practice Requirements – Strategy: LP will comply with KBHLPO Objective 7.

4.1.8 KBHLPO Objective 8 – Fire-Maintained Ecosystems

Objective: *“To restore and maintain the ecological integrity of fire-maintained ecosystems, provide for treatments to the areas identified as shrub land, open range, open forest, and managed forest ecosystem components in NDT 4”*

Practice Requirements – Strategy: This objective does not apply to LP as these ecosystems are not located in the FDUs under this FSP.

4.1.9 KBHLPO Objective 9 – Visuals

Objective: *“To conserve the quality of views from communities, major waterways and major highways by establishing the areas identified on Map 9.1 as known scenic areas”*

Practice Requirements – Strategy: This objective has been replaced by GAR 7.1 and 7.2 order – see section 5.2.9 of this FSP.

4.2 Objectives Prescribed Under FRPA Section 149(1)

4.2.1 Objective Set by Government for Soils

Legal References: FPPR sections 5 and 12.1(1)

Objective: *“The objective set by government for soils is without unduly reducing the supply of timber from British Columbia’s forests, to conserve the productivity and the hydrologic function of soils”*

Practice Requirements – Result

LP adopts sections 35 and 36 of the FPPR as the intended result for the objective set by government for soils.

4.2.2 Objective Set by Government for Timber

Legal References: FPPR sections 6 and 12(8)

Practice Requirements – Result

LP is exempt from the requirement to prepare results or strategies for an objective set by government for timber as per section 12(8) of the FPPR.

4.2.3 Objective Set by Government for Wildlife

Legal References: FPPR section 7 and GAR sections 9 to 13

Objective: *“The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia’s forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for the survival of species at risk, the survival of regionally important wildlife, and the winter survival of specified ungulate species.”*

Practice Requirements – Results and Strategies

Species at Risk – Strategies for SAR are found in the FSP Background Document under “Information Concerning Wildlife Habitat for the Survival of Species at Risk in the Columbia Forest District”.

LP will employ qualified professionals (QP) and qualified registered professionals (QRP) on the operating area. If new species at risk are added to the list(s), or their individual risk rating changes, LP will inform the QPs and QRPs working on the Forest Licenses. Information dissemination will include one or more of the following: site plans with SAR details, website links and/or information packages that detail species at risk and their habitat requirements and/or, locations of know habitat features utilized by a species at risk.

When planning blocks and roads, LP will refer to the following sources for finding information related to species and ecosystems at risk:

1. Species and ecosystems at risk layer in geobc data warehouse; or
2. the Species at Risk explorer tool website
<https://www.canada.ca/en/environment-climate-change/services/environmental-enforcement/acts-regulations/about-species-at-risk-act.html> ; or,
3. BC conservation data center website
<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre> ; or,
4. Species account documents found on Accounts and Measures website for managing

identified wildlife. <http://www.env.gov.bc.ca/wld/frpa/iwms/accounts.html>

For Species at Risk that are identified by forest workers, LP will:

1. have a QRP assess if there are indeed SARA species present; and,
2. follow the species management practices in the species account documents found on Accounts and Measures website for managing identified wildlife; and,
3. Include the area into WTRA's, RMAs, or remove the area entirely from proposed development area if consistent with species account document.

Wildlife Habitat Features

The Kootenay-Boundary Wildlife Habitat Features Order has provided a list and direction regarding regionally important WHFs. A QP or QRP will endeavor to identify such features during field operations. The species appropriate management strategy outlined in the WHF document will be utilized in the field.

Information regarding WHFs can be found at the following website:

<https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/legislation-regulation/forest-range-practices-act/government-actions-regulation/wildlife-habitat-features/kootenay-boundary-wildlife-habitat-features-order>

A list of potential WHFs found in LP's operating area is included in the background document. This list (and any pertinent updated lists) will be provided to contractors and staff.

Section 7 Notices

Coeur d' Alene Salamander - A section 7 notice of the Forest Planning and Practices Regulation was issued in the Columbia Forest District for Coeur d' Alene Salamander. The Ministry of Environment provided a map of the Potential Habitat of the Salamander which did not encompass FL A17645 or FL A82664. Additionally, we referred to the "Accounts and Measures for Managing Identified Wildlife", Species Information for Coeur d' Alene Salamander and noted the habitat distribution does not occur on any of LP's FDUs. Therefore, a Result or Strategy is not necessary for this species under this FSP.

Ungulate Winter Range – Moose, Whitetail Deer, Mule Deer and Elk

With respect to section 7 of the FPPR and the notice entitled "Indicators of the Amount, Distribution, and Attributes of Wildlife Habitat Required for the Winter Survival of Ungulate Species in the Golden Timber Supply Area", issued in December 2004, the results or strategies that apply to the FDUs are:

LP will allocate the amounts, distributions and attributes of forest cover as specified in schedule 1 of the notice. The allocation will be on a prorated share of UWR within the Golden TSA. The UWR requirements under Section 7 will be recalculated on a cutting permit by cutting permit basis that have blocks in UWR. See Appendix C for ungulate winter range maps.

The amounts and distribution of UWR are tracked using a GIS layer and a spreadsheet. Distribution of cover requirements are tracked by LU. The distribution is recalculated on a cutblock-by-cutblock basis when development is proposed within UWR.

In areas where the removal of timber is required to address community interface wildfire protection, wildfire, serious forest health issues and/or windthrow damage (for purposes of this FSP, greater than 25% merchantable stand damage is considered serious), LP will

make all reasonable efforts to be fully consistent with the Section 7 UWR requirements. Where it is not practicable to meet the established Section 7 UWR Requirements, LP will submit a request to the Delegated Decision Maker(s) for an exemption from FPPR section 25.1 via FPPR section 12(7).

There are no other Section 7 notices that apply to LP's FDUs. Should a new Section 7 notice come into effect that applies to LP's FDUs, the content of the notice will be applied to LP's operations.

4.2.4 Objective Set by Government for Water, Fish, Wildlife and Biodiversity within Riparian Areas

Legal References: FPPR sections 12(3), 47 to 51, 52(2) and 55 to 57

Objective: *"The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas"*

Practice Requirements – Results and Strategies

LP adopts the requirements of sections 47 to 51, 52 (2), and 55 to 57 of the FPPR and the following as a strategy for this Objective. The following strategy also satisfies the requirements under section 12(3) of the FPPR

Strategy: Each Riparian Management Zone (RMZ) within or adjacent to a cutblock or adjacent to a road will be assessed by a QRP. The QRP will prescribe a site-specific management regime for each RMZ associated with a cutblock and include the regime in the applicable Site Plan(s). Safety considerations and adherence to the Workers Compensation Act and Regulations will be incorporated into the retention prescription. The RMZ management regime will include, where required, strategies to address (1) Wildlife Tree retention, (2) stream-side bank and vegetation protection, (3) Harvest debris within the wetted perimeter, and (4) Additional Lakeshore Management Zone requirements. Factors such as fish habitat, windthrow risk, coarse woody debris requirements, shade requirements, forest health, Visual Quality Objectives and consumptive use will be considered in the management regime.

The following management strategies only apply to the portion of the RMZ located within or adjacent to a cutblock.

(1) Wildlife Tree Retention within the RMZ (cut blocks only)

Table 2. RMZ Retention

Riparian Class	Minimum Retention Level Target of Stems/ha or Basal Area/ha (m ²) within the RMZ ¹
S1A, S1B, S2, S3	≥20%
W1, W3, W5, L3	≥10%
S4, S5	≥15%
S6 > 1.5 meters	≥10%
L1-A, L1-B, S6 ≤ 1.5 meters	≥0%

¹The retention % only applies to the length of RMZ adjacent to or within the cutblock.

Retention may not be uniformly distributed throughout the RMZ within the cutblock. Retention levels are based on data from the associated cruise compilation.

If the Table 2 retention requirements for the RMZ are met via the portion of the RMZ between the falling boundary and the riparian feature, there may be no retention identified within the harvest area of the cutblock.

The retention targets specified in Table 2 may be reduced but only to the extent necessary where trees are removed (as determined by a QRP) for the following reasons:

- (i) Trees that have been windthrown or have been damaged by fire, insects, or diseases; or,
- (ii) Danger trees; or,
- (iii) Located within 5 m of either side of a skid crossing; or,
- (iv) Located within the right-of-way of a stream crossing; or,
- (v) Located within the road right-of-way were, as determined by a QRP, locating the road outside of the RMZ will:
 - Increase slope instability,
 - increase sediment production (erosion of cut and fill slopes)
 - increase potential for introduction of large woody debris (windthrow)
 - allow avoidance of, old growth, WHA, Special Tree, or another resource feature requiring 'protection'.

Wildlife Tree Retention Area requirements will be fulfilled in the RMZ where appropriate.

(2) Stream-side Protection

- (a) To avoid streambank scour, trees will be felled and skidded/yarded away from the stream. Where avoiding scour is not practicable, LP will minimize scour by following the General Guidelines - "Falling and Yarding" - detailed in the Riparian Management Area Guidebook – see FSP background document or through winter harvest where possible. Winter harvest will not occur in avalanche prone terrain.
- (b) Where a stream does not have an RRZ (S4, S5, and S6), LP will establish an MFZ (minimum of 5 meters wide) on each side of the stream within a cutblock where ground-based harvesting/felling is proposed.
- (c) Understory vegetation and advanced regeneration, that meets stocking standard acceptability requirements, will be left within the MFZ on S4, and S5 or S6 >1.5m streams that directly connect to fish-bearing or consumptive use streams. Shade intolerant conifers (Fd, Pl, Sx, Pw) are preferred for retention. Shade-tolerant (Cw, Hw) should not be left as these species generally do not respond well to exposure. Deciduous tree species will also be left on ground-based harvest blocks. Where it is not practicable to meet the retention in b or c above (i.e., cable blocks), LP will ensure tree planting occurs within 1-2 years of harvest to allow conifers to reestablish quickly post-harvest. LP will follow, where practicable, the applicable General Guidelines – "Falling and Yarding" – detailed in the Riparian Management Area Guidebook – see FSP background document or through winter harvest where possible. Winter harvest will not occur in avalanche prone terrain.
- (d) Where a stream crossing is required within a cutblock, a designated crossing(s) will be identified by a QP, and a 'skid-bridge' constructed. The skid-bridge will be removed post-harvest and natural drainage re-established. Any debris associated with crossing construction and deactivation will be placed outside of the MFZ in a manner that does not allow the material to erode into/enter the stream channel.
- (e) Road cuts/fills and ditch lines will be grass seeded after road construction and/or after harvest completion to minimize surface erosion and siltation into water bodies. The grass seeding will only be done on areas where the grass seed has a high probability of establishing (not on cuts/fills that are >133% slope, rock, or compact

till). Silt fencing and/or sumps will be utilized in road construction to minimize siltation from ditch lines into streams. Grass seeding will also occur on the road surface once the road is deactivated.

(3) Harvest Debris

To avoid the introduction of logging-related woody-debris into streams without an RRZ (S4, S5, and S6), trees will be felled and skidded/yarded away from the stream. High “stumps” or “Stubs” <3 meters high may be prescribed by a QRP to be left along the MFZ boundary to limit debris entering a stream. On cable blocks it may not be practicable to yard and fall away from a stream. In these instances, LP will follow, where practicable, the General Guidelines - “Falling and Yarding” - detailed in the Riparian Management Area Guidebook – see FSP background document.

Streams within a cutblock will be assessed by a QRP during harvest or post-harvest (in snow free conditions) to evaluate the presence of unstable harvest debris accumulations within the stream. The harvest debris accumulations deemed to be an impediment to stream flow and function will be removed from the stream and placed outside of the high-water mark of the stream. Naturally occurring woody material and imbedded debris will be left in the stream. To comply with the MFZ conditions, hand removal of the debris will be the preferred removal method.

(4) Lakeshore Management Zones Objectives

In relation to established objectives for lakeshore management zones (LMZ), the results or strategies are that a 10 m riparian reserve zone and a 100m lakeshore management zone will apply to the following L3 lakes:

- (a) Cedar Lakes, Big and Small Canyon, Abitibi, Moose, Wells and Dainard; and,
- (b) All L1 lakes in each FDU >5ha and <1000ha.

There are no L2 or L4 lakes within LP’s FDUs.

4.2.5 Objectives Set by Government for Fish Habitat in Fisheries Sensitive Watersheds

Objective 8.1 Fisheries Sensitive Streams

There are **no** defined fisheries sensitive streams in the FDUs under this FSP.

4.2.6 Objectives Set by Government for Water in Community Watersheds

Objective 8.2 Community Watersheds

There are **no** defined Community Watersheds in the FDUs under this FSP.

4.2.7 Objective Set by Government for Wildlife and Biodiversity – Landscape Level

Legal References: FPPR sections 9, 64 and 65

Objective: *“The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia’s forests and to the extent practicable, to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.”*

Practice Requirements – Results and Strategies

In relation to the objective set by government for wildlife and biodiversity set out in section 9 of the FPPR, the results or strategies are:

- (a) The requirements of section 64 of the FPPR; and,
- (b) The requirements of section 65 of the FPPR except that to be consistent with Objective 4 of the KBHLPO, green-up height is 2.5m rather than 3.0m.

Patch-Size Analysis: A patch-size distribution analysis will be completed by a QRP for each CP that has blocks or combinations of blocks exceeding 40 ha.

The strategy used to determine patches and associated distribution is provided in the FSP background document. Larger patches will be designed to follow natural timber-type patterns, mimic windthrow, small wildfires, or other events occurring in nature that create openings in the forest canopy.

The analysis will be used to ensure recommended landscape level biodiversity opening size percentages are managed for each Natural Disturbance Type within each LU – per Biodiversity Guidebook.

<https://www.for.gov.bc.ca/tasb/legsregs/fpc/fpcguide/biodiv/biotoc.htm>

4.2.8 Objective Set by Government for Wildlife and Biodiversity – Stand Level

Legal References: FPPR sections 9.1, 66 and 67

Objective: “*The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees.*”

Practice Requirements – Results and Strategies

In relation to the objective for wildlife and biodiversity at the stand level set out in section 9.1 of the FPPR, the intended results or strategies that apply to the areas of primary forest activity for each FDU are:

- (1) when LP completes harvesting on a cutting permit, LP will ensure that the total area covered by WTRAs at the completion of harvesting is a minimum of 7% of the harvest area (including access structures) of the cutting permit; and,
- (2) LP will ensure that, at the completion of harvesting, the total amount of WTRA area that relates to a cutblock is a minimum of 3.5% of the harvest area if the cutblock >5ha and,
- (3) A WTRA may relate to more than one cutblock if all the cutblocks that relate to the WTRA collectively meet the applicable requirements of paragraphs (1) and (2).
- (4) Where the total of individual stems retained within a cutblock is either 3.5% or 7% of the pre-harvest basal area or stem count (based on cruise data), the WTRA requirements for the block will be considered satisfied.
- (5) LP may not assign WTRAs to blocks with a harvest area of ≤5ha. Condition (1) under this section will be met for each CP under LP's authority. The rationale for this strategy is that the small patches (0.3ha or less) are generally not effective representations of potential habitat. These small patches are subject to windthrow, snow damage or other abiotic factors leading to potentially ineffective WTRAs. Allowing for larger, more structurally sound WTRAs is preferred for long-term retention across the landscape and at the stand level.

The locations of WTRAs will be areas such as Riparian Management Areas, Special Tree reserves, identified Wildlife Habitat Feature (WHF), OGMAs, or stands representative of the harvest area. Priority for WTRAs will be given to those areas with identified wildlife habitat features such as, but not limited to, bear dens, mineral licks, stick nests, or areas where Species at Risk have been identified.

From time to time an existing RESULTS identified WTRA may be included (or a portion of) in a new harvest or road right-of-way area. A QRP will determine a rationale for the removal and replacement of each WTRA or portion there-of. This rationale will be included in the associated Permit application. The WTRA will be replaced with a polygon of equal area and similar timber attributes. It will be relocated, where possible, proximal to the original WTRA. Moving WTRAs is intended to be the exception not the norm.

WTRA replacement strategy will be implemented under 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.
- 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.
- f. Where a WHA has been identified within a cutting permit area and the WTRA requirements for a CP can be satisfied via the WHA.
- g. Where a QRP determines that a pre-FRPA reserve was grandfathered, via RESULTS, into a 'Reserve' rather than a 'Leave Strip' i.e., a reserve between harvest patches required by the cruising manual to create a 'contiguous' cutblock.

Special Tree Protection Regulation is adopted as a stand level biodiversity strategy. The Regulation is found the FSP background document.

4.2.9 Objective Set by Government for Visual Quality

Legal References: FPPR sections 9.2, GAR 7(1) & 7(2)

Objective: *"This objective does not apply to LP as Visual Quality Objectives have been legally determined through Government Actions Regulation Order."*

Practice Requirements – Results and Strategies

In relation to the Visual Quality Objective Order set forth under GAR 7(1) and 7(2) and the DM's GAR order letter of November 20, 2014, LP's cutblocks and roads will be consistent with the GAR Order.

Prior to Permit application, a QRP will, where required by GAR Order, ensure a Visual Impact Assessment (VIA) is complete. The principles outlined in the "Visual Impact Assessment Guidebook" will be utilized to ensure harvest remains within GAR VQOs and follows Landscape level Visual Design concepts. The results of the VIA will be included in operational plans.

LP will also utilize the principles/processes that are described in the Forest & Range Evaluation Program Visual Quality Monitoring Protocols in evaluating harvesting and road construction in Scenic Areas. <http://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/integrated-resource-monitoring/forest-range-evaluation-program/frep-monitoring-protocols/visual-quality>.

In areas where the removal of timber is required to address community interface wildfire protection, wildfire, serious forest health issues and/or windthrow damage (for purposes of this FSP, greater than 25% merchantable stand damage is considered serious), LP will make all reasonable efforts to be fully compliant with the established VQO. Where it is not

practicable to meet the established VQO, LP will submit a request to the Delegated Decision Maker(s) for an exemption from FPPR section 25.1 via FPPR section 12(7).

4.2.10 Objective Set by Government for Cultural Heritage Resources

Legal References: FPPR sections 10

Objective: *“The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are*

- (a) The focus of a traditional use by an aboriginal people that is of continuing importance to that people, and*
- (b) Are regulated under the Heritage Conservation Act.”*

Practice Requirements – Results and Strategies

To provide opportunity for bilateral sharing of information between LP and First Nations groups and consider this information in planning and carrying out forest management activities LP will:

- (a) Annually, use the provincial consultative area database (CAD) to determine which First Nations groups are to be contacted regarding LP’s development plans.
- (b) At minimum once per year, LP will provide an information sharing package with First Nations for a minimum 30-day referral period. The package will include blocks and roads that have not yet been info shared or have not been info shared in the previous 3 years. The package will include a letter, shape files of locations of planned development areas, and a table which includes a development identifier, location, FDU, and approximate harvest and road development areas. LP will follow up with the individual First Nations to ensure the information sharing package was received.
- (c) Keep a record of any information provided by First nations groups on *cultural heritage resources that are the focus of a traditional use* within the FDUs;
 - 1) Record the location of the cultural heritage resource;
 - 2) In consultation with affect FN(s), evaluate the direct impact of the planned development on the cultural heritage resource;
 - 3) Where necessary, alter planned development to conserve, mitigate, or protect the cultural heritage resource at that location considering:
 - i) The relative value or importance of the cultural heritage resource (as defined by affected FN(s)) to a traditional use by a First Nation group;
 - ii) The relative abundance or scarcity of the cultural heritage resource;
 - iii) The historical extent of the traditional use of the cultural heritage resource;
 - iv) Recommendations of the affected First Nation to conserve, mitigate, or protect the cultural heritage resource, and;
 - v) The impact on the FSP holder’s government granted timber harvest rights in conserving or protecting the cultural heritage resource.
- (d) LP will record communications regarding the above on the LP First Nation Information Sharing Tracking Sheet.

LP will meet with any FN that requests an in-person meeting to discuss the FSP or the Information Sharing package.

Any sensitive information will remain confidential between LP and the individual Indian Band whose cultural heritage feature is identified.

5. MEASURES

5.1 Invasive Plants

Legal References: FRPA section 47, FPPR section 17, Invasive Plants Regulation

Measures

LP will identify sites within active road or cutblock areas that are known to contain priority 1 and 2 invasive plants, as defined by the Columbia Shuswap Invasive Species Society (CSISS) listed on the following website: <https://columbiashuswapinvasives.org/wp-content/uploads/2021/05/Golden-IPMA-Priority-Plant-List.pdf> and plants listed under section 2 of the Invasive Plants Regulation that are able to establish in the Golden TSA. The **Invasive Alien Plant Program (IAPP)** website (<http://maps.gov.bc.ca/ess/hm/iapp/>) is also a tool used to determine presence of invasive plants. The invasive plant list from the regulation is a provincial list and not all the plants on this list are found in the Golden TSA.

If any priority invasive plants are found on to LP's active permitted areas, they will be recorded in a Site Plan and be reported to a site such as "Report-A-Weed".

LP will establish grass seed during the first spring or first fall after road construction or on harvest areas that do not have stocking standards. Grass seeding for invasive plant control will be scheduled when climatic and soil conditions are conducive to successful germination of the seed. It will not be done during the winter or extended periods of hot, dry weather. LP will ensure successful (>20% coverage) grass seed establishment (via road maintenance inspections by a QP) within one year of completing timber harvesting or road construction on an area. LP will seed roadside and landing areas with grass seed that meets or exceeds Canada Common #1 Specifications as defined by the *Canada Seeds Act*; if all the following conditions apply:

- (i) the area was disturbed through LP's forest practices and has not been reforested; and,
- (ii) Grass will likely grow on the disturbed area and will materially reduce the likelihood of invasive plant germination – areas such as steep south, facing road cuts, compact till soils, and/or steep road cuts/fills where seed will not adhere will not be seeded.

On sites with priority rank 1 - 3 (refer to above website) invasive plants, all contactor equipment will be visually inspected, and any lodged plant parts will be removed prior to leaving the site. Winter harvest on snowpack, to reduce ground disturbance, will be considered for these sites where practicable.

All contractors supplying equipment for harvesting, road construction and road maintenance on priority invasive plant sites will be informed of invasive plant(s) and will be provided with plant identification tools.

Planning and Development will be undertaken by QRPs or QPs who are expected to be aware of invasive plants.

Equipment will not be parked on invasive plant infestations. These sites will also not be utilized for staging, parking, and/or log sorting.

A list of invasive plants can be found in the FSP Background document. This list will be monitored and updated if new information is made available via the IAPP database.

5.2 Recreation Resources Objectives

Legal References: FRPA sections 56, 180 and 181, FRR Section 16

Objective: “All objectives in respect of an interpretive forest site, recreation site and/or a recreation trail are continued under section 180 that were in effect immediately before the effective date are continued as objectives under FRPA.”.

Practice Requirements – Results and Strategies

In relation to the objectives for recreation sites, trails, and interpretive sites, listed in Appendix E and indicated on the FSP maps, the results or strategies are:

- (a) When harvesting in Recreation Sites listed in Appendix E, LP will adhere to the recreation site specific objectives detailed in the Appendix and Section 16 of the Forest Recreation Regulation, where applicable. LP is not responsible for the ‘Management’ or ‘Maintenance’ of Rec Sites.
- (b) If, because of harvesting timber or road construction under paragraph (a), LP damages existing infrastructure within a recreation site, trail or interpretive site, LP will repair or mitigate the damage, whichever is practicable, and
- (c) For Recreation Sites not listed in Appendix E, LP will harvest in a recreation site only when authorization under Section 16 of the Forest Recreation Regulation has been granted by the recreation officer. The conditions set forth in the recreation officer’s authorization letter will be considered as strategies specific to the Recreation Site or Trail described in LP’s authorization application letter.

5.3 Natural Range Barriers

Legal References: FRPA sections 48 and 51, FPPR section 18

There are no range tenures within LP’s FDU’s.

Measures

No measures have been specified as no known natural range barriers exist within the identified FDU’s.

5.4 Cumulative Effect of Multiple FSP’s

LP operates exclusively within Golden TSA LUs G4, G6, G7, G8, G9, G10, G12, G13, G14, G18, G20, G22, G23, G26 and G28. There are two other FSPs within the Golden TSA. BCTS currently operates exclusively within the Golden TSA in LUs G11, G15, G16, G17, G19, G25, G27 and G29. Downie Timber (Gorman Bros.) operates exclusively in LUs G1, G2 and G3. There is currently no overlap of operations within these LUs.

5.5 Review and Referral

5.5.1 First Nations

Louisiana-Pacific Canada Ltd. will complete a 60-day First Nations FSP information sharing process with affected First Nations. Comments will be reviewed, assessed, and incorporated into the final FSP document and FSP Background Document if applicable. LP will work with interested FNs on incorporating tradition values and traditional management strategies into the FSP.

LP will also undertake a yearly information sharing process as described in section 4.2.10 (b) of this FSP.

5.5.2 Public Review of Proposed Development

A block and road plan (operational plan) will be made available to the public, affected stake holders listed in sections 5.5.3 to 5.5.5 and any other interested parties through local newspaper advertising and the Forest Operations Map (FOM)portal. Affected stakeholders will be personally invited (via e-mail or letter) to view any proposed development that may directly affect their concerns. The Operational Plan will have a 30-day review and comment period.

5.5.3 Licensed Water Users

As per section 21(c) of the FPPR, LP will refer block and road plans to the ‘affected’ holders of domestic water licenses that are within LP FDU’s prior to layout – this may be done in conjunction with yearly FN info sharing. The referrals will include a letter to the affected domestic water licensees and the posting the block and road plan on the LP website. The FSP replacement has also been referred to domestic water licensees.

5.5.4 Commercial Helicopter and Backcountry/Outdoor Recreation

There are several commercial helicopter skiing and outdoor recreation companies operating within LP’s FDU’s.

LP will:

- (a) Refer for comment, any cutblocks that are within/adjacent recreation features such as ski runs, skier drop-off or pick-up points.
- (b) Refer the FSP renewal and/or replacements to the recreation companies.

LP will refer the FSP to recreation clubs/societies such as the Golden Cycling Club, the Golden Snowmobile Club, and the Golden Nordic Ski Club where our plans overlap the designate recreation sites.

5.5.5 Trap Licenses and Guide Outfitters

There are several active trapping and guide outfitters licensees operating within the FDU’s. Communications regarding the FSP replacement will be forwarded to the trappers and guide outfitters.

6. STOCKING REQUIREMENTS

Legal References: FRPA section 29(2), FPPR sections 16 and 44

The following standards and Appendix F were jointly developed (Version 3) by FLNRO staff and forest licensees within the former Columbia Forest District (now the northern portion of the Selkirk District). The stands were approved under the previous FSP by FLNRO.

6.1 General Standards

For the purposes of section 16 (1) of the FPPR, section 44 (1) of that regulation will apply to every cutblock where LP is required to establish a free growing stand.

For the purposes of section 16 (3) of the FPPR, for each FDU in this plan where LP is required to establish a free growing stand:

- (a) The applicable stocking standards and applicable regeneration date referred to in section 44 (1) (a) of the FPPR; and,
- (b) The applicable stocking standards and applicable free growing height referred to in section 44 (1) (b) of the FPPR are as set out in Appendix F.

During the term of this plan, if LP carries out timber harvesting that is restricted to commercial thinning, removal of individual trees or a similar type of intermediate cutting, the stocking standards

referred to in section 16 (4) the FPPR have been included in the regeneration and free growing stocking standards in Appendix F.

6.2 Specific Standards

Unless otherwise specified, in addition to Appendix F, the following standards apply in all the FDU's Louisiana Pacific manages under.

6.2.1 Vole Damage to Plantations

Situations and Circumstances where these clauses are intended to apply:

These clauses are intended to be used within Louisiana-Pacific Canada Ltd.'s (LP) operating area within drainages where there are high populations of voles causing significant damage to cut block plantations. The standards are not intended to be applied automatically to blocks post-harvest. Cutblocks must first be planted to a minimum of 1200 stems/ha in all LU's except G28 where a minimum of 1100 stems/ha could be planted – dependent upon cone crop year. Plantation tree species that are a less preferred food source for voles should be considered. Blocks must be surveyed post planting and where greater than 30% of the well-spaced trees have unacceptable vole damage then clause 1 or 2 may be used. Note: In those instances where voles remove the seedlings proper, some professional reliance will be required.

The drainages named in clause 1 were identified in 2009 by a qualified Small Mammal Researcher Dr. Tom Sullivan (see background information in FSP) as having a high population build-up of voles. Drainages may be deemed to be added to clause 1 should they be identified by a qualified Wildlife Ecologist (or like professional) as having a high population build-up of voles. A letter providing their professional opinion will be added to the FSP background information. Clause 2 is intended for use in cut blocks where there is a localized high vole population. Clauses 1 and 2 will not be applied after vole populations' return to endemic levels in these areas.

- (1) In FL A17645, within Landscape Unit G26, within cutblocks in the ICHmk1, ICHmw1 and MSdk within the Glenogle, Roth and Palliser drainages:
 - (i) Where, post-initial plant, a silviculture survey has determined that vole damage has occurred to the extent that the number of well-spaced preferred and acceptable stems/ha falls below the minimum stocking standard – spruce (Sx) may be considered a preferred tree species and/or Sub-alpine fir (BI) may be considered a preferred tree species for up to 50% of the stems/ha of the minimum stocking standard.
 - (ii) If a post-harvest/pre-plant assessment determines high vole populations are present then the following measures may be taken:
 - A) The regeneration delay can be extended up to 7 years after the commencement of harvest.
 - B) Plant fast growing species PI and larch > Douglas fir > spruce,
 - C) Use larger stock, and higher densities, where possible.
- (2) In FL A17645 within Landscape Units G10, G18, G20, G21 and G28 within cutblocks in the ICHmk1, ICHmw1 and MSdk:
 - (i) Where, post-initial plant, a silviculture survey has determined that vole damage has occurred to the extent that the number of well-spaced preferred and acceptable stems/ha falls below the minimum stocking standard – spruce (Sx) may be considered a preferred tree species and/or Sub-alpine fir (BI) may be considered a preferred tree species for up to 50% of the stems/ha of the minimum stocking standard.

6.2.2 Free Growing Assessment of Trees with a Visible Stem Wound

This clause is intended to be used within LP's operating area where there is an obligation to establish a free growing stand, the type of Free Growing Damage being assessed is a wound, the tree is at least 15 years old and greater than 4 meters in height.

If the tree being assessed is Douglas-fir or Lodgepole Pine, the tree unacceptable if:

- the tree has any wound which is greater than 50% of the stem circumference, or
- the tree has a wound which is greater than 20% of the total length of the stem, or
- The tree has a wound centered on an infection caused by stem rust, canker, or dwarf mistletoe.
- The Visible Stem Wound criteria for all other tree species is as per guidelines detailed in the Forest Practices Code guidebooks listed in Section 7.5 of the Silviculture Survey Procedures Manual.

Comments:

- A wound is defined as an injury in which the cambium is dead or completely removed from the tree.
- Measure the wound across the widest point of the exposed sapwood (or dead cambium when the tree is damaged by sunscald).
- Healed over wounds are acceptable.

6.2.3 Stocking Standards and Free Growing Assessment

Free Growing survey stratification, free growing survey statistical summaries and the resulting free growing declarations will be made on a Standard Unit basis. If, after completing a Free Growing assessment based on the procedures outlined in section 46.11 of the FPPR, a Standard Unit is determined to be not free growing, but, on a prorated basis, the sum of the various strata associated with the SU have a mean Free Growing stems per hectare of 850 or greater, then the SU will be considered a free growing stand for the purpose of free growing obligations acquired by Louisiana-Pacific Canada Ltd. through:

- (a) Section 29 of the *FRPA* in accordance with *section 44* or *46.2(5)* of the *FPPR*, or
- (b) *Part 11* of the *FRPA* in accordance with *section 69.1* or *section 70* of the *Forest Practices Code Act of B.C.*, or
- (c) *Section 46(1)* or *section 111(4)* of the *FPPR*.

6.2.4 Dispersed Strata

On standards units where dispersed, un-mappable complexes of differing site series are noted, the preferred and acceptable species for the applicable site series shall apply. The target and minimum stocking standards shall be based on the dominant site series.

6.2.5 Species Footnote Restrictions and Qualifiers

If a species is prohibited due to its footnote restriction(s), but comprises over 15% of the pre-harvest stand volume, the footnote restriction will no longer apply. The species can be counted up to a maximum of 30% of the total well-spaced and free growing stems per hectare. The variation to the stocking standard will only be implemented upon DDM approval.

6.2.6 Stocking Standards in Primary Management Objectives

For areas on a site plan where biodiversity, riparian values, wildlife habitat or visual concerns have been identified as a primary management objective, the acceptable species will be considered a preferred species for all BEC zones where these species are considered acceptable, and the applicable footnotes have been adhered to. The variation to the stocking standard will only be implemented upon DDM approval.

6.2.7 Armillaria ostoyae Root Disease

The variation to the stocking standard will only be implemented upon DDM approval.

Brushing deciduous species is not recommended on DRA sites as brushed stumps increase the inoculum on site and contribute to the spread of DRA.

This clause is intended to be used within the ICHmw1 of LP's operating area. A survey must determine that a minimum of 20% of the SU area contains Armillaria (*Armillaria ostoyae*) Root Disease (DRA) infestations. Plantation tree species that have a low-moderate host susceptibility rating (Cw, Lw, Pli, Sx, Pw, Ep, At, Ac) for DRA will be considered first.

This clause is limited to not more than 100 hectares of the NAR managed at one time by LP.

Within LP's operating area, the following standards apply:

- (a) Where stump removal is not a treatment option:
 - Up to 25% of any mixture of the following deciduous species (At, Ep, Ac) will be considered preferred well-spaced and free growing trees.
 - Cw and up to 20% of Sx will be considered preferred well-spaced and free growing trees.
 - Coniferous trees with high host susceptibility (Fdi, Bl, Hw) shall not individually contribute to more than 50% of the initial planting species mix.
- (b) Where stump removal is a treatment option:
 - Cw and up to 20% of Sx will be considered preferred well-spaced and free growing trees.
- (c) The free growing surveyor will employ the following when assessing the acceptability of deciduous species:
 - The surveyor will track the well-spaced deciduous trees in the survey plot.
 - The surveyor will track preferred deciduous trees that meet the free growing or potentially free growing criteria. Preferred deciduous trees will be treated exactly as conifers (i.e., consider their competitive effects on other trees); and
 - Free growing or potentially free growing deciduous trees will not contribute to the number of "countable" deciduous trees for the purpose of determining if potential free growing trees may be accepted as free growing.
 - The surveyor will use the Free Growing Damage Criteria for Deciduous Trees outlined in Appendix 11 of the Free Growing Procedures Manual (April 2013).

6.2.8 Snow Press, Snow Creep and Snow Slide Damaged Plantations

Conifer establishment in areas affected by snow press, snow creep and/or snow slides establish in clumps (i.e., uniform spacing is atypical).

This clause is intended to be used within LP's operating area where a survey determines that within a standards unit snow press, snow creep, and/or snow slides have rendered at least 30% of the preferred well-spaced and/or free growing trees as unacceptable. This variation to the stocking standard will only be implemented upon DDM approval.

The inter-tree spacing in these areas will be treated in the same manner as the "problem vegetation types" noted in version 3.0 of the Selkirk Forest District FSP Stocking Standards. The inter-tree spacing will be reduced to 1.3 meters.

6.2.9 Considering Sub-alpine Fir a Preferred Species

The variation to the stocking standard will only be implemented upon DDM approval.

Anecdotal evidence indicates that Sub-alpine fir is not being damaged by snow press/snow creep/snow slide. Young Sub-alpine fir trees are more malleable and able to bend (as opposed to break) under these heavier than normal snow load events.

Situations and Circumstances where this clause is intended to apply:

This clause is intended to be used within LP's operating area where a survey determines that within a standards unit snow press, snow creep and/or snow slides have rendered at least 30% of the preferred well-spaced and/or free growing trees as unacceptable.

Up to 50% of the Sub-alpine fir will be considered a preferred species.

6.2.10 Regeneration Delay Extension

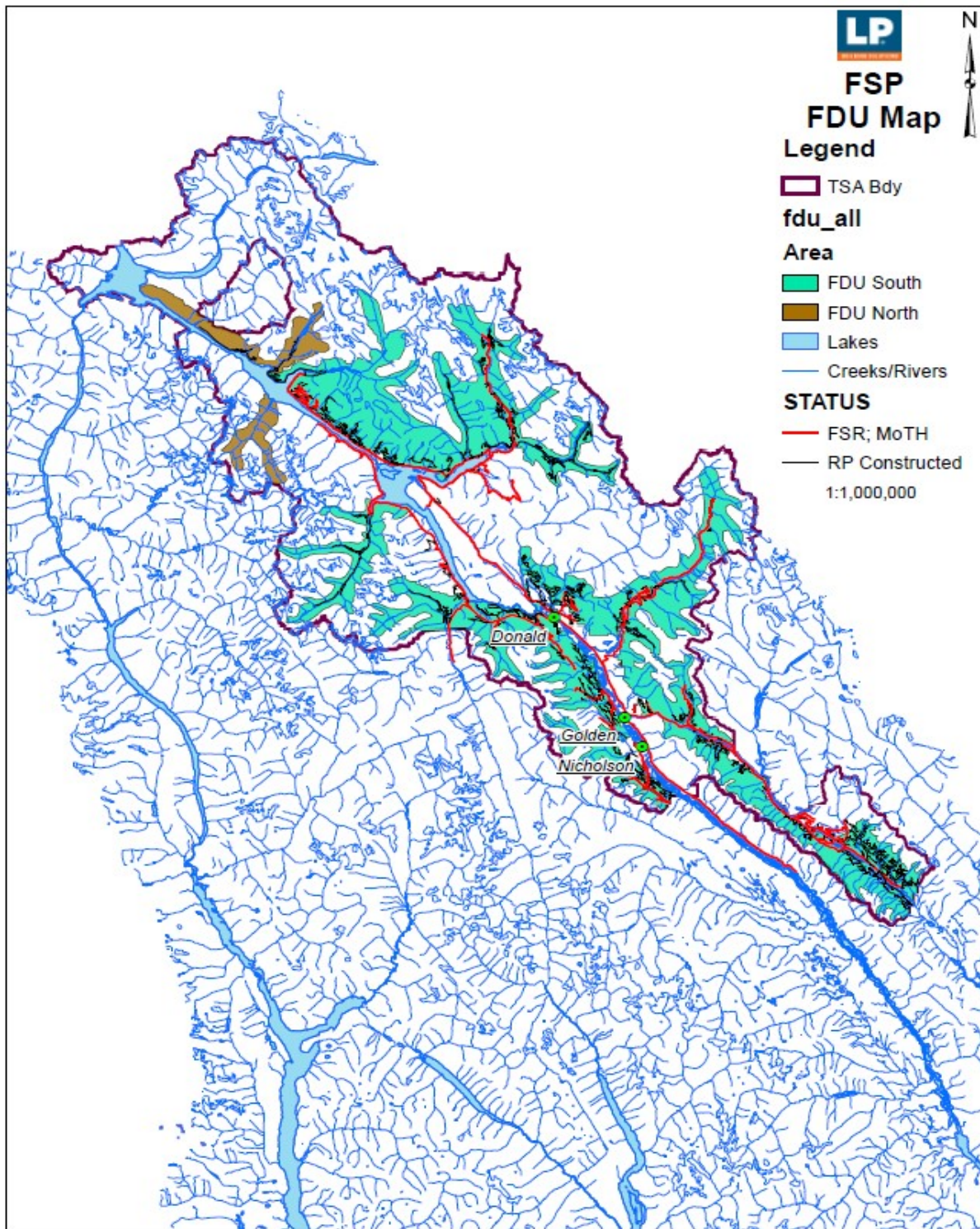
This clause is intended to be used within LP's operating area where LP was granted permission to postpone a Cutting Permit under section 58.21 subsection 1 of the *Forest Act* and harvesting has commenced on the setting. On the unharvested portion of the setting the Regeneration Delay will be rounded up to the number of years the postponement was granted. For example, if the CP was postponed for 9 years and three months, the Regeneration and Free Growing Extension will equal 10 years.

SIGNATURES OF PERSONS REQUIRED TO PREPARE PLAN

<p>Preparing Forester:</p> <p><i>"I certify that I have determined that this work was performed to an acceptable standard"</i></p>	<p style="color: red; font-size: 2em; text-align: center;">DRAFT</p>
	<p>Tim Arnett, R.P.F. Planning Forester</p>

<p>Authorized Licensee Signature:</p>	
	<p>Fernando Cocciolo Area Forest Manager Golden Forest Resources Division Louisiana-Pacific Canada Ltd. Signing Authority</p>

Appendix A: Forest Development Units

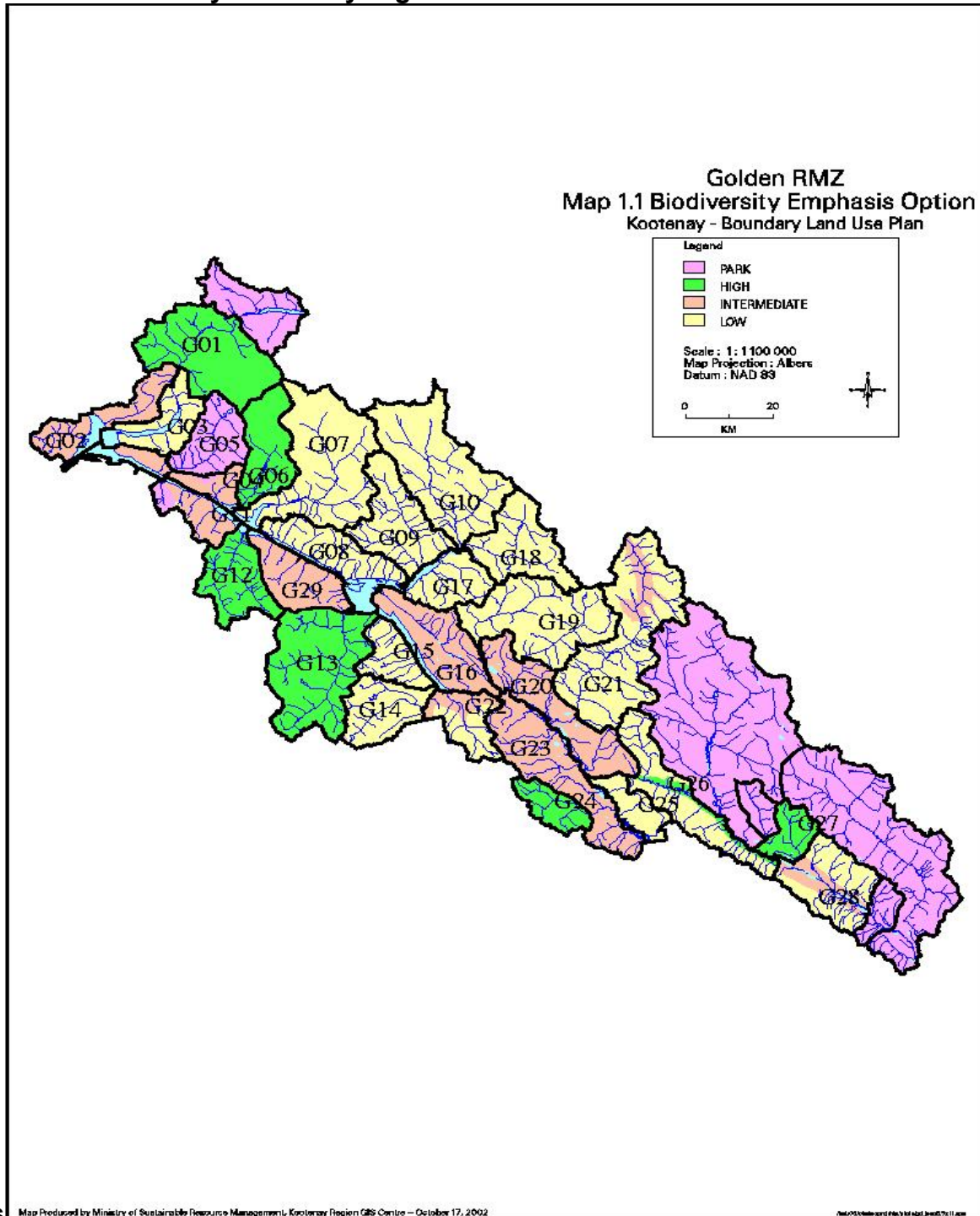


Appendix B: Declared Area

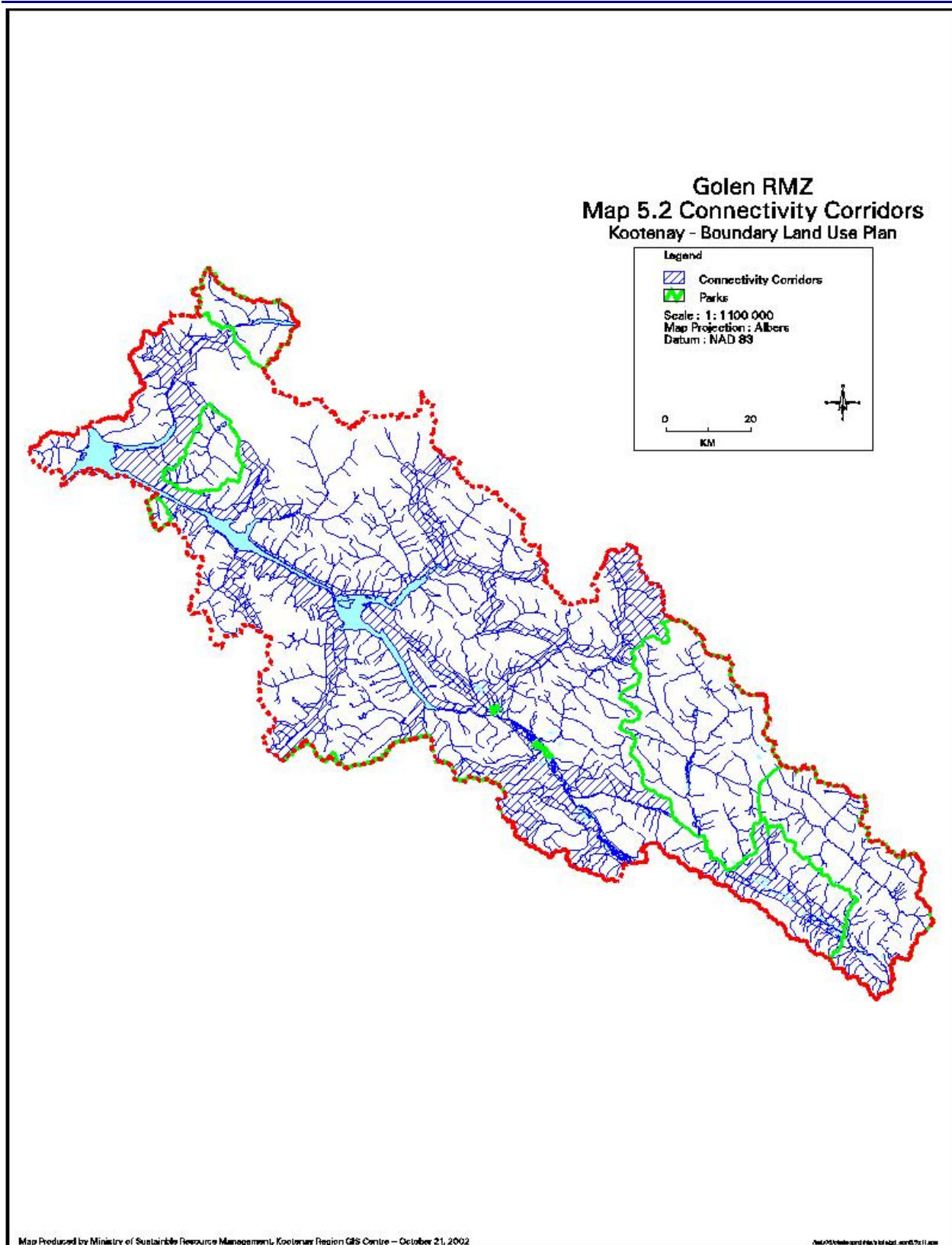
Location	Block ID	Area (ha)	STATUS	LU	FDU
Sullivan Bay	CV8334-005	5.3	Declared	G07	South
Sullivan Bay	CV8334-007	36.6	Declared	G07	South
Sullivan Bay	CV8334-010	11.9	Declared	G07	South
Sullivan Bay	CV8334-011	5.9	Declared	G07	South
Kinbasket Point	CV8334-012	18.3	Declared	G07	South
Kinbasket Point	CV8334-014	9.6	Declared	G07	South
Kinbasket Point	CV8334-015	33.9	Declared	G07	South
Kinbasket Point	CV8334-021	9.7	Declared	G07	South
Kinbasket Point	CV8335-013	18.6	Declared	G07	South
Kinbasket Point	CV8335-016	17.3	Declared	G06	North
Kinbasket Point	CV8335-017	14.4	Declared	G06	North
Kinbasket Point	CV8335-018	11.4	Declared	G07	South
Kinbasket Point	CV8335-019	28.6	Declared	G07	South
Kinbasket Point	CV8335-022	6.0	Declared	G07	South
Kitchen Creek	EY5331-658	10.4	Declared	G08	South
Kitchen Creek	EY5331-683	13.1	Declared	G08	South
Kitchen Creek	EY5331-685	15.9	Declared	G08	South
Kitchen Creek	EY5331-718	17.2	Declared	G08	South
Boulder Creek	EY5333-639	23.4	Declared	G08	South
Boulder Creek	EY5333-640	19.2	Declared	G08	South
Upper Prattle Bowl	EY5437-005	21.3	Declared	G10	South
Upper Prattle Bowl	EY5437-006	10.4	Declared	G10	South
Donald_Weatherall	EY5650-515	48.5	Declared	G23	South
Donald_Weatherall	EY5650-516	15.6	Declared	G23	South
Donald_Weatherall	EY5650-517	13.1	Declared	G23	South
Donald_Weatherall	EY5650-518	57.0	Declared	G23	South
Donald_Weatherall	EY5650-519	14.3	Declared	G23	South
Donald Creek	EY5655-166	8.2	Declared	G23	South
Donald Creek	EY5655-167	9.0	Declared	G23	South
Donald Creek	EY5655-168	7.2	Declared	G23	South
Donald Creek	EY5655-169	9.4	Declared	G23	South
Donald Creek	EY5655-174	12.8	Declared	G23	South
Donald Creek	EY5655-512	15.2	Declared	G23	South
Donald Creek	EY5655-607	48.8	Declared	G23	South
Donald Creek	EY5655-608	21.3	Declared	G23	South
Donald Creek	EY5655-610	18.1	Declared	G23	South

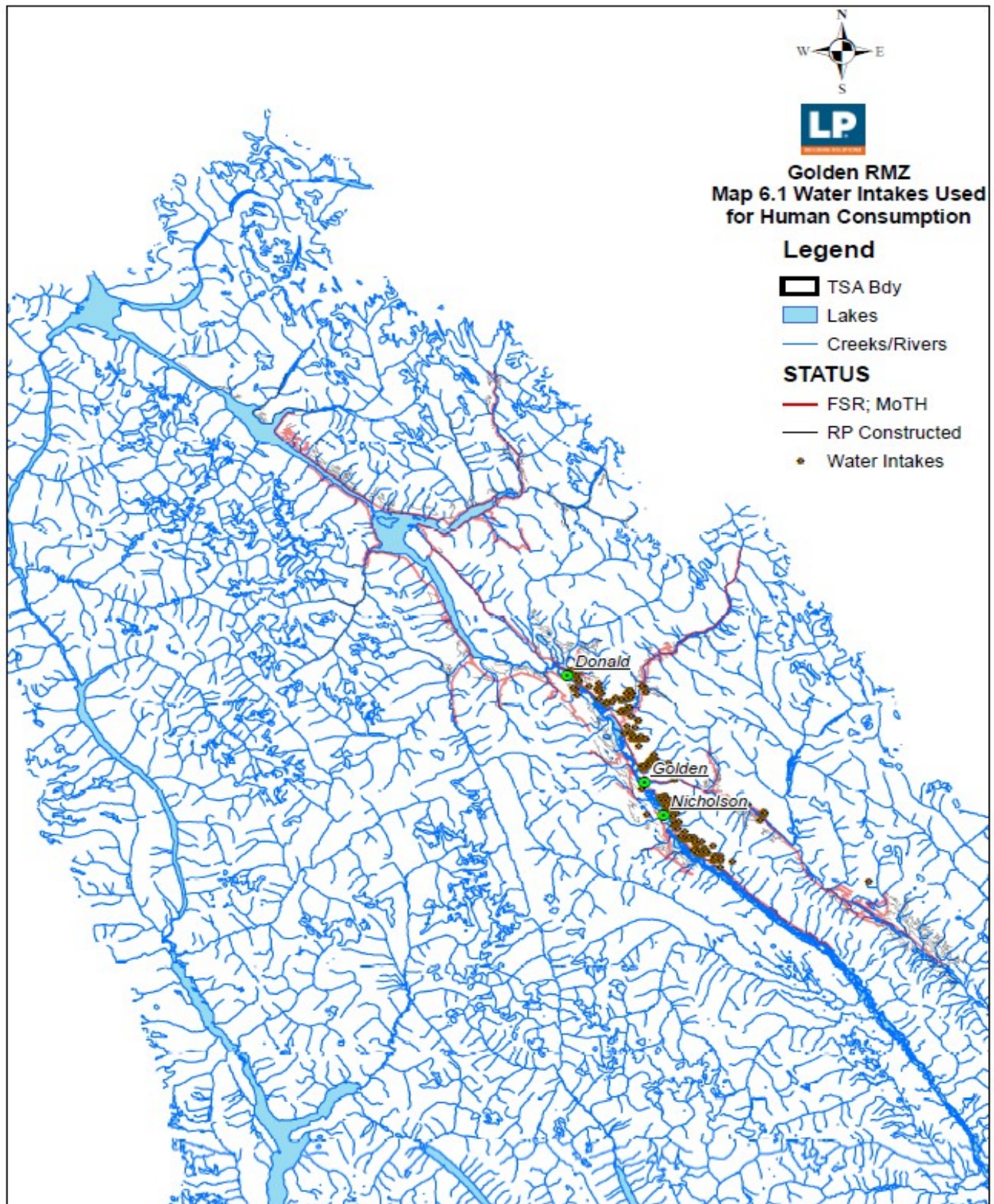
Glenogle	EY5837-236	16.1	Declared	G26	South
Palliser West	EY5852-353	65.6	Declared	G26	South
Palliser West	EY5852-358	13.2	Declared	G26	South
Palliser West	EY5852-359	4.0	Declared	G26	South
Palliser West	EY5852-360	12.9	Declared	G26	South
Hidden Valley	EY5854-160	20.1	Declared	G28	South
Hidden Valley	EY5854-161	19.9	Declared	G28	South
Hidden Valley	EY5854-167	29.0	Declared	G28	South
Hidden Valley	EY5854-193	28.2	Declared	G28	South
Hidden Valley	EY5854-194	35.0	Declared	G28	South
Hidden Valley	EY5854-195	12.2	Declared	G28	South
Castle Creek	EY5855-481	9.8	Declared	G26	South
Castle Creek	EY5855-483	5.7	Declared	G26	South
Castle Creek	EY5855-501	17.5	Declared	G26	South
Castle Creek	EY5855-502	9.1	Declared	G26	South

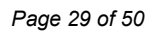
Appendix C: Kootenay-Boundary Higher Level Plan



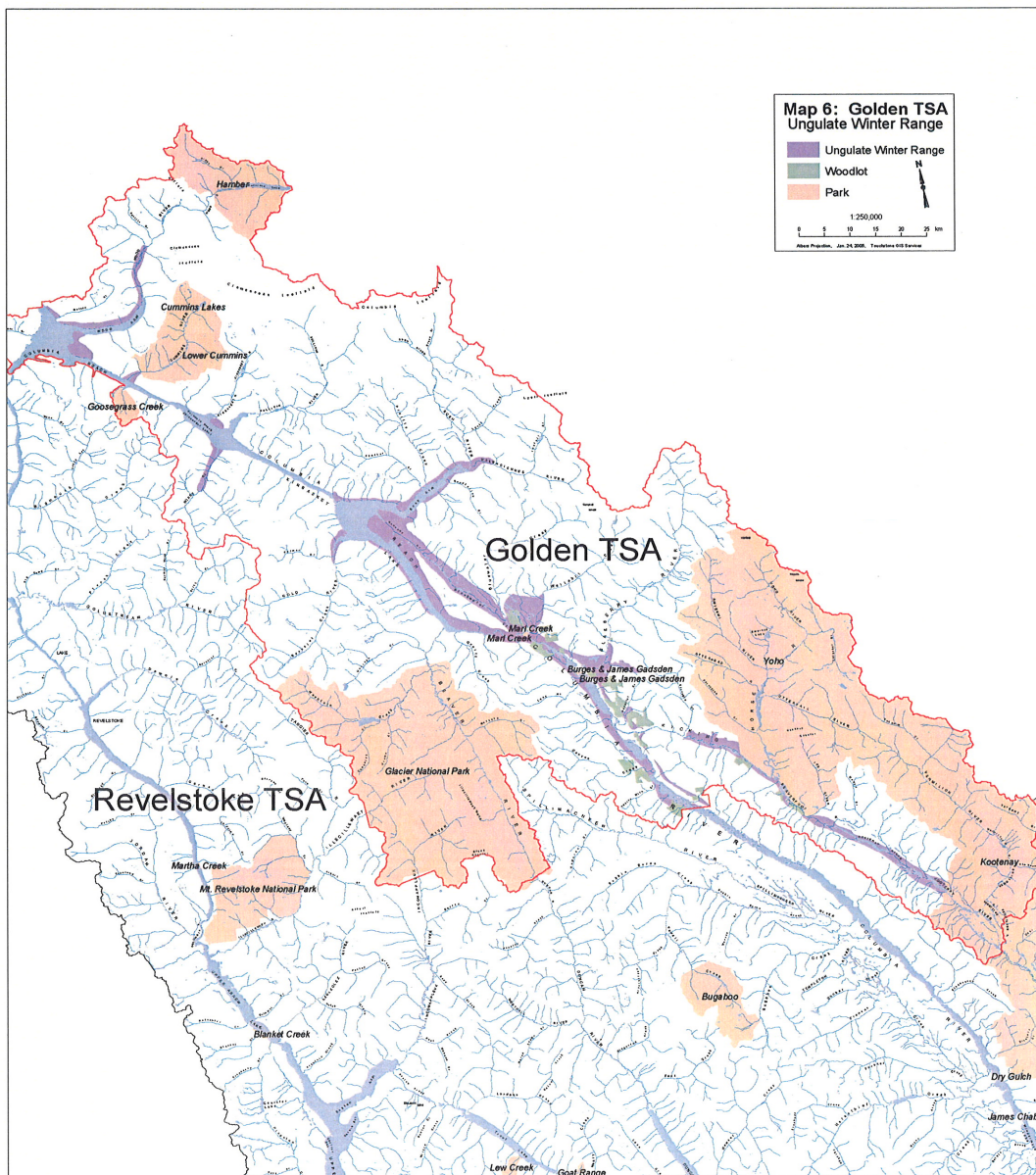
Maps

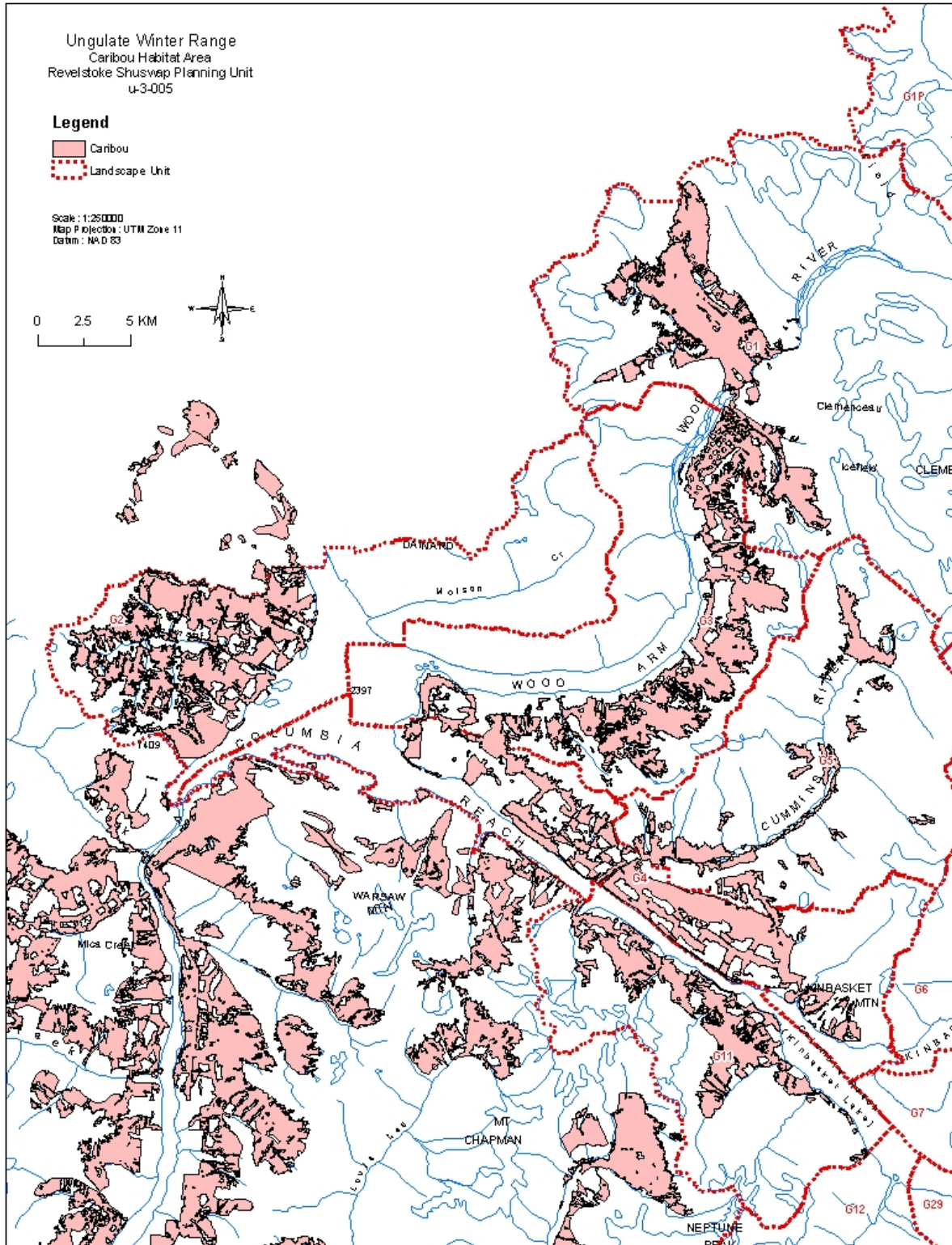


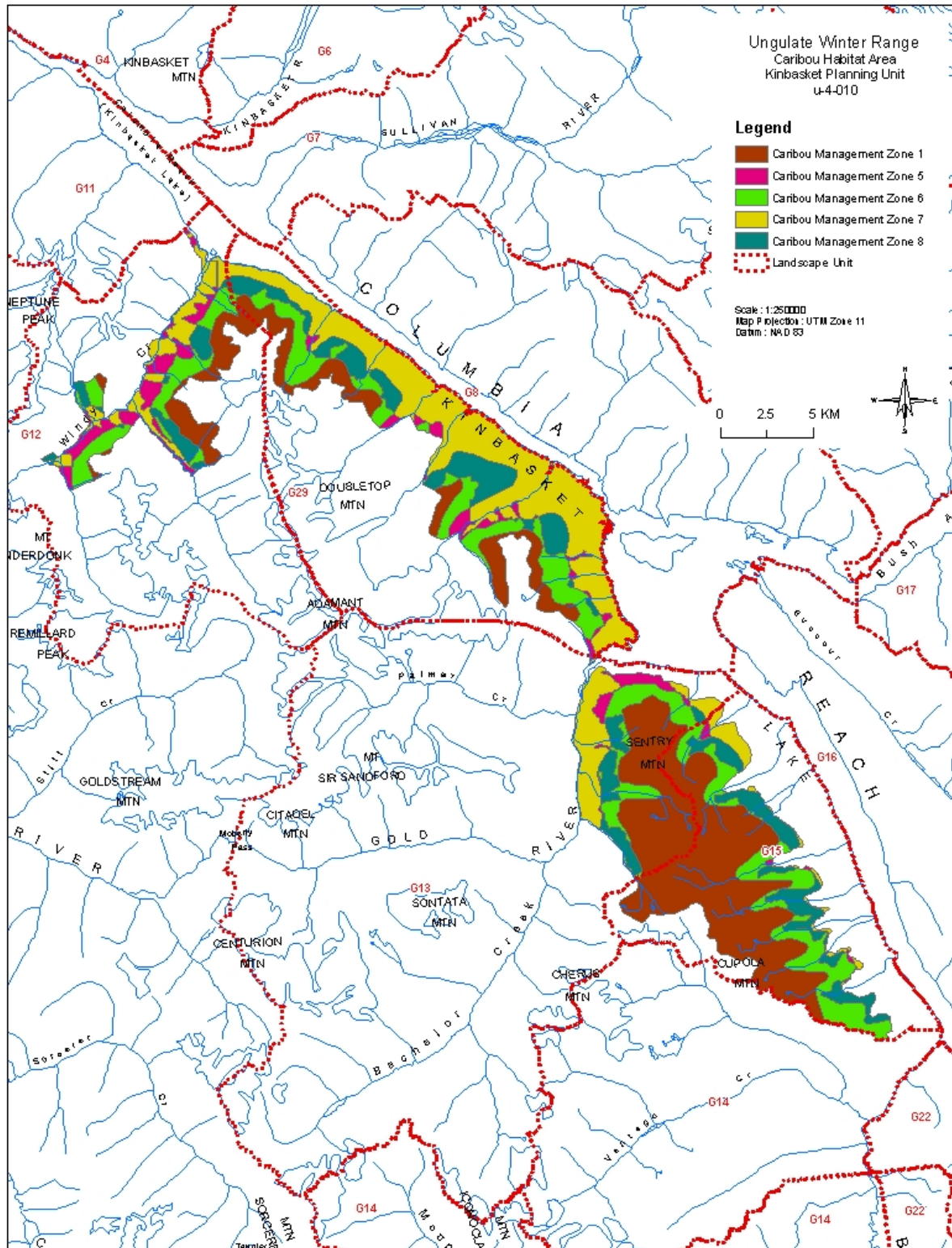




Appendix D: Ungulate Winter Range Maps







Appendix E: Recreation Sites and Trails with Objectives

Table E1. Recreation Sites and Trails with Objectives

FDU	Mapsheet	Proj No.	Project Name	Objectives
North	82M100	5062	Windy Island	98/01/30. The objective is to manage the Windy Island recreation site for a semi primitive motorized recreation experience. The campsite will be maintained; the island-lake shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, and boating will be available at the site. Access is by water.
South	82K099	2062	Paul Creek	1998/01/30. The objective is to manage the Paul 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.
South	82N009	2066	Marion Lake	1998/01/30. The objective is to manage the Marion 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.
South	82N009	2079	Kootenay Crossing	1998/01/30. The objective is to manage the Kootenay Crossing recreation site for a roaded recreation experience. The campsite will be maintained; the river shoreline and natural vegetation will be conserved. Opportunities for camping and picnicking will be available at the site.
South	82N016	5061	Mulligan Slough	98/01/30. The objective is to manage the Milligan Slough recreation site for a roaded recreation experience. The campsite will be maintained; the slough shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, boating, and swimming will be available at the site.
South	82N016	6497	South Dogtooth	2001/03/22 In the summer, during the snow free season, the objective is to manage the South Dogtooth Recreation Site for an alpine/subalpine, semi primitive, non motorized recreation experience; in the winter, when snow is on the ground, the objective is to manage for a semi primitive motorized recreation experience. The natural vegetation will be conserved. In summer, opportunities for dispersed, primitive camping and hiking will be available. In winter, opportunities for ski touring and snowmobiling will be available. To preserve wilderness values, recreation infrastructure will not be built unless deemed absolutely necessary.
South	82N018	2065	Wapta Falls	1998/01/30. The objective is to manage the Wapta Falls recreation site for a roaded recreation experience. The campsite will be maintained and the natural vegetation will be conserved. Opportunities for camping, and picnicking will be available at the site.
South	82N018	6661	Fraser Creek	2001/03/22 The objective is to manage the Fraser Creek Recreation Site for a creek side, day use, roaded recreation experience. The natural vegetation will be conserved and day use facilities will be maintained. Opportunities for parking vehicles will be available.
South	82N026	2057	Cedar Lake	1998/01/30. The objective is to manage the Cedar 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, electric-powered boating, and swimming will be available at the site.
South	82N026	2480	Moonraker X-Country Trails	2001/03/22 The objective is to manage the Moonraker Trails Recreation Site for a semi primitive, non motorized recreation experience. The trail system will be maintained and adjacent vegetation conserved. Opportunities for hiking, mountain biking, and equestrian use are available, no motorized uses permitted. Lake shorelines and natural vegetation will be conserved, and campsite opportunities will be provided.
South	82N027	5059	Kicking Horse	98/01/30. The objective is to manage the Kicking Horse recreation site for a roaded recreation experience. The campsite will be maintained; the river shoreline and natural vegetation will be conserved. Opportunities for camping and picnicking will be available at the site.
South	82N027	6496	Palliser Station	2001/03/22 The objective is to manage the Palliser Station Recreation Site for a roaded recreation experience. The river shoreline and natural vegetation will be conserved. Opportunities for camping, and canoe/kayak launching will be available.
South	82N034, 35	5066	Gorman Lake & Trail	2001/03/22 In the summer, during the snow free season, the objective is to manage the Gorman Lake and Trail Recreation Site for an alpine/subalpine, semi primitive, non motorized recreation experience; in the winter, when snow is on the ground, the objective is to manage for a semi primitive motorized recreation experience. The natural vegetation will be conserved. In summer, opportunities for managed camping, picnicking, and hiking will be available. The campsite, trail, and associated facilities will be maintained, and adjacent vegetation will be conserved. In winter, opportunities for snowmobiling will be available.
South	82N034, 35	6506	Holt Lake	2001/03/22 In the summer, during the snow free season, the objective is to manage the Holt Lake Recreation Site for an alpine/subalpine, semi primitive non motorized recreation experience; in the winter, when snow is on the ground, the objective is to manage for separated semi primitive, motorized and semi primitive, non motorized recreation experiences. The natural vegetation will be conserved. Opportunities for dispersed and managed camping, hiking, and mountaineering will be available. In winter, opportunities for ski touring, mountaineering, and snowmobiling will be available. To preserve wilderness values, recreation infrastructure will not be built unless deemed absolutely necessary.
South	82N034, 44	2074	Quartz Creek	2001/03/22 In the summer, during the snow free season, the objective is to manage the Quartz Creek Recreation Site for an alpine/subalpine, semi primitive non motorized recreation experience; in the winter, when snow is on the ground, the objective is to manage for a semi primitive, motorized recreation experience. The natural vegetation will be conserved. In summer, opportunities for dispersed, primitive camping, and hiking will be available. In winter, opportunities for snowmobiling will be available.
South	82N034, 44	2389	Prairie Hills Trail	2001/03/22 The objective is to manage the Prairie Hills Recreation Trail for a forested, roaded, and semi primitive motorized recreation experiences. The trail will be maintained and adjacent vegetation conserved. In the summer, during the snow free season, opportunities for vehicular use will be permissible to the first groomer bridge. ATV use only is permitted past this point to the snowmobile cabin. In the winter, when snow is on the ground, opportunities for snowmobiling will be available.
South	82N044	5084	Quartz Lake	2001/03/22 The objective is to manage the Quartz Lake Recreation Site for a semi primitive, non motorized experience in summer, and a semi primitive, motorized experience in the winter. In summer, opportunities for dispersed and managed camping, hiking, and mountaineering will be available. In winter, opportunities for ski touring, mountaineering and snowmobiling will be available. The campsite and trail will be maintained and the adjacent natural vegetation conserved.
South	82N054	2056	Bluewater Bridge	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.

APPENDIX F: Stocking Standards

Stocking Standards - Version 3.0

A person required to prepare a Forest Stewardship Plan (FSP) must include stocking standards as per Section 16 or the Forest Planning and Practices Regulation (FPPR).

The Stocking Standards used under this FSP are the “DSE Stocking Standards dated 2018 – as amended from time to time”.

The DCO Stocking Standards have been developed to ensure that the objectives set by government for timber [FPPR 6 (a)] are met. That is: the standards are designed to maintain or enhance an economically valuable supply of commercial timber from British Columbia’s forests. The remaining values of government as outlined in the FPPR should be achievable without compromising timber production.

These standards should be applied to an area based on the Silviculture System chosen for the site and the biogeoclimatic ecological classification zone (BEC Zone) that the area falls in.

Definitions

Silviculture Systems

Silviculture systems terminology and definitions are as per the Silviculture Systems Guidebook April 1995 and the Silviculture Systems Handbook for British Columbia – October 2001.

The definition of an even-aged stand and an uneven aged stand is currently contained in the FPPR:

“Even-aged stand means a stand of trees consisting of only one or two age classes”

“Uneven-aged stand means a stand of trees consisting of three or more age classes”

Even-aged Silviculture Systems are:

Clear Cut, Patch Cut, Seed Tree, and Shelterwood

Even aged Silviculture Systems have regeneration objectives. The intent is to remove enough of the existing stand so that an adequate density of regeneration may be achieved either naturally or artificially over a relatively short period of time. A new stand (crop) is created and managed for a future date (rotation). Table A contains stocking standards developed for areas managed with even aged Silviculture Systems. The stocking standard, regeneration date, free-growing date and free growing height apply to the new crop of trees. In the stocking standard, density is a measure of trees per hectare.

Reserves may form a component of any even aged Silviculture System, but they do not contribute to crop tree stocking.

A Clear Cut with Dispersed Retention cannot have more than 8M² BA in the MSdk, IDFdm2, ICHmw1, ICHmk1 and ESSFdk BEC Zones and still be classified as a Clear Cut. A Clear Cut with Dispersed Retention cannot have more than 12m² BA in all other BEC Zones and still be classified as a Clear Cut.

Dispersed retention is defined in the October 1, 2008 RESULTS INFORMATION SUBMISSION SPECIFICATIONS as: “trees that are retained individually or in unmapped groups (e.g., small clusters < 0.25ha) but are enclosed within the boundaries of the mapped polygon.

Uneven-aged Silviculture Systems are:

Single Tree Selection, Group Selection and occasionally Irregular Shelterwood

Uneven aged Silviculture Systems depend on the recruitment of trees into successive age classes over time (>3 age classes), including a regeneration layer. The stand is managed using regular, sustained harvesting entries in perpetuity by managing towards a balanced uneven-aged structure. The crop is made up of trees from several age classes of the existing stand, plus either artificial or natural regeneration. Table B stocking standards are developed for areas with Single Tree Selection systems in the IDF BEC Zone. The standards are layered, and the stocking level applicable to each layer is shown in Table B. The density is a measure of trees per hectare.

The groups within a Group Selection system should be large enough that they can be tracked within the stand and managed using even aged stocking standards and measured with classic stocking and free growing surveys. Groups are openings with a width of less than two times the height of adjacent mature trees.

Reserves may form a component of any Uneven-aged Silviculture System, but they do not contribute to crop tree stocking.

Intermediate Cut

Partial Cutting and Intermediate Cutting are not Silviculture Systems; they refer to harvesting methods and are generic to a stand entry that forms part of a Silviculture System. These cuts generally occur in even aged stands and imply even aged management objectives. However, they may be part of a plan to create an uneven aged stand which will eventually be managed using a selection system. An Intermediate Cut entry has no regeneration objectives; the crop is the existing stand as modified by the harvest entry. Table C contains standards for Intermediate Cuts with no Regeneration Obligation. There is no regeneration date, free growing date, or free growing height. The stocking density is measured in terms of Basal Area per hectare. To qualify as an IC, a minimum of 40% of the stands original BA must be retained or the minimum BA required by BEC zone whichever is greater. Minimum BA requirements by BEC zone are: 18m² BA of **merchantable** crop trees in the MSdk, IDFdm2, ICHmk1, ICHmw1 and ESSFdk BEC zones and greater than 24m² BA of **merchantable** crop trees in all other BEC zones.

Beetle Proofing

To reduce the susceptibility of a stand to mountain pine beetle the merchantable BA of the stand may be reduced to 15m² in the following circumstances:

- The stand is dominated by Pli – i.e., the Pli is >75% of the volume of the Layer 1 trees.
- The stand is 80-120 yrs. old and has reasonable vigour
- The average stand diameter is >20cm dbh
- The stand density is between 750 and 1500 total stems/ha
- The stand is thinned from below
- The height diameter ratio will not apply to these stands

Height to Diameter Ratio (HDR)

The HDR is calculated by taking the total height of the tree in meters and dividing it by the 1.3 m diameter (dbh) of the tree in centimetres. For example, a 16 m tall tree that is 20.0 cm dbh has a HDR of 16/20 = 0.8

Additional DCO Standards

This text portion of these standards constitutes approved variations to the Stocking Standards in the Tables that may be entered directly into RESULTS.

Note: in the FPPR the regeneration date, free growing date and free growing height are 'separate' from the stocking standard. The stocking standard will include: The BEC Zone, the preferred and acceptable crop tree species; the stocking densities (target, minimum preferred and minimum preferred and

acceptable) as either stems/ha or Basal Area (BA)/ha; the minimum inter-tree distance for well-spaced crop trees; maximum density requirements, post spacing densities minimums and maximums; and height of trees relative to competing vegetation.

Regeneration Period

The period to calculate the Regeneration Date is 4 years for Artificial Regeneration and 7 years for Natural Regeneration

Free Growing Period

The period to calculate the Free Growing Date is 20 years.

Free Growing Height

Minimum free growing heights are shown in Table A.

Maximum Density (all areas)

As per the Regional Executive Director's letter dated February 8, 2006

Re: Revised Maximum Density Number for Lodgepole Pine in the Southern Interior Forest Region

Max (countable sph) Pli = 25,000

Max (countable sph) all other species = 10,000

Post Spacing (sph) Min=1000, Max =4000

Minimum Inter-Tree Distances (MITD)

Trees must be greater than or equal to the approved minimum inter-tree distance apart in order to be well spaced.

Minimum inter-tree distance (m)	Location/Condition
1.00	Planting on mechanically mounded sites
1.30	Planting on sites with elevated microsites (natural hummocks and mounds), problem vegetation areas (woody brush; Douglas maple; willow; alder), very rocky sites and planting on hygric or wetter sites,
1.50	Fill plants, areas with a significant number of advanced regen, and areas with significant accumulations of untreatable slash.
1.70	Planting in the ICHwk1, ICHvk1, ICHmw1, ICHmw2, ICHmw3, ESSFvc, ESSFwc1, ESSFwc2 and ESSFwc4.
2.00	All other areas

Height of Trees Relative to Competing Vegetation

In addition to being the required minimum height, tree height must be greater than the following % relative to competing vegetation within a one metre radius of the trunk:

<u>% Ht above competing veg</u>	<u>BEC Zone</u>
125%	ESSF IDF MS
150%	all other areas

Note: Free growing status will be evaluated using the MOF procedures in place at the time of assessment. Current procedures are defined in Appendix 9 of the Establishment to Free Growing Guidebook: Nelson Region, May 2000. Use Appendix 9 as revised October 2007

Adjustments to Stocking Standards

Changes to target/minimum stocking levels will be considered as separate amendments to the forest stewardship plan on a site-specific basis (one off). The amendment will be submitted using the MOF

procedures in place at the time of the amendment submission. The current method for submitting a one-off stocking standard is through the FSP Tracking System.

Free Growing Damage Criteria

For even aged Silviculture Systems, damage to FG trees will be evaluated using the MOF procedure in place at the time of assessment. Current procedures are as per the April 2008 Free Growing Damage Criteria. These criteria are contained within Appendix 10 of the Stocking and Free Growing Survey Procedures Manual, April 2009.

For uneven aged Silviculture Systems damage to FG trees will be evaluated using the MOF procedure in place at the time of assessment. Current procedures are as per the May 16th, 2008, Multi-Layer Free Growing Damage Criteria.

Further leave tree criteria for mature trees are listed in Tables A, B and C.

Minimum Leave Tree Characteristic for Advance Regeneration

Advance regeneration must meet the requirements of Appendix 10 of the Establishment to Free Growing Guidebook: Nelson Region, May 2000 to be acceptable. In addition to Appendix 10:

When employing an Even aged Silviculture System with even-aged stocking standards (Table A) – to be an acceptable crop tree - advance regen are:

- Trees that existed in the under-story in the pre-harvest stand and were not removed during harvest.
- No more than 40 years old at the time of harvest at dbh in all BEC zones except in the ESSF to be acceptable.

Dispersed retention of trees that were in the over-story in the pre-harvest stand are not considered to be advance regen.

Wildlife Trees

Dispersed wildlife trees in a block that contribute to Wildlife Tree Retention Areas required by the FSP to meet biodiversity requirements do not count towards crop tree stocking.

Dispersed Veteran Deciduous Wildlife Trees will not count as impeding to crop trees when conducting a Free Growing Survey where the BA of the total dispersed retention in the blocks is less than 8M2 in the MSdk, IDFdm2, ICHmk1, ICHmw1 and ESSFdk BEC Zones and less than 12 m2 BA in all other BEC Zones.

Dispersed Strata

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

ESSF/ICH Transition Sites

Where it is not practical to separate a transitional site into standards units applicable to two BEC Zones the Stocking Standards from either BEC Zone may be used or a combination of both.

Whitebark Pine

Whitebark pine (Pa) is a blue listed species. Pa will be considered a preferred species wherever it is found naturally. Minimum leave tree characteristics for advance regeneration do not apply to Pa.

Addition of new Biogeoclimatic zones in Golden

Until new stocking standards have been developed use the Table A, B and C stocking standards for the new BEC zones.

ICHdk5 – Use IDFdm2 standards

ICHmk4 – Use ICHmk1 standards

MSdk2 – Use the MSdk standard

ESSFdk2 – Use the ESSFdk standards or the ESSFwm (as per BEC Version 5) whichever is the best fit.

Relationship of Stocking Standards to Silviculture System

Even aged Silviculture systems

When denudation is reported into RESULTS, any area reported as an even aged Silviculture System must have Table A stocking standards. The exception is a Shelterwood preparatory cut which may have Intermediate Cut – No Regeneration Obligation Standards.

Classic stocking and free growing surveys should be used to measure even aged regenerated stands against the stocking standard. Where there is dispersed retention an even aged layered survey may be used.

Uneven aged Silviculture Systems

When denudation is reported into RESULTS, any area reported as an uneven aged Silviculture System in the IDF must have Table B stocking standards.

Multi story survey methodology should be used to measure the stand against the standard. The basal area may be collected for layer 1 trees. For all other BEC Zones, Table B densities may be modified to fit existing stand conditions if the densities are developed using stand/stock tables and the BDq methodology outlined in the Silviculture Systems Handbook for British Columbia 2001.

The exception may be group selection where the groups are mappable and managed as small even aged areas with Table A standards. If any harvesting occurs outside the groups but within the block (i.e., skid roads between groups) the area must have an Intermediate Cut Standard from Table C.

Intermediate Cuts

When denudation is reported into RESULTS, any area reported as an Intermediate Cut must have Table C stocking standards.

The post-harvest survey must measure the basal area of the crop trees for compliance with the standard. The stand description should not be layered – it should resemble the pre-harvest inventory label with an accurate portrayal of what the stand looks like post-harvest.

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.

Wildfire Risk Reduction Stocking Standards - Golden



DSE_WUIStockingStandards_Golden202

FSP Even-Aged Stocking Standards**
Table A

BGC		ID#	Regeneration and Free Growing Stocking Standards					Min FG Height	
Classification			Species		Stocking				
			Conifer		Well-spaced/ha				
Zone/SZ	Series	ID#	Preferred p	Acceptable a	Target	MINpa	MINp	Species	Ht m
ESSFdk	01,03,04	1033743	Pl Sx (Fd Lw) ¹⁴	Bl	1200	700	600	Pl, Lw Fd Others	1.6 1.0 0.8
	02	1033744	(Fd Lw) ^{9,14} Pl	Sx	1000	500	400	Pl, Lw Fd Others	1.2 0.8 0.6
	05,06	1033745	(Bl Sx) ³² Pl		1200	700	600	Pl Others	1.6 0.8
ESSFvc	01, 04	1033746	Sx Bl Hm ^{71,34}		1200	700	600	All	0.8
	02, 03, 05	1033747	Sx Bl Hm ^{71,34}		1000	500	400	All	0.8
ESSFwc1	01, 03, 04	1033748	Bl Sx Pl ^{23,34}	(CwHw) ^{9,32} Hm	1200	700	600	Pl Others	1.6 0.8
	02	1033749	Pl ³⁴ Sx Bl	Cw ⁵⁵ Hm Hw	1000	500	400	Pl Others	1.2 0.6
ESSFwc2	01, 04, 05,	1033750	Bl Sx	Pl ^{23,34} Hm	1200	700	600	Pl Others	1.6 0.8
	02	1033751	Pl Sx ^{10,13}	Bl ¹⁰ Hm	1000	500	400	Pl Others	1.2 0.6
	03	1033752	Sx Bl Pl ^{23,34}	Hm	1000	500	400	Pli Others	1.2 0.6
	06 07	1033753	(Sx Bl) ³² Pl ^{23,34}	Hm	1200	700	600	Pli Others	1.6 0.8
	08	1033754	(Bl Sx) ^{1,32} Pl ^{23,34}	Hm	1000	500	400	Pl Others	1.2 0.6
	09*	1033755	Pl ¹ Sx ^{1,32}	Bl ^{1,32} Hm	400	200	200	Pl Others	1.2 0.6
1,2 etc. – see “Footnotes” Brackets indicate the footnote applies to all species within the brackets e.g. (Fd Lw) ^{9,14} *Avoid Logging **Additional information or requirements may be found in the text portion of these standards and/or in the FSP Stocking Standard Section									

FSP Even-Aged Stocking Standards**
Table A

BGC		ID#	Regeneration and Free Growing Stocking Standards					Min FG Height	
Classification			Species		Stocking				
			Conifer		Well-spaced/ha				
Zone/SZ	Series	ID#	Preferred p	Acceptable a	Target	MINpa	MINp	Species	Ht m
ESSFwc4	01 04 05	1033756	Bl Sx Pl ^{23,34}	Hm	1200	700	600	Pl Others	1.6 0.8
	02 03	1033757	Sx Bl ⁵⁴ Pl ^{23,34} ⁵⁴ 02 only	Hm	1000	500	400	Pli Others	1.2 0.6
	06	1033758	(Sx Bl) ^{1,32}	Hm	1200	700	600	All	0.8
	07	1033759	(Sx Bl) ¹ Pl ^{23,1,34}	Hm	1000	500	400	Pli Others	1.2 0.6
ESSFwm	01	1033760	Bl Sx (FdLw) ¹⁴	Pl ³⁴	1200	700	600	Lw, Pl Others	2.0 1.0
	02	1033761	Sx Pl ³⁴	Bl Hw ¹⁴	1200	700	600	Pl Others	2.0 1.0
	03	1033762	(Fd Lw) ^{9,32} Sx	Bl Pl ³⁴ Pw ^{9,31,32,57} Hw	1200	700	600	Lw Pl Pw Fd, Others	2.0 1.4 1.0
	04	1033763	Bl Sx	Pl ³⁴ Hw ¹⁴	1200	700	600	Pl Others	2.0 1.0
ESSFmm1	01, 04, 05, 06	1033764	Bl Sx	Pl	1200	700	600	Pl Others	1.6 0.8
	02, 03	1033765	(Bl Sx) ²⁸ Pl		1000	500	400	Pl Others	1.2 0.6
	07*	1033766	(Bl Sx) ^{1,32}	Pl ¹	400	200	200	Pl Others	1.2 0.6
ESSFmm3	101	1062204	Sx Bl ^{201,208}	Pl ³⁴	1200	700	600	Pl-1.6, Others- 0.8	
	102	1062205	Fd ^{9,14} Pl Pa ²⁰¹	Sx Bl ²⁰⁸	1000	500	400	Pl-1.2, Fd-0.8, Others-0.6	
	103	1062206	Fd ¹⁴ Sx Pa ²⁰¹	Pl Bl ²⁰⁸	1000	500	400	Pl-1.6, Lw-1.6, Fd-1.0, Others-0.8	
	104	1062207	Sx Bl ^{201,208}	Pa Pl ³⁴	1200	700	600	Pl-1.6, Others-0.8	
	110	1062208	Bl ²⁰⁸ Sx		1200	700	600	All-0.8	
	111	1062209	Bl ^{32,208} Sx ³²		1200	700	600	All-0.8	
	112	1062210	Bl ^{1,32,208} Sx ^{1,32}		1000	500	400	All-0.8	
1,2 etc – see “Footnotes” Brackets indicate the footnote applies to all species within the brackets e.g. (Fd Lw) ^{9,14}									
*Avoid Logging									
**Additional information or requirements may be found in the text portion of these standards and/or in the FSP Stocking Standard Section									

FSP Even-Aged Stocking Standards**
Table A

BGC		ID#	Regeneration and Free Growing Stocking Standards					Min FG Height	
Classification			Species		Stocking				
			Conifer		Well-spaced/ha				
Zone/SZ	Series	ID#	Preferred p	Acceptable a	Target	MINpa	MINp	Species	Ht m
ICHmk1	01	1033767	(Fd Lw) ^{9, 14, 32} Pl Sx ^{10,13}	Bl ^{10,13} Cw ^{10,13,32}	1200	700	600	Pl Lw Fd Others	2.0 1.4 1.0
	02	1033768	Fd Pl	(Sx Bl) ^{10,13} Py ^{9,14}	600	400	400	Pl Fd Others	1.4 1.0 0.8
	03	1033769	Fd Lw Pl Sx ^{10,13}	(Cw Bl) ^{10,13}	1000	500	400	Pl Lw Fd Others	1.4 1.0 0.8
	04	1033770	(Fd Lw) ³² Pl Sx ^{10, 13}	Bl ^{10, 13} Cw ^{10, 13, 32}	1200	700	600	Pl Lw Fd Others	2.0 1.4 1.0
	05, 06	1033771	Pl Sx Fd ^{9, 14, 32}	Bl Lw ^{9,14,32} Cw ³²	1200	700	600	Pl Lw Fd Others	2.0 1.4 1.0
	07	1033772	Pl ¹ Sx ¹ Fd ^{1, 32}	Bl ¹ Cw ³² Lw ^{1,32}	1000	500	400	Pl Lw Fd Others	1.4 1.0 0.8
ICHmk5	101	1062218	Cw Fd ⁵⁸ Lw ¹⁶ Sx	Pl ²⁰⁰ Bl ^{10,13,208}	1200	700	600	Pl-2.0, Lw-2.0, Fd-1.4, Others-1.0	
	102	1062220	Fd	Pl	600	400	400	Pl-1.4, Fd-1.0	
	102	1062219	Fd	Pl	U8	76 ^{U10}	U20	Pl-1.4, Fd-1.0	
	103	1062221	Fd Lw ¹⁶	Pl	600	400	400	Pl-1.4, Lw-1.4, Fd-1.0	
	104	1062222	Fd ⁵⁸ Lw ¹⁶ Sx ^{10,13}	Pl ²⁰⁰ Bl ^{10,13,208}	1200	700	600	Pl-1.4, Lw-1.4, Fd-1.0, Others-0.8	
	110	1062223	Cw Sx	Bl ^{10,13,208} Lw ¹ Fd ¹	1200	700	600	Lw-2.0, Fd-1.4, Others-1.0	
	111	1062224	Sx	Bl ²⁰⁸ Fd ¹	1200	700	600	All-1.0	
	112	1062225	Sx ¹	Bl ^{1,208} Cw ³²	1000	500	400	All-0.8	
ICHmw1	01	1033773	Fd Pl Cw Sx ¹ Lw ²³ Hw ⁷¹	Bl Pw ^{31,57}	1200	700	600	Pl Lw Pw Fd, Others	2.0 1.4 1.0
	02, 04	1033774	Fd Pl Lw ²³	(Cw Sx) ²⁸ (Bl Hw) ²⁸ Pw ^{31,57}	1200	700	600	Pl Lw Pw Fd, Others	2.0 1.4 1.0

	03	1033775	Fd Pl Hw ⁷¹ Sx ^{10, 13, 28} Lw ²³ Cw ²⁸	Bl ²⁸ Pw ^{31, 57}	1200	700	600	Pl Lw Pw Fd Others	2.0 1.4 1.0
	05	1033776	Cw ³² Fd ^{1, 32} , Hw ³² Sx Lw ^{9,14,23}	Bl Pl Pw ^{1, 32, 57}	1200	700	600	Pl Lw Pw Fd, Others	2.0 1.4 1.0
	06	1033777	Cw Fd ^{9, 14} Bl Hw Sx Lw ^{9, 14,23}	Pl Pw ^{31, 57}	1200	700	600	Pl Lw Pw Fd Others	2.0 2.0 1.4 1.0
	07	1033778	(Cw Hw) ³² Sx Fd ^{1,14,32}	Bl Pl	1000	500	400	Pl Fd Others	1.4 1.0 0.8
	1,2 etc – see “Footnotes” Brackets indicate the footnote applies to all species within the brackets e.g. (Fd Lw) ^{9,14}								
	*Avoid Logging								
	**Additional information or requirements may be found in the text portion of these standards and/or in the FSP Stocking Standard Section								
BGC		ID#	Regeneration and Free Growing Stocking Standards					Min FG Height	
Classification			Species		Stocking				
			Conifer		Well-spaced/ha				
Zone/SZ	Series	ID#	Preferred p	Acceptable a	Target	MINpa	MINp	Species	Ht m
ICHmw2	01, 04	1033779	Fd Lw Pl ⁷¹ Sx ^{10,13} Cw Hw	Pw ^{31,57} Bl ^{10,13} Py ^{9,14,23}	1200	700	600	Pl Lw Pw Fd Others	2.0 1.4 1.0
	03	1033780	Fd Lw Pl Cw	Pw ^{31, 57} (SxBl) ^{10, 13} Hw Py ^{9, 14 23}	1200	700	600	Pl Lw Pw Fd, Others	2.0 1.4 1.0
	05	1033781	Cw Sx Pl ⁷¹ Hw (Fd Lw) ^{9,14}	Bl Pw ^{31,57} Py ^{14,23}	1200	700	600	Pl Lw Pw Fd, Others	2.0 1.4 1.0
	06	1033782	Cw ³² Sx Pl ⁷¹ Hw ³² (Fd Lw) ^{1,32}	Bl Pw ^{31,57} Py ^{14,23}	1200	700	600	Pl Lw Pw Fd, Others	2.0 1.4 1.0
	07 08	1033783	(Cw Hw) ^{1, 32} Sx ¹ Fd ²³	(Bl Pl) ¹ Pw ^{1, 31, 57}	1000	500	400	Pl Pw Others	1.4 0.8
ICHmw3	01 04 05	1033784	Fd Pl ⁷¹ Lw ²³ (Cw Sx Hw) ^{10, 13}	Pw ^{31, 57} Bl	1200	700	600	Pl Lw Pw Fd Others	2.0 1.4 1.0
	02	1033785	Fd Pl Lw ²³	Py ^{9,14,23} Pw ^{31,57}	1000	500	400	Pl Lw Pw Fd Py	1.4 1.0 0.8
	03	1033786	Fd ³² Pl Lw ^{23,32} Hw ²³ Cw ^{10,13}	Pw ^{31,57} (Sx Bl) ^{10,13}	1000	500	400	Pl Lw Pw Fd Others	1.4 1.0 0.8
	06	1033787	Fd ¹⁴ Pl ⁷¹ Lw ²³ Cw Sx Hw	Pw ^{31,57} Bl	1200	700	600	Pl Lw Pw Fd Others	2.0 1.4 1.0
	07	1033788	(Cw Hw) ³² Sx Fd ^{1,32} Pl ⁷¹	Bl Pw ^{31,57} Lw ^{1,23,32}	1200	700	600	Pl Lw Pw Fd	2.0 1.4

								Others	1.0
	08	1033789	(Cw Hw) ^{1,32} (Sx Pl) ¹	Bl ¹ Pw ⁵⁷	1000	500	400	Pl Pw Others	1.4 0.8
	1,2 etc – see “Footnotes” Brackets indicate the footnote applies to all species within the brackets e.g. (Fd Lw) ^{9,14}								
	*Avoid Logging								
	** Additional information or requirements may be found in the text portion of these standards and/or in the FSP								
BGC	ID#	Regeneration and Free Growing Stocking Standards						Min FG Height	
Classification		Species			Stocking				
		Conifer			Well-spaced/ha				
Zone/SZ	Series	ID#	Preferred p	Acceptable a	Target	MINpa	MIN p	Species	Ht m
ICHvk1	01 04	1033790	(Cw Hw) ³² Sx Bl ²³ Fd ^{1,9,14,32,34,71} Lw ^{9, 14, 23}	Pw ^{31,57} Yc ²³	1200	700	600	Pw Lw Fd Others	2.0 1.4 1.0
	03	1033791	Fd ⁹ , Cw Sx Hw Bl ²³ Lw ^{9,14,23}	Pw ^{31,57}	1200	700	600	Lw Pw Fd Others	2.0 1.4 1.0
	05 06	1033792	(Cw Hw) ^{1,32} Sx ¹	Bl ¹ Pw ^{1,31,57} Yc ²³	1000	500	400	Pw Others	1.4 0.8
ICHwk1	01 04	1033793	Cw Hw Sx ^{10,13} Fd ^{9,14} , Bl ²³ Lw ^{9,14,23,32}	Pw ^{31,57} (Yc Pl) ²³	1200	700	600	Pl Lw Pw Fd Others	2.0 1.4 1.0
	03	1033794	Fd Pl	Bl Cw Hw Pw ⁵⁷ Sx	1000	500	400	Pl Pw Fd Others	1.4 1.0 0.8
	05	1033795	(Cw Hw) ³² Sx Bl ²³ Fd ^{1,9,14,32} Lw ^{1,14,23,32}	Pw ^{31,57} (Yc Pl) ²³	1200	700	600	Pl Lw Pw Fd Others	2.0 1.4 1.0
	06 07 08	1033796	(Cw Hw) ^{1,32} Sx ¹ Bl ^{1,23}	Pw ^{1,31,57} Pl ^{1,23,34}	1000	500	400	Pl Pw Others	1.4 0.8
	1,2 etc – see “Footnotes” Brackets indicate the footnote applies to all species within the brackets e.g. (Fd Lw) ^{9,14}								
	*Avoid Logging								
	** Additional information or requirements may be found in the text portion of these standards and/or in the FSP								

FSP Even-Aged Stocking Standards**
Table A

BGC		ID#	Regeneration and Free Growing Stocking Standards					Min FG Height	
Classification			Species		Stocking				
			Conifer		Well-spaced/ha				
Zone/SZ	Series	ID#	Preferred p	Acceptable a	Target	MINpa	MIN p	Species	Ht m
IDFdm2	01	1033797	(Fd Lw) ³² Py	Pl ^{10,13}	1000	500	400	Pl Lw Fd Py	1.0 0.8 0.6
	03	1033798	Fd ²⁷ Py Lw ^{10,13}		600	400	400	Lw Fd Py	1.0 0.8 0.6
	04	1033799	(Fd Lw) ³² Pl Sx		1200	700	600	Pl Lw Fd Others	1.4 1.0 0.8
	05 07	1033800	Pl Sx (Fd Lw) ^{1,32}		1000	500	400	Pl Lw Fd Others	1.0 0.8 0.6
MSdk	01 05	1033801	(Fd Lw) ³² Pl Sx	Bl	1200	700	600	Pl Lw Others	1.4 0.8
	03	1033802	Fd Lw Pl	Bl Sx	1000	500	400	Pl Lw Others	1.0 0.6
	04	1033803	Fd Lw Pl	Bl Sx	1200	700	600	Pl Lw Others	1.4 0.8
	06	1033804	Sx (Fd Lw) ^{1,32}	Pl ¹ Bl	1200	700	600	Pl Lw Others	1.4 0.8
1,2 etc – see “Footnotes” Brackets indicate the footnote applies to all species within the brackets e.g. (Fd Lw) ^{9,14}									
*Avoid Logging									
** Additional information or requirements may be found in the text portion of these standards and/or in the FSP									

For Plantations with Vole Damage – per section 7.2.1 of this FSP

BGC Zone/SZ	Standards ID	Additional Criteria (all areas)
ICHmk1 ICHmw1 MSdk	1033805	Where, post-initial plant, a silviculture survey has determined that vole damage has occurred to the extent that the number of well-spaced preferred and acceptable stems/ha falls below the minimum stocking standard – spruce (Sx) may be considered a preferred tree species and/or Sub-alpine fir (Bl) may be considered a preferred tree species for up to 50% of the stems/ha of the minimum stocking standard.

Wildfire Risk Reduction Stocking Standards

Fire management even-aged stocking standards

SSID	BGC	Site Series	Preferred species	Acceptable Species	Target WS/ ha	MIN pa	MIN p	MAX conifer at FG	M-value	Regen Delay	FG early	FG late	FG Min tree height (m)
1070386	ICHmk5	101	Fd Lw ¹	Pli Sx Cw At	400	250	200	800	4	7	12	20	Lw,Pli,At=2.0 Fd=1.4 Others=1.0
1070387		102	Fd	Pli	400	250	200	800	4	7	12	20	Pli=1.4 Fd=1.0
1070388		103	Fd Lw	Pli	400	250	200	800	4	7	12	20	Lw,Pli=2.0 Fd=1.4
1070389		104	Fd Lw	Sx ^{13,28} Pli At Ep	400	250	200	800	4	7	12	20	Lw,Pli,At,Ep=2.0 Fd=1.4 Others=1.0
1070390		110	Fd ¹ Lw ¹	Sx ^{13,28} Pli At Ep	400	250	200	800	4	7	12	20	Lw,Pli,At,Ep=2.0 Fd=1.4 Others=1.0
1070391	ICHmw1	01	Fd Lw ²³	Cw Sx At Ep	400	250	200	800	4	7	12	20	Lw,At,Ep=2.0 Fd=1.4 Others=1.0
1070392		02	Fd	Pw ³¹ Cw ²⁸ Sx ²⁸	400	250	200	800	4	7	12	20	Pli=2.0 Fd,Pw=1.4 Others=1.0
1070393		03	Fd Lw	Sx ^{10,13,28} Pw ³¹ Pl Cw ²⁸ At Ep	400	250	200	800	4	7	12	20	Pli,At,Ep=2.0 Fd,Pw=1.4
													Others=1.0
1070394		04	Fd Lw	Cw ²⁸ Sx ²⁸ Pw ³¹ Pli At Ep	400	250	200	800	4	7	12	20	Lw,Pli,At,Ep=2.0 Fd,Pw=1.4 Others=1.0
1070395		05	Fd ^{1,32}	Sx Pli Hw ³² Cw ³² Pw ^{1,31,32} Bl Act At Ep	400	250	200	800	4	7	12	20	Pli,Act,At,Ep=2.0 Fd,Pw=1.4 Others=1.0
1070396		06	Fd ^{9,14} Lw ^{9,14}	Cw Sx Hw Pw ³¹ Pli At Act Ep	400	250	200	800	4	7	12	20	Lw,Pli,Act,At,Ep=2.0 Fd,Pw=1.4 Others=1.0
1070397	IDFdk5	101	Fd Lw ^{32,203}	Pli	400	250	200	800	4	7	12	20	Lw,Pli=1.0 Fdi=0.8
1070398		102, 103	Fd Py ²⁰³	None	400	250	250	800	4	7	12	20	Fd=0.8 Py=0.6
1070399		104	Fd Lw ²⁰³ Py ^{9,203}	Pli At	400	250	200	800	4	7	12	20	Lw,Pli,At=1.0 Fdi=0.8 Py=0.6
1070400		110	Fd ³² Lw ^{32,203}	Sx Pli Ep At Act	400	250	200	800	4	7	12	20	Lw,Pli,Ep,At,Act=1.0 Fdi=0.8 Sx=0.6
1070401	MSdk	101	Fd ³² Lw ^{32,203}	Sx Pli At Ep	400	250	200	800	4	7	12	20	Lw,Pli,At,Ep=1.4 Others=0.8
1070402		102	Fd Py ^{14,203}	Pli	400	250	200	800	4	7	12	20	Pli=1.4 Fd=0.8

													Py=0.6
1070403		103	Fd Lw ^{14, 16, 203} Py ^{14, 203}	Sx ^{10,13} Pli At	400	250	200	800	4	7	12	20	Lw,Pli, At=1.0 Others=0.6
1070404		105	Fd Lw ^{16,203}	Sx Pli At	400	250	200	800	4	7	12	20	Lw,Pli,At = 1.4 Fd=1.0 Others=0.8
1070405		110.1	Fd ³² Lw ^{16,32,203}	Sx Pli B ²⁰⁸ Ep At Act	400	250	200	800	4	7	12	20	Lw,Pli,Ep,At,Act = 1.4 Others=0.8
1070406		110.2	Fd ³² Lw ^{16,32,203}	Cw Sx Pli B ²⁰⁸ Ep At Act	400	250	200	800	4	7	12	20	Lw,Pli,Ep,At,Act = 1.4 Others=0.8

Minimum Inter Tree distance is 2.0 metres for all sites

Crop tree over Brush Height % is 150% for all ICH sites, 125% for all IDF & MS sites

Post maximum density is set at TSS+200 sph as Maximum and MSSpa as minimum

Footnotes for species are as per current Selkirk District Default Stocking Standards

MSdk1 – 104 – No WUI standards developed as there were no ecologically suitable fire resistant species. LMH 71 states this is a relatively rare Site Series. Manage as per default standards.

FSP Stocking Standards Definitions and Footnotes for Table A B and C Stocking Standards

Conifer Tree Species	#	Footnotes
“Ba” means amabilis fir	1	Elevated microsites are preferred
“Bg” means grand fir	2	Suitable on thick forest floors
“Bl” means subalpine fir	3	Recommended for coarse-textured soils
“Bp” means noble fir	4	Recommended for medium-textured soils
“Cw” means western red cedar	6	Recommended on nutrient-very-poor sites
“Fd” means Douglas-fir	7	Recommended on nutrient-medium sites
“Hm” means mountain hemlock	8	Recommended on steep slopes
“Hw” means western hemlock	9	Recommended on southerly aspects (SSE to WSW)
“Lt” means tamarack	10	Recommended on northerly aspects (NW to ENE)
“Lw” means western larch	11	Recommended to crest slope positions
“Pa” means whitebark pine	12	Suitable on cold air drainage sties
“Pl” means lodgepole pine	13	Recommended in upper elevations of BGC Unit
“Pw” means white pine	14	Recommended on lower elevations of BGC Unit (Species not recommended within 200m vertical of max elevation)
“Py” means ponderosa pine	15	Recommended in northern portion of BGC unit in region
“Sb” means black spruce	16	Recommended in southern portion of BGC unit in region
“Se” means Engelmann spruce	17	Recommended in western portion of BGC unit in region
“Ss” means Sitka spruce	18	Recommended in eastern portion of BGC unit in region
“Sw” means white spruce		19-22 Coastal only
“Sx” means hybrid spruce or interior spruce	23	Restricted to max 20% of well-spaced P&A
“Sxs” means hybrid Sitka spruce	24	Suitable (as a major species) in wetter portion of BGC Unit
“Sxw” means hybrid white spruce	25	Suitable on sites lacking salal
“Yc” means yellow cedar	26	Suitable minor species on salal-dominated sites
Broadleaf Tree Species	27	Partial canopy cover required for successful establishment
“Acb” means balsam poplar	28	Limited by moisture deficit
“Act” means black cottonwood	29	Risk of heavy browsing by moose
“At” means trembling aspen	30	Risk of porcupine damage
“Dr” means red alder	31	Risk of white pine blister rust
“Ep” means common paper birch	32	Limited by growing –season frost
“Mb” means big leaf maple	34	Risk of snow damage
“Qg” means garry oak	35	Risk of weevil damage
“Ra” means arbutus	36	Suitable major species on salal-dominated sites
Definitions	37	Risk of heart rots
“MIN” or “Min” means minimum	39	Avoid exposed and windy sites
“P” means Preferred	40	Risk of redheart

“A” means Acceptable	41	Limited by poorly drained soils
“Biogeoclimatic unit” or “BGC classification” means the zone, subzone, variant, and site series described in the most recent field guide published by the MOF for the Identification and interpretation of ecosystems as applicable to a harvest area. Abbreviated BEC Zone in most of the DCO standards.	42	Restricted to fresh soil moisture regimes
		43-46 – Coastal only

FSP Stocking Standards Definitions and Footnotes for Table A B and C Stocking Standards

Definitions	#	Footnote
	47	Risk of balsam woolly adelgid
	48	Risk of heavy browsing by deer
	49	Applies only to rust resistant, planted stock
Footnotes # 5, 33, and 38 retired	50	Restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
Any reference to well-spaced stems in the footnotes also applies to free growing stems	51	Restricted to areas with proven PI performance
	52	Restricted to sheltered microsites with deep soil
	53	minor component
	54	Risk of unsuccessful release of advance regeneration
	55	Acceptable in sx-sm portion of site series
#	Localized Footnotes	
57	Selkirk Forest District – Pw rust-resistant stock may be preferred to a max 50% of preferred and acceptable well-spaced stems. Natural provenance Pw – acceptable to a maximum of 50% per plot and 10% well-spaced P&A. Minimum pruning height of 1.0 m applies to natural Pw if required to meet MSS P&A	
69	Species is restricted to upper elevations when used in the southern portion of the BGC Unit	
70	Restricted to a maximum of 20% of preferred and acceptable well-spaced stems on northerly aspects	
71	Restricted to a maximum of 50% of preferred and acceptable well-spaced stems	
	Broadleaf Management Constraints	
a	Productive, reliable, and feasible regeneration option	
b	Limited in productivity, reliability and/or feasibility	
	Additional information or requirements may be found in the text portion of these standards and/or in the FSP	

Table B Stocking Standards

Uneven Aged Stocking Standards – Single –tree selection for the IDF BEC Zone only				
Target from Table A Standards*	Layer**	Stocking		
Stems/ha (Standards ID#)		Target pa***	MIN pa	MIN p***
		Well-Spaced /ha		
1200	1	600	300	250
	2	800	400	300
IDF dm2 04 (1033933)	3	1000	500	400
	4	1200	700	600
1000	1	400	200	200
	2	600	300	250
IDF dm2 01 (1033931)	3	800	400	300
IDF dm2 05 07 (1033934)	4	1000	500	400
900	1	400	200	200
	2	500	300	250
No IDF with 900 targets	3	700	400	300
In DCO	4	900	500	400
800	1	300	150	150
	2	400	200	200
No IDF with 800 targets	3	600	300	300
In DCO	4	800	400	400
600	1	300	150	150
	2	400	200	200
IDF dm2 03 (1033932)	3	500	300	300
	4	600	400	400
400	1	200	100	100
No IDF with 400 target	2	300	125	125
In DCO	3	300	150	150
	4	400	200	200

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

**Stand Layer Definition

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

***pa and ***p Preferred and acceptable species and Target are as specified in Table A by Biogeoclimatic Ecosystem Classification (BEC) site series.

Table B Stocking Standard Definitions

For all BEC Zones except IDF:

Table B densities may be modified to fit existing stand conditions if the densities are developed using stand/stock tables and the BDq methodology outlined in the Silviculture Systems Handbook for British

Columbia 2001. Target pa, min pa and min p must be achieved in each layer and measured with “non-nested” survey methodology.

Minimum Leave Tree Characteristics

Trees Age Class 6 and Younger

Layer 1 trees must meet limits defined in the Tree Wounding and Decay guidebook (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 to be acceptable.

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

Trees Age Class 7 and Older

Layer 1 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 of 1.0 (HDR) or less to be acceptable - except Pli which must have a HDR of 1.2 or less to be acceptable.

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

Trees Age Class 1

Note: Damage to FG trees will be evaluated using the MFLNRO procedure in place at the time of assessment. Current procedures are as per the Multi-layer Free Growing Damage Criteria May 16, 2008

Additional information or requirements may be found in the text portion of these standards and/or in the FSP.

Table C Stocking Standards

Intermediate Cut - No Regeneration Obligation – Standards		
Minimum Crop Tree Basal Area Retained (M2/ha)	Standards ID	Additional Criteria (all areas)
50	1033935	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 stands original BA must be retained or the minimum BA by BEC zone whichever is greater.
45	1033936	
40	1033937	
35	1033938	
30	1033939	
26	1033940	
24 min for all other BEC Zones	1033941	“No Regen” Obligation Window is early 1 year and late 4 years
18 min for the MSdk, IDF dm2, ICHmk1, ICHmw1, ESSFdk BEC Zones only	1033942	
15 min for Beetle Proofing. HDR does not apply	1033943	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 Table A by biogeoclimatic ecosystem classification (BEC) site series.

Table C Stocking Standard Definitions**Minimum leave tree characteristics****Stands Age Class 6 and Younger**

Crop trees must meet limits defined in the Tree Wounding and Decay guidebook (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

Crop 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 of 1.0 (HDR) 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 Table A by BEC site series.

Additional information or requirements may be found in the text portion of these standards and/or in the FSP.