MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS INFORMATION NOTE

Date: February 7, 2012

File: 17730-50-PG TSA BIOD

280-20

CLIFF/tracking #: 184034

PREPARED FOR: Bill Warner, Regional Executive Director, Omineca Region

ISSUE:

REVIEW THE LANDSCAPE BIODIVERSITY ORDER FOR PRINCE GEORGE TIMBER SUPPLY AREA INFORMATION

BACKGROUND:

The *Prince George Timber Supply Landscape Biodiversity Order* (the *Order*) was established in 2004 by the Regional Director, Ministry of Sustainable Resource Management. For 7 years, it has provided a results-based forum to manage for the coarse filter environmental values, specifically those values that are dependent on old forest values. There is now need to review the *Order* due to operational timber supply issues.

DISCUSSION:

The *Order* was established in 2004 after a collaborative process with the Major Forest Licensees and BC Timber Sales (BCTS)to reach a recommended order and implementation process. It was over approximately 2 years, with many meetings, negotiations, and contract timber supply support that the agreed draft *Order* was arrived at.

Within the *Order*, the Timber supply Area (TSA) is divided into ecological units and percent thresholds for old forest and interior old forests are identified. There is also a section on "Contributions, Interpretations and Alternatives" that provides some flexibility for management around "Epidemic or Catastrophic Events", using a "Portion of a Younger Age Class" and using recruitment strategies to allow harvesting below the threshold.

Due to many factors (e.g. inventory changes, Mountain Pine Beetle harvesting, economically available timber), the *Order* is now identified as a major constraint to available timber supply. The Mid-Term Timber Supply project for the Prince George TSA identified many options for changing how we many landscape level biodiversity and the subsequent impact on timber supply. There was also an assessment of the options impact on landscape biodiversity values.

From the annual data submitted by the Forest Licensees and BCTS, the number and respective area of units that are currently below the thresholds in the *Order* indicate a significant change from 2010 data to 2011 data. In 2010, the data indicated that there were two units in deficit. The Crown Forested Land Base "locked down" in 2010 was

about 152,000 ha. In 2011, the data indicates that six units are in deficit. The Crown Forested Land Base "locked down", based on the 2011 data, is about 555,000 ha.

CONCLUSION:

The Regional Executive Director of the Ministry of Forests, Lands and Natural Resource Operations is the Statutory Decision Maker, for the Land Use Objectives Regulation for significant amendments to the *Order*. There are several broad options of how to move forward on this Issue. Each option has implications to the economic, social and environmental values in the TSA.

The Landscape Objective Working Group is a group of government staff and Forest Licensees / BC Timber Sales that have been working on the implementation of the *Order*, since 2004. The Landscape Objective Working Group is a resource that is available to develop and recommend options for moving forward on this issue.

Contact: Alternate Contact: Prepared by:

ADM: Name: Name: Shannon Carson
Div: Div/Region/Branch: Branch/Region: Resource

Management, Omineca Region

Phone: Phone: 250-565-4463

Reviewed by	Initials	Date
DM		
DMO		
ADM		
Dir./Mgr.		
Author		



RECEIVED

MAY 0 2 2012

FRONTCOUNTER BC PRINCE GEORGE, BC

May 01, 2012

Ministry of Forests, Lands and Natural Resource Operations Omenica Region 1011 Fourth Ave. Prince George, BC V2L 3H9

Attention: Shannon Carson,

Re: Amendment to Recruitment Strategy in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit

Dear Shannon,

In February of 2012 a Recruitment Strategy in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit was submitted to, and approved by your office. The Strategy, based on the phase II inventory adjustment demonstrates compliance with the Old Forest Retention Objective, in the Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area, while at the same time enabling the licensees to continue to address forest health concerns in the unit.

The recruitment strategy also spoke to the need for licensees to be able to move forward in the unit on planned harvest opportunities developed prior to the phase II inventory adjustment.

This letter is being sent to your office as an amendment to the recruitment strategy. This amendment proposes to account for three blocks that fit the criteria of being developed prior to the inventory adjustment, but were missed by BCTS at the time of the February recruitment strategy submission. The result of the inclusion of the 3 blocks will further draw down the current balance by 107 ha to -3085ha. However, as referenced in Table #1 of the recruitment strategy document, a large volume of area in age class 7 will be coming on line to more than account for the inclusion of the missed BCTS blocks.

Please accept this letter and a copy of the A4 recruitment strategy, reflecting the adjusted numbers to the current balance of Old Forest. It is my hope that your office will accept this amendment and allow BCTS to proceed with the proposed developments.

Thank you for your consideration on this matter. If you have any questions please do not hesitate to call.

Yours truly,

Lee Evans, RPF

Planning Forester, BCTS

Attachments: A-4 approved recruitment strategy showing changes to the "current balance" in table #1.

Ministry of Forests, Lands and Natural Resource Operations BC Timber Sales Prince George Business Area Location: 2000 South Ospika Boulevard Prince George BC Mailing Address: 2000 South Ospika Boulevard Prince George BC V2N4W5 Tel: (250) 614-7400

Recruitment Strategy in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit.

February 6, 2012

Background

The need for a recruitment strategy to address forest conditions in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit stem from three issues:

- 1) Under current conditions the unit is in deficit of the old forest requirement as specified in the *Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area, October 20, 2004* (the Order).
- 2) There is a continuing need to address forest health issues within the unit to provide the opportunity to prevent future losses of the existing old forest in the unit.
- To account for natural disturbance events that may impact the amount of existing old forest in the unit.

Table #1 outlines the 2010/11 condition of old forest in the unit based on the age adjusted VRI inventory.

Table # 1 Old Forest and Younger Stands For A4

Stand	Current Condition				
Classification	Area:	% of Target			
	Hectares				
CFLB Area	227,722				
Target of Old					
Forest					
Retention	59,208	100			
equals 26% of					
CFLB					
Current Old	56,230	95			
Forest					
Retention					
taking into					
account all					
development					
since the last					
reporting					
period					
Current	-3085				
Balance					
Total Age	26,234	44			
Class 7					
Unconstrained	15,973	27			
THLB Age					
Class 7					
Constrained	2,551	4			
Age Class 7					
NHLB Age	7,710	13			
Class 7					

Considerations

The management of the Order requires that, in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit, a minimum of 26% of the Crown Forest Land Base (CFLB) be retained as old forest. The Order also requires that a minimum of 10% of the old forest required must be old interior forest.

Where either the old forest retention or the old interior forest objectives cannot be achieved, with consideration of the timely and economic harvesting of timber rights, then a recruitment strategy must be submitted and complied with. The recruitment strategy must contain results or strategies that will result in a forest condition that is consistent with the objectives in the shortest time that is practicable, with consideration for the timely and economic consideration of timber rights.

Where it can be demonstrated that equal or better conservation benefits would result, up to 20% of the old forest retention and old interior forest objectives may be comprised of younger age classes.

The inventory using the Vegetation Resource Inventory (VRI) standards in the Prince George Timber Supply Area (PGTSA) resulted in changes to the CFLB. This has impacted the target area of old forest given that the order specifies a percentage of the CFLB as the target area. In this unit the CFLB increased by 25,356 ha based on the VRI. This leads to an increase in the target area of old forest of 6,593 ha in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit as compared to the original target area based on the Forest Cover Inventory.

The Phase II age adjustment for the VRI results in a reduction in the age of stands as a result of the statistical adjustment process. The phase II adjustment results in a reduction in old forest of 7,779 ha as compared to the unadjusted inventory.

The inventory changes are what they are, but they contribute to the deficit that exists in the unit. Based on the increase in the CFLB the area required to meet the old forest objective has increased as compared to the original target. Based on the downward age adjustment to the forest stands, the area available that meets the old forest definition has been reduced.

The inventory changes have also created a situation where an investment in harvest planning by licensees has taken place based on the unadjusted inventory that was in place in 2010. There was a surplus of old forest when considering the 2010 data. The Phase II inventory adjustment has created an immediate impact on the economic consideration of timber rights by throwing the unit into a deficit situation.

There exists a sufficient amount of age class 7 (121-140 year stand age) stands in the unit to make up the deficit in old forest. This is the penultimate age class to the age class 8 stands that meet the Orders definition of old forest meaning forest stands greater than 140 years old. Replacement stands should come from the age classes that will result in consistency with the objectives in the shortest possible time frame.

Using age class 7 stands defined as non timber harvesting land base will address the timely and economic consideration of timber rights. Using these stands that are not expected to be harvested will reduce the impact on timber harvesting rights.

There is a surplus of interior old forest in the unit. There are 28,903 ha of old forest that meets the interior old forest definition in the unit as of December, 2011. This is 500% of the area required to meet the objective of 5,921 ha. Interior old forest conditions do not need to be addressed in the recruitment strategy.

If the mortality of old forest exceeds the level of replacement by younger age classes, harvesting opportunity will be lost in the short and midterm in the unit. Any mortality of old stands that results in a 20% or greater deficit will effectively result in a deferral of harvesting for the unit. The timber supply implications of the length of this deferral will exacerbate an already compromised fiber supply situation in the midterm for the PGTSA.

If stand damaging events such as wind throw or fire occurs, meeting the old forest objective with a healthy age class 7 stands could provide better conservation benefit. Inventory procedures provide for reclassification of a stand where damage of 2 ha or greater occurs to 60% or more of the main canopy stems. Replacing old forest damaged beyond this extent with age class 7 stands would provide better conservation benefits.

If insect infestation occurs in an old forest the potential exists for the infestation to spread to other forest stands. Addressing the infestation would provide a conservation benefit. Bark Beetle guidelines recommend that if infestation levels are 8% or greater, harvesting should be considered as a control measure. Replacing old forest with bark beetle attack levels of 8% or greater with age class 7 stands would provide better conservation benefits.

Accounting for a buffer of age class 7 stands, in addition to the area needed to address the current deficit, would provide options to address potential future forest health impacts on the old forest stands. This would provide a conservation benefit by increasing the amount of "near old" forest if additional losses of old forest occur.

Recruitment Results or Strategies for the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit

Retain, at least, an equal area (3,085 ha) of age class 7 stands to provide the replacement area for the deficit in old forest that currently exists, and to take into consideration development that had taken place prior to the updated inventory being released.

Use up to an additional 8,757 ha of age class 7 stands as a forest health buffer against future losses to old forest. The age class 7 buffer will be used as replacement forest to meet the old forest retention or the old interior forest objectives in the event of damaging events in the old forest stands.

Old forest will only be harvested within the unit where:

- 1) There is a forest damaging event that results in the fewer than 40% of the old trees remaining standing and/or alive and the area of damage is greater than 2 ha or,
- 2) There is bark beetle attack equal to or greater than 8% of the stems in the stand.

The age class 7 buffer would provide options to replace old forest stands that are lost to natural disturbance events to the extent practicable.

Replacement retention by age class 7 stands will not exceed twenty percent (11,842 ha) of the target area.

Track the amount of age class 7 stands in the annual report to monitor compliance with the Recruitment Strategy.

Modify the Licensee Memorandum of Understanding to require licensees to identify, at the planning stage, any activity to harvest of damaged stands in the old forest and any activity in age class 7 stands that are being used as the deficit replacement area and as the forest health buffer to monitor compliance with the recruitment strategy.



File: 17730-50/PG-TSA

June 6, 2012

Doug Perdue Chief Forester Dunkley Lumber Ltd. PO Box 173 Prince George, British Columbia V2L 4S1

Re: Response to Recruitment Strategy proposals for Units A5, A15, A18 and A25

Dear Doug Perdue:

Thank you for the four Recruitment Strategies submitted on behalf of the Licensee and BCTS members of the Landscape Objectives Working Group. These Recruitment Strategies are for:

- A5: Moist Interior Mountain and Omineca Mountain Natural Disturbance Units / ESSFwk2, ESSFmv3, ESSFmv1, ESSFmv3 merged BEC Units;
- A15: Wet Mountain Natural Disturbance Unit / ESSFwc3 merged BEC Unit;
- A18: Wet Trench Mountain Natural Disturbance Unit / ESSFwcp3 merged BEC Unit; and,
- A25: Wet Trench Valley Natural Disturbance Unit / SBSvk merged BEC Unit.

As per the *Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area* – *October 20, 2004*, section D.5 allows for a Recruitment Strategy that will result in a forest condition that is consistent with the objective in the shortest time practicable, with consideration for the timely and economic harvesting of timber rights.

The submitted Recruitment Strategies have been reviewed by Ministry of Forests, Lands and Natural Resource Operations staff as per the *Protocol for Provincial Government Review of Recruitment Strategies* (up-dated version March 5, 2012).

Page 1 of 2

Doug Perdue

This letter is to notify you that I approve the recruitment strategies for Units A5, A15, A18 and A25 as per your letter dated March 20, 2012.

In reviewing the recruitment strategies, government staff has these additional comments:

- As discussed at the May 9-11 workshop, there is an unintended consequence managing for the old forest objectives. That is, the retention of old forests in static geographic areas, into the future, rather than allowing for rotating the old forest through-out the landscape. This is most relevant in units that have a relatively short natural disturbance cycle. As discussed at the May 9-11, 2012 workshop, this unintended consequence of implementation of the Order requires attention beyond the submission and approval of recruitment strategies. The Landscape Objectives Working Group has expressed commitment to address this issue.
- There is some reservation about the wording regarding harvesting of old forest where there is bark beetle attack; however, we understand where this wording originates and believe that the overall strategy is consistent with the intent of *the Order*.
- The letter of support from BCTS for unit A15 is likely inaccurate in its statement that "The strategy will enable the licensees to address forest health issues, while at the same time, meet the old forest objectives." The recruitment strategy is to "Defer activities in the unit until such time as a surplus of old forest occurs."

Thank you for your on-going commitment to the continuous improvement of the implementation of the landscape biodiversity order in the Prince George TSA.

If you have any questions, please direct them to Shannon Carson at 250-565-4463.

Yours truly,

W.J. (Bill) Warner, RPF Regional Executive Director Omineca Region

Pc: Shannon Carson, Land Use Stewardship, Omineca Region

Recruitment Strategy in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit Establishing 'Landscape Biodiversity Areas'.

May 27, 2014

Background

The need for a recruitment strategy to address forest conditions in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit stem from four issues:

- 1) Under current conditions the unit is in deficit of the old forest requirement as specified in the *Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area*, *October* 20, 2004 (the Order).
- 2) There is a continuing need to address forest health issues within the unit to provide the opportunity to prevent future losses of the existing old forest in the unit.
- 3) To account for natural disturbance events that may impact the amount of existing old forest in the unit.
- 4) Past harvesting activities

The management of the Order requires that, in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit, a minimum of 26% of the CFLB be retained as old forest. The Order also requires that a minimum of 10% of the old forest required must be old interior forest.

Where either the old forest retention or the old interior forest objectives cannot be achieved, with consideration of the timely and economic harvesting of timber rights, then a recruitment strategy must be submitted and complied with. The recruitment strategy must contain results or strategies that will result in a forest condition that is consistent with the objectives in the shortest time that is practicable, with consideration for the timely and economic consideration of timber rights.

As part of a working group output, several initiatives were considered to both improve the biodiversity management practices within the Order while also attempting to improve access to fiber in already constrained areas to help with further salvage of mountain pine beetle killed timber. One strategy was to establish a portion of the old forest retention with spatially located areas utilizing landscape features that provide high biodiversity values (e.g. alluvial fans, high wildlife value), stand level characteristics that are of high value (besides age e.g. vertical structural characteristics), and functional forest area (e.g. areas of age class 4 & 5 pine that are fire origin, replaceable, time bound) that wouldn't necessarily include just old forest. While the objective was to utilize "old forest" to achieve this goal, whenever possible, it was recognized that younger age classes contribute to the characteristics which create high value. As such, the spatially defined Landscape Biodiversity Areas (LBA's) were designed to include a composition of younger age classes (from 3 and up with younger age classes permitted for delineating corridors), where they were considered to contribute a higher value for biodiversity.

This is the basis on which this Recruitment Strategy was developed.

Table #1 outlines the 2013 condition of old forest in the unit based on the age adjusted VRI inventory.

Table # 1 Old Forest and Younger Stands For A4 TARGETS BASED ON 2009 CFLB Definition

							Targets	
					Total CFLB	% Target	% Target	
		% Target from the		% Target from	Area (ha)	from the	from the	2013
Natural Disturb	ance Zone (NDZ)	Order	Mbec	the Order	2010	Order	Order	CFLB
A4	McGregor	26%	SBS wk 1	26%	227,723	26%	26%	59,208

	Area (ha)				
ID	TOTAL	2013 Old Forest	2013 Old Interior		
A4	227,723	58,389	29,503		
100 % of Target	59,208				
80% of Target	47,366				

Considerations

Through the area selection process, the following were key elements that guided the Licensees decisions:

- Attempt to reserve large contiguous areas
- Utilize all the age class 7, 8, and 9 forest in the NTHLB towards meeting the targets
- Consider partially constrained areas such as PR and R visual polygons along with rare, valuable habitat/ecosystems
- Located close to merged Bec boundary to facilitate transitions to adjacent units
- Incorporate any unique features
- Build areas off of already constrained areas
- Utilize deciduous leading areas
- Link areas where feasible (both within and between units and between different Licensee areas)
- Select areas with a mix of age classes but preferably leading with age class 8 and/or 9
- Minimize age classes 3 and 4
- Minimize the amount of dead pine included in retention areas
- To the extent practicable, proportionately distribute the age class targets between the licensees operating in the mBec unit
- attempt to establish areas >100 ha in size
- 80% of target was selected to allow for the inclusion of future and existing WTP's in contributing towards meeting the overall target

Using arcmap and/or hard copy maps, the area was broken down into age classes using VRI as the base data layer. Constraints (i.e. visuals), water features (lakes, streams), existing and proposed blocks and roads, licensee operating areas and parks were all utilized to identify areas to retain or exclude.

Several revisions were made as the group (combination of Licensees, Ministry staff and Consultants) reviewed and assessed the areas.

Recruitment Results or Strategies for the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit

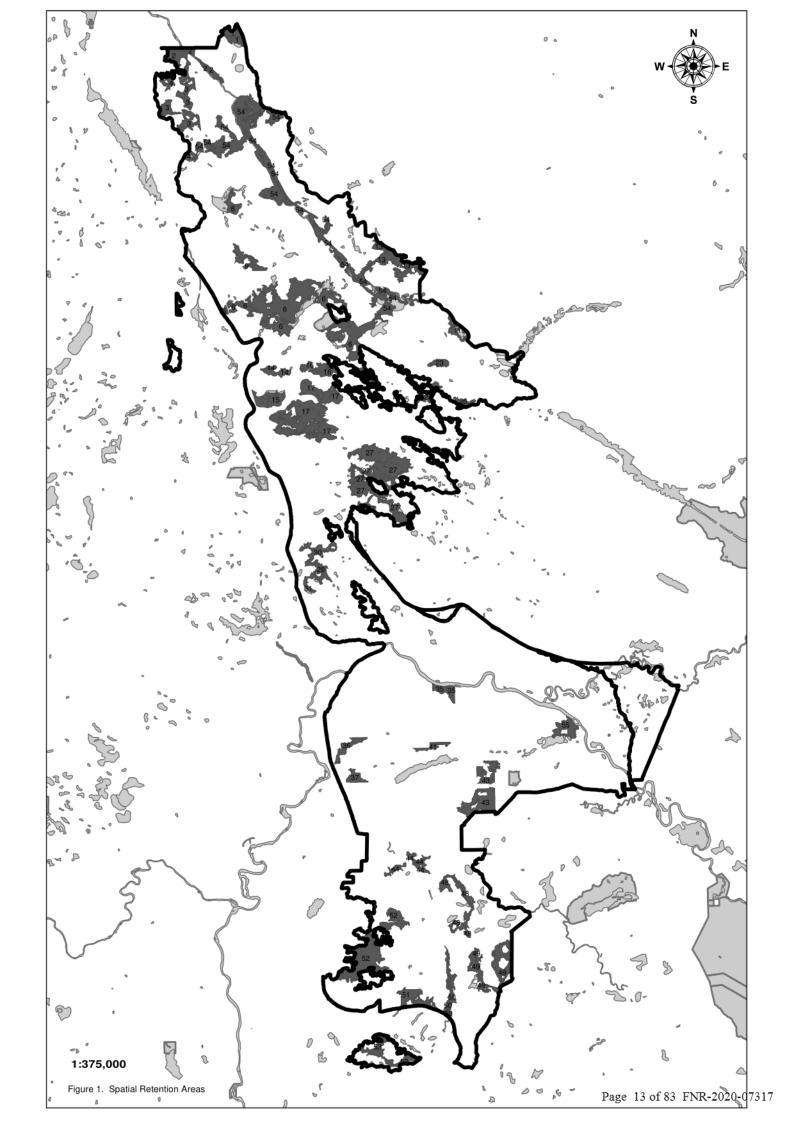
Pilot Biodiversity Retention Area at 80% of Target				
Age Class	Total	% of Retention	Cumulative Total against 2013 Target	
1	17	0%	42,634	72%
2	15	0%	42,617	72%
3	1,740	4%	42,601	72%
4	3,451	8%	40,862	69%
5	8,404	20%	37,411	63%
6	3,397	8%	29,007	49%
7	3,955	9%	25,610	43%
8	21,402	51%	21,655	37%
9	253	1%	253	0%
Total	42,634			

Strategy

The polygons associated with the above table and identified in figure 1 will be retained (no harvesting activity) for a minimum of 10 years with opportunity for review and adjustments in coordination with designated Ministry staff

Along with the 21,655 ha of old (age classes 8 and 9) identified in this strategy, an additional 16,607 ha of old (28% of target) will be managed as part of the aspatial strategy as per the Prince George Biodiversity Order.

In addition to this, age classes 1 and 2 have been included in the summaries. That being said, these age classes within the identified polygons contribute the following: age class 1 (17 ha), age class 2 (15 ha).



Periodic Review

These areas will be reviewed (at a minimum) every 10 years to reevaluate the age class distribution within the selected areas and assess the functionality. At these times, adjustments may be proposed based on the results.

It should also be noted that there may be slight changes (<5%) to the boundaries to incorporate operational issues. If polygons are impacted (area reductions) replacement areas of equal or better value will be identified. These changes will be tracked and the information provided to the Government Landscape Objective Working Group (GLOWG) or government designate.

Data

Included with this package is an Arcmap Geodatabase which has the VRI attributes and polygons associated with unit A4 and a map outlining the delineated and numbered polgons . Included is the excel summary dataset and summary for reference.

Licensee Representatives:

BC Timber Sales

MAY 29, 2014 Date

Carrier Lumber Date

Canadian Forest Products Ltd

Date

Sinclar Group May 27, 2019

CANFOR

Canadian Forest Products Ltd.

and affiliated companies

June 2, 2014

Ministry of Forests, Lands and Natural Resource Operations Omenica Region 1044 Fifth Ave. Prince George, BC V2L 5G4

Attention: Shannon Carson

Re: Recruitment Strategy in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit

Dear Shannon,

We are pleased to submit a copy of a Recruitment Strategy in the McGregor Plateau SBS wk1 A4 Natural Disturbance Unit for review and approval. As you know, this Strategy is intended to demonstrate compliance with the Old Forest Retention Objective, in the Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area, while at the same time enabling the licensees to continue to address forest health concerns in the unit.

The Strategy has been reviewed and accepted by the Licensee members of the Landscape Objectives Working Group (LOWG).

Thank you for your assistance in this project. If any questions come up please do not hesitate to call.

Sincerely,

Terry Lazaruk, RPF,

Strategic Planning Coordinator

Canfor - Forest Management Group

Attachment #3: Government Assessment of mBEC Unit A4 Pilot proposed recruitment strategy (May 27/14) which includes spatial location of Landscape Biodiversity Areas in the Prince George Timber Supply Area

September 10, 2014

A. Introduction

In May 2012, a workshop organized and attended by Government and Forest Licensees / BCTS, initiated a project called: "Project to Explore Options to improve management of Landscape Level Biodiversity in the Prince George Timber Supply Area". The project goal was: "To review the current Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area October 20, 2004 and identify and recommend options for improving management of landscape level biodiversity that also improve the timber supply". A Recommendations Report was submitted to the Omineca Regional Executive Director in February 2013. One of the options identified in that report was: "Establish a Portion of the Old Forest Retention with Spatially Located Areas".

This assessment is to provide the Omineca Regional Executive Director of Ministry of Forests, Lands and Natural Resource Operations with information regarding the costs / benefits or pros / cons to the <u>ecological</u> aspects of the Recruitment Strategy (date May 27, 2014) submitted by the Licensees Landscape Objectives Working Group (LLOWG) for A4 unit (McGregor Plateau, SBSwk1). The proposed recruitment strategy represents one scenario to "Establish a Portion of the Old Forest Retention with Spatially Located Areas" and meet the broad goal of "improving management of landscape level biodiversity that also improve the timber supply".

The proposed Recruitment Strategy (date May 27, 2014) identifies approximately 71% of the old forest target to be met through spatially located Landscape Biodiversity Areas (LBAs) and approximately 29% of the target to be met through old forest that is not spatially located (non-spatial). Landscape Biodiversity Areas (LBAs) were proposed by Forest Licensees / BCTS based on identified criteria set by government staff. Several iterations occurred based on review and comment by government and consultant subject matter experts. Landscape Biodiversity Areas (LBAs) can consist of different age classes and have been selected and assessed based on site and landscape level attributes.

The information provided in this report is broken down into the following topic headings:

- A. Introduction
- **B.** Assessment
 - 1. Comparison of old forest retention between the proposed recruitment strategy referred to in this assessment as the "base case" (May 27/14) and:
 - The status quo [Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area (referred to in this assessment as "the Order")(October 2004) including the approved non-spatial recruitment strategy (approved Feb 6, 2012)];
 - the non-spatial objectives (the Order 2014);
 - Biodiversity Guidebook / Landscape Unit Planning Guide (status quo for much of the rest of the Province); and,
 - Amount present on the land base, as per March 31, 2013 data.
 - 2. Assessment of old interior forest (200m buffered edge from cut blocks and from roads).
 - 3. Assessment of the following attributes within the proposed Landscape Biodiversity Areas, as compared to the whole A4 unit (i.e. representation assessment):
 - Age;
 - Crown Closure;
 - Site Index;
 - Species; and,
 - Timber Harvesting Land Base contribution.
 - 4. Discussion about Crown Forest Land Base versions (CFLB)
- C. Summary

B. Assessment

- 1. Comparison of impact to old forest retention between the proposed recruitment strategy referred to in this assessment as the "base case" (May 27/14) and:
 - a) The status quo [Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area (referred to in this assessment as "the Order")(October 2004) including the approved non-spatial recruitment strategy (approved Feb 6, 2012)];
 - b) the non-spatial objectives (the Order 2014);
 - c) Biodiversity Guidebook / Landscape Unit Planning Guide (status quo for much of the rest of the Province); and,
 - d) Amount present on the land base, as per March 31, 2013 data.

scenario	Scenario Description	Crown Forest Land Base (hectares)	old forest retained (>140 yrs.) (hectares)	difference between old forest retained for base case and other scenarios (hectares)	forest retained that is 81 – 140 years old (hectares)	Comments
base case	Spatial Landscape Biodiversity Areas with 28% non-spatial requirement (referred to in this document as the May 27, 2014 Recruitment Strategy)	227,723	38,262*	n/a	15,756	21,665 ha in spatial LBA polygons and 16,607 ha from non-spatial old forest;
a)	Order (2004) including the approved non-spatial recruitment strategy (approved Feb 6, 2012)	227,723	47,366	+ 9,104	n/a	Commitment made to use age class 7 (121-140 years) to make up the 20% or 11,842 ha of younger ages to meet the target
b)	the Order (2004)	227,723	59,208	+ 20,946	n/a	
c)	Order Establishing Provincial Non- Spatial Old Growth Objectives (June 2004) (based on the Biodiversity Guidebook {September 1995} and	227,723	25,050 (would be the requiremen	- 13,212	Approx. 6,800 (would be the requirement for mature,	Mostly Low BEO, some Moderate BEO (Crooked unit); Old >140 11% requirement; for Mod BEO target for mature

	Landscape Unit Planning Guide		t for old		because about	of additional 12%; no
	March 1999})		retention)		1/4 of the unit	requirement in Low BEO
					is Moderate	
					BEO)	
d)	Amount present as per March 31,	227,723	58,389	+ 20,127	n/a	For reference
	2013 data					

NOTE: source of data is from the Licensees Landscape Objectives Working Group (LLOWG);

old forest is defined as >140 years in all scenarios;

CFLB is based on 2013 LLOWG version of VRI

Interpretation of data in the table above:

In the table above, the *May 27, 2014 Recruitment Strategy* is called the "base case" and is compared to other scenarios. The current status quo is the Order (2004) including approved Feb 6, 2012 Recruitment Strategy or the line identified as "b)". Therefore, as indicated above, the amount of old forest retained through this proposed spatial / non-spatial recruitment strategy is approximately 9,100 hectares less than the status quo. The forest retained that is 81 – 140 years old, in the spatial portion (LBAs) of the proposed recruitment strategy is approximately 15,750 hectares.

As per the above table when the base case (or *May 27, 2014 Recruitment Strategy*) is compared to the *Order Establishing Provincial Non-Spatial Old Growth Objectives* (June 2004), the data indicates that 13,200 hectares more old forest is retained in the *May 27, 2014 Recruitment Strategy* as compared to the *Order Establishing Provincial Non-Spatial Old Growth Objectives*.

Also, added to the table above is the amount of old forest that was on the crown forest land base when reported by the Licensee / BCTS Landscape Objectives Working Group (LLOWG) for the period ending March 31, 2013. At that time there was approximately 20,100 hectare more old forest than will be required to be retained with the *May 27, 2014 Recruitment Strategy*.

^{*} according to government analysis, 584 hectares of the LBA area proposed by the LLOWG as Landscape Biodiversity Areas are not within the CFLB

2. Assessment of old interior forest hectares (200m buffered edge from cut blocks and from roads)

	Crown Forest Land Base (hectares)	old forest target (26% of CFLB) (hectares)	Interior old forest target (10% of old forest target) (hectares)	Interior old forest (hectares)	Interior old forest in LBA (hectares)
Licensees LOWG data source: Legal objectives for interior old forest as per the <i>Order</i> (2004)	227,723	59,208	5,921		
Amount of interior old forest present as per March 31, 2013 data	227,723	58,389		29,503	
Government analysis of LBA interior old forest buffered for blocks and roads (>140 years old)					4,359
Government analysis of LBA interior old forest buffered for blocks and roads (>40 years old)					9,507

Interpretation of data in the table above:

From the analysis that government staff have conducted, Landscape Biodiversity Areas alone will not meet the interior old forest target of 10% of the old forest target (i.e. 2.6% of the CFLB total hectares). However, with the non-spatial old forest that is included in the *May 27, 2014 Recruitment Strategy* (i.e. 28%), it is very likely that interior old forest on the A4 units will meet the target in the 2004 Order.

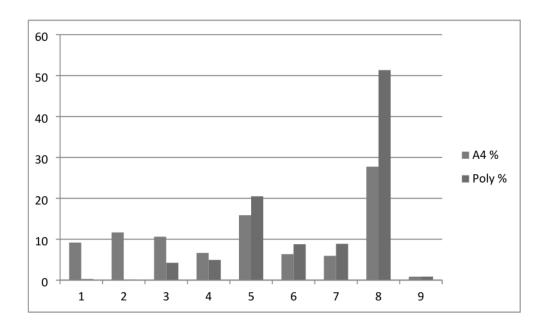
Including the all stands greater than age class 2 (i.e. >40 years old) the interior forest (buffered for cut blocks and roads) is calculated to be 9,507 hectares. The areas with younger age classes are part of the proposed spatial recruitment strategy and will contribute to the interior old forest, over time, if undisturbed.

3. Assessment of attributes within the proposed Landscape Biodiversity Areas, as compared to the whole A4 unit (i.e. representation assessment)

Note: source of data for all of the tables and graphs in this representation assessment is government's TSR 4 dataset. It is acknowledged and understood that natural and human initiated disturbance (i.e. forest harvesting) have taken place in this geographic unit. Therefore, the data portrayed in the tables and graphs below is a snap shot based on the data available at TSR4 and is not reflective of the "natural" forest distribution for these attributes.

a) Age
Net Crown Forest Land Base (TSR4)
All Age Classes

AC	A4 (ha)	A4 %	Licensee Polygons (ha)	Poly %
Null	11723	5	71	0
1	20769	9	111	0
2	26402	12	31	0
3	24014	11	1807	4
4	15048	7	2108	5
5	35929	16	8737	20
6	14368	6	3747	9
7	13463	6	3783	9
8	62804	28	21888	51
9	1912	1	368	1
	226432		42652	

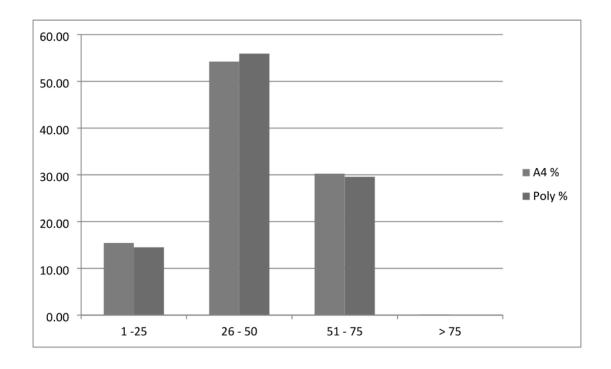


I:\General\PLANNING\LOWG_PG\2012 and 2013 and 2014\Spatial SG\April May June 2014\Government Assessment_A4 Pilot_Sep 10_14.docx 6

b) Crown Closure

Net Crown Forest Land Base (TSR4) Age Class > 4

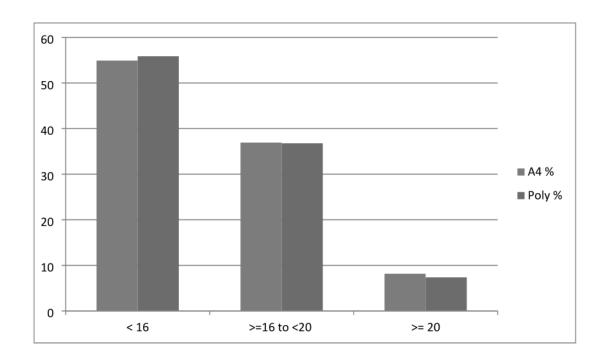
Crown Closure	A4 (ha)	A4 %	Licensee Polygons (LBA) (ha)	Poly (LBA) %
1 -25	18,911	15	5251	14
26 - 50	66,454	54	20,255	56
51 - 75	37,063	30	10,714	30
> 75	131	0	0	0
	122,559		36,220	



c) Site Index

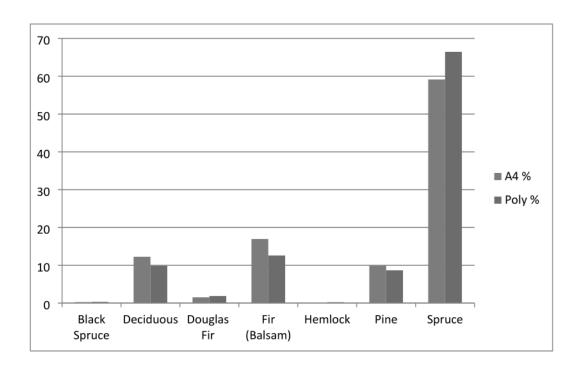
Net Crown Forest Land Base (TSR4) Age Class > 4

Index	A4 (ha)	A4 %	Licensee Polygons (ha)	Poly %
< 16	67,181	55	20,087	56
>=16 to <20	45,168	37	13,220	37
>= 20	9975	8	2,649	7
	122,324		35,956	



d) <u>Species</u>Net Crown Forest Land Base (TSR4)Age Class > 4

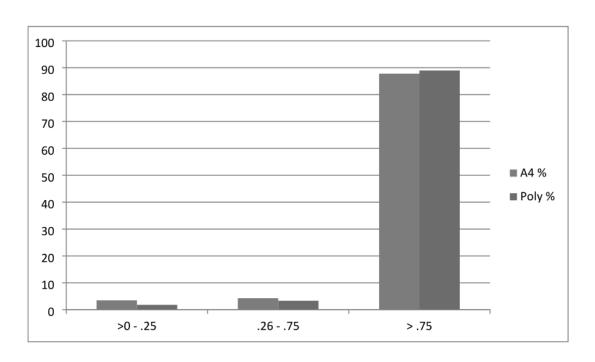
			Licensee Polygons	
Species	A4 (ha)	A4 %	(ha)	Poly %
Black Spruce	325	0	118	0
Deciduous	15,004	12	3577	10
Douglas Fir	1880	2	682	2
Fir (Balsam)	20,757	17	4575	13
Hemlock	0	0	85	0
Pine	12,106	10	3146	9
Spruce	72,435	59	24,121	66
	122,507		36,304	



e) Timber Harvesting Land Base

Net Crown Forest Land Base (TSR4) All Age Classes

			Licensee				
THLB	Polygons						
Factor	A4 (ha)	A4 %	(ha)	Poly %			
0	10,008		2527				
>025	7924	3	776	2			
.2675	9712	4	1431	3			
> .75	198,788	88	38,231	89			
	226,432		42,965				



4. Crown Forest Land Base assessment

comparison between 2009 and 2013 spatial representation of CFLB

There has been significant work done by both the Licensees LOWG group and government to assess and understand the various versions of the CFLB.

Agreement has been reached that going forward we will use the current version (associated with TSA4 or 2013 version) of CFLB for LOWG work.

visual assessment to determine if any LBA polygons are outside the CFLB

Government staff produced a map for different versions of the CFLB and identified where proposed LBAs were outside of the CFLB. For the CFLB associated with TSR 2, there were 6701 hectares of the LBAs that were outside the CFLB. For the CFLB associated with TSR 3, there were 6410 hectares of the LBAs that were outside the CFLB. For the CFLB associated with TSR 4, there were 683 hectares of the LBA that are outside of the CFLB. Since it has been agreed that we will be using the CFLB associated with TSR 4, there is an outstanding issue regarding the 683 hectares that are counted in the recruitment strategy are not within the CFLB. There is communication regarding this issue and resolution is close.

C. Summary

This summary is intended to include the key points about the above quantitative assessment (i.e. table and graphs) and some qualitative information from government and consultant subject matter experts. The summary focuses on a comparison between the proposed recruitment strategy referred to in this assessment as the "base case" (May 27/14) and the status quo [Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area (referred to in this assessment as "the Order") (October 2004) including the approved non-spatial recruitment strategy (approved Feb 6, 2012)].

Some implications of approving the Recruitment Strategy (date May 27, 2014) (with a component of spatially located Landscape Biodiversity Area) over the status quo (*The Order* and the approved non-spatial recruitment strategy) are as follows:

- Spatial LBAs provide increased certainty
 - Assessments can be performed to assess biological attributes of area. These
 attributes are landscape level [e.g. large contiguous area (i.e. interior forest),
 connectivity, representative capture of attributes]. The attributes that can be
 assessed are also stand level [e.g. large old trees, snags, coarse woody debris,
 species, site series, etc.).
 - Recruitment of younger ages can be spatially identified and tracked.
 - Information can be provided to other natural resource proponents for consideration during resource development planning.
- Spatial LBA areas overlap with known values (heritage, wildlife habitat, riparian, etc.)
 reducing likelihood of harvesting negatively impacting the other values
- For interior old forest, the information above in #2 indicates that, while it is difficult to
 definitively provide what the retention of interior old forest will be, approximately 74%
 of the Order's requirement will be met within the LBAs (i.e. 4359 hectares or the target
 of 5887 hectares).
- The quantitative assessment in #3 above indicates that the Licensees and BCTS have generally captured similar areas within their LBAs as is found in the unit as a whole for Crown Closure, Site Index, Species and the Timber Harvesting Land Base. As would be expected and hoped they have captured substantially more age class 8 in their LBAs than is proportionally represented on the whole unit.
- Through the past decade of implementation of the Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area (2004) it has become apparent that there are challenges to the implementation of non-spatial old forest objectives by merely meeting the numerical old forest percentages. A specific challenge is that if 26% of Crown Forest Land Base is to be retained as old forest, then harvesting in some units can proceed until that percentage is met. At that point, the old forest is

I:\General\PLANNING\LOWG_PG\2012 and 2013 and 2014\Spatial SG\April May June 2014\Government Assessment_A4 Pilot_Sep 10_14.docx 12

essentially spatially located and any future harvesting is only permitted in the stands below the definition of old. These become islands of old forest in a landscape where younger stand are not allowed to become old. The concept of "rotating reserves of old, over time" will not happen. When the old and recruitment areas are spatially located, there may be less old forest but the concept of rotating reserves and landscape level design is possible.

- Spatial LBAs overlap with areas already constrained reducing the number of hectares unavailable for timber harvesting.
- Area of old forest would be available for harvesting in the immediate future (mid-term period for timber supply) (please refer to the separate timber supply assessment).
- Requirement for retention of old forest will be approximately 9,100 hectares less within the A4 unit (McGregor Plateau, SBSwk1).
- The spatial portion of the recruitment strategy was to be 80% of the old forest requirement. The submission (May 27, 2014) works out to be approximately 72% of the old forest retention amount. A lesson learned from this pilot is that Licensees / BCTS could locate greater than 80% of the target, so that this does not happen in future units.
- Although the Vegetation Resource Inventory (VRI) representation assessment in #3
 indicates that the LBA polygons are representative of the unit for the attributes
 assessed, some field assessment or aerial reconnaissance is recommend by the
 government ecosystem biologist and regional ecologist.
- Although the Vegetation Resource Inventory (VRI) representation assessment in #3
 indicates that the LBA polygons are representative of the unit for the attributes
 assessed, the unit has been impacted by previous harvesting. Therefore, the current
 distribution of attributes like crown closure, site index and species (> age class 4) may
 not be reflective of the pre-harvest attributes for the unit.

MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS DECISION NOTE

Date: September 16, 2014

Date of previous note: February 12, 2014

File: 17730-50-PG TSA BIOD

CLIFF: 184034

PREPARED FOR: Greg Rawling, Regional Executive Director, Omineca Region

ISSUE: RECRUITMENT STRATEGY (DATE MAY 27, 2014) FOR MERGED BIOGEOCLIMATIC UNIT A4, PRINCE GEORGE TIMBER SUPPLY AREA

BACKGROUND:

In May 2012, there was an initial workshop with the goal of reviewing the current Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area October 20, 2004 (the Order) and recommending options for improving management of landscape level biodiversity that may improve mid-term timber supply. The workshop was sponsored by Peter Baird (Planning Manager, Canfor) and Bill Warner (Regional Executive Director, MFLNRO).

In February 2013, a report of recommended options for further analysis was provided to the Regional Executive Director, Omineca Region, FLNR.

Between February 2013 and February 2014 the Landscape Objective Working Group (LOWG), made up of representatives of Forest Industry / BCTS and MFLNRO staff established a pilot in Unit A4 (McGregor Plateau, SBSwk1) and worked on iterations of spatially located Landscape Biodiversity Areas. Landscape Biodiversity Areas can consist of different age classes and have been selected and assessed based on site and landscape level attributes.

On May 27, 2014 the LLOWG submitted a Recruitment Strategy for A4 unit (McGregor Plateau, SBSwk1) which identifies approximately 71% of the old forest target as spatially located Landscape Biodiversity Areas and approximately 29% will contine to be met through old forest that is not spatially located (non-spatial). The cover letter and submitted Recruitment Strategy can be found in Attachment #1 and #2.

DISCUSSION:

The purpose of this note is to obtain a decision from the Regional Executive Director for the submitted Recruitment Strategy (May 27, 20014).

In a briefing note provided to the Omineca RED, dated February 12, 2014, the recommended option for implementing spatial Landscape Biodiversity Areas for this Pilot Project was identified as a recruitment strategy under Section D.5 of the Order. Section D.5 states: "Where either the old forest retention or the old interior forest objectives can not be achieved, with consideration of the timely and economic harvesting of timber rights, then a recruitment strategy must be submitted and complied with." The recruitment strategy must contain results or strategies that will result in a forest condition that is consistent with the objectives in the shortest time as is practicable, with consideration for the

1 of 3

timely and economic harvesting of timber rights. The recruitment strategy must be submitted to and approved by the designate of the Minister of Sustainable Resource Management."

A guidance document titled the Protocol for Provincial Government Review of Recruitment Strategies For Prince George Timber Supply Area Landscape Biodiversity Objectives, Up-dated version: March 5, 2012, states "A response will be provided in writing to the applicant(s), from the Regional Executive Director, with the input from the GLOWG representatives."

The Government members of the LOWG (commonly referred to as the GLOWG) involved with the A4 Pilot have prepared an assessment of the Landscape Biodiversity Areas and the recruitment strategy, in general. It provides information from an ecological perspective. The Licensees and BCTS have provided data that serves as a "rough" assessment of timber supply / economics of the recruitment strategy. These assessments are in Attachment #3 and #4. The information from these assessments is the basis of the pros and cons listed in the Options section of this Note. This is a pilot and lessons learned will be used to improve recruitment strategies and engagement levels in future units.

OPTIONS:

Option 1: Approve the recruitment strategy and associated Landscape Biodiversity Areas. Pros:

- Spatial Landscape Biodiversity Areas provide increased certainty.
- Landscape Biodiversity Areas increase the integrity of landscape biodiversity by reducing the level of fragmentation
- The proposed Landscape Biodiversity Areas generally capture "similar" areas within their boundaries as is found in the unit as a whole for Crown Closure, Site Index, Species and the Timber Harvesting Land Base.
- When the old and recruitment areas are spatially located, there may be less old forest but the concept of rotating reserves and landscape level design is possible.
- Spatial Landscape Biodiversity Areas overlap with areas already constrained reducing the number of hectares unavailable for timber harvesting.
- Some immediate and Mid-term Timber Supply relief.
- General agreement amongst industry and government staff involved in this pilot that recruitment strategy with spatial component is an improvement over non-spatial implementation of the Order.

Cons:

- Requirement for retention of old forest will be approximately 9,100 hectares less within the A4 unit (McGregor Plateau, SBSwk1).
- Public and / or First Nations may be concerned that there was inadequate engagement.

Option 2: Do not approve the recruitment strategy.

Pros:

Maintain old forest levels at status quo amounts.

Cons:

- None of the perceived ecological benefits, listed above, of spatially located of Landscape Biodiversity Areas will be realized.
- No timber supply relief would be realized from this initiative.

2 of 3

Option 3: Request revisions to the Recruitment Strategy to increase the amount of old in the spatially located Landscape Biodiversity Areas.

Pros:

Would increase the amount of old forest requirement in this unit.

Cons:

- Landscape Biodiversity Areas would contain primarily old forest which would be more susceptible to forest health issues and would be less robust over time.
- It has taken considerable time to agree on these Landscape Biodiversity Areas.

RECOMMENDATION:

Option 1: Approve the recruitment strategy and associated Landscape Biodiversity Areas.

DECISION & STONATURE Physic Z 31 (2) 2014

Date

October 9 2014

Date

Omineca Regional Executive Director ted in tent attached 20141001 e-mail

Attachments:

#1. Cover letter for Recruitment Strategy (May 27, 2014)

#2. Recruitment Strategy in the McGregor Plateau, SBS wk1 A4 Natural Disturbance Unit Establishing 'Landscape Biodiversity Areas' May 27, 2014

#3. Government Assessment of A4 Pilot proposed recruitment strategy (May 27/14) which includes spatial location of Landscape Biodiversity Areas, August 26, 2014

#4. Rough Timber Supply Assessment Information for A4 Pilot Recruitment Strategy, August 27, 2014

Contact:

Director: Norm Bilodeau Div: Resource Management

Phone: 250-565-6107

Alternate Contact:

Name: John Pousette Div/Region/Branch: Prince George District

Phone: 250-614-7423

Prepared by:

Name: Shannon Carson Branch/Region: Research and Stewardship, Omineca Phone: 250-565-6214

OBJECTID *	Shape *	TRACKNUM	LIC_FINAL	Shape_Length	Shape_Area	LBA_ECOLOGICAL RATIONALE	LBA_CULTURAL_SOCIAL RATIONALE	LBA_ECONOMIC	APPROVED_DATE	Area
						connectivity within unit, connectivity between units, part of large contiguous area (>1000 ha); age class predominantly 7-		some constrained area, boundary may need		
1 '						9, minimal road development, valuable habitat (expands on	I'	adjusting for future adjacent		
1						area of Caribou UWR U-7-003)	Modification	blocks, BCTS & Winton		
1 1	Polygon	13	Sinclar Group Forest Products Ltd.	42342.93743	7197688.763	· · · · · · · · · · · · · · · · · · ·			October 20, 2014	720
	,,,		,			connectivity within unit, constrained area, part of large		BCTS & CanFor	,	
						contiguous area (>1000 ha); species diversity (i.e. deciduous				
						leading), mix of age classes, minimal road development,				
						contains areas id as plant communities at risk				
2	Polygon	17	Canadian Forest Products Ltd.	126397.6498	34083719.69				October 20, 2014	3408
3	Polygon	25	Sinclar Group Forest Products Ltd.	5836.338956	373532.5725	none indicated			October 20, 2014	37
,						connectivity within unit, connectivity between units, part of		BCTS & CanFor		
						large contiguous area (>1000 ha); species diversity (i.e.				
,						deciduous leading), mix of age classes, minimal road				
,						development, valuable habitat (expands on area of Caribou				
!	<u>.</u>					UWR U-7-003), contains areas id as plant communities at				
4	Polygon	27	Canadian Forest Products Ltd.	28003.71295	5308397.734				October 20, 2014	531
'						connectivity within unit, connectivity between units, part of		BCTS & CanFor		
1 '						large contiguous area (>1000 ha); species diversity (i.e.				
						deciduous leading), mix of age classes, minimal road				
1						development, valuable habitat (expands on area of Caribou				
-!	Dolugon	27	Canadian Forest Products Ltd.	E 4707 40042	15093614.81	UWR U-7-003), contains areas id as plant communities at			October 20, 2014	1509
5 120	Polygon	27	Canadian Forest Products Ltd.	34767.49643	15095614.61	connectivity within unit, connectivity between units, part of		BCTS & CanFor	October 20, 2014	1505
						large contiguous area (>1000 ha); species diversity (i.e.		BC13 & Califol		
1						deciduous leading), mix of age classes, minimal road				
						development, valuable habitat (expands on area of Caribou				
						UWR U-7-003), contains areas id as plant communities at				
	Polygon	27	Canadian Forest Products Ltd.	78543.19669	15596621.01				October 20, 2014	1560
	. 0.,60			, 65 15125 655	1000001101	connectivity between units, large contiguous area (>1000		Carrier	000000. 20, 202.	
						ha), species diversity (i.e. deciduous leading), mix of age				
	Polygon	52	Canadian Forest Products Ltd.	62685.42811	22806847.21				October 20, 2014	2281
	,,,					connectivity between units, large contiguous area (500 - 250		Carrier		
1						ha), species diversity (i.e. deciduous leading)				
8 P	Polygon	53	Canadian Forest Products Ltd.	20315.75172	3501520.703				October 20, 2014	350
						connectivity within unit, species diversity (i.e. deciduous		constrained area, boundary		
						leading), mix of age classes, age class predominantly 7-9, IU		may need adjusting for		
1						logging		future adjacent blocks,		
								BCTS, CanFor & Winton		
9 Poly	Polygon	54	Canadian Forest Products Ltd.	13630.37268	2453914.319				October 20, 2014	245
						connectivity within unit, large contiguous area (1000 - 500	overlaps a portion of a	constrained area, boundary		
							culturally significant	may need adjusting for		
1						, , , , , , , , , , , , , , , , , , , ,	aboriginal trail	future adjacent blocks,		
10	Polygon	E 4	Canadian Forest Products Ltd	20524 06652	9321349.193	significant area id as plant communities at risk		BCTS, CanFor & Winton	October 20, 2014	027
10	Polygon	54	Canadian Forest Products Ltd.	39334.90032	3321343.133	connectivity within unit large contiguous area />1000 ha)	overlans a portion of a	constrained area, boundary	October 20, 2014	932
						connectivity within unit, large contiguous area (>1000 ha), species diversity (i.e. deciduous leading), mix of age classes,	overlaps a portion of a culturally significant	may need adjusting for		
						[· · · · · · · · · · · · · · · · · · ·	aboriginal trail,	future adjacent blocks,		
						area id as plant communities at risk, major riparian corridor	abongniai trali,	BCTS, CanFor & Winton		
1 '	I	I	BC Timber Sales			expanded, Parsnip River	1	Joseph Carrier & William	October 20, 2014	1034

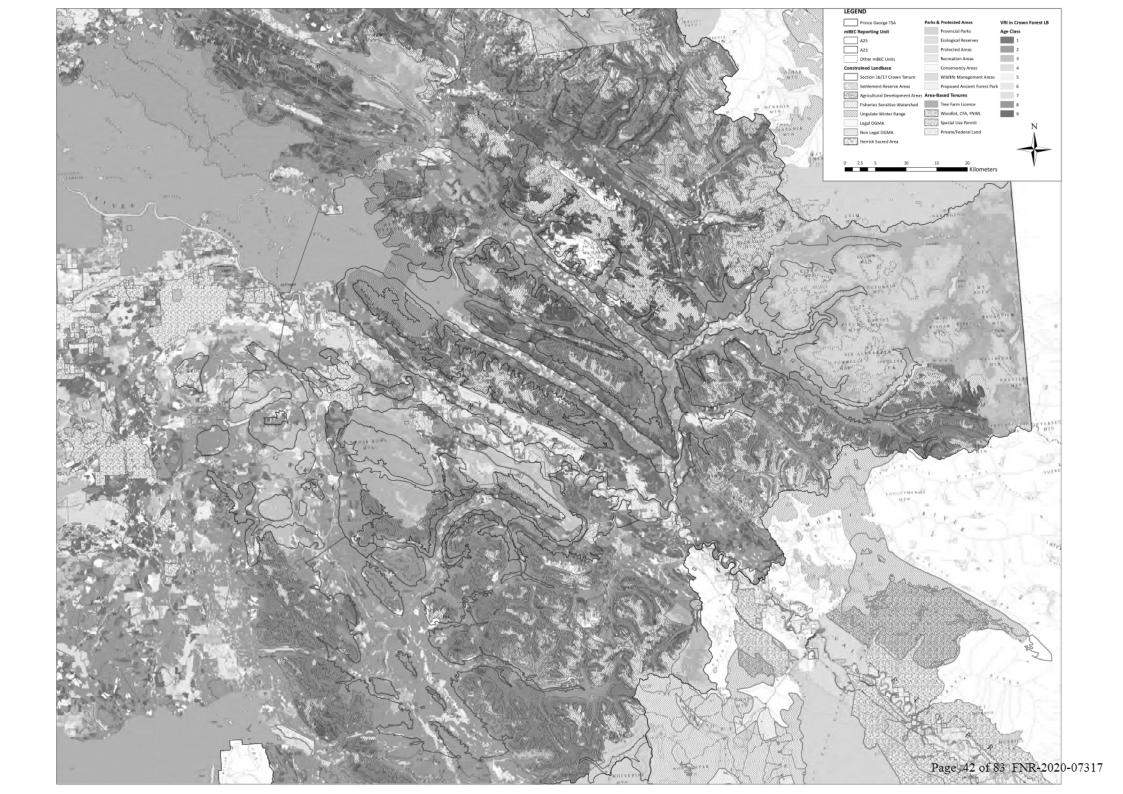
						1			
					connectivity within unit, large contiguous area (1000 - 500		constrained area, boundary		
					ha), species diversity (i.e. deciduous leading), mix of age		may need adjusting for		
					classes, age class predominantly 7-9, IU logging, contains		future adjacent blocks,		
					significant area id as plant communities at risk, major		BCTS, CanFor & Winton		
					riparian corridor expanded, Parsnip River				
12	2 Polygon	54 Sinclar Group Forest Products Ltd.	85889.20488	8926708.628				October 20, 2014	893
					connectivity between units, large contiguous area (500 - 250		Carrier		
					ha), species diversity (i.e. deciduous leading)				
13	3 Polygon	53 Canadian Forest Products Ltd.	26183.65345	4343442.381				October 20, 2014	434
					connectivity between units, large contiguous area (1000 -		BCTS		
					500 ha), species diversity (i.e. deciduous leading), mix of age				
					classes, age class predominantly 7-9, connectivity with				
14	4 Polygon	1 BC Timber Sales	995.403167	48126.61323	OGMA in Mackenzie			October 20, 2014	5
					connectivity between units, large contiguous area (1000 -		BCTS		
					500 ha), species diversity (i.e. deciduous leading), mix of age				
					classes, age class predominantly 7-9, connectivity with				
15	Polygon	1 BC Timber Sales	10454.58087	I .	OGMA in Mackenzie			October 20, 2014	262
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				connectivity between units, large contiguous area (1000 -		BCTS		
					500 ha), species diversity (i.e. deciduous leading), mix of age				
					classes, age class predominantly 7-9, connectivity with				
16	6 Polygon	1 BC Timber Sales	13768 47078	2495021 892	OGMA in Mackenzie			October 20, 2014	250
10	oli oliygoli	Tibe timber sales	13700.47070	2433021.032	connectivity within unit, species diversity (i.e. deciduous	portion of historic aborigina	constrained area BCTS	October 20, 2014	230
					leading), mix of age classes, age class predominantly 7-9,	trail	Constrained area, BC13		
17	7 Dolugon	2 BC Timber Sales	17702 0402	2220590 571	minimal road development	l lan		Ostobor 30, 2014	223
1/	7 Polygon	2 BC Timber Sales	1//65.6495	2230369.371	·	naution of historia aboriaina	Lanctrained area DCTS	October 20, 2014	223
					connectivity between units, species diversity (i.e. deciduous	portion of historic aboriginal	constrained area, BC15		
1.0	2 0 2 1 1 2 2 2	2 PC Tirely on Color	F0F0 F67000	1110072 460	leading), mix of age classes, age class predominantly 7-9,	trail		0-1-1-20 2014	112
18	3 Polygon	2 BC Timber Sales	5058.567089	11190/3.469	minimal road development	la subtract of this task and a state of	DOTS	October 20, 2014	112
					connectivity within unit, species diversity (i.e. deciduous	portion of historic aborigina	constrained area, BC15		
1		2007: 1 01	1005 100710	425040450	leading), mix of age classes, age class predominantly 7-	trail		0	4.0
19	Polygon	2 BC Timber Sales	1986.129719	126018.159	9,minimal road development,			October 20, 2014	13
					connectivity within unit, connectivity between units, large	portion of historic aborigina	BCTS		
					contiguous area (1000 - 500 ha), species diversity (i.e.	trail			
					deciduous leading), mix of age classes, age class				
20	Polygon	3 BC Timber Sales	30813.93133	5492383.954	predominantly 7-9, plant community at risk			October 20, 2014	549
					connectivity between units, large contiguous area (1000 -	portion of historic aborigina	constrained area, BCTS		
					500 ha), species diversity (i.e. deciduous leading), mix of age	trail			
					classes, age class predominantly 7-9, minimal road				
21	1 Polygon	2 BC Timber Sales	13311.77587	5246739.482	development			October 20, 2014	525
					connectivity between units, age class predominantly 7-9,		BCTS		
22	2 Polygon	4 BC Timber Sales	14214.44884	1674583.057	plant community at risk			October 20, 2014	167
					connectivity within unit, connectivity between units, large	portion of historic aborigina	BCTS		
					contiguous area (1000 - 500 ha), species diversity (i.e.	trail			
					deciduous leading), mix of age classes, age class				
23	Polygon	3 BC Timber Sales	23060.99564	5013152.548	predominantly 7-9, plant community at risk			October 20, 2014	501
					connectivity within unit, connectivity between units, large	portion of historic aborigina	ВСТЅ		
					contiguous area (500 - 250 ha), species diversity (i.e.	trail			
					deciduous leading), mix of age classes, age class				
24	1 Polygon	3 BC Timber Sales	13855.78606	3409979.775	predominantly 7-9, plant community at risk			October 20, 2014	341
	/5=				connectivity within unit, species diversity (i.e. deciduous	may overlap a portion of a	constrained area, boundary		
					leading), mix of age classes, age class predominantly 7-9, IU	culturally significant	may need adjusting for		
					logging, contains significant area id as plant communities at		future adjacent blocks,		
					risk		BCTS, CanFor & Winton		
25	Polygon	54 BC Timber Sales	10127.06291	1729702.5				October 20, 2014	173
	71, 01,8011	5-100 Timber Sales	10127.00231	1 1,25,02.5	I .	I .		300301 20, 2014	1/.

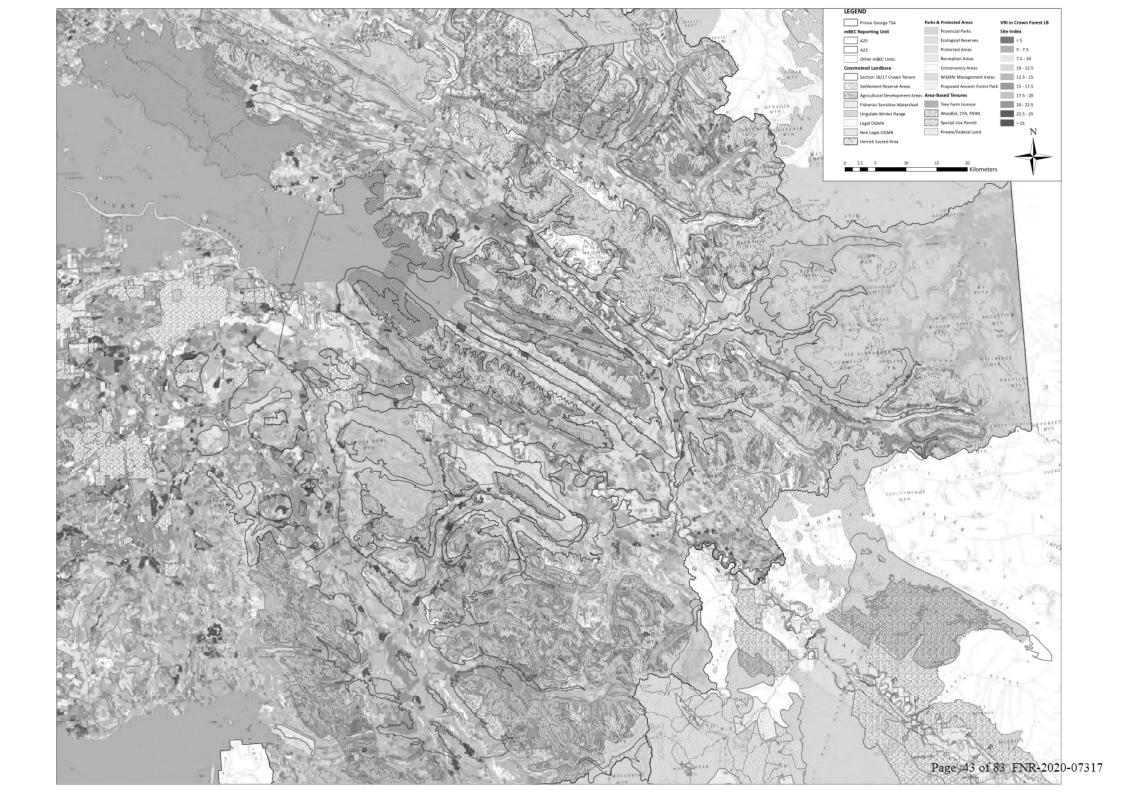
			T				
			connectivity within unit, species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, IU logging, contains significant area id as plant communities at	may overlap a portion of a culturally significant aboriginal trail	may need adjusting for future adjacent blocks,		
26 Polygon	54 BC Timber Sales	6763.54487 1248393.44	risk		BCTS, CanFor & Winton	October 20, 2014	125
27 Polygon	54 BC Timber Sales	91799.6819 16590035.2	connectivity with unit, connectivity between units, large contiguous area (>1000 ha), species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, IU logging, contains significant area id as plant communities at risk, major riparian corridor expanded, Parsnip River	may contain overlap with a portion of a culturally significant aboriginal trail,	constrained area, boundary may need adjusting for future adjacent blocks, BCTS, CanFor & Winton	October 20, 2014	1659
27 Tolygon	54 Be Timber Sales	31733.0013 10330033.2	connectivity with unit, species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, may contains area id as plant communities at risk, major riparian corridor expanded, Parsnip River	may contain overlap with a portion of a culturally significant aboriginal trail,	constrained area, BCTS, CanFor & Winton	October 20, 2014	1033
28 Polygon	54 BC Timber Sales	12629.3724 1493461.26	6			October 20, 2014	149
			connectivity with unit, species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, may contains area id as plant communities at risk, major riparian corridor expanded, Parsnip River	may contain overlap with a portion of a culturally significant aboriginal trail,	constrained area, BCTS, CanFor & Winton		
29 Polygon	54 BC Timber Sales	65662.78611 9704937.91				October 20, 2014	970
			connectivity with unit, species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, may contains area id as plant communities at risk, major riparian corridor expanded, Parsnip River	may contain overlap with a portion of a culturally significant aboriginal trail,	constrained area, BCTS, CanFor & Winton		
30 Polygon	54 BC Timber Sales	8783.071557 357988.221				October 20, 2014	36
		45005 00050 0476400 56	area of Caribou UWR U-7-003)	I'	some constrained area, boundary may need adjusting for future adjacent blocks		
31 Polygon	13 BC Timber Sales	45335.00953 8476429.59			La construciona di conse RCTC	October 20, 2014	848
32 Polygon	54 BC Timber Sales	8906.135847 1073011.06	connectivity with unit, species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, may contains area id as plant communities at risk, major riparian corridor expanded, Parsnip River	may contain overlap with a portion of a culturally significant aboriginal trail,	constrained area, BCTS, CanFor & Winton	October 20, 2014	107
			connectivity with unit, species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, may contains area id as plant communities at risk, major riparian corridor expanded, Parsnip River	may contain overlap with a portion of a culturally significant aboriginal trail,	constrained area, BCTS, CanFor & Winton		
33 Polygon	54 BC Timber Sales	7088.226476 963517.384			DCTC 9 Minton	October 20, 2014	96
			constained area, species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, IU logging, contains significant area id as plant communities at risk,		BCTS & Winton		
34 Polygon	6 BC Timber Sales	5203.656666 891434.953			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	October 20, 2014	89
			connectivity with unit, constained area, large contiguous area (>1000 ha) as contiguous with OBJECTID * 54, species diversity (i.e. deciduous leading), mix of age classes, age class predominantly 7-9, IU logging, contains significant area id as plant communities at risk, may contain important fish habitat	may contain portion of historic aborignial trail	BCTS & Winton		
35 Polygon	6 BC Timber Sales	7441.122199 1345927.21	3			October 20, 2014	135

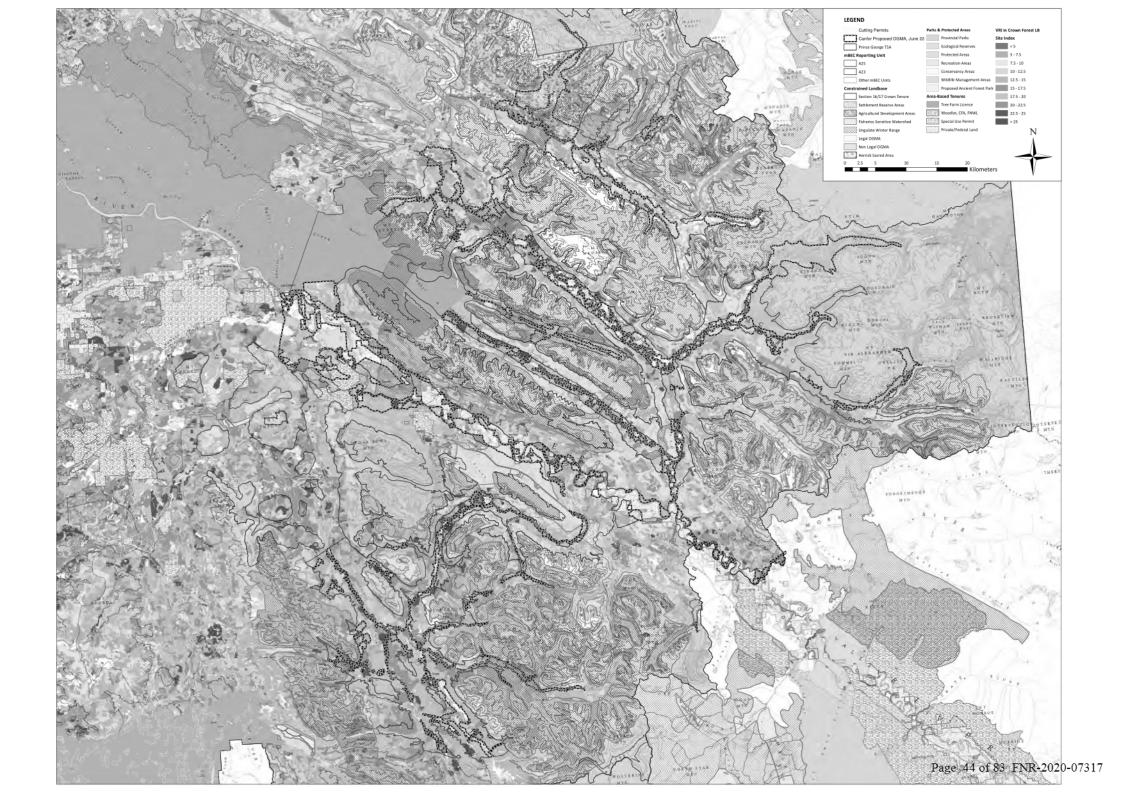
			connectivity with unit constained area large centiqueus	may contain portion of	DCTS 9 Winton		
			connectivity with unit, constained area, large contiguous	1 '	BCTS & Winton		
			area (>1000 ha) as contiguous with OBJECTID * 54, specie	historic aborignial trail			
			diversity (i.e. deciduous leading), mix of age classes, age				
			class predominantly 7-9, IU logging, contains significant a				
			id as plant communities at risk, may contain important fi	sn			
36 Polygon	6 BC Timber Sales	10658.70537 2091	habitat			October 20, 2014	209
Jorrolygon	o be fillibel Sales	10038.70337 2031	connectivity within unit, large contiguous area (1000 - 50	0 area overlaps a portion of a	constrained area BCTS	October 20, 2014	203
			ha), species diversity (i.e. deciduous leading), mix of age	culturally significant	leonstrained drea, bers		
			classes, age class predominantly 7-9, minimal road	aborginal trail			
			development, contains a small area of 'at risk' plant	aborginar trail			
37 Polygon	15 BC Timber Sales	21357.212 7048	3480.428 communities			October 20, 2014	70
			connectivity with unit, constrained area, part of large		BCTS & CanFor		
			contiguous area (>1000 ha); species diversity (i.e. decidu	ous			
			leading), mix of age classes, minimal road development,				
			contains areas id as plant communities at risk				
38 Polygon	17 BC Timber Sales	16053.75308 5378	·			October 20, 2014	53
			connectivity within unit, large contiguous area (500 - 250		BCTS		
			ha), age class predominantly 7-9, expands on area of				
39 Polygon	14 BC Timber Sales	12529.74049 2859	9763.681 Caribou UWR U-7-003			October 20, 2014	28
			connectivity within unit, connectivity between units, larg	e	BCTS & Winton		
			contiguous area (500 - 250 ha), species diversity (i.e.				
			deciduous leading), mix of age classes, age class				
			predominantly 7-9, minimal road development, contains	a			
40 Polygon	16 BC Timber Sales	17029.33533 3225	5010.408 small area of 'at risk' plant communities			October 20, 2014	32
			connectivity within unit, large contiguous area (1000 - 50	0	BCTS		
			ha), constained area, age class predominantly 7-9, minim	al			
41 Polygon	30 BC Timber Sales	31592.39311 5683	3050.154 road development			October 20, 2014	56
			connectivity within unit, large contiguous area (500 - 250		BCTS		
			ha), constained area, age class predominantly 7-9, minim	al			
42 Polygon	29 BC Timber Sales	21406.66202 4348	3842.954 road development			October 20, 2014	43
			connectivity within unit, constained area, age class		BCTS		
			predominantly 7-9, minimal road development, contains				
			areas id as plant communities at risk, MPB impacted pine				
43 Polygon	31 BC Timber Sales	6014.039709 103		_		October 20, 2014	10
			connectivity with unit, connectivity between units, part of	f	BCTS & CanFor		
			large contiguous area (>1000 ha); species diversity (i.e.				
			deciduous leading), mix of age classes, minimal road				
			development, valuable habitat (expands on area of Carib				
			UWR U-7-003), contains areas id as plant communities at				
44 Polygon	27 BC Timber Sales	4708.566049 7715				October 20, 2014	7
			connectivity with unit, connectivity between units, part of	†	BCTS & CanFor		
			large contiguous area (>1000 ha); species diversity (i.e.				
			deciduous leading), mix of age classes, minimal road				
			development, valuable habitat (expands on area of Carib				
45 5	27 22 1 2 1		UWR U-7-003), contains areas id as plant communities at				
45 Polygon	27 BC Timber Sales	29699.34568 6422			DOTS.	October 20, 2014	64
			connectivity within unit, large contiguous area (500 - 250	1 ' '	BCTS		
			ha), species diversity (i.e. deciduous leading), mix of age	cultural heritage trail			
46 0-1	ac no Timeles a Select	10440 64004 3044	classes, age class predominantly 7-9, minimal road			0-4-4	22
46 Polygon	36 BC Timber Sales	[19449.64984] 3943	3436.794 development			October 20, 2014	394

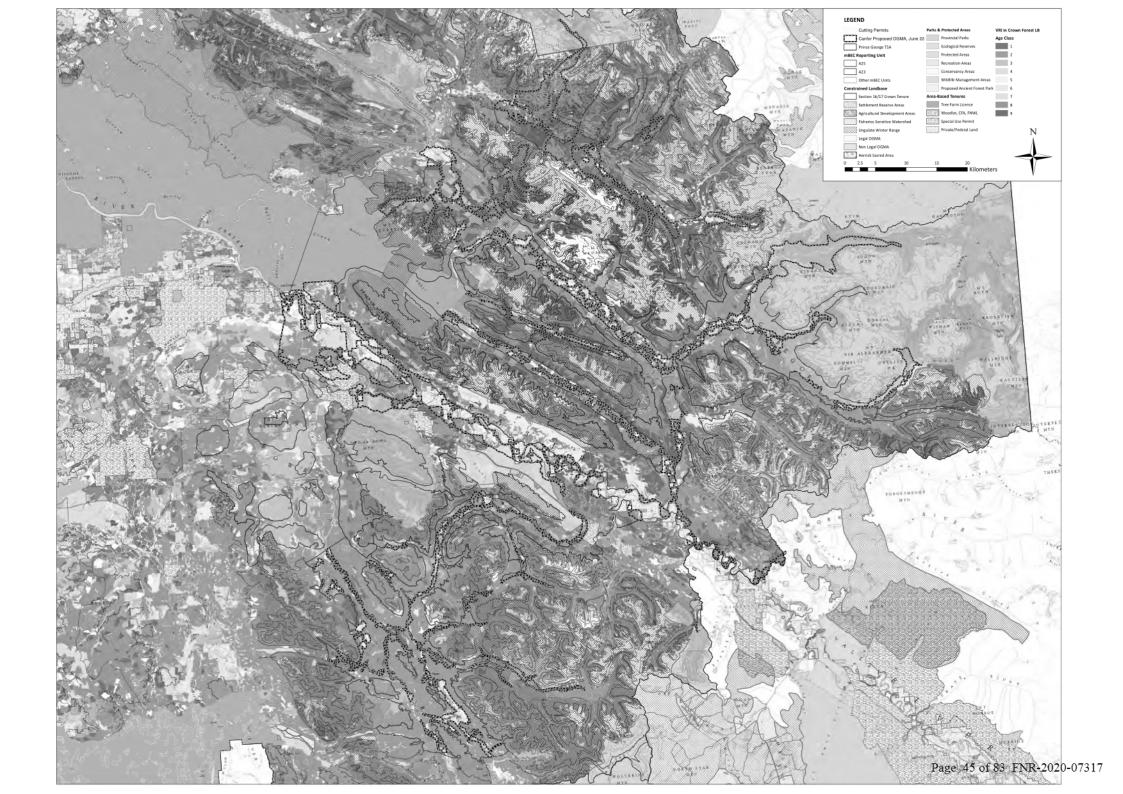
				large contiguous area (500 - 250 ha), constained area, mix of	:	UI logging, BCTS		
				age classes, age class predominantly 7-9, minimal road				
				development, contains areas id as plant communities at risk				
47 Polygon	35 BC Timber Sales	15372.05886	3807321.647				October 20, 2014	38
				large contiguous area (500 - 250 ha), species diversity (i.e.		BCTS		
				deciduous leading), mix of age classes, age class				
48 Polygon	37 BC Timber Sales			predominantly 7-9,			October 20, 2014	29
49 Polygon	41 BC Timber Sales	18155.14799	2041910.74	age class predominantly 7-9		BCTS	October 20, 2014	20
				connectivity within unit, connectivity between units, part of		BCTS		
				large contiguous area (>1000 ha); mix of age classes, age				
	40 00 71 1 0 1			class predominantly 7-9, contains significant areas id as			0	4 7
50 Polygon	43 BC Timber Sales	63779.72056	1/2/6//3.88	plant communities at risk	1 1, 11	la care	October 20, 2014	17
				connectivity within unit, species diversity (i.e. deciduous	area overlaps a culturally	BCTS		
				leading), mix of age classes, minimal road development,	significant aborginal trail			
54 0 1	AAI BG Timbon Colon	40004 45 600		contains significant areas id as plant communities at risk			0.1.1	
51 Polygon	44 BC Timber Sales	40984.45689	4737537.009		1 1 1	DOTS.	October 20, 2014	4
				connectivity within unit, constrained area, large contiguous	area overlaps a culturally	BCTS		
				area (1000 - 500 ha), mix of age classes, age class	significant aborginal trail			
F3 Dalugan	49 DC Timbor Solos	FCF3C 93C39		predominantly 7-9, contains areas id as plant communities			Ostobor 20, 2014	7
52 Polygon	48 BC Timber Sales	50520.82028	7306190.482	connectivity within unit, large contiguous area (1000 - 500	portion of historic aborigina	DCTC	October 20, 2014	7.
				ha), age class predominantly 7-9, minimal road	trail	BCIS		
				development, contains a small portion of area id as plant	traii			
53 Polygon	9 BC Timber Sales	29714 85831		communities at risk			October 20, 2014	5
33 Folygon	5 BC Tilliber Sales	29714.83831		connectivity with unit, constained area, large contiguous	may contain portion of	BCTS & Winton	October 20, 2014	
				area (>1000 ha), species diversity (i.e. deciduous leading),	historic aborignial trail	Bers & Willton		
				mix of age classes, age class predominantly 7-9, IU logging,	Thistoric aboriginal trail			
				contains significant area id as plant communities at risk, may	,			
				contain important fish habitat				
54 Polygon	6 Sinclar Group Forest Products Ltd.	214879.8061	60104584.06	•			October 20, 2014	60:
1 1 1 1 1 1				connectivity within unit, connectivity between units, large		BCTS & Winton		
				contiguous area (500 - 250 ha), species diversity (i.e.				
				deciduous leading), mix of age classes, age class				
				predominantly 7-9, minimal road development, contains a				
55 Polygon	16 Sinclar Group Forest Products Ltd.	18347.49891		small area of 'at risk' plant communities			October 20, 2014	3
	·			connectivity within unit, large contiguous area (500 - 250		BCTS		
				ha), age class predominantly 7-9, expands on area of				
56 Polygon	14 Sinclar Group Forest Products Ltd.	5504.463436	537383.1404	Caribou UWR U-7-003			October 20, 2014	
				connectivity within unit, constrained area, part of large		BCTS & CanFor		
				contiguous area (>1000 ha); species diversity (i.e. deciduous				
				leading), mix of age classes, minimal road development,				
				contains areas id as plant communities at risk				
57 Polygon	17 Sinclar Group Forest Products Ltd.	8382.504479	3291335.782				October 20, 2014	3
				connectivity between units, large contiguous area (500 - 250		boundary may need		
				ha), age class predominantly 7-9, minimal road development	t	adjusting for future adjacent		
58 Polygon	19 Sinclar Group Forest Products Ltd.		2903586.783			blocks, Winton	October 20, 2014	2
59 Polygon	23 Sinclar Group Forest Products Ltd.			none indicated			October 20, 2014	2
60 Polygon	24 Sinclar Group Forest Products Ltd.	33564.52238		none indicated			October 20, 2014	3
				connectivity between units, age class predominantly 7-9,		Winton		
61 Polygon	26 Sinclar Group Forest Products Ltd.	15435.32148	1838343.569	minimal road development			October 20, 2014	1
				connectivity between units, constrained area, age class		boundary may need		
				predominantly 7-9, minimal road development, riparian,		adjusting for future adjacent		
62 Polygon	11 Sinclar Group Forest Products Ltd.	33501.99638	2618721.869	Parsnip River,		blocks, Winton	October 20, 2014	26

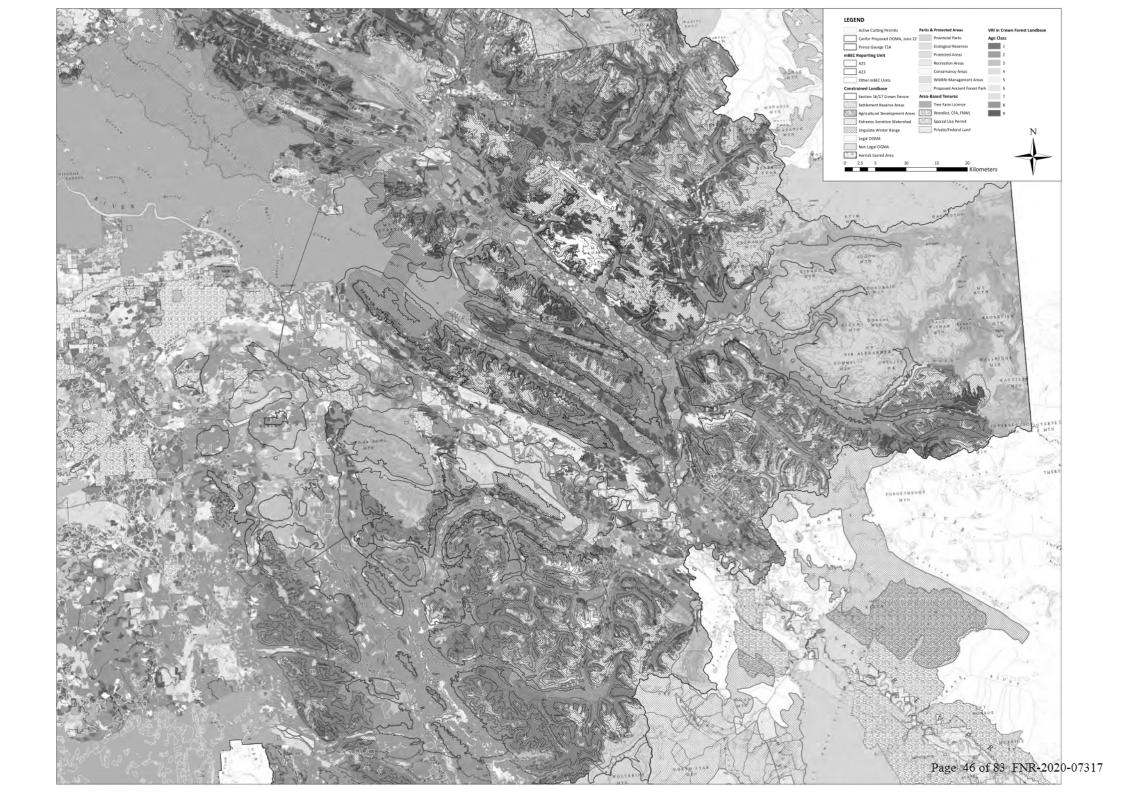
				connectivity within unit, connectivity between units, part of	adjacent to recreational trail	Carrier		
				large contiguous area (1000 - 500 ha); species diversity (i.e.	development	Carrier		
					development			
	54 6	20520 24540	7202504 500	deciduous leading), mix of age classes, age class			0	
63 Polygon	51 Carrier Lumber Ltd.	39530.31518	7203584.598	predominantly 7-9			October 20, 2014	
				connectivity within unit, connectivity between units, part of		constrained area, steep		
				large contiguous area (1000 - 500 ha); species diversity (i.e.		terrain along river, Carrier		
				deciduous leading), mix of age classes, age class				
64 Polygon	50 Carrier Lumber Ltd.	58284.06031	5665963.674	predominantly 7-9, Willow River			October 20, 2014	
				connectivity within unit, connectivity between units, part of		constrained area, steep		
				large contiguous area (>1000 ha); species diversity (i.e.		terrain, Carrier		
				deciduous leading), mix of age classes, age class				
				predominantly 7-9, Wansa Creek and wetland complex				
65 Polygon	49 Carrier Lumber Ltd.	77250.87198	16159418.01	l' '			October 20, 2014	:
				constrained area, large contiguous area (500 - 250 ha),		ВСТЅ		
				species diversity (i.e. deciduous leading), mix of age classes,				
				age class predominantly 7-9, contains a small area of 'at risk'				
66 Polygon	8 BC Timber Sales	12422.48066	3416913.932	plant community, fish habitat			October 20, 2014	
00110178011	o be timber eares	12 122 10000	3 120313.332	connectivity within unit, connectivity between units, large	portion of historic aborigina	BCTS	000000. 20, 201	
				contiguous area (1000 - 500 ha)(combined with OBJECTID *	trail			
				20), species diversity (i.e. deciduous leading), mix of age				
				classes, age class predominantly 7-9, plant community at risk				
67 Polygon	3 Canadian Forest Products Ltd.	7170 754221	1560936.649	1			October 20, 2014	
67 Folygon	S Calladian Forest Floudets Etd.	7179.734331	1300930.049	connectivity within unit, constrained area, large contiguous	may overlaps a culturally	BCTS	October 20, 2014	
				area (1000 - 500 ha), mix of age classes, age class	significant aborginal trail	l l l		
					Significant aborginal trail			
		4.5000.505.40	l	predominantly 7-9, contains areas id as plant communities				
68 Polygon	48 Canadian Forest Products Ltd.	16220.62643	1899600.496				October 20, 2014	
				connectivity between units, large contiguous area (1000 -		Carrier		
				500 ha), species diversity (i.e. deciduous leading), mix of age				
69 Polygon	52 Canadian Forest Products Ltd.	22262.33774	6493357.855				October 20, 2014	
				large contiguous area (1000 - 500 ha), Fraser River, riparian,		constrained area		
				new polygon from when government rankings were done so				
				little information is available about polygon				
70 Polygon	55 Canadian Forest Products Ltd.	20016.21032	5871380.866				October 20, 2014	

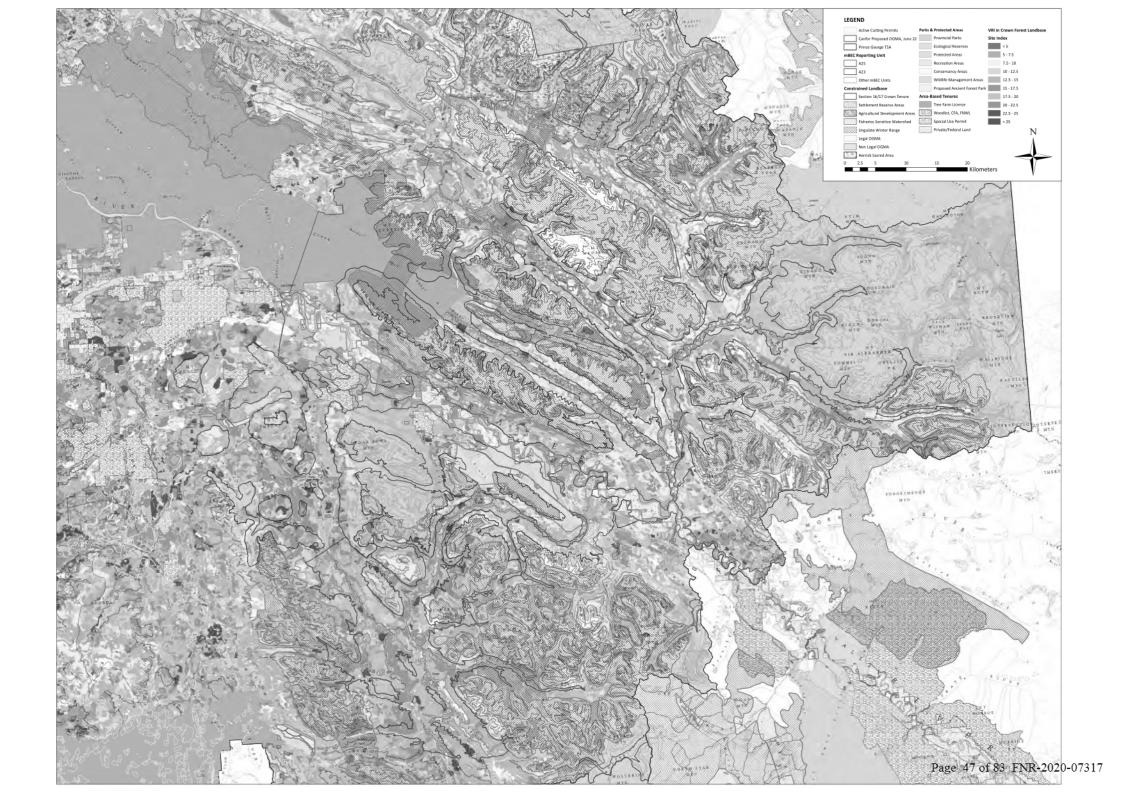


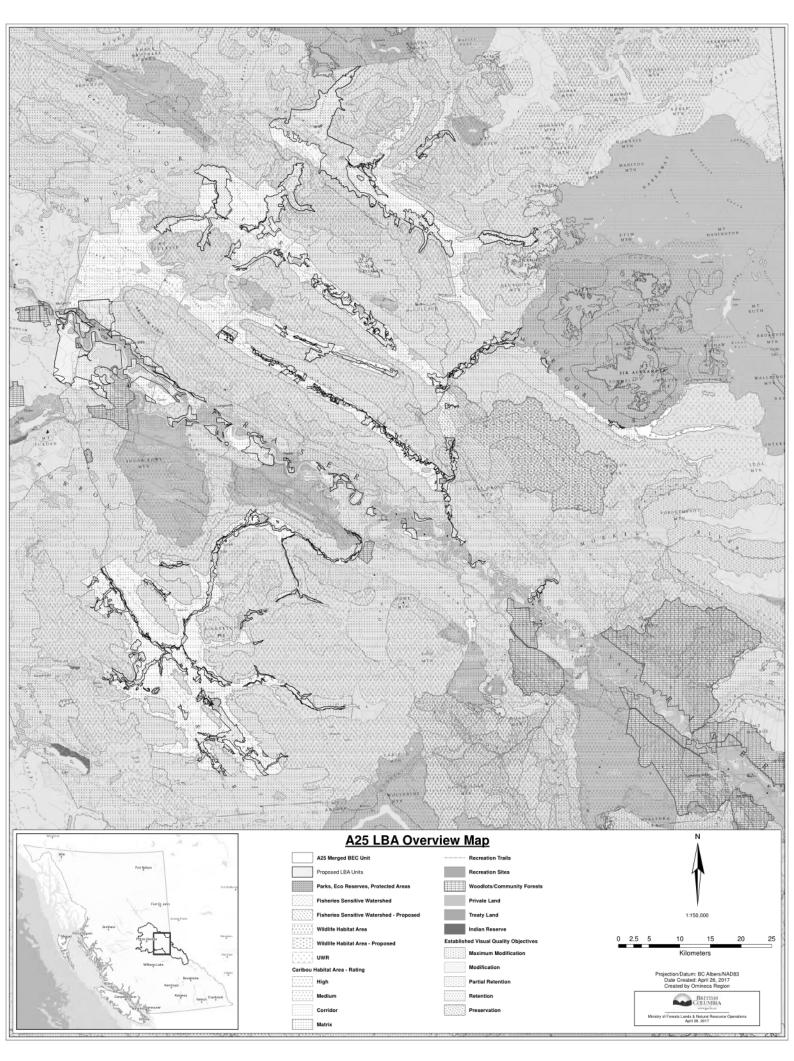


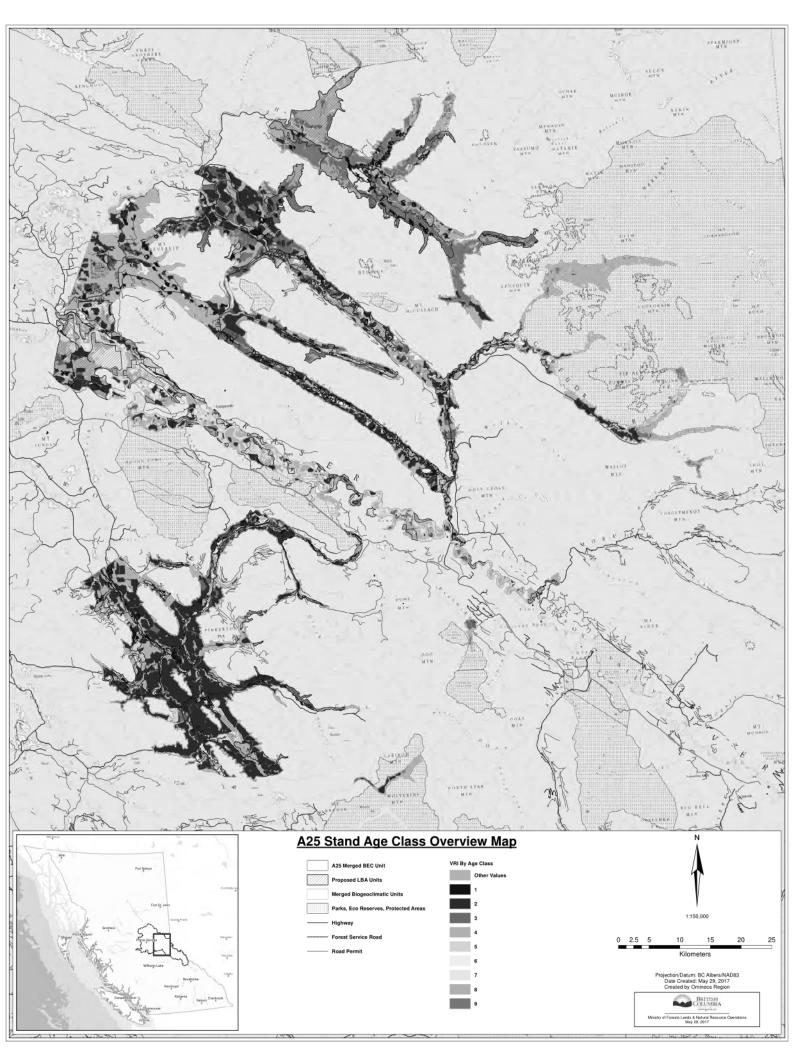












Page 49 of 83 FNR-2020-07317

Canadian Forest Products Ltd.



and affiliated companies

February 20, 2018

Greg Rawling Regional Executive Director Omineca Natural Resource Region FLNRORD, 5th Floor – 499 George Street Prince George BC V2L 1R5

Dear Greg,

Re: Recruitment Strategy for the Wet Trench - Valley SBSvk A25 natural disturbance unit

Thank you for your October 24th 2017 response to the proposed Recruitment Strategy submitted by Canfor in April 2017, for the Wet Trench – Valley SBSvk A25 natural disturbance unit (File 17330-50/PG-TSA).

As per your suggestion, Canfor staff met with Shannon Carson and John Pousette on December 11th 2017 to discuss the letter and decision. Canfor understands the factors outlined in your letter and the uncertainty that we face in the Prince George Timber Supply Area. We believe the submitted recruitment strategy; which focused on spatial identification, can be used to address these factors and provide for more certainty in the TSA. Based on additional context provided from Shannon and John, we believe that the submitted Recruitment Strategy can be improved and Canfor would like to continue to work collaboratively on the Strategy.

We believe that a spatial strategy would provide the best opportunity to manage for a variety of values and objectives including timber supply. Canfor would like to explore a collaborative landscape unit planning process, involving the relevant First Nations and staff from FLNRORD. One approach would be to incorporate multiple mBEC units, for a defined landscape, allowing for better Land Use Planning. This landscape level plan, as opposed to mBEC units, would better address:

- Government's direction relative to current stewardship initiatives.
- Spruce beetle-related forest health issues, in accordance with guidance documents including the Chief Forester's retention guidance
- Engagement of First Nations
- Certainty of the timber supply in the Prince George TSA

Please note that in the short term, Canfor intends to manage within mBEC unit A25 according to the spatial old forest areas submitted with the Recruitment Strategy.

Thank you for your consideration of our proposal, which we look forward to discussing with you or your staff.

Sincerely.

Shane Neukomm

Operations Manager, Canfor Prince George

Cc: Shannon Carson, FLNRORD
John Pousette, FLNRORD

Canadian Forest Products Ltd.



and affiliated companies

February 20, 2018

Greg Rawling Regional Executive Director Omineca Natural Resource Region FLNRORD, 5th Floor – 499 George Street Prince George BC V2L 1R5

Dear Greg,

Re: Recruitment Strategy for the Wet Trench - Valley SBSvk A25 natural disturbance unit

Thank you for your October 24th 2017 response to the proposed Recruitment Strategy submitted by Canfor in April 2017, for the Wet Trench – Valley SBSvk A25 natural disturbance unit (File 17330-50/PG-TSA).

As per your suggestion, Canfor staff met with Shannon Carson and John Pousette on December 11th 2017 to discuss the letter and decision. Canfor understands the factors outlined in your letter and the uncertainty that we face in the Prince George Timber Supply Area. We believe the submitted recruitment strategy; which focused on spatial identification, can be used to address these factors and provide for more certainty in the TSA. Based on additional context provided from Shannon and John, we believe that the submitted Recruitment Strategy can be improved and Canfor would like to continue to work collaboratively on the Strategy.

We believe that a spatial strategy would provide the best opportunity to manage for a variety of values and objectives including timber supply. Canfor would like to explore a collaborative landscape unit planning process, involving the relevant First Nations and staff from FLNRORD. One approach would be to incorporate multiple mBEC units, for a defined landscape, allowing for better Land Use Planning. This landscape level plan, as opposed to mBEC units, would better address:

- Government's direction relative to current stewardship initiatives.
- Spruce beetle-related forest health issues, in accordance with guidance documents including the Chief Forester's retention guidance
- Engagement of First Nations
- Certainty of the timber supply in the Prince George TSA

Please note that in the short term, Canfor intends to manage within mBEC unit A25 according to the spatial old forest areas submitted with the Recruitment Strategy.

Thank you for your consideration of our proposal, which we look forward to discussing with you or your staff.

Sincerely.

Shane Neukomm

Operations Manager, Canfor Prince George

Cc: Shannon Carson, FLNRORD
John Pousette, FLNRORD



File: 17730-50/PG-TSA

October 24, 2017

Chris Schacke, RPF, Forestry Supervisor Canadian Forest Products Ltd. 5162 Northwood Pulpmill, Road PO Box 9000 Prince George, BC, V2L 4W2

Dear Chris,

This letter is in response to your final submission for Recruitment Strategy in the Wet Trench – Valley SBSvk A25 natural disturbance unit establishing 'landscape biodiversity areas', submitted on April 7, 2017.

Based on a number of factors which are centered around uncertainties we face in the Prince George Timber Supply Area (TSA) and the broader region, my decision regarding your submission is that we cannot move forward on it, at this time. These factors include:

- First Nations government to government agreements regarding stewardship;
- The Prince George TSA allowable annual cut determination implementation;
- Developing Spruce Beetle forest health issues;
- Mountain Caribou management initiatives (species at risk); and
- The new Provincial government's direction and priorities regarding land use planning and other stewardship initiatives.

It is my understanding that there is a non-spatial recruitment strategy that was approved June 6, 2012 for Unit A25 that allows some flexibility around harvesting and management of forest health issues.

If you would like to discuss this letter and decision further, please contact Shannon Carson to (250)-561-3463 Shannon.Carson@gov.bc.ca , or John Pousette (250)-561-3416 John.G.Pousette@gov.bc.ca .

Yours truly.

Greg Rayling

Regional Executive Director

Omine a Natural Resource Region

Page 1 of 2

pc: Shannon Carson, Research and Stewardship Team Leader, Omineca Region John Pousette, Major Projects Team Lead, Omineca Region



File: 17730-50/PG-TSA

280-30/239926

June 15, 2018

Shane Neukomm, RPF, Operations Manager Forest Management Group, Canadian Forest Products Ltd. 5162 Northwood Pulpmill Road PO Box 9000 Prince George, British Columbia V2L 4W2

Dear Shane Neukomm:

Thank you for your February 20, 2018 response letter on the Recruitment Strategy for the Wet Trench – Valley, SBS vk A25 Natural Disturbance Unit regarding the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) decision to not move forward with Canfor's proposed spatial recruitment areas. We are encouraged that Canfor wants to collaborate with FLNRORD and First Nations to improve on spatialized recruitment areas by incorporating multiple mBEC units at a defined landscape level.

Since receiving your letter, staff within Landbase Stewardship, Prince George Natural Resource District and Omineca Region Major Projects have been compiling information and exploring options to improve the certainty for the management of old forest objectives under the Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area (TSA).

Contact will be made to schedule a meeting to review the information and discuss moving forward. In the meantime, it is my expectation that the non-spatial recruitment strategy approved on June 6, 2012 for Unit A25 will be followed for Canfor's forest harvesting operations in the area.

If you have any concerns or would like to discuss this letter in detail, please contact Denise Hogue, Stewardship Officer at (250) 614-7492 Denise.Hogue@gov.bc.ca or Traci Van Spengen, Land and Resource Specialist Stewardship, (250) 614-7549 Traci.Vanspengen@gov.bc.ca.

Yours truly,

Greg/Rawling

Regional Executive Director

Omineca Natural Resource Region

Pc: Denise Hogue, Stewardship Officer, Prince George Natural Resource District

Traci Van Spengen, Land and Resource Specialist Stewardship, Prince George Natural

Resource District



File: 17730-50/PG-TSA

October 24, 2017

Chris Schacke, RPF, Forestry Supervisor Canadian Forest Products Ltd. 5162 Northwood Pulpmill, Road PO Box 9000 Prince George, BC, V2L 4W2

Dear Chris,

This letter is in response to your final submission for Recruitment Strategy in the Wet Trench – Valley SBSvk A25 natural disturbance unit establishing 'landscape biodiversity areas', submitted on April 7, 2017.

Based on a number of factors which are centered around uncertainties we face in the Prince George Timber Supply Area (TSA) and the broader region, my decision regarding your submission is that we cannot move forward on it, at this time. These factors include:

- First Nations government to government agreements regarding stewardship;
- The Prince George TSA allowable annual cut determination implementation;
- Developing Spruce Beetle forest health issues;
- Mountain Caribou management initiatives (species at risk); and
- The new Provincial government's direction and priorities regarding land use planning and other stewardship initiatives.

It is my understanding that there is a non-spatial recruitment strategy that was approved June 6, 2012 for Unit A25 that allows some flexibility around harvesting and management of forest health issues.

If you would like to discuss this letter and decision further, please contact Shannon Carson to (250)-561-3463 Shannon.Carson@gov.bc.ca, or John Pousette (250)-561-3416 John.G.Pousette@gov.bc.ca.

Yours truly.

Greg Ray Ving

Regional Executive Director

Omine a Natural Resource Region

Page 1 of 2

pc: Shannon Carson, Research and Stewardship Team Leader, Omineca Region John Pousette, Major Projects Team Lead, Omineca Region

MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS AND RURAL DEVELOPMENT DECISION NOTE

Date: September 28, 2017 File: 17580-PG TSA- A25-01

280-20

CLIFF: 245805 XREF 245806

PREPARED FOR: Greg Rawling, Regional Executive Director, Omineca Natural Resource Region

ISSUE: Government review results of Spatial Recruitment Strategy submitted by Forest Licensees for Landscape Unit A25 in the PG TSA

BACKGROUND:

Old Growth Objectives in the Prince George Timber Supply Area (PG TSA) are managed under the Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area (the Order), October 20, 2004. This Order establishes old growth targets that are required to be met in merged biogeoclimatic (mBEC) Landscape Units. Section D.5 states that: "Where the old forest retention cannot be achieved, of the Order requires the forest licensee to submit a recruitment strategy that will achieve old forest objectives in the shortest timeframe possible, without unduly impacting the timber supply. This recruitment strategy is approved by the designate of the BC provincial government." The Delegated Decision Maker is the Regional Executive Director of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD).

Landscape Unit mBEC A25 is a unit of SBSvk in the Wet Trench Natural Disturbance Unit. Generally it is made up of the valley bottoms of the Herrick, McGregor, Torpy, Fraser and Bowron drainages.

The forest licensees who operated in unit A25 submitted a non-spatial recruitment strategy on March 20, 2012 and that strategy was approved by government on June 6, 2012. It allows for up to 12,917 hectares of age class 7 (121-140 year old stands) to be used to meet the legal targets identified within *the Order*. In addition, the approved non-spatial recruitment strategy states:

"Old forest will only be harvested within the unit where:

- 1) there is a forest damaging event that results in fewer than 40% of the old trees remaining standing and /or alive and the area of damage is greater than 2 hectares; or,
- 2) there is a bark beetle attack equal to or greater than 8% of the stems of the stand."

This approved non-spatial recruitment strategy provides forest licensees access to a continued timber supply in the unit and operational flexibility to address forest health issues.

Canadian Forest Products Ltd. (Canfor)submitted a spatial recruitment strategy (Attachment #1) on April 7, 2017, on behalf of the forest licensees operating in mBEC A25 (Wet Trench, SBSvk). A team of government technical experts reviewed the submission and identified substantial strategic and operational challenges with the proposal.

1 of 4

Based on the results of this internal review the government technical review team is seeking advice and decision from the Delegated Decision Maker on how best to address the situation in the A25 mBEC.

DISCUSSION:

The A25 mBEC unit requires 46% or 69,623 hectares of the Crown Forested Landbase (CFLB) be in old forest > 140 years old. According to the March 31, 2016 data reported by forest licensees, there is 71,320 hectares of old forest, placing this unit 1697 hectares above the legal target of old forest.

The current situation in the A25 has significant challenges associated with the maintenance of old forest due to the scarcity of ecosystem representation from past forest harvesting.. In 2016, FLNRO (Carson, Pousette and Konwicki) provided Canfor advice and recommendations for their submission on what should be considered and captured in spatial reserves to assist with this challenge. This included the consideration of a landscape design approach (connectivity, ecosystem representation, distribution, ecosystem resilience), ecological indicators (oldest and near old first, species composition, site index, slope, aspect, upland forest) and use of areas of biological significance as anchors.

The FLNRO technical review of the proposed spatial recruitment strategy identified the following concerns / key issues:

The proposal does not demonstrate how the intent of the order will be maintained by
providing certainty of continued representation of old forest biodiversity. The approval of this
spatial recruitment strategy by government will directly endorse the on-going harvesting of
old forest below legal targets.

Based on Delong (Technical Report 059, 2011), the Natural Range of Variability (NRV) science indicates that the mean amount of old forest (>140 years) is for 80% in the A25 unit (Wet Trench Valley Natural Disturbance Unit).

Current understanding quantifies the risk class to biodiversity as a deviation from the mean predicted Natural percent of old forest. (https://www.for.gov.bc.ca/tasb/slrp/citbc/b-co/iltFull-Holt-Mar03.ndf).

deviation from the mean predicted Natural percent of old forest	0-20%	20-40%	40-60%	60-80%	80-100%
Risk Class	Very Low	Low	Moderate	High	Very High

The legal target in the Order is to maintain >46% for >140 years old of the CFLB. Therefore, a calculation of the risk to biodiversity for the legal target is 100 - (46% / 80) = 42.5%, or moderate. The proposed spatial recruitment strategy further lowers the amount of old forest that will be retained within A25 to 32.5% of the CFLB (spatially located and non-spatially contributing). This represents 100 - (32.5%/80) = 59.4% or moderate risk class but getting very close to high. The spatial located old forest makes up 21.2% of the CFLB and this represents 100 - (21.2% / 80) = 73.5 or high risk class.

Although the proposed areas are valuable for overall biodiversity, it is FLNRO's opinion the
areas lack the ecological and functional attributes required to maintain old forest biodiversity
within the unit (e.g. age class 2 cutblocks, wetland complexes and fragmented isolated / small
patches).

OPTIONS:

Option 1: Defer the decision on the spatial recruitment strategy submission.

Implications:

- There are substantial unknowns, primarily due to: on-going discussions with Carrier Sekani First Nations regarding biodiversity management; the yet to be determined expression of the new government's interests around timber and biodiversity values; and, the release of the PG TSA Allowable Annual Cut Determination and any accompanying Chief Forester direction.
- Approving the submission will lower the amount of old forest by a further 7486 hectares
 that will be retained within mBEC unit A25. It is the FLNRO technical review team's
 opinion, which is supported by the literature, that this will put old forest and biodiversity
 values at further risk of being non-functional.
- The issues in this unit are similar to those identified at the Environmental Stewardship
 Initiative table with the Carrier Sekani First Nations. Government should maintain
 consistency in how old forest is managed across the Prince George Timber Supply Area.

Option 2: Reject the current spatial recruitment strategy submission and provide comments regarding changes that are required.

Implications:

- Significant Government staff time and effort will be required to provide strategic and operational feedback to Canfor.
- The workload to provide feedback and to revise the recruitment strategy will take substantial resources from both Canfor and FLNRO.
- The government review team has significant concern that likely cannot be resolved while meeting Canfor's objectives for this recruitment strategy.

Option 3: Reject the spatial recruitment strategy submission. Implications:

- Forest licensees may react negatively if the submission is rejected and seek political advice from MLA and FLNRORD ADMs/DM/Minister.
- The government review team has significant concerns that likely cannot be resolved while meeting Canfor's objectives for this recruitment strategy.
- There is potential under the current approved non-spatial recruitment strategy for a further 12,917 hectares to be harvested within A25 which access to timber supply in the unit and operational flexibility to address forest health issues.

RECOMMENDATION:

Approved Not Approved

Not Approved Not Approved

Not Approved Not Approved

Regional Executive Director

Omineca Natural Resource Region

The original signed the can not see occuped.

This nate is to conticm my decision was

for defer the sprain recruitment strategy submission.

Attachment(s): #1 - Canadian Forest Products Ltd. submitted spatial recruitment strategy #2 - Table showing impacts of A25 unit's old forest requirements from NRV, legal order, approved non-spatial recruitment strategy and proposed spatial recruitment strategy.

Contact:

Alternate Contact:

Prepared by:

Name: James Jacklin Div: Omineca Name: Traci Van Spengen Region: Omineca Name: Region:

Phone: 250-561-3403

Phone: 250-614-7549

Phone:

Reviewed	Initials	Date
by		
DRM		



File: 17580-PG TSA-A25-01

MAR 0 5 2019

Terry Lazaruk, RPF Canfor – Forest Management Group 1399 Bearhead Road Vanderhoof, British Columbia V0J 3A2

Dear Terry Lazaruk:

Thank you for your letter dated December 19, 2018 outlining your concerns regarding the draft work to establish the criteria for a Spatial Recruitment Strategy. The "Criteria for Spatial Recruitment Strategies for the Legal Orders" is a draft document and I welcome any comments that the licensees may have. Ministry of Forests, Lands, Natural Resource Development and Rural Development (FLNRORD) staffs will collate and consider all comments when preparing a final recommendation for my consideration.

The November 28, 2018 LLOWG reporting data confirms that merged BEC unit (mBEC) A25 along with a number of other mBECs (see attached table) are nearing or have exceeded the minimum old forest targets set out in the "Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area dated October 20, 2004" (Order).

While I recognize the opportunity for proposed recruitment strategies to include younger age classes (other than those identified as old forest), my expectation is that the recruitment strategy will comply with the Order. As per Section D.1 of the Order, parks may contribute to meeting the objectives of this order. However, parks cannot be used as part of a spatial recruitment strategy.

As per Section 2 of the Implementation Policy of the Order, I am requiring the establishment of spatially located old forest retention areas for A25 mBEC with the intent to spatialize other mBECs in the future for the following reasons:

- Many mBEC units are close to threshold levels of the Order,
- There are gaps within age class distributions on the landscape which hinder the ability to manage for and maintain old forest values on the landscape, and
- A spatial recruitment strategy that considers elevational connectivity will provide greater certainty for managing the old forest values on the landscape and opportunities for timber harvest.

Page 1 of 3

Terry Lazaruk

I appreciate the work that has taken place thus far between Canfor, LLOWG and FLNRORD staffs and encourage the continued collaboration to submit a spatial strategy for the A25 mBEC that complies with the Order and incorporates elevational connectivity through adjacent mBECs.

As per my letter dated June 15, 2018 and Section D5 of the Order, it is my expectation that the non-spatial recruitment strategy approved on June 6, 2012 for A25 mBEC will be followed for all forest harvesting operations in the area until a new spatial recruitment strategy is approved.

Yours truly,

Greg Raysling

Regional Executive Director

Omineca Natural Resource Region

Attachment:

Table 1: Status of the Landscape Units (mBECs) in the Prince George Natural Resource District

Table 1: Status of the Landscape Units (mBECs) in the Prince George Natural Resource District

Unit Label	Minimum Age of Stands to be Counted as Old Forest (years)	Minimum % of CFLB retained as Old Forest (target)	Total CFLB (ha)	Old Forest Retention Target Area (ha)	Old Forest Retention Area (ha)	Total (Deficit)/Surplus (ha)
A1	141	33	7,031	2,320	5,974	3,654
A2	141	26	15,164	3,943	7,841	3,899
A3	121	12	67,971	8,156	22,218	14,061
A4	141	26	210,567	54,747	52,724	-2,023
A5	141	29	14,086	4,085	3,970	-115
A6	141	29	16,362	4,745	7,565	2,820
A7	121	17	4,182	711	1,354	644
A8	121	12	9,306	1,117	1,899	782
A9	121	12	34,148	4,098	5,216	1,118
A10	121	17	40,238	6,840	12,392	5,552
A11	121	12	127,990	15,359	30,904	15,545
A12	121	12	161,142	19,337	33,554	14,217
A13	121	12	360,368	43,244	79,493	36,249
A14	141	50	124,795	62,397	103,117	40,719
A15	141	84	16,375	13,755	11,699	-2,055
A16	141	26	35,543	9,241	15,161	5,920
A17	141	50	120,101	60,050	85,476	25,425
A18	141	80	2,211	1,769	1,812	44
A19	141	48	63,579	30,518	53,085	22,567
A20	141	80	97,469	77,975	85,091	7,116
A21	141	48	116,777	56,053	68,054	12,001
A22	141	53	28,022	14,852	18,702	3,850
A23	141	53	148,856	78,894	95,201	16,307
A24	141	30	129,801	38,940	35,594	-3,346
A25	141	46	158,243	72,792	75,162	2,370
Total			2,110,327	685,939	913,258	227,320

Data Source: November 2018 Licensee Landscape Objective Working Group (LLOWG)



CLIFF: 248332

BRIEFING NOTE FOR INFORMATION

DATE: April 24, 2019

PREPARED FOR: Greg Rawling, Regional Executive Director, Omineca Region, Minister of Forests,

Lands, Natural Resource Operations and Rural Development

ISSUE: Provincial interpretation of old growth forest policy and recruitment

strategies.

BACKGROUND:

 The Landscape Unit Planning Guide (LUPG 1999) is the Provincial policy that outlines the guidelines for establishing old growth objectives and informs planning for the priority biodiversity elements of old growth forest and Wildlife Tree Retention.

- The Order Establishing Non-Spatial Old Growth Objectives (PNOGO 2004) was established under FRPA to set default provincial objectives for the amount of old forest that will be maintained and to assist in clarifying the amount of area available for timber harvesting. The PNOGO follows the same general principles as the LUPG.
- Regional Land Use Orders that establish old growth objectives were designed to comply with guidance in the LUPG or PNOGO to ensure impacts to timber supply are managed. This includes the Prince George Timber Supply Area Biodiversity Order.¹
- Canadian Forest Products (Canfor), representing the Licensee Landscape Objectives Working Group for the PG TSA, has submitted a recruitment strategy for Landscape Unit A25 that would allow all age classes in Parks, including stands as young as 20 years, to contribute to old forest targets. This strategy is inconsistent with the LUPG and PNOGO, which prioritize retention of old forests, where available, and require recruitment strategies to meet old seral targets in the shortest timeframe possible.
- In Spring 2019, in response to a request from Omineca region staff, the Wildlife and Habitat Branch initiated a discussion with technical experts from all regions to confirm how LUPG policy has been applied across the province to inform a regional decision.

DISCUSSION:

The LUPG and PNOGO set specific targets for the retention of old forest, where the age of old forest is defined for each BEC zone, by Natural Disturbance Type. Guidance specifies that old seral targets are to be met by selecting old forests from the Non-Contributing land base (NC) first, then the Timber Harvesting Land base (THLB) if the old forest target cannot be met entirely in the NC. Under the LUPG and PNOGO the land base in Parks is considered NC.

The LUPG states that (p 29) OGMAs... "should be delineated to maximize their value to biodiversity conservation". Stands less than the defined age of old can contribute to old growth retention targets, but only where it can be demonstrated that equal or better conservation benefits would result. The PG TSA Biodiversity Order places a cap of 20% on the total area of younger forest that can be counted towards old forest targets, where old forest is available.

¹ Regional Land Use Orders supersede the LUPG and PNOGO.

1 of 2



CLIFF: 248332

If sufficient old forest is not available, a recruitment strategy is required and stands must be selected to meet old forest targets in the shortest timeframe possible. This generally involves selecting the next oldest stands. An alternative strategy for recruitment may be proposed provided: the strategy maintains or improves benefits for old forest conservation; is endorsed by, or reflects any specific policy direction of, the Minister or designate; and is consistent with meeting the full target in the shortest timeframe possible. These policies apply to areas in the NC, including Parks, and the THLB.

The PG TSA Biodiversity Order allows for some deviation from provincial policy by specifying the need to balance timely recruitment of old forest with timber harvesting opportunities. Specifically, Section D of the PG TSA Biodiversity Order states that "Parks and protected areas may contribute to meeting the objectives of this order", and that a recruitment strategy "must contain results or strategies that will result in a forest condition that is consistent with the objectives in the shortest time as is practicable, with consideration for the timely and economic harvesting of timber rights".

Recent work in the PG TSA, that is associated with the provincial Cumulative Effects Framework, shows that the A25 land base is already unable to meet landscape-level old forest targets. Further harvesting of the oldest age classes will result in High risk to old forest biodiversity and will be in contravention of the targets in the PG TSA Biodiversity Order.

In some regions, the harvesting of old forest has ceased if a Landscape Unit has reached old growth objective minimum thresholds. Further details are provided in Appendix A.

MINISTRY RESPONSE:

A decision related to A25 will set precedence for other recruitment strategies in the PG TSA and may have long term implications to the management of old growth forest Provincially.

The proposal to count all forested areas in Parks towards old seral forest targets deviates substantially from the objective of meeting old forest targets in the shortest timeframe and is considerably different than long-established provincial policy.

Provincial and Regional policies and Orders recognize the need to balance biodiversity values with economic factors. However, the proposal in A25 to prioritize conservation of young forests in Parks as a strategy for meeting legal old forest biodiversity targets deviates beyond the expected balance between biodiversity and economics.

The current condition of old forests in the Omineca region means that the PG TSA Order objectives will not be achieved with continued forest harvesting of the oldest age classes in the A25 unit.

PREPARED BY:

Nyssa Temmel Biodiversity Specialist Wildlife and Habitat Branch (778) 698-4078

REVIEWED BY:

	Initials	Date
Program Dir	JP	April 24, 2019
Program Mgr.	SG	April 9, 2019

APPENDIX A: Application of the Provincial old growth forest policy and recruitment strategies from the Coast and Cariboo Regions

According to The Order Establishing Non-Spatial Old Growth Objectives (PNOGO 2004)¹, other than the small exception listed in under section 6, old growth must be used first to fill to full target in all Intermediate and High Biodiversity Emphasis (BE) units. In Low BE units the first 1/3 of target must use old forest first and the draw down is limited by the extent required to address impacts on timber supply.

Stands less than the age of old can contribute to old growth retention targets, but only where it can be demonstrated that equal or better conservation benefits would result. Implementation guidance for the PNOGO states that in intermediate and high BEO landscape units "younger age classes (preferably age classes 6, 7 and 8 but potentially younger) may be used to comprise the old forest objective. Where younger age classes are substituted it must be demonstrated that the younger stands are of equal or better conservation value". In Low BEO landscape units, "the remaining 1/3 old forest must be retained with no opportunity for substituting younger stands." The PG TSA Biodiversity Order places limits on the ability to include stands younger than the age of old. Where sufficient old forest is available, "up to 20% of the Old Forest Retention and Old Interior Forest objectives may be comprised of younger age classes".

The test in section 6 requires evidence that the non-old forest selected has equal or better conservation benefits. Typically, this is only a viable option when the OG target is being spatialized e.g. small isolated patches of old growth can be left and a larger polygon of mature could be substituted. If sufficient old forest is not available and a recruitment strategy is required, stands must be selected to meet old forest targets in the shortest timeframe possible. "If equal or better conservation values can be attained by delineating recruitment OGMAs in the NC, rather than the THLB, use the NC first. Otherwise, recruitment OGMAs can be delineated in the THLB to the target amount" (LUPG 1999, p.33). This requires selecting sites that are oldest or that have old growth stand structural values. The LUPG provides the mandate to go outside the NC and use old growth forest in the Timber Harvesting Land Base (THLB) before the use of younger age classes in the NC.

In an aspatial assessment there is no practical way to test the requirements in sections 2 and 6 of the Order Establishing Provincial Non-Spatial Old Growth Objectives.

Section 2: Old growth objectives

"To contribute to the conservation of biodiversity, licensees must maintain old forest by biogeoclimatic variant, and within each landscape unit according to the age of old forest and the percentage of old forest retention that is specified in Tables 1 through 4 and the assignment of Natural Disturbance Types outlined in Appendix 3, and subject to provisions 5 through 9."

Section 6: Use of younger forests to meet old forest objectives

"In intermediate and high emphasis landscape units where it can be demonstrated that equal or better conservation benefits would result, stands less than the age of old and preferably mature forest, may contribute to the percentage of old forest retention defined in Tables 1 through 4."

¹ https://www2.qa.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crownland/land-use-plans-and-objectives/policies-guides/old_growth_order_may18th_final.pdf

For the entire target in Intermediate and High BE units and for the first 1/3 of the target in Low BE units the selection order is:

- 1. Old age class in the NC
- 2. Old age class in the Parks Contributing (PC)
- 3. Old age class in the THLB.

If targets for old forest cannot be met this way, then a recruitment strategy can be implemented where the selection order is:

- 1. Mature age class in the NC
- 2. Mature age class in the PC
- 3. Mature age class in the THLB

This same recruitment order is implemented in for younger age classes in descending order if required (LUPG 1999).

Application of the Provincial old growth forest policy and recruitment strategies in the Coast Region

In most cases the harvesting of old growth is monitored by BEC variant within an LU, and it is rare that all the BEC variants in an LU are in deficit of the old growth target. The table below lists Coast Region LUs where OG targets have been reached and harvest of old growth age class has stopped.

Landscape Unit	Variant	OG total (ha)	OG in OGMAs/ target (ha)	Notes
Caycuse LU	CWHvh1	41	39	All but 2 ha of NC old in the OGMAs
Order Establishing Objectives for the Renfrew Sustainable Resource Management Plan (SRMP) Area - 2012 (PDF)	CWHmm1	361	335	All suitable OG captured in the OGMAs balance in polygons too small to select/less value than older mature.
Gordon LU (Renfrew Order)	CWHvh1	41	39	Only 2 ha of NC old not included in OGMAs.
Kaouk Provincial Non- Spatial Order	CWHvh1	544ha	595ha	All of the current OG is required to meet target in this variant.
White LU spatial legal OGMAs	CWHxm2	212	185	Most of the Old Growth utilized to meet target a few hectares left not suitable/better mature substituted
Gold LU Provincial Order	CWHxm2	1031	1073	All OG is needed to meet the target
Little Qualicum Provincial Order	CDFmm CWHxm1	13 6	75 28	All OG is needed to meet target
Quadra Island Provincial Order	CWHxm	645	1165	All OG is needed to meet target

Application of the Provincial old growth forest policy and recruitment strategies in the Cariboo Region

Under the Cariboo Chilcotin Land Use Plan (CCLUP 1996)², Mature (M) + Old (O) seral targets are implemented aspatially. In assessment units that are in deficit of M+O, harvesting exceptions are allowed for beetle salvage however recruitment areas must be identified and reserved from harvest. The CCLUP Biodiversity Conservation Strategy was updated in 2004 to provide guidelines for this, namely that recruitment areas:

 $^{^2\} https://www2.gov.bc.ca/gov/content/industry/crown-land-water/land-use-planning/regions/cariboo/cariboochilcotin-rlup$

- Are identified in descending order of priority from oldest to youngest stands, in amounts required to meet the M+O deficit
- Are identified with preference given to stands with >30% non-pine species, since
 Mountain Pine Beetle was the concern at the time. The reasons for this approach
 were to minimize the recovery time for biodiversity, and to offer the best opportunity to
 maintain stands to mature age for biodiversity (i.e. beetle resistant). The "beetle
 resistant" principle behind this approach would be modified for other areas and times
 according to the type of pest present.
- Are reserved from harvest until the M+O target is met entirely with mature and older stands.

Application of the Prince George Timber Supply Area Biodiversity Order in the Omineca Region

In Prince George Timber Supply Area Biodiversity Order³ (D.5. section pasted in below), the objectives to maintain minimum % targets of old forest are clear (Table 1, 2 and 3 from the Old Forest Retention Objectives in the Order³). Continuing to harvest old forest when the units are in deficit, and with recruitment areas containing early seral instead of mature forest that is current present in the units, is a combination that is inconsistent with the legal objectives. Including early seral in recruitment areas when mature is available could result in the old seral objectives never being achieved.

D.5. Alternatives to the Order

(a) Where either the old forest retention or the old interior forest objectives can not be achieved, with consideration of the timely and economic harvesting of timber rights, then a recruitment strategy must be submitted and complied with. The recruitment strategy must contain results or strategies that will result in a forest condition that is consistent with the objectives in the shortest time as is practicable, with consideration for the timely and economic harvesting of timber rights. The recruitment strategy must be submitted to and approved by the designate of the Minister of Sustainable Resource Management.

All seral stages during succession right from initiation to maturity will have characteristic structure, species richness and species composition or "biodiversity" and in terms of the Natural range of variation (NRV) concept. Having a natural range of ecological representation to support this range of diversity is important. However, young early seral stands are abundant on the landscape in the Omineca Region. In many MU's old/mature stands are becoming increasingly scarce and it is thus important to strive to maintain true "old forest" biodiversity.

Ecological Context for Old Growth Retention in the Omineca Region

In Omineca Region there is a trend regarding the implementation of the PG TSA Biodiversity Order where old forest objectives are pushed to deficit thresholds to enact recruitment strategies under the Order. This circumstance has resulted in:

 More and more recruitment strategies proposed that include younger forest contributing to the old forest age targets in their Management Units (MUs) and recent suggestions that all area of parks within a MU contribute to old growth targets regardless of their age

³ https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/omineca-region/princegeorge-biodiversity-order/biodiversity_order.pdf

class or condition. If maintaining old growth forest biodiversity is still an "Old Growth Objective" as per the LUPG and the Biodiversity Orders, there is a need to highlight why this apparent trend does not represent the intent of the Biodiversity Orders. In terms of continuous improvement to the PGTSA Order (and others), there may also be a need to discuss the open-endedness of the wording in the PG TSA Order's "D.5. Alternatives to the Order" clause, as some interpretations around recruitment strategies may not be consistent with the intent of the Order. Old forest biodiversity and mature (or younger) forest biodiversity are not equivalent, thus distinctions between them should be maintained and old forest targets should be met with the use of "old forest". Section 7.0 of the Provincial Non-Spatial Old Growth Order appears to have been misused in the past. Both Orders require clear direction on the appropriate situations for recruitment strategies when there is a risk of old forest deficit.

2) Recruitment strategies that make ecological sense when, for example, there are inventory issues with the identification of the extent of old forest and there is an abundance of "next-to-old" that can fulfill the target quota. Next-to-old should also be clearly defined. For example, AC-8 (140-250 years) may contribute when old forest is defined as AC-9; 251+ years as long as it is functional interior forest and interpretations from the PG TSA Order do already allow for up to 20% younger contributing if it is shown that it will result in equal or better conservation benefits. Review on a case by case basis should occur to ensure that this is the case and younger stands are ecologically appropriate. Proposing that young forest be included toward targets to free up old forest for harvest is contrary to the intent to maintain old forest biodiversity. If old forest targets are being spatially addressed, then including younger forest in the matrix (especially young natural forest) is also ecologically beneficial, but it is not old forest. Therefore, if old forest biodiversity is still the landscape objective of the Orders/LUPG, having young forest replace old toward old growth targets will not achieve this objective.

File:

July 18, 2019

Jaret van der Giessen, RPF, Chair Prince George Timber Supply Area (PGTSA) Licensee Landscape Objective Working Group (LLOWG)

Dear Jaret van der Giessen,

The November 28, 2018 reporting data submitted by the LLOWG confirms that a number of merged BEC units (mBEC) within the Prince George Natural Resource District (PGNRD) are nearing or have exceeded the minimum old forest targets (see attached table) set out in the "Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area dated October 20, 2004" (Order).

This letter is to inform the LLOWG that as per Section 2 of the Implementation Policy of the Order, I am directing Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) staff to spatially locate legal Old Growth Management Areas (OGMA) that consider elevational and landscape connectivity throughout all mBECs located within the PGTSA portion of the PGNRD for the following reasons:

- Many mBEC units are close to threshold levels of the Order,
- There are gaps within age class distributions on the landscape which hinder the ability to manage for and maintain old forest values on the landscape, and
- The legal spatial location of OGMAs that consider elevational and landscape connectivity will provide greater certainty for managing old forest values and opportunities for harvest.

The selection of OGMAs will be based on the most current science, be co-located as much as possible with other values. My expectation is that the LLOWG will continue to work cooperatively with FLNRORD staff and present any comments or concerns to the Omineca Government Landscape Objective Working Group for consideration.

Yours truly,

Greg Rawling
Regional Executive Director
Omineca Natural Resource Region

Attachment: Table 1. Status of the mBECs in the PGNRD

Table 1. Status of the mBECs in the PGNRD

Unit Label	Minimum Age of Stands to be Counted as Old Forest (years)	Minimum % of CFLB retained as Old Forest (target)	Total CFLB (ha)	Old Forest Retention Target Area (ha)	Old Forest Retention Area (ha)	Total (Deficit)/Surplus (ha)
A1	141	33	7,031	2,320	5,974	3,654
A2	141	26	15,164	3,943	7,841	3,899
A3	121	12	67,971	8,156	22,218	14,061
A4	141	26	210,567	54,747	52,724	-2,023
A5	141	29	14,086	4,085	3,970	-115
A6	141	29	16,362	4,745	7,565	2,820
A7	121	17	4,182	711	1,354	644
A8	121	12	9,306	1,117	1,899	782
A9	121	12	34,148	4,098	5,216	1,118
A10	121	17	40,238	6,840	12,392	5,552
A11	121	12	127,990	15,359	30,904	15,545
A12	121	12	161,142	19,337	33,554	14,217
A13	121	12	360,368	43,244	79,493	36,249
A14	141	50	124,795	62,397	103,117	40,719
A15	141	84	16,375	13,755	11,699	-2,055
A16	141	26	35,543	9,241	15,161	5,920
A17	141	50	120,101	60,050	85,476	25,425
A18	141	80	2,211	1,769	1,812	44
A19	141	48	63,579	30,518	53,085	22,567
A20	141	80	97,469	77,975	85,091	7,116
A21	141	48	116,777	56,053	68,054	12,001
A22	141	53	28,022	14,852	18,702	3,850
A23	141	53	148,856	78,894	95,201	16,307
A24	141	30	129,801	38,940	35,594	-3,346
A25	141	46	158,243	72,792	75,162	2,370
Total			2,110,327	685,939	913,258	227,320

Data Source: November 2018 LLOWG

FW: A4 Retention Polygon tracking

From: Lazaruk, Terry <Terry.Lazaruk@canfor.com>

To: Van Spengen, Traci FLNR:EX < Traci. Van Spengen@gov.bc.ca>

Sent: August 4, 2020 3:24:24 PM PDT
Received: August 4, 2020 3:24:36 PM PDT
Attachments: A4_Retention_06062020.zap

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Got bounced the first attempt.....zip file

From: Lazaruk, Terry

Sent: August-04-20 3:17 PM

To: Van Spengen, Traci FLNR:EX <Traci.VanSpengen@gov.bc.ca>

Cc: 'jaret.van.der.giessen@westfraser.com' <jaret.van.der.giessen@westfraser.com>

Subject: A4 Retention Polygon tracking

Hi Traci,

On behalf of the PGTSA LLOWG, please accept the attached layer as an update to the spatial A4 polygons being used as part of the recruitment strategy approved October 20, 2014.

Modifications made to the established spatial areas (including both removals and additions), are meant to be tracked and submitted back to the applicable Ministry by the parties responsible for the alterations.

There have been two parcels of land that were awarded to the McLeod Lake Indian Band as a harvesting opportunity. Both these areas directly overlapped the A4 spatial retention polygons, and were harvested with no replacement areas identified, or with no upfront discussions with the impacted Licensee. This impacts PG TSA licensee efforts in managing within the PG Biodiversity Order. The LLOWG welcomes any input the GLOWG has on how this can be prevented in the future and where the alternative replacement areas are proposed.

If you could please ensure this updated data is posted on the LRDW site, it would be greatly appreciated.

If there are any questions, please let us know.

Terry Lazaruk, RPF Strategic Planning Coordinator Canfor Woodlands Canadian Forest Products Ltd.

T 250-567-8260 C 250-570-8444

<u>Terry.Lazaruk@canfor.com</u> <u>www.canfor.com</u>
1399 Bearhead rd, Vanderhoof, BC, V0J 3A0

Canfor Legal Disclaimer: This e-mail and any attachment(s) are confidential. If you are not the intended recipient, please notify the sender immediately by return e-mail, delete this e-mail and do not copy, use or disclose it to any other person.

CLIFF: 245806 File: 17580-PG TSA-A25-01

BRIEFING NOTE FOR INFORMATION

DATE: February 27, 2019

PREPARED FOR: Greg Rawling, Regional Executive Director, Omineca Natural Resource Region

ISSUE: Recruitment Strategy for Old Forest in the A25

BACKGROUND:

- Landscape level biodiversity objectives for the management of old forest retention, interior forest condition for old forest and young patch size distribution within the Prince George Timber Supply Area (PGTSA) are managed under the "Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area October 20, 2004" (Order).
- In situations where the objectives of the Order cannot be achieved in a given merged BEC (mBEC), a recruitment strategy must be submitted to and approved by the designate of the Minister of Sustainable Resource Management, who is designated as the Regional Executive Director (RED) for the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), if forest licensees wish to continue to harvest in that mBEC.
- In 2012, Canfor, on behalf of the Licensee Landscape Objectives Working Group (LLOWG), submitted a non-spatial recruitment strategy for the A25 mBEC that was approved by the RED.
- On April 7, 2017, Canfor, on behalf of the LLOWG, submitted a spatial recruitment strategy for the A25 mBEC which was subsequently denied by the RED on October 24, 2017.
- On February 20, 2018, Canfor responded to the October 24, 2017 decision stating that "Canfor intends to manage within A25 mBEC according to the spatial old forest areas submitted within the recruitment strategy" until an improved spatial strategy was completed and approved.
 On June 15, 2018, the RED responded to the February 20 Canfor letter reaffirming FLNRORD's commitment to work on the A25 mBEC.
- On June 28 and November 7, 2018, members of the Government Landscape Objective Working Group (GLOWG) met with Canfor to discuss the latest version of their spatial recruitment strategy where the strategy and the specifics of the Order were discussed.
- On Dec 20, 2018 Canfor submitted a letter to the RED in response to the topics discussed at the November 7, 2018 meeting expressing strong concern and objection to FLNRORD Draft Guidance and options for spatial recruitment strategies, particularly to the use of areas within parks and it's young age classes.

DISCUSSION:

The A25 mBEC has a history of extensive harvesting which has created a bimodal distribution of age classes, where a large percentage of the crown forest is within the old forest and young plantations (see Table 1). As a result, FLNRORD staffs encouraged Canfor to pursue a spatial recruitment strategy within the A25 mBEC, which was to leverage key habitats (via co-location) and provide for elevational connectivity.



CLIFF: 245806 File: 17580-PG TSA-A25-01

The key issues with Canfor's most recent revision of the recruitment strategy presented during the November 7, 2018 meeting for the A25 mBEC is the incorporation of younger age classes (down to age class 1) to contribute to the old forest targets in the Order to free up approximately 33,598 hectares of old forest for harvesting (see Table 1). Additionally, the entire old forest target under the Order was not spatially identified (approximately 20%) and the polygons that were identified were judged to be inadequate for contribution to old forest habitats.

Using the current literature, FLNRORD staffs conducted an ecological risk analysis to old forest biodiversity in the Prince George Natural Resource District (PGNRD) in 2019. This analysis determined that the A25 mBEC is currently at a moderate risk to old forest biodiversity but will decline to a very high risk under Canfor's proposed recruitment strategy. Canfor's continuation of harvesting old forest in the A25 mBEC limits their options for selecting suitable old forest and recruitment polygons (see Table 2).

The spruce beetle outbreak in the Omineca Natural Resource Region has increased harvesting pressure and Canfor has made significant investments into the A25 mBEC that includes a new bridge over the McGregor River. As well, increased harvest in the Bowron watershed is targeting the remaining old forest, a concern raised by the Lheidli T'enneh First Nation. The spruce beetle outbreak highlights the shortcomings of the current Order, not only because of its non-spatial nature, but also because the mBECs are geographically separated, causing the calculations of remaining old forest to be skewed in distribution.

The A25 mBEC is not the only unit that is facing deficit of old forests as prescribed by the Order (see Table 3) and FLNRORD staffs anticipate that the A25 mBEC recruitment strategy will be the first of many recruitment strategies to come in the PGNRD. Despite the uncertainty as to what ecosystems will dominate future forests due to climate change, the risk of not pursuing spatial recruitment strategies will limit decision maker options, and lead to further fragmentation and decline of old forest on the landscape.

Creating legal Old Growth Management Areas (OGMAs) within all of the mBECs would provide elevational connectivity between critical habitats and maintain representation of ecosystems on the landbase. OGMAs would also provide certainty for licensees in their operating areas and an opportunity to adapt to a shrinking timber supply. Finally, OGMAs would provide certainty to government that critical habitats, such as caribou habitat and other important values, are being maintained on the landscape.

CONCLUSION:

FLNRORD staffs have substantial concern regarding the current condition of old forests as per the Order that will be difficult to resolve while accommodating Canfor's intent for continued status quo forest harvesting in the A25 mBEC. The direction that FLNRORD takes in the A25 mBEC will set precedence for other recruitment strategies and may have long term ramifications to other mBECs reaching thresholds under the Order.

Given the multitude of pressures in the A25 mBEC, and other mBEC units in the PGNRD, FLNRORD staffs are requesting the establishment of spatial OGMAs to, retain old forest targets, provide certainty for recruitment and meet other objectives on the landbase.

CLIFF: 245806

File: 17580-PG TSA-A25-01

Attachment(s):

Table 1: Age Class Distribution and Proposed Strategy for A25

Table 2: Harvesting in the Prince George Natural Resource District by mBEC

Table 3: Status of the Landscape Units (mBECs) in the Prince George Natural Resource District

Map 1: PG TSA Biodiversity Order Reporting - Old Growth Targets

Map 2: PGTSA Biodiversity Order Reporting - Old Growth Targets East Detail

REVIEWED BY:

PREPARED BY: Traci Van Spengen, PAg Old Growth and Biodiversity Specialist Landbase Stewardship

Tammy Baerg, RPF Stewarship Officer PGNRD

	Initials	Date
DM		
Associate DM		
DMO		
ADM		
Program Dir/Mgr.	SR/JB/JP	Feb 27, 2019
Program Staff	TVan	E 07 0040
	SPengen/TBaerg	Feb 27, 2019

CLIFF: 245806 File: 17580-PG TSA-A25-01

Table 1: Age Class Distribution and Proposed Strategy for A25

Projected Age Class	Available Hectare	Proposed hectares in strategy polygons
1 (1-20)	18,441	2,129
2 (21-40 years)	33,963	3,625
3 (41-60 years)	10,389	2,142
4 (61-80 years)	1,115	620
5 (81-100 years)	1,729	824
6 (101-120 years)	3,552	2,335
7 (121-140 years)	3,837	2,086
8 (141-250 years)	52,017	30,372
9 (>251 years)	20,722	8,799
CFLB Total	145,765	52,932

Source of Data: Presentation from Canfor, November 7, 2018

Table 2: Harvesting in the Prince George Natural Resource District by mBEC

Year	mBEC Unit	Area Harvested (ha)	Estimated Volume (m³)
2011	A4	54	17,062
2012	A4	65	17,967
2013	A4	55	11,691
2014	A4	34	8,860
2015	A4	1,658	453,144
2016	A4	3,819	925,820
2017	A4	1,352	375,219
2018	A4	421	103,780
Total	A4	7458	1,913,546
2013	A10	66	19,029
2014	A10	800	364,101
2015	A10	451	143,033
2016	A10	179	55,125
2017	A10	33	7,547
Total	A10	1529	588,837



CLIFF: 245806 File: 17580-PG TSA-A25-01

Year	mBEC Unit	Area Harvested (ha)	Estimated Volume (m³)
2014	A11	14	1,968
2015	A11	157	8,809
2016	A11	0	0
2017	A11	21	4,355
Total	A11	192	15,133
2012	A12	63	12,231
2013	A12	1,554	298,307
2014	A12	2,124	227,829
2015	A12	2,173	303,199
2016	A12	620	110,814
2017	A12	177	58,161
2018	A12	94	30,533
Total	A12	6806	1,041,077
2015	A16	5	954
2016	A16	669	167,290
2017	A16	282	71,159
Total	A16	956	239,403
2011	A23	48	9,348
2015	A23	671	158,106
2016	A23	694	194,606
2017	A23	115	31,069
2018	A23	70	35,758
Total	A23	1598	428,889
2014	A24	0	49
2015	A24	129	27,748
2016	A24	224	54,146
2017	A24	103	25,695
Total	A24	456	107,639
2015	A25	0	43
2016	A25	361	105,175
2017	A25	1,092	313,660
2018	A25	118	25,562
Total	A25	1571	444,446

Source of Data: Consolidated Cut block and FTEN cut blocks,

FTEN cut blocks includes: 2018 cut blocks harvested, issued, and pending issuance in the Forest Tenure Administration system (FTA), and FTA.

CLIFF: 245806 File: 17580-PG TSA-A25-01

Table 3: Status of the Landscape Units (mBECs) in the Prince George Natural Resource District

Unit Label	Minimum Age of Stands to be Counted as Old Forest (years)	Minimum % of CFLB retained as Old Forest (target)	Total CFLB (ha)	Old Forest Retention Target Area (ha)	Old Forest Retention Area (ha)	Total (Deficit)/Surplus (ha)
A1	141	33	7,031	2,320	5,974	3,654
A2	141	26	15,164	3,943	7,841	3,899
A3	121	12	67,971	8,156	22,218	14,061
A4	141	26	210,567	54,747	52,724	-2,023
A5	141	29	14,086	4,085	3,970	-115
A6	141	29	16,362	4,745	7,565	2,820
A7	121	17	4,182	711	1,354	644
A8	121	12	9,306	1,117	1,899	782
A9	121	12	34,148	4,098	5,216	1,118
A10	121	17	40,238	6,840	12,392	5,552
A11	121	12	127,990	15,359	30,904	15,545
A12	121	12	161,142	19,337	33,554	14,217
A13	121	12	360,368	43,244	79,493	36,249
A14	141	50	124,795	62,397	103,117	40,719
A15	141	84	16,375	13,755	11,699	-2,055
A16	141	26	35,543	9,241	15,161	5,920
A17	141	50	120,101	60,050	85,476	25,425
A18	141	80	2,211	1,769	1,812	44
A19	141	48	63,579	30,518	53,085	22,567
A20	141	80	97,469	77,975	85,091	7,116
A21	141	48	116,777	56,053	68,054	12,001
A22	141	53	28,022	14,852	18,702	3,850
A23	141	53	148,856	78,894	95,201	16,307
A24	141	30	129,801	38,940	35,594	-3,346
A25	141	46	158,243	72,792	75,162	2,370
Total			2,110,327	685,939	913,258	227,320

Data Source: November 2018 Licensee Landscape Objective Working Group (LLOWG)



Date of previous note: September 2017 CLIFF 245805 Date of previous note: February 27, 2019 CLIFF 245806

CLIFF: 249801

BRIEFING NOTE FOR DECISION

DATE: July 18, 2019

PREPARED FOR: Greg Rawling, Regional Executive Director (RED), Omineca Natural Resource

Region (the Region), Ministry of Forests, Lands, Natural Resource Operations and

Rural Development (FLNRORD)

ISSUE: Spatial Recruitment Strategy of Old Forest in the Prince George Natural Resource

District (PGNRD)

RECOMMENDED OPTION:

Staff from the PGNRD and Regional Stewardship recommends that they establish legal spatially located old growth management areas (OGMAs) that consider elevational and landscape connectivity throughout all merged BEC units (mBEC) located within the PGNRD, outside of the ESI study area. This work is to take place in collaboration with impacted First Nations.

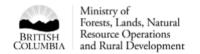
BACKGROUND:

- The Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area, October 20, 2004, (Order) is the legal entity that governs the amount of old forest, old interior forest, and young forest patch size distribution in the PGNRD.
- On March 5, 2019 the Omineca RED sent a letter to Canfor requiring them to establish spatially located old forest retention areas for the A25 mBEC with the intent to spatialize other mBECs in the future, as per Section 2 of the Implementation Policy of the Order.
- On March 7, 2019 staff from PGNRD and Region met with Canfor staff to continue discussions regarding Canfor's spatial recruitment strategy for the A25 mBEC. Canfor staff indicated that harvest operations are continuing under the guidance of their February 2017 spatial recruitment strategy, which includes the recruitment of younger age classes. At the time Canfor stated that they were only concerned with mBECs approaching threshold under the Order.
- On April 24, 2019 the Omineca Regional RED received an Information Briefing Note from the Director of Habitat and Biodiversity Branch providing a provincial opinion on recruitment strategies and expressed concerns with the Canfor A25 spatial recruitment strategy proposal (see Cliff 248332).

DISCUSSION:

Under the Order mBECs are managed non-spatially and independent of one another. This management has allowed unbalanced harvesting to occur within mBECs, as they are geographically dispersed on the landscape and for a lack of connectivity between mBECs. Currently, many mBECs that occupy the valley bottoms are already in or approaching deficit of the targets set by the Order while other mBECs that occupy mid-elevation ranges have surpluses (see Table 1). As a result, harvesting is now being concentrated in the mid-elevational mBECs, which in many cases abut to caribou ungulate winter range (UWR).

Forest licensees have yet to create and plan for spatial connectivity corridors on the landscape but are instead focused on creating recruitment strategies that will allow harvesting in old forest to continue. Having functional connectivity on the landscape is critical for managing species at risk, such as caribou, and will support future herd plans. The areas that have been and continue to be targeted



Date of previous note: September 2017 CLIFF 245805 Date of previous note: February 27, 2019 CLIFF 245806

CLIFF: 249801

for harvest are being contested by the Lheidli T'enneh First Nation. It is within FLNRORD's mandate to sustainably manage BC's ecosystems, including old growth forests and it is an objective for government to reconcile with First Nations.

Section 2 of the Implementation Policy of the Order provides rationale for spatially locating old forest retention areas when there is a risk to the biological values and gaps in the ability to manage old growth values. An ecological risk assessment of the PGNRD mBECs was conducted by Regional stewardship staff that examined the risk to biodiversity and ecological function. Both the current condition and the targets set by the Order for old forest and old interior forest were assessed. Results show that the majority of mBECs are at moderate to high ecological risk and that ecological risk increases with the loss of old forest (see Appendix 1).

OPTION 1: Staff from the PGNRD and Regional Stewardship recommends that they establish legal spatially located old growth management areas (OGMAs) that consider elevational and landscape connectivity throughout all merged BEC units (mBEC) located within the PGNRD, outside of the ESI study area. This work is to take place in collaboration with impacted First Nations.

- Provides an opportunity to manage biological and old growth values and aligns with FLNRORD's mandate to manage ecosystems and old growth forests.
- Spatially locating and legally establishing connectivity OGMAs is a stop gap to ensure the management of old growth forests and connectivity until such time as better policy mechanisms are in place.
- Provides opportunity to strengthen relationships with First Nations; aligns with the Lheidli
 T'enneh First Nation's interest in the Bowron, McGregor and Herrick watersheds; and aligns
 with government's objective to reconcile with indigenous people.
- Will not overlap with the Environmental Stewardship Initiative (ESI) project between government and the Carrier Sekani First Nation (CSFN).
- Provides opportunities to identify old forest habitat matrix for caribou and other species and aligns with FLNRORD's mandate to improve wildlife management and habitat conservation.
- Forest licensees can continue to manage to the targets of the Order and will be engaged via the Government and Licensee Landscape Objective Working Groups to have their concerns considered.
- Risks for wildfire and spruce beetle will be assessed as part of the spatial identification process. Co-location of areas will be employed when possible.
- PGNRD and Regional stewardship staff will prioritize resources to undertake this project and expect completion within 18 months.

OPTION 2: Status Quo

- FLNRORD will not be responding to the issues surrounding the implementation of the Order.
- Forest licensees can continue to manage to the targets of the Order.
- May harm current and future relationships with First Nations which may be seen as contradicting government's objective to reconcile with indigenous people.
- May lead to inoperable herd plans for caribou due to the lack of old forest habitat matrix.
- Will result in increasing risk to biodiversity and old growth, which are already at a moderate to high risk based on conservation biology principles.

RECOMMENDATION staff from the PGNRD and the Region recommends the following Option:

Option 1

Date of previous note: September 2017 CLIFF 245805 Date of previous note: February 27, 2019 CLIFF 245806

CLIFF: 249801

Approved / Not Approved	Greg Rawling	Date
	Regional Executive Director	
	Omineca Natural Resource Region	

Table 1. Example of Elevational and Landscape Distribution in the A25 and Associated mBECs Appendix 1. Ecological Risk Assessment of the PGTSA PGNRD mBECs

PREPARED BY:

Tammy Baerg, RPF Stewardship Officer Prince George Natural Resource District (250) 614-7508

Traci Van Spengen, PAg Old Growth and Biodiversity Specialist Omineca Natural Resource Region

REVIEWED BY:

	Initials	Date
DM		
Associate DM		
DMO		
ADM		
Program Dir/Mgr.	JJ/KH/;JH/SR/JC	July 18, 2019

Table 1. Example of Elevational and Landscape Distribution in the A25 and Associated mBECs

Geographic Position	mBEC	Old Forest Area Available for Harvest (ha)
Valley Bottom	A25	2,370
Mid Elevation	A23	16,307
Mid Elevation	A19	22,567
Mid Elevation	A20	7,116
High Elevation	A18	44

Data Source: November 2018 Licensee Landscape Objective Working Group (LLOWG)

