



***SUSTAINABLE FOREST MANAGEMENT***  
***2014 ANNUAL REPORT***  
***APRIL 1, 2014 TO MARCH 31, 2015***  
***CANFOR FORT NELSON***

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**July 8, 2015<sup>1</sup>**

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<sup>1</sup> Cover page Photo Credit – Aliette Seigel, RPF

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## Glossary and Acronyms

**Adaptive Management:** A learning approach to management that recognizes substantial uncertainties in managing forests and incorporates into decisions the experience gained from the results of previous actions. Adaptive management can be simplified into "learning by doing."

**Annual Allowable Cut (AAC):** The allowable rate of timber harvest from a specified area of land. The Chief Forester sets specific AACs for Timber Supply Areas and Tree Farm Licences in accordance with Section 8 of the *Forest Act*.

**Biogeoclimatic Ecosystem Classification (BEC):** A hierarchical system of ecosystems that integrates regional, local and chronological factors and combines climatic, vegetation and site factors.

**Biological richness (species richness):** The number of species in a given area.

**Coarse woody debris (CWD):** Downed woody material of a minimum diameter or greater that is resting on the forest floor or at an angle to the ground of 45 degrees or less. CWD consists of sound and rotting logs and branches, and may include stumps when specified. Coarse woody debris provides habitat for plants, animals and insects, and a source of nutrients for soil development.

**Criterion:** A category of conditions or processes by which sustainable forest management may be assessed; characterized by a set of related indicators which are monitored periodically to assess change.<sup>1</sup>

**Crown Forest Land Base (CFLB):** Forested land managed by the Ministry of Forests and Range is referred to as the Crown forested land base. In the CFLB, specific conditions (e.g. a stand or a group of similar trees) are assigned either to the non-harvesting land base or to the timber harvesting land base. An area can only be removed for one reduction type; for example, the area of a stand that falls within a park, and also has sensitive soils, is assigned only once to the non-harvesting land base.

**Customary use rights:** The rights of First Nations peoples to use lands and resources based on culturally established patterns of utilisation and management which may include fishing; hunting; trapping; gathering of foods, medicines and materials for ceremonial, spiritual, sustenance, or fabrication (e.g. clothing, artwork, building, etc.) purposes.

**Defined Forest Area (DFA):** A specified area of forest, including land and water. The Defined Forest Area for the Sustainable Forest Management Plan is the Fort Nelson Forest District, excluding private land and woodlots.

**Forest Management System (FMS):** The FMS is a systematic means of identifying, addressing and managing environmental impacts and sustainable forest management commitments within Canfor's Woodlands operations.

**Forest and Range Practices Act (FRPA):** The *Forest and Range Practices Act* brings in the application of a results-based system for the management of forest and range resources. It will fully replace the *Forest Practices Code of British Columbia Act* by December, 2005.

**General Development Permit (GDP):** permit obtained by oil and gas sector to authorize limited development of an area in preparation for exploration activities for oil and gas.

**Global ecological cycles:** The complex of self-regulating processes responsible for recycling the Earth's limited supplies of water, carbon, nitrogen and other life-sustaining elements.

**Inoperable:** Lands that are unsuited for timber production now and in the foreseeable future because of a range of factors, including elevation; topography; inaccessible location; low value of timber; small size of timber stands; steep or unstable soils; or designation as parks, wilderness areas, or other uses incompatible with timber production.

**Indicator:** A measure of an aspect of the criterion; a quantitative or qualitative variable which can be measured or described and which, when observed periodically, demonstrates trends. <sup>1</sup>

**Landscape Unit:** a planning area, generally up to about 100,000 ha in size, delineated according to topographic or geographic features such as a watershed or series of watersheds. It is established by the district manager.

**Measure:** A set of variable that provides quantitative information about the status/standard established for an indicator.

**Natural disturbance:** the historic process of fire, insects, wind, landslides and other natural events in an area.

**Non Commercial brush (NCBR):** Describes potential productive forest land that is covered with either 'Forest' or 'Brush'.

**Natural Disturbance Unit (NDU):** These units separate areas based on differences in disturbance processes, stand development, and temporal and spatial landscape pattern.

**NHLB:** Non-Harvestable Land Base This is area not considered part of the THLB. This includes areas excluded from contributing to timber supply during the TSR process, such as parks, riparian reserve areas, inaccessible areas, inoperable areas, non-merchantable forest types, low productivity types, recreation features, and environmentally sensitive areas.

**Old Growth Management Area (OGMA):** areas which contain, or are managed to replace, specific structural old-growth attributes and which are mapped out and treated as special management areas.

**Predictive Ecosystem Mapping (PEM):** A computer, GIS and knowledge-based method that divides landscapes into ecologically-oriented map units for management purposes.

**Recreation Opportunity Spectrum (ROS):** a mix of outdoor settings based on remoteness, area size, and evidence of humans, which allows for a variety of recreation activities and experiences. The descriptions used to classify the settings are on a continuum and are described as: rural, roaded resource, semi-primitive motorized, semi-primitive non- motorized, and primitive.

**Regeneration delay:** the maximum time allowed in a prescription, between the start of harvesting in the area to which the prescription applies, and the earliest date by which the prescription requires a minimum number of acceptable well-spaced trees per hectare to be growing in that area.

**Riparian:** Area adjacent to a stream, river, lake or wetland. The FPC Riparian Management Area Guidebook defines it as "areas [that] occur next to the banks of streams, lakes, and wetlands and include both the area dominated by continuous high moisture content and the adjacent upland vegetation that exerts an influence on it".

**Riparian Reserve Zone (RRZ):** The portion of the riparian management area or lakeshore management area located adjacent to a stream, wetland or lake.

**Seral:** the stage of development of an ecosystem, from a disturbed, un-vegetated state (early-seral) to a mature plant community (late-seral).

**Site Index:** an expression of the forest site quality of a stand, at a specified age, based either on the site height, or on the top height, which is a more objective measure.

**Snag:** a standing dead tree, or part of a dead tree, found in various stages of decay—from recently dead to very decomposed.



**Stream Crossing Quality Index:** a field based hazard assessment of the potential for accelerated erosion and sediment delivery at stream crossings. The procedure evaluates and scores the potential for eroded sediment to reach the stream environment. A high score infers that there is a significant erosion problem which may in turn cause sediment related water quality problems.

**Sustainable Forest Management (SFM):** Management “to maintain and enhance the long-term health of forest ecosystems, while providing ecological, economic, social and cultural opportunities for the benefit of present and future generations”<sup>2</sup>

**Target:** A specific statement describing a desired future state or condition of measure. Targets should be clearly defined, time-limited and quantified, if possible.

**Timber Harvesting Landbase (THLB):** The area of the Defined Forest Area available for timber extraction.

**Traditional Use Study (TUD):** Compilation of data respecting historic use of the land and resources by First Nations

Acronyms

<b>AAC</b> Allowable Annual Cut	<b>MOFR</b> British Columbia Ministry of Forests and Range
<b>AIA</b> Archaeological Impact Assessment	<b>MPS</b> Market Pricing System
<b>AMD</b> Amendment	<b>NSOGO</b> Non Spatial Old Growth Order
<b>AOA</b> Archaeological Overview Assessment	<b>NSR</b> Not Satisfactorily Restocked
<b>BCTS</b> BC Timber Sales	<b>NTPF</b> Non-Timber Forest Products
<b>BEC</b> Biogeoclimatic Ecosystem Classification	<b>OGMA</b> Old Growth Management Area
<b>BEO</b> Biodiversity Emphasis Option	<b>OHSC</b> Occupational Health and Safety Committee
<b>Canfor</b> Canadian Forest Products Ltd.	<b>OSB</b> Oriented Strandboard
<b>CHR</b> Cultural Heritage Resource	<b>PAG</b> Public Advisory Group
<b>CFS</b> Canadian Forest Service	<b>PEM</b> Predictive Ecosystem Mapping
<b>CFLB</b> Crown forested land base	<b>PMP</b> Pest Management Plan
<b>COPI</b> Creating Opportunity for Public Involvement	<b>PRISM</b> Public Response for Informed Sustainable Management
<b>CP</b> Cutting Permit	<b>RMZ</b> Riparian Management Zone
<b>DBH</b> Diameter at Breast Height	<b>ROS</b> Recreation Opportunity Spectrum
<b>EFG</b> Early Free Growing	<b>RRZ</b> Riparian Reserve Zone
<b>FDP</b> Forest Development Plan	<b>RVQC</b> Recommended Visual Quality Class
<b>FMS</b> Forest Management System	<b>SDE</b> Spatial Data Engine
<b>FG</b> Free Growing	<b>SFMP</b> Sustainable Forest Management Plan
<b>FIA</b> Forest Investment Account	<b>SI50</b> Site Index for age 50
<b>FPC</b> Forest Practices Code	<b>SOP</b> Standard Operating Procedure
<b>FSP</b> Forest Stewardship Plan	<b>Sx</b> White Spruce
<b>CENGEA</b> Name for data management system	<b>TBD</b> To be determined
<b>GIS</b> Geographic Information Systems	<b>THLB</b> Timber Harvesting Land Base
<b>GMZ/GRZ</b> General Resource Zone	<b>TSA</b> Timber Supply Area
<b>ILMB</b> Integrated Land Management Bureau	<b>TSR</b> Timber Supply Review
<b>ITS</b> Incident Tracking System	<b>UWR</b> Ungulate Winter Range
<b>KDC</b> Kaska Dene Council	<b>VRI</b> Vegetation Resources Inventory
<b>LFG</b> Late Free Growing	<b>VQO</b> Visual Quality Objective
<b>LRMP</b> Land Resources Management Plan	<b>WQCR</b> Water Quality Concern Rating
<b>LU</b> Landscape Unit	<b>WHA</b> Wildlife Habitat Area
<b>LUPG</b> Landscape Unit Planning Guide	<b>WTP</b> Wildlife Tree Patch
<b>MAI</b> Mean Annual Increment	<b>WTR</b> Wildlife Tree Retention
<b>MOA</b> Memorandum of Agreement	

<sup>2</sup> The State of Canada’s Forests 2001/2002, as cited by the CSA.

## Executive Summary

### Fort Nelson Defined Forest Area location

The Defined Forest Area (DFA) of the SFM Plan is the Fort Nelson Timber Supply Area (TSA) as described for the Timber Supply Review. The Fort Nelson DFA is located in the northeastern corner of British Columbia and covers approximately 9.8 million hectares, bordering Alberta to the east and the Northwest Territories and the Yukon Territory to the north. The Alaska Highway (Highway # 97) is the main access to the town of Fort Nelson and the only major service road within the DFA. The Alaska Highway leads travelers north from Dawson Creek, BC, through the Yukon to Fairbanks, Alaska. The 317 Road (Highway 77), so named because it begins 17 miles from Fort Nelson (Mile 300 on the Old Alaska Highway), is the only other year round road access to the Fort Nelson area, providing access to the Northwest Territories (source MOFR website).

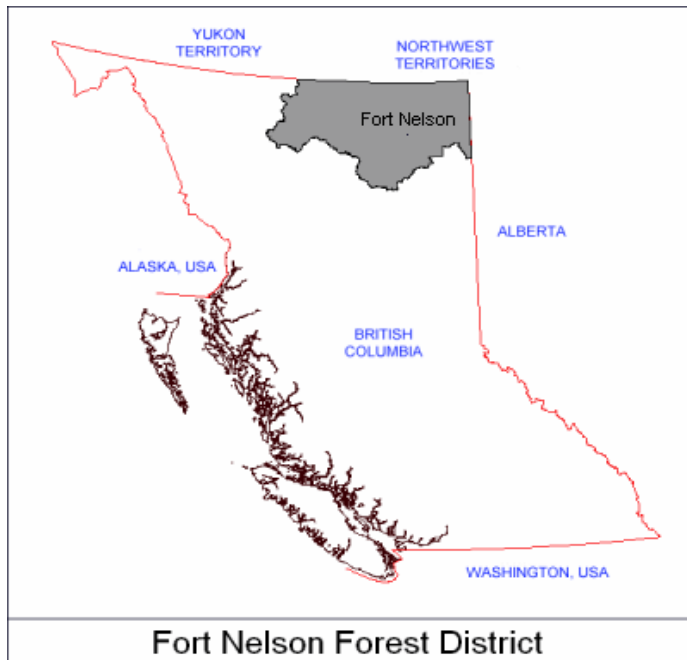


Figure 1: Fort Nelson Defined Forest Area

### Purpose

This report is prepared as part of the annual assessment to confirm Canfor's continued implementation of the CSA SFM standard. This report is the tenth edition since registration to the CSA-Z809-02 standard in 2005 and provides a status from April 1, 2014 to March 31, 2015 of the locally developed measures of the SFMP. The SFM Annual Report target completion date is September 30<sup>th</sup> annually. In this report, each measure is re-iterated, and a brief status update is provided. For further reference to the intent of the measures, or the practices involved, the reader should refer to Canfor's Sustainable Forest Management Plan for the Fort Nelson DFA (SFMP, second edition April 1, 2011).

The development of an updated SFM Plan in conformance with the requirements of the CSA Z809-08 standard was concluded on April 1, 2011. This annual report will summarise performance under the indicators included in the revised SFMP second edition (April 1, 2011). Reporting for BC Timber Sales is provided in a separate report.

### Circumstances affecting SFM process

Canfor Corporation announced on January 18th, 2008 that due to poor wood product markets, a high Canadian dollar and record low oriented strand board (OSB) prices, its PolarBoard OSB and Tackama plywood mills in Fort Nelson would be closing indefinitely. The Polarboard closure took effect once the existing inventories were utilized and finished products shipped, which occurred in early June 2008. On February 26th, 2008 it was announced that Canfor's Fort Nelson Tackama mill would continue operations, largely because of the efforts of the United Steel Workers Union, employees, suppliers, the provincial government and contractors to identify means to reduce costs at Tackama and establish a business case to keep Tackama operating. Through the contributions of the union, employees, contractors and suppliers and policy changes announced by the provincial government a business case was made to continue operations at Tackama. The business case was predicated upon

Tackama realizing the intended cost savings and continued positive performance of plywood markets. Although Tackama had performed very well and achieved record production targets, Canfor Corporation reassessed Tackama's situation and announced on October 8th, 2008 that due to the continued poor demand and low prices for plywood across North America, it would be closing indefinitely the Tackama plywood plant in Fort Nelson. The market conditions and future outlook for plywood prices were not encouraging, with no evidence of a turnaround in the near future and consequently Canfor decided to curtail production to address the reduced market demand. The indefinite shutdown of the Canfor mills continued throughout 2009/2010, 2010/2011, 2011/2012, 2012/2013, 2013/2014, 2014/2015 and is expected to continue through the next few reporting years. As of the date of completion of this report, the Canfor mills in Fort Nelson remain indefinitely closed.

The closure of the PolarBoard mill, followed later by the closure of the Tackama mill affects local forest management and the PRISM Public Advisory Group in the following ways:

- Reduced and/or no operational harvesting activities affects reporting of certain measures, rendering reporting on current status of much of the indicators as static until resumption of harvest activity;
- Cessation of harvest activities reduces the economic benefit of forest management to the region;
- With the exception of the added meetings required to discuss revisions to the SFM plan, suspended harvesting activities has reduced the need to continue with frequent PAG meetings, resulting in reduced numbers of meetings and field tours;
- Difficulty in attracting new PAG members and promoting general interest in forestry in the community.

### **Overview of Canfor Achievements**

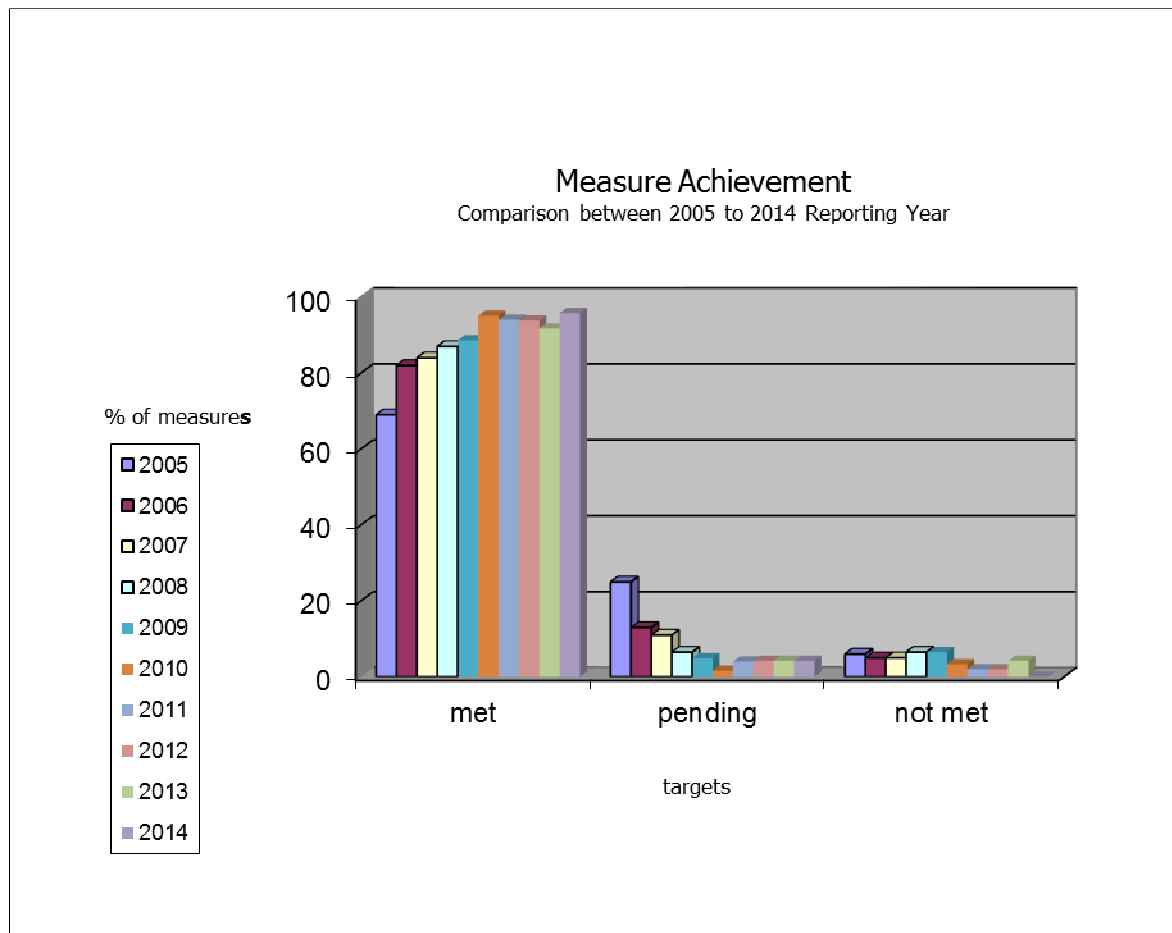
For the 2014 reporting year the following list describes the results achieved:

- ✓ 46 of the 48 measures were achieved (95.8%),
- ✓ 2 measures are pending (4.2%),
- ✓ 0 of the indicator objectives were not met (0%).

The overview of target achievements in this section captures Canfor's performance measures. BC Timber Sales is responsible for reporting their achievements through their Annual Report. Figure 2 below compares the 2014 measure achievement to previous reporting periods and Table 1 shows the status of each individual measure. Very similar indicator performance for the 2013 reporting year is noticeable, with respect to the number of indicators either pending or not achieved. Measures that were not met will be discussed during the upcoming Management Review and actions will be identified that should result in improving trends.

With the shutdown of the Canfor mills in Fort Nelson, no Canfor harvest activities took place in 2014/15. As a result, many measures directly linked to harvest activities do not contain new data and those often refer to the 2008 data (last year of harvesting activities) instead. It is anticipated that the upcoming 2015/16 Annual Report will continue to provide minimal new reporting of measures that are directly influenced by harvest activities. Table 1 identifies the measures that will receive minimal reporting and are recommended to be deferred for full reporting until harvesting activities resume.

## Summary of 2014 Measures Performance



**Figure 2: Comparison of measure achievement Canfor 2005 to 2014**

**Table 1: Summary of Canfor's 2014 Measure Status**

Measure		Target Met	Target Pending	Target Not Met	Minimal reporting
1.1.1	Ecosystem area by type	✓			✓
1.1.2	Forest area by type or species	✓			✓
1.1.3	Forest area by seral stage or age class	✓			✓
1.1.4.1	Degree of within stand structural retention – WTP Percentage	✓			✓
1.1.4.2	Degree of within stand structural retention – Dispersed Retention	✓			✓
1.1.4.3	Degree of within stand structural retention – Riparian Management	✓			✓
1.1.5	Shrub Habitat	✓			✓
1.2.1 and 1.2.3	Degree of habitat protection for selected focal species including species at risk <b>and</b> degree of suitable habitat in the Proportion of regeneration comprised of native species	✓			✓
1.3.1	Percentage of stands artificially regenerated that are free of genetically modified organisms (GMOs)	✓			
1.4.1	Proportion of identified sites with implemented management strategies	✓			
1.4.2	Protection of identified sacred and culturally important sites	✓			
2.1.1.1	Reforestation success – Regen Delay	✓			
2.1.1.2	Reforestation success – Free Growing	✓			
2.1.1.3	Percentage of silviculture obligation areas with significant detected forest health damaging agents which have	✓			
2.1.1.4	Evidence of efforts being made to manage known significant forest health damaging agents	✓			
2.2.1	Additions and deletions to the forest area	✓			✓
2.2.2	Proportion of long term sustainable harvest that is actually harvested		✓		✓
3.1.1	Level of soil disturbance	✓			✓
3.1.2	Level of downed woody debris	✓			✓
3.2.1.1	Proportion of watershed or water management areas with recent stand replacing disturbance - Watersheds	✓			✓
3.2.1.2	Proportion of watershed or water management areas with recent stand replacing disturbance – Roads and road structures	✓			✓
4.1.1.1	Net carbon uptake – Total Carbon Storage	✓			✓
4.1.1.2	Net carbon uptake – Sequestration rate	✓			✓
4.1.2	Reforestation success – <b>Covered by indicator 2.1.1</b>	✓			
4.2.1.1	Addition and deletions to forest area – <b>Covered by indicator 2.2.1</b>	✓			✓
4.2.1.2	Evidence of best efforts to coordinate forest management activities with the oil and gas industry	✓			
5.1.1.1	Quantity and quality of timber and non-timber benefits, products and services in the DFA – Timber – <b>Covered by indicator 2.2.2</b>		✓		✓
5.1.1.2	Quantity and quality of timber and non-timber benefits, products and services in the DFA – Non-timber	✓			
5.1.1.3	Participants forest management activities will not negatively impact established recreational sites and trails	✓			✓
5.1.1.4	Forest management activities will be consistent with Visual Quality Objectives (VQO's)	✓			✓
5.2.1.1	Level of investment in initiatives that contribute to community sustainability	✓			✓
5.2.1.2	Amount of stumpage paid in the Fort Nelson TSA	✓			✓
5.2.2	Level of investment in training and skills development	✓			
5.2.3	Level of direct and indirect employment	✓			✓
5.2.4	Level of aboriginal participation in the forest economy	✓			✓
6.1.1	Evidence of good understanding of the nature of aboriginal title and rights	✓			
6.1.2	Evidence of best efforts to obtain acceptance of management Plans based on Aboriginal communities having a clear understanding of the plans	✓			
6.1.3	Level of management and/or protection of areas where culturally important practices and activities (hunting/fishing/gathering) occur	✓			
6.2.1	Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities using a process that identifies and manages culturally important resources and values	✓			
6.3.1	Evidence that the organization has cooperated with other forest dependent businesses, forest users and the local community to strengthen and diversify the local economy.	✓			
6.3.2	Evidence of cooperation with DFA related workers to enhance safety standards, procedures and outcomes in all DFA workplaces and affected communities	✓			
6.3.3	Evidence that a worker safety program has been implemented and is periodically reviewed and improved	✓			
6.4.1	Level of participant and Prism member satisfaction with the public participation process	✓			
6.4.2	Evidence of efforts to promote capacity development and meaningful participation in general	✓			
6.4.3	Evidence of efforts to promote capacity development and meaningful participation for Aboriginal communities – <b>Covered by indicator 6.1.2</b>	✓			
6.5.1	Number of People reached through educational outreach	✓			
6.5.2	Availability of summary information on issues of concern to the public	✓			
<b>Total</b>		46	2	0	

**Continuous Improvement**

To facilitate reporting and continuous improvement of the measures and targets in the SFM Plan, and to ensure that data is collected in a timely and orderly fashion, each measure will be recorded and tracked. This will occur either in Canfor's Cengea Resources' module or in a separate database specific to the measure. CENGEA acts like a warehouse for most SFM tasks, tracking responsibilities, due dates, and progress comments.

**Detailed Review of SFM Measure Performance**

**Criterion 1.0 Biological Diversity**

**1-1.1 - Ecosystem area by type**

Measure 1-1.1	
Target	Results
Based on a percent representation of ecosystem groups across the DFA:	Canfor did not complete any harvesting or road construction during the reporting period. Therefore no activities were completed involving rare or uncommon ecosystems. This indicator is therefore considered to be achieved.
A) 100% of the rare and uncommon ecosystems will have special management strategies associated with them (0%)	
B) 100% of the strategies for rare and uncommon ecosystems will be followed.	

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
The ecosystem representation analysis for the Fort Nelson DFA was updated in 2011/12. Prior to resumption of harvest activities the management strategies currently identified for rare and uncommon ecosystems and the SFMP table 16 rare and Uncommon Ecosystems will be updated to be consistent with the revised 2011/12 ERA results. Those ecosystems found to be uncommon or rare in the NHLB will be subject to specific management strategies where they occur in the THLB.

References
Table 5: Rare and Uncommon Ecosystem Groups in the Fort Nelson DFA in Appendix 2.

**1-1.2 – Forest area by type and species**

Measure 1-1.2	
Target	Results
Percent distribution of Forest type (treed conifer, treed broadleaf, treed mixed) >20 years old across the DFA. Target is to maintain baseline ranges and distribution in the future (5%)	Canfor was not actively harvesting or constructing roads during the reporting period. Accordingly, there was no effect on the forest type distribution. This indicator is considered met due to zero net effect on the indicator.

Target Met		
✓ Yes	No	Pending

**Recommendations and Next Steps**

None at this point.

**References**

See Table 6: Forest Cover Type in Appendix 2.



**Figure 3: Deciduous, conifer and mixed wood forest stands.**

### 1-1.3 – Forest area by Seral stage or age class

Measure 1-1.3		
Target	Results	
Percent of late seral stage (old growth) distribution by natural disturbance unit is maintained at the legal target for old growth as set by the Non-Spatial Old Growth Objectives of the Fort Nelson Forest District Order (NSLBOO) and spatially established OGMA's or to trend positive each year toward meeting the legal target.%)	Canfor was not actively harvesting or constructing road during the reporting period. Accordingly there was no effect on the late seral stage forest distribution across the DFA. This indicator is considered met due to zero net effect on the indicator.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		
See Table 7: Required Percentage of Retention in the DFA, Figure 8: Natural Disturbance Units of the Fort Nelson DFA and Table 8: Current Percentage of Old Seral Stage by NDU in Appendix 2 for a summary of the data supporting this indicator.		

#### 1-1.4.1 - Degree of within stand structural retention – WTP percentage

Measure 1-1.4.1		
Target	Results	
Percent of within stand structure retained across the DFA in harvested areas:	Canfor completed no harvesting activities in the reporting period. No harvesting occurred since the calculation of the 2010 baseline data for the 2011 SFMP. Accordingly, there was no effect on the percentage of WTP retention within the DFA and the trend was unaffected as well. This indicator is considered met due to zero net effect on the target.	
A) 100% conformance with landscape level (LU) target of 7% set by FRPA for all new harvesting (0%)		
B) positive trend toward the baseline 7% in LU's where current level of retention is deficient		
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
The Canfor Forest Stewardship Plan (FSP) WTP retention target was amended in 2012 to be consistent with the target noted in the SFMP.		
References		
See Table 9: Current Stand Level Retention Percentage in Appendix 2.		



**1-1.4.2 – Degree of within stand structural retention – Dispersed Retention**

Measure 1-1.4.2		
Target	Results	
Percent of blocks meeting dispersed retention levels as prescribed in the site/logging plan, target of 100% (0%)	Canfor completed no harvesting activities during the reporting period. Accordingly there was no effect on the indicator target. This indicator is considered met due to zero net effect on the target.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**1-1.4.3 – Degree of within stand structural retention – Riparian management**

Measure 1-1.4.3		
Target	Results	
Number of non-conformances where forest operations are not consistent with riparian management requirements as identified in operational plans, target of 0 non conformances. (Variance of 0)	Canfor completed no harvesting activities during the reporting period. Accordingly, there were no non-conformances with riparian management requirements in operational plans. This indicator is considered met due to zero net effect on the target.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**1-1.5 – Shrub Habitat**

Measure 1-1.5		
Target	Results	
A) Sustain current baseline shrub habitat percentage in the THLB (5%)	Canfor completed no harvesting or road construction activities during the reporting period therefore our forest activities had no effect on the shrub percentage in the THLB. This target is considered met due to zero net effect on the target.	
B) Monitor shrub habitat percentage in the NHLB		
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		
See Table 10: Area in Stands Less than 20 Years Old and Polygons labeled as Shrub Area and Table 11: Areas in Stands with the Label NPBr in Appendix 2.		

- 1-2.1 – Degree of Habitat protection for selected focal species including species at risk, and**
- 1-2.2 – Degree of suitable habitat in the long term for selected focal species including species at risk.**

Measure 1-2.1 and 1-2.2		
Target	Results	
Percentage of forest management activities consistent with management strategies for species of management concern, target of 100% conformance with management strategies. (Variance of 0).	Canfor completed no harvesting or road construction activities during the reporting period therefore no activities took place that would have the potential to impact habitat of a species of management concern. This target is considered met due to zero net effect on the target.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**1-2.3 - Proportion of regeneration comprised of native species**

Measure 1-2.3		
Target	Results	
Regeneration will be consistent with provincial regulation and standards for seed and vegetative material use. Target of 100% conformance with standards (0).	Canfor's planting activities during the reporting period were in conformance with the Chief Forester's Standards for Seed Use. Seedlings were planted from local seed collected in Fort Nelson in accordance with the Chief Forester's Standards for Seed Use. This target has been met.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**1-3.1 - Percentage of stands artificially regenerated that are free from genetically modified organisms (GMO's)**

Measure 1-3.1		
Target	Results	
100 percent of stands artificially reforested by participants will be free of GMO's. (Variance of 0%).	Canfor's planting activities during the reporting period were in conformance with the Chief Forester's Standards for Seed Use. All blocks were planted with seedlings grown from locally harvested seed as mentioned in indicator 1.2.3. No genetically modified organisms were used to reforest any areas in the DFA. This target has been met.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		
•		

**1-4.1 - Proportion of identified sites with implemented management strategies**

Measure 1-4.1	
Target	Results
100 percent of forest management activities consistent with management strategies for protected areas and sites of biological significance (Variance of 0%)	Canfor completed no harvesting or road construction activities during the reporting period therefore no activities took place that would have the potential to impact protected areas or sites of biological significance. Silviculture activities were consistent with operational plans. This indicator is considered met due to zero impact on the target.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
The indicator target and variance includes sites of cultural significance made known to the participants by First Nations and other parties.
References

**1-4.2 - Protection of identified sacred and culturally important sites**

Measure 1-4.2	
Target	Results
100 percent of identified Aboriginal forest values, knowledge and uses considered in forestry planning processes (0).	Canfor completed no harvesting or road construction activities during the reporting period, accordingly no activities took place that would have the potential to impact identified sacred or culturally important sites. No sites of significance to first nations to be addressed by planning processes were brought forward to Canfor during this reporting period. This indicator is considered met due to zero harvesting activities having occurred.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
Inherent in the SFMP description of this indicator is the understanding that the consideration of Aboriginal forest values, knowledge and uses in forestry planning also includes addressing the mitigation of potential negative impact of these items and known sites of cultural importance to First Nations by way of site level plans.
References

## Criterion 2.0 Ecosystem Condition and Productivity

### 2-1.1.1 - Reforestation success – Regen Delay

Measure 2-1.1.1	
Target	Results
100 percent of stands established annually will have an average regeneration delay of 3 years or less (variance Site Plan specific)	Four blocks were due to be established in 2014. All were established prior to the deadline. Fill planting of previously established stands occurred in 2014 to maintain stocking within target thresholds. This target has been met.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
Four stands were due to be established in 2014, OBL026, TSO002, NDD121 and KLD1756. All were declared as being established prior to the deadline.
References
See Appendix 3 Table 14.

### 2-1.1.2 - Reforestation success – Free Growing

Measure 2-1.1.2	
Target	Results
100 percent compliance with free growing timelines prescribed in site plans (0)	100% of all blocks required to be free growing in 2014 achieved free growing status and were declared as free growing. This target has been met.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
References
See Appendix 3 Table 13.

**2-1.1.3 - Percentage of silviculture obligation areas with significant detected forest health damaging agents which have treatment plans**

Measure 2-1.1.3		
Target	Results	
100 Percent of sites with significant forest health damaging agents will have a treatment plan developed and initiated within one year of detection (0)	All blocks found to have a significant forest health damaging agent that threatens the survival of the stand have had treatment plans developed. The most significant damaging agent found in blocks surveyed in 2014 was competing vegetation. These blocks have been scheduled for vegetation management and/or fill planting treatments. This indicator target has been achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
Wildfires in the Kotcho area destroyed a number of Canfor's plantations in 2012. Action plans have been developed to deal with reforesting these areas. No blocks were lost to fire, insects or disease in 2013.		
References		
See Appendix 3 Table 15		

**2-1.1.4 - Evidence of efforts being made to manage known significant forest health damaging agents**

Measure 2-1.1.4		
Target	Results	
<b>a)</b> Annually report out on percentage of harvest activity that is focused on the treatment of stands damaged by or susceptible to damage by natural events or damaging agents	Canfor completed no harvesting or road construction activities during the reporting period, accordingly no harvest salvage or sanitation activities took place that would have the potential to impact significant forest health damaging agents. Canfor has implemented brushing activities where required. Canfor staff were members of the Fort Nelson Mountain Pine Beetle Task Force during the reporting period. Therefore, this indicator is considered to have been met.	
<b>b)</b> Annually report out on participation in management efforts within the DFA (committees, Task Forces, etc.) for significant forest health damaging agents		
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**2-2.1 - Additions and deletions to the forest area**

Measure 2-2.1		
Target	Results	
Report out the percentage of gross forested landbase (CFLB) in the DFA converted to non-forest land use through forest management activities. Target of less than 3% of the gross forested landbase at any given time (variance of 0%).	Canfor completed no harvesting or road construction activities during the reporting period, accordingly no activities took place that converted forest land to non forest land use. This indicator target is considered achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		
See Appendix 3 Table 16.		

**2-2.2 - Proportion of long term sustainable harvest level that is actually harvested**

Measure 2-2.2		
Target	Results	
Percentage of volume harvested compared to the long term harvest level (AAC) with a target of 100 percent over 5 years (10%)	Canfor completed no harvesting or road construction activities during the reporting period. This indicator target is considered pending.	
Target Met		
Yes	No	✓ Pending
Recommendations and Next Steps		
The PRISM has agreed that reporting of the Participants performance for this indicator will be waived pending the resumption of timber harvesting by the Participants within the DFA.		
References		

## Criterion 3.0 Soil and Water

### 3-1.1 - Level of soil disturbance

Measure 3-1.1	
Target	Results
Percentage of harvested blocks meeting soil disturbance objectives identified in plans. Target of 100 percent (variance of 0%)	Canfor completed no harvesting, mechanical site preparation or road construction activities during the reporting period. Therefore no negative soil disturbance was created. This indicator target is considered achieved.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point.
References

### 3-1.2 - Level of Downed woody debris

Measure 3-1.2	
Target	Results
Percent of cutblocks reviewed where post harvest coarse woody debris (CWD) levels are within the targets contained in plans. Target of 100% (10)	Canfor completed no harvesting or road construction activities during the reporting period. Therefore the population of blocks required to meet the target was zero. This indicator target is considered achieved.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point.
References



**3-2.1.1 - Proportion of watersheds or water management areas with recent stand replacing disturbance – Watersheds**

Measure 3-2.1.1		
Target	Results	
Sensitive watersheds that are found to be above peak flow targets will have further assessment done and strategies created for water management prior to harvest within the watershed. Target of 100 percent (0)	Canfor completed no harvesting or road construction activities during the reporting period. Therefore no harvesting occurred in sensitive watersheds. This indicator target is considered achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
Watersheds within the DFA will be analyzed to create a baseline of information identifying sensitive watersheds. The Interior Watershed Assessment procedures Guidebook and the advice of hydrologists will be considered in the analysis. This analysis will be completed prior to resumption of harvest activities.		
References		

**3-2.1.2 - Proportion of watersheds with recent stand replacing disturbance – Roads and Structures**

Measure 3-2.1.2		
Target	Results	
Percentage of high hazard drainage structures on road permits in sensitive watersheds with identified water quality concerns that have mitigative strategies implemented. Target of 100 (0)	Canfor completed no harvesting or road construction activities during the reporting period. Therefore no harvesting occurred in sensitive watersheds. This indicator target is considered achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
Prior to resumption of harvest activities, an analysis will be conducted to identify sensitive watersheds within the Fort Nelson DFA. Harvesting conducted in sensitive watersheds utilizing roads held under permit by Canfor will be targeted for assessment of drainage structures as identified in the SFMP, to identify stream crossings considered to be of high potential hazard for sediment delivery to fish bearing streams. Mitigation strategies will be developed for high sedimentation hazard crossing structures.		
References		

## Criterion 4.0 Role in Global Ecological Cycles

### 4-1.1.1 - Net carbon uptake – Total Carbon Storage

Measure 4-1.1.1	
Target	Results
Maintain or increase the CFS-CBM derived baseline of 1,752 mega-tonnes total ecosystem carbon on the productive CFLB (10%)	The total carbon storage for the Fort Nelson DFA was calculated in 2006 and came out to 1,752 MT of carbon in the DFA. This indicator is considered met as the data from the initial run is still the baseline and believed to be applicable.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
This data is tied to inputs from the Timber Supply Review (TSR). The next run of the model may be completed in conjunction with the anticipated 2016 TSR for the Fort Nelson Timber Supply Area. Should new carbon storage data for the DFA become available prior to the TSR, it will be presented within the reporting year report when it was released. The lack of harvesting and road building activities by Canfor has resulted in no reductions in Carbon storage resulting from Canfor's forest management activities.
References
See Table 18: Summary of ecosystem carbon storage in the forested landbase over a 250 year period in Appendix 4 – Criterion 4 Supporting Data for a summary of the data from the carbon analysis report.

#### 4-1.1.2 - Net carbon uptake – Sequestration rate

Measure 4-1.1.2	
Target	Results
Maintain or increase the CFS-CBM derived baseline sequestration rate of 0.93 MT carbon per year in the THLB and 0.55 MT carbon per year in the NHLB (10%)	The annual carbon sequestration rate for the Fort Nelson DFA was calculated in 2006 and came out to 0.93 MT per year in the THLB and 0.55 MT per year in the NHLB. This indicator is considered met as the data from the initial run is still the baseline and believed to be applicable.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
This data is tied to inputs developed under Timber Supply Review (TSR) analyses. The next run of the model may be completed in conjunction with the anticipated 2016 TSR. Should new carbon sequestration rate data for the DFA become available prior to the TSR, it would be presented within the reporting year report when it was released. Canfor’s reforestation activities have contributed to maintaining and / or increasing the Carbon sequestration rate.
References
See Table 19: Average carbon sequestration rate in the forested landbase over a 250 year period in Appendix 4 – Criterion 4 Supporting Data for a summary of the data from the carbon analysis report.

#### 4-1.2 – Reforestation Success

Measure 4-1.2	
Target	Results
Average regeneration delay for stands established annually will be 3 years or less (Variance site plan specific).	No stands were established in the last 5 years, as no harvesting has occurred since 2008. Fill planting of previously established stands occurred in 2014 to maintain stocking within target thresholds. This target has been met

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
Cut block stocking will continue to be monitored and fill planting completed, where required to maintain stocking within target thresholds.
References

**4-2.1.1 - Addition and deletions to the forest area**

Measure 4-2.1.1	
Target	Results
Percent of gross forested landbase in the DFA converted to non-forest land use through forest management activities. Target of less than 3% of gross forested landbase at any given time (0).	Canfor completed no harvesting or road construction activities during the reporting period, accordingly no activities took place that converted forest land to non forest land use. This indicator target is considered achieved

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point.
References

**4-2.1.2 - Evidence of best efforts to coordinate forest management activities with the oil and gas industry**

Measure 4-2.1.2	
Target	Results
A) Share 100% of annual planned block and road construction with the Oil and Gas Commission (0) B) Report out the number of oil and gas referrals for the Fort Nelson DFA responded to by each of the participants	Canfor completed no harvesting or road construction activities during the reporting period, nor did Canfor complete any harvest planning activities. Accordingly, there was no annual operating plan to share with the OGC. This indicator target is considered achieved. During 2014 Canfor received and responded to 7 Fort Nelson based oil and gas project referrals.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
Prior to resumption of harvest activities, Canfor will share it's annual harvest plan with the Oil and Gas Commission. Canfor continues to comment on oil and gas project referrals received. See the BCTS Annual Report for the number of referrals responded to by BCTS.
References
A risk assessment of the impact of oil and gas activities on SFM targets was completed in 2012. See Appendix 3 Figure 6.

## Criterion 5.0 Economic and Social Benefits

### 5-1.1.1 - Quantity and quality of timber and non-timber benefits, products and services produced in the DFA - Timber

Measure 5-1.1.1		
Target	Results	
Proportion of the long term sustainable harvest level that is actually harvested. Percentage of volume harvested annually compared to long term harvest level (AAC) with a target of 100 percent over 5 years (0)	Canfor completed no harvesting or road construction activities during the reporting period. This indicator target is considered pending.	
Target Met		
Yes	No	✓ Pending
Recommendations and Next Steps		
The PRISM has agreed that reporting of the Participants performance for this indicator will be waived pending the resumption of timber harvesting by the Participants within the DFA.		
References		



**Figure 4:** Canfor Polarboard OSB mill circa 2003.

**5-1.1.2 - Quantity and quality of timber and non-timber benefits, products and services provided in the DFA – Non-Timber**

Measure 5-1.1.2		
Target	Results	
Conformance with strategies for non-timber benefits identified in plans. Target of 100 percent compliance (0).	Canfor completed no harvesting or road construction activities during the reporting period. As such no plans were implemented that required strategies for provision of non-timber benefits. This indicator target is considered met.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
References		

**5-1.1.3 - Participants forest management activities will not negatively impact established recreational sites and trails**

Measure 5-1.1.3		
Target	Results	
100 percent of Participants road building and harvesting activities will take place outside of established recreation sites and trails. A variance is allowed in the event there is a compelling forest health or safety concern and that appropriate permissions are obtained.	Canfor completed no harvesting or road construction activities during the reporting period. As such there was no potential or actual impact to established recreation sites and trails. The indicator is considered achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
A variance, if required, would be requested from the appropriate designated decision maker.		
References		
See Table 20: Recreation sites and trails in the Fort Nelson DFA in Appendix 5 – Criterion 5 Supporting Data for a summary of Recreation sites and trails identified in the SFMP.		

**5-1.1.4 - Forest management activities will be consistent with Visual Quality Objectives (VQOs)**

Measure 5-1.1.4		
Target	Results	
100 percent of Participants forest operations will be consistent with the established VQOs for the Fort Nelson DFA. A variance is allowed in the event there is a compelling forest health or safety concern, and the appropriate permissions are obtained.	Canfor completed no harvesting or road construction activities during the reporting period. As such there was no potential or actual impact to established VQOs. The indicator is considered achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
A variance, if required, would be requested from the appropriate designated decision maker.		
References		
See Figure 9: Fort Nelson Visual Quality Objectives, Table 21: Visual Quality Objective Class, Table 22: Maximum Allowable Disturbance Percentage by VQO Class, Table 23: Percent Denudation for Established VQOs in Appendix 5 – Criterion 5 Supporting Data, for a summary of the background data from the 2011 SFMP.		

**5-2.1.1 - Levels of investment in initiatives that contribute to community sustainability**

Measure 5-2.1.1		
Target	Results	
Percent of total budget spent in local communities on a 5 year rolling average. This will be a report out indicator until the PAG decides on an acceptable target and variance. Annual expenditures will also be reported out in this indicator	Of Canfor’s 2014 planning budget for Fort Nelson 18% (\$1,957) was spent on local suppliers. Of Canfor’s 2014 silviculture budget 46.5% (\$869,190) was spent on local suppliers. Of Canfor’s 2014 road maintenance budget 100% (\$19,817) was spent on local suppliers. Overall, 46.8% (\$775,714) of Canfor’s 2014 budget was spent on local suppliers. The 5 year rolling average is 45.4%	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		
See Appendix 5 Table 28.		

**5-2.1.2 - Amount of stumpage paid in the Fort Nelson DFA**

Measure 5-2.1.2		
Target	Results	
This is a report out indicator requested by the Public Advisory Group to show what revenues are being generated by the forest resource (timber extraction) in the DFA. As such there is no target or variance associated with it.	Canfor completed no harvesting or road construction activities during the reporting period. As such there was no stumpage charged and none paid in the reporting period. The indicator is considered to have been achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**5-2.2 - Level of investment in training and skills development**

Measure 5-2.2		
Target	Results	
Training in environmental and safety procedures in compliance with company training plans. Target of 100 percent of company employees will have both environmental and safety training (5).	In 2014 Canfor had 4 woodlands employees with duties in Fort Nelson. All 4 employees received required safety and environmental training. This indicator target is considered to have been met.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		



### 5-2.3 - Level of direct and indirect employment

Measure 5-2.3		
Target	Results	
Maintain current level of direct and indirect employment as expressed as a factor of current harvest level (or using indirect job multipliers derived from the last TSR (variance of 10%))	During the reporting period Canfor had a total of 4 staff assigned to Fort Nelson duties. The TSR employment multiplier of 1.25 yields a total of 5 direct and indirect jobs. This indicator target is considered to have been achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
With the sale of Canfor's panel manufacturing equipment in the spring of 2013, the 14 manufacturing staff assigned to Canfor Fort Nelson had their employment with the Company terminated. As of the writing of the 2013 report, Canfor had no manufacturing staff in Fort Nelson. At the time of preparation of the 2013 report Canfor had and continues to have 4 employees (Woodlands) with duties in Fort Nelson. This became the baseline level of direct employment to be maintained in the 2014 and subsequent reporting years.		
References		

### 5-2.4 - Level of Aboriginal participation in the forest economy

Measure 5-2.4		
Target	Results	
Number of opportunities compared to the three year rolling average. There will be no set target for this indicator as the objective is to ensure that some opportunities are being made available to first nations within the DFA. No variance is prescribed with this indicator	Canfor maintained 1 MOU with Prophet River First Nation. The provisions of the MOU are considered "on hold" until harvest operations resume by Canfor. Canfor did not tender any contracts for work in Fort Nelson in 2014. As this is a report out indicator it is considered to have been met.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**6-1.1 - Evidence of good understanding of the nature of Aboriginal title and rights**

Measure 6-1.1	
Target	Results
100% of Canfor Forest Management Group (Fort Nelson Woodlands) employees and 100% of all BCTS Fort Nelson Field Team staff will receive First Nations awareness training (variance of 0%)	Canfor's Fort Nelson Woodlands employees received First Nations awareness training. This indicator is considered to have been achieved.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
Canfor's aboriginal awareness training module was placed on the Eclipse training website in the form of a self administered training module in 2012.

References

**6-1.2 - Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans**

Measure 6-1.2	
Target	Results
100% of management plans exhibit evidence of best efforts to obtain acceptance by aboriginal communities	During the reporting period no harvesting plans were developed. Notice of Intent to Treat were shared with affected First Nations (Prophet River, Fort Nelson) and invited to meet with Canfor reps to review the plans. Prophet River FN accepted the offer to discuss the plan and provided comment which were addressed. This indicator is considered to have been met.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point. Worked with both the FNFN and PRFN extensively last year with the development of the Integrated Pest Management Plan, to make sure their concerns were met both in the document as well as how the work is performed on the ground

References

**6-1.3 - Level of Management and/or Protection of areas where culturally important practices and activities (hunting, fishing, gathering) occur**

Measure 6-1.3	
Target	Results
100 percent of forest operations in conformance with operational / site plans developed to address Aboriginal forest values, knowledge and uses (variance of 0)	Canfor completed no harvesting or road construction activities during the reporting period. Canfor's brushing activities were completed in conformance with site plans & comments received in response to the Pesticide Management Plan (PMP). The indicator is achieved.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point.
References

**6-2.1 - Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values**

Measure 6-2.1	
Target	Results
100 percent of identified Aboriginal forest values and uses considered in the forestry planning process	Canfor did not propose or complete any harvesting or road construction activities during the reporting period. Canfor's brushing activities were completed in conformance with site plans and comments received from First Nations in response to the PMP. The indicator is achieved.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
Inherent in the SFMP description of this indicator is the understanding that the consideration of Aboriginal forest values and uses in forestry planning includes addressing the protection of these items in forest plans. Every trapper/guide/First Nation is notified of herbicide treatments, and in 2014 First Nations were contacted to comment on the PMP; any concerns are addressed prior to vegetation management activity taking place.
References

**6-3.1 - Evidence that the organization has co-operated with other forest dependent businesses, forest users and the local community to strengthen and diversify the local economy**

Measure 6-3.1		
Target	Results	
Report out the number of purchase/Sale/Trade relationships with local forest dependant businesses where primary forest products and by-products are bought, sold or traded (Variance not applicable).	Canfor maintained an inactive purchase relationship with BCTS and other industrial suppliers in the Fort Nelson area, due to the indefinite closure of Canfor’s mills. The indicator is considered to have been achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**6-3.2 - Evidence of co-operation with DFA related workers to improve and enhance safety standards, procedures and outcomes in all DFA workplaces and affected communities**

Measure 6-3.2		
Target	Results	
100 percent of Participants and their contractors and licensees (in the case of BCTS) will implement and maintain a certified safety program (10%).	Canfor maintained Safe Companies Certification in the reporting period. Canfor did not complete any harvesting or road construction activities during the reporting period. Silviculture contractors working for Canfor in the woods during the reporting period maintained certified safety programs. This indicator is considered to have been achieved.	
Target Met		
✓ Yes	No	Pending
Recommendations and Next Steps		
None at this point.		
References		

**6-3.3 - Evidence that a worker safety program has been implemented and is periodically reviewed and improved.**

Measure 6-3.3	
Target	Results
A) 100 Percent of non-conformities found during external audits will have an action plan developed and implemented in a manner and timeframe acceptable to the auditor (0).	A) Canfor successfully underwent a surveillance audit of its safety certification, which was maintained during the reporting period. No non conformities were identified. B) A management review of Canfor’s 2014 Forest Management Group safety program was completed. This indicator is considered to have been achieved.
B) An annual management review of the safety program will be completed (0)	

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point.

References

**6-4.1 - Level of Participant and PRISM satisfaction with the public participation process**

Measure 6-4.1	
Target	Results
80 percent or greater level of satisfaction indicated by a PRISM established and maintained satisfaction survey (10%)	The PRISM public participation process satisfaction survey was administered at the March 19 <sup>th</sup> 2015 PAG meeting. Four surveys were returned and the average satisfaction level with the Public advisory process was rated as 5.0 out of 5 (100%). Therefore this indicator is considered to be met.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point.

References
See Appendix 6 Table 28: Summary of 2014 Public Participation Process Satisfaction <b>Survey</b>

**6-4.2 - Evidence of efforts to promote capacity and meaningful participation in general**

Measure 6-4.2	
Target	Results
1 or more educational opportunities for information/training are delivered to the PAG Annually	Two Educational opportunities were provided to the PAG during the reporting period: 1) November 27 <sup>th</sup> , 2014 PRISM Meeting a) Government Revision of the Boreal Caribou Implementation Plan – Darrell Regimbald 2) March 19 <sup>th</sup> , 2015 PRISM meeting a) Boreal Caribou Research in Northeastern BC – Megan Waters, MFLNRO This indicator is considered to have been met.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point.

References

**6-4.3 - Evidence of efforts to promote capacity development and meaningful participation for Aboriginal communities**

Measure 6-4.3	
Target	Results
100 percent of management plans exhibit evidence of best efforts to obtain acceptance by Aboriginal communities (0%)	During the reporting period no harvesting plans were developed. Notice of Intent to Treat were shared with affected First Nations (Prophet River, Fort Nelson and Fort Liard First Nations) and invited to meet with Canfor reps to review the plans. Prophet River FN accepted the offer to discuss the plan and provided comment. This indicator is considered to have been met.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
None at this point.

References

**6-5.1 - Number of people reached through educational outreach**

Measure 6-5.1	
Target	Results
50 or greater people to whom educational opportunities have been offered (variance of -10 people)	<p>Following is a summary of the Participants' educational outreach activities and the attendance:</p> <ul style="list-style-type: none"> <li>• May Trade Show – 31 people</li> <li>• NLC Student Presentation – 1 Person</li> <li>• Summer 2014 Field Tour - 4 people</li> <li>• November 27<sup>th</sup> PRISM Meeting – 5 people</li> <li>• March 19<sup>th</sup> PRISM Meeting – 6 people</li> <li>• Fort Nelson public library (unsure of number of people reached)</li> </ul> <p>Total People reached via educational outreach – <b><u>47+ people</u></b></p> <p>As total is within the 10 person variance, this indicator is considered to have been met.</p>

Target Met		
Yes	✓ No	Pending

Recommendations and Next Steps
None at this point.

References



**Figure 5 PRISM Field Tour June 2014**

**6-5.2 - Availability of summary information on issues of concern to the public**

Measure 6-5.2	
Target	Results
Previous years' annual report must be made available to the public via the web prior to March 31 <sup>st</sup> of the current reporting year (no variance).	Canfor posted the 2013 annual report to it's external website. The 2013 SFM annual report was submitted to the Fort Nelson public library. This indicator has been met.

Target Met		
✓ Yes	No	Pending

Recommendations and Next Steps
The 2014 SFM annual report will be posted to Canfor's external website and a copy will be provided to the Fort Nelson public library.
References





**Figure 6 Toad River, Fort Nelson Defined Forest Area.**

Questions regarding the 2014 SFM annual report may be directed to Canfor:  
Darrell Regimbald RPF  
Planning Coordinator North  
250 787-3651

## **Appendix 1 – SFMP Change Tables**

Table 2: Summary of Changes to Criteria from the 2004 SFMP to the 2011 SFMP

Table 3: Summary of changes from 2004 Measures to 2011 Indicators

Table 4: Dropped Measures from the Amended 2004 SFMP

**Table 2: Summary of Changes to Criteria from the 2004 SFMP to the 2011 SFMP**

<b>2004 Criteria</b>	<b>CSA Z809-08 Criteria</b>
C1 Biological richness and its associated values are sustained in the defined forest area (DFA)	C1 Biological diversity
C 2. The productive capability of forest ecosystems within the Timber Harvesting Land Base (THLB) are sustained	C2 Ecosystem Condition and Productivity
C 3. Forest ecosystem contributions to global ecological cycles are sustained within the DFA	C3 Soil and Water
C 4. The flow of economic benefits from forests through the forest industry is sustained	C4 Role in Global Ecological Cycles
C 5. The flow of marketed non-timber economic benefits from forests is sustained	C5 Economic and Social Benefits
C 6. Forest management contributes to a diversified local economy	C6 Society's responsibility
C 7. Decisions guiding forest management on the DFA are informed by and respond to a wide range of social and cultural values	
C 8. Forest management sustains or enhances the cultural (material and economic), health (physical and spiritual) and capacity benefits that First Nations derive from forest resources	
C 9. Forest management sustains ongoing opportunities for a range of quality of life benefits	

**Table 3: Summary of changes from 2004 Measures to 2011 Indicators**

CSA Z809-08 Core indicator or Local Indicator	Measure replaced from the 2008 update of the 2004 plan
1.1.1 Ecosystem area by type	1-1.1 Ecosystem Representation
1.1.2 Forest area by type or species composition	1-2.1 Habitat elements
1.1.3 Forest area by seral stage or age class	1-1.2 Seral stage
1.1.4.1 Degree of within stand structural retention – WTP percentage	1-2.1 Habitat elements
1.1.4.2 Degree of within stand structural retention – Dispersed Retention	1-2.1 Habitat elements
1.1.4.3 Degree of within stand structural retention – Riparian Management	1-2.1 Habitat elements
1.1.5 Shrub Habitat	1-2.1 Habitat elements
1.2.1 Degree of habitat protection for focal species including species at risk	1-3.1 Vertebrate species populations 1-3.2 SAR management strategies 1-4.1 Operations in parks, reserves and PA's 1-4.2 Special sites of biological significance 1-4.3 Management activities consistent with the Muskwa-Kechika management area 1-4.4 Management activities consistent with legal objectives
1.2.2 Degree of suitable habitat in the long term for selected focal species including species at risk	1-2.1 Habitat elements 1-3.1 Vertebrate species populations 1-4.1 Operations in parks, reserves and protected areas 1-4.2 Special sites of biological significance 1-4.3 Management activities consistent with the Muskwa-Kechika management area 1-4.4 Management activities consistent with legal objectives
1.2.3 Proportion of regeneration comprised of native species	1-6.1 Conifer seed use in accordance with regulation 1-6.2 Aspen regeneration – Natural regeneration
1.3.1 Percentage of stands artificially regenerated that are free of genetically modified organisms	New Measure with no equivalent from the older plans
1.4.1 Proportion of identified sites with implemented management strategies	1-4.1 Operations in parks, reserves and protected areas 1-4.2 Special site of biological significance 1-4.4 Management activities consistent with legal objectives 9-3.1 compliance with documented strategies
1.4.2 Protection of identified sacred and culturally important sites	8-2.1 Percentage of specific/confirmed culturally important sites identified by first nations
2.1.1.1 Reforestation success – Regen Delay	2-3.1 Regeneration delay 2-3.2 Compliance with regeneration standards
2.1.1.2 Reforestation success – Free Growing	2-3.3 Compliance with free growing

CSA Z809-08 Core indicator or Local Indicator	Measure replaced from the 2008 update of the 2004 plan
2.1.1.3 Percentage of silviculture obligation areas with significant detected forest health agents which have treatment plans	4-6.2 Management strategies for damaging events or agents
2.1.1.4 Evidence of efforts being made to manage known significant forest health damaging agents	4-6.1 Assessment of damaging events or agents
2.2.1 Addition and deletions to the forest area	2-2.1 forest converted to non-forest use 2-2.3 Landslides
2.2.2 Percentage of long term sustainable harvest level that is actually harvested	4-1.1 Harvested Volume 4-1.2 Timber supply certainty
3.1.1 Level of Soil disturbance	2.-2.2 Long term detrimental soil disturbance
3.1.2 Level of downed woody debris	1-2.1 Habitat elements 2-1.2 Coarse woody debris
3.2.1.1 Proportion of watershed or water management areas with recent stand replacing disturbance - Watersheds	1-5.1 Stream crossings – WQCR 1-5.2 Stream crossings – installed/removed to design/standard 1-5.3 Stream crossings - inspections
3.2.1.2 Proportion of watershed or water management areas with recent stand replacing disturbance - Roads	1-5.1 Stream crossings – WQCR 1-5.2 Stream crossings – installed/removed to design/standard 1-5.3 Stream crossings - inspections
4.1.1.1 Net Carbon Uptake – Total Carbon Storage	3-1.1 Carbon stored in trees and non-tree vegetation <b>Note this measure was pulled directly across</b>
4.1.1.2 Net Carbon Uptake – Carbon sequestration rate	3-3.1 Carbon Sequestration <b>Note this measure was pulled directly across</b>
4.1.2 Reforestation success	As per indicator 2.1.1
4.2.1.1 Additions and deletions from to the forest area	As per indicator 2.2.1
4.2.1.2 Evidence of best efforts to coordinate forest management activities with the oil and gas industry	2-2.4 Information requests – oil and gas industry
5.1.1.1 Quantity and Quality of timber and non-timber benefits, products and services produced in the DFA	As per indicator 2.2.2
5.1.1.2 Quantity and Quality of timber and non-timber benefits, products and services produced in the DFA	5-1.1 Potential for marketed non-timber resource benefits 5-1.2 Amount of marketed non-timber resource activity
5.1.1.3 Participants forest management activities will not negatively impact established recreational sites and trails	9-1.1 Number of forest recreation sites/facilities maintained
5.1.1.4 Forest management activities will be consistent with Visual Quality Objectives (VQO's)	9-2.1 Compliance with Visual Quality Objectives
5.2.1.1 Level of investment in initiatives that contribute to community sustainability	New Measure with no equivalent from the older plans

CSA Z809-08 Core indicator or Local Indicator	Measure replaced from the 2008 update of the 2004 plan
5.2.1.2 Amount of stumpage paid in the Fort Nelson DFA	4-3.1 Fees paid by the Forest Industry
5.2.2 Level of investment in training and skills development	New Measure with no equivalent from the older plans
5.2.3 Level of direct and indirect employment	4-2.1 Direct employment in the forest industry 4-2.2 Indirect and induced employment
5.2.4 Level of Aboriginal participation in the forest economy	4-4.1 Opportunities for first nations 4-4.2 Opportunities for first nations (BCTS)
6.1.1 Evidence of good understanding of the nature of Aboriginal title and rights	New Measure with no equivalent from the older plans
6.1.2 Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans	8-1.1 Percentage of cutblocks where information sharing took place 8-2.1 Access to resources for first nations 8-3.1 First nations opportunities to comment 8-3.2 Percentage of archaeological impact assessments sought
6.1.3 Level of management and/or protection of areas where culturally important practices and activities (hunting, fishing, gathering, Etc.) occur	8-1.1 Percentage of cutblocks where information sharing took place 8-2.1 Access to resources for first nations 8-3.1 First nations opportunities to comment
6.2.1 Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values	8-1.1 Percentage of cutblocks where information sharing took place 8-2.1 Access to resources for first nations
6.3.1 Evidence that the organization has co-operated with other forest dependant businesses, forest users and the local community to strengthen and diversify the local economy	New Measure with no equivalent from the older plans
6.3.2 Evidence of co-operation with DFA related workers and their unions to improve and enhance safety standards, procedures and outcomes in all DFA workplaces and affected communities	9-4.1 Safe company registration and certification 9-4.2 safety incidences 9-4.3 Number of serious injuries 9-4.4 Number of fatalities
6.3.3 Evidence that a worker safety program has been implemented and is periodically reviewed and improved	9-4.1 Safe company registration and certification
6.4.1 Level of Participant satisfaction with the public process	7-1.3 Effective public advisory group 7-1.4 Equitable and inclusive deliberation process
6.4.2 Evidence of efforts to promote capacity development and meaningful participation in general	7-1.2 Methods used for public communication 7-1.3 Effective public advisory group 7-1.5 perceptions of members of the Fort Nelson public advisory group
6.4.3 Evidence of efforts to promote capacity development and meaningful participation for Aboriginal communities	New Measure with no equivalent from the older plans

CSA Z809-08 Core indicator or Local Indicator	Measure replaced from the 2008 update of the 2004 plan
6.5.1 Number of people reached through educational outreach	7-1.2 Methods used for public communication
6.5.2 Availability of summary information on issues of concern to the public	New Measure with no equivalent from the older plans

**Table 4: Dropped Measures from the Amended 2004 SFMP**

Dropped Measure	Reason for deletion
2-1.1 Site index	This measure was dropped because of the high variability in the methodology of measuring Site Index for any given site. There are three methods for calculating SI, and there is no way of knowing how the original SI was derived. This makes any comparison to a newly calculated SI very difficult to reconcile.
2-4.1 Treatment plans for natural disturbance events	As natural disturbance events are not under the control of the Participants, neither is the legal responsibility for management of these events which are not triggered by the actions of the participants. The treatment of such areas would have to be voluntary. Such losses to natural disturbance would be taken into account by the TSR process, resulting in downward pressure on AAC in the short term.
2-4.2 Percent of catastrophic natural disturbance events due to forestry activities	If forestry activities were to result in a catastrophic natural disturbance or to exacerbate a natural disturbance, the Participants would be required to help with the mitigation as a matter of law.
4-2.3 Dollar value of BCTS timber sales and total timber volume advertised by BCTS	This measure did not really fit in with any of the elements from the 6 CSA criteria.
4-3.2 Personal income taxes paid	This measure did not fit in with any of the elements from the 6 CSA criteria, and was considered inappropriate by the Participants as it was reporting personal information.
4-5.1 Perceptions of Canfor and BCTS	This measure did not really fit in with any of the elements from the 6 CSA criteria.
4-5.2 Competitive primary milling facility	This measure was removed as the presence of a competitive primary milling facility is controlled by the lumber market, which is beyond the control of the Participants to influence.
6-1.1 Employments by broad sector	This measure is out of the scope of control of the Participants and as such not appropriate for the SFMP
6-1.2 Employment by industry	This measure is out of the scope of control of the Participants and as such not appropriate for the SFMP
7-1.1 Stakeholder database	This measure did not really fit in with any of the elements from the 6 CSA criteria. The stakeholder database has been retained as a tool to be used by the participants to assist in efforts to inform the public about the SFM activities of the participants.



## **Appendix 2 – Criterion 1 Supporting Data**

Table 5: Rare and Uncommon Ecosystem Groups in the Fort Nelson DFA

Table 6: Forest Cover Type

Table 7: Required Percentage of Retention in the DFA

Table 8: Current Percentage of Old Seral Stage by NDU

Table 9: Current Stand Level Retention Percentage

Table 10: Area in Stands Less than 20 Years Old and Polygons labeled as Shrub Area

Table 11: Areas in Stands with the Label NPBr

Figure 7: Natural Disturbance Units of the Fort Nelson DFA

**Table 5: Rare and Uncommon Ecosystem Groups in the Fort Nelson DFA**

Rare Ecosystems in the NHLB	Forest Area (ha)
Group #	
7 - BWBS dk1 (02), SBS mk1 (03), SBS mk2 (02)	532
73 - BWBS dk1 (06)	2,397
71 - BWBS dk1 (07)	704
74 - BWBS dk1 (08)	74
69 - SWB mk (09)	346
Uncommon Ecosystems in the NHLB	Ecosystem Description
3 - SWB mk (02)	5,695
36 - ESSF mc (05)	8,158

**Table 6: Forest Cover Type\***

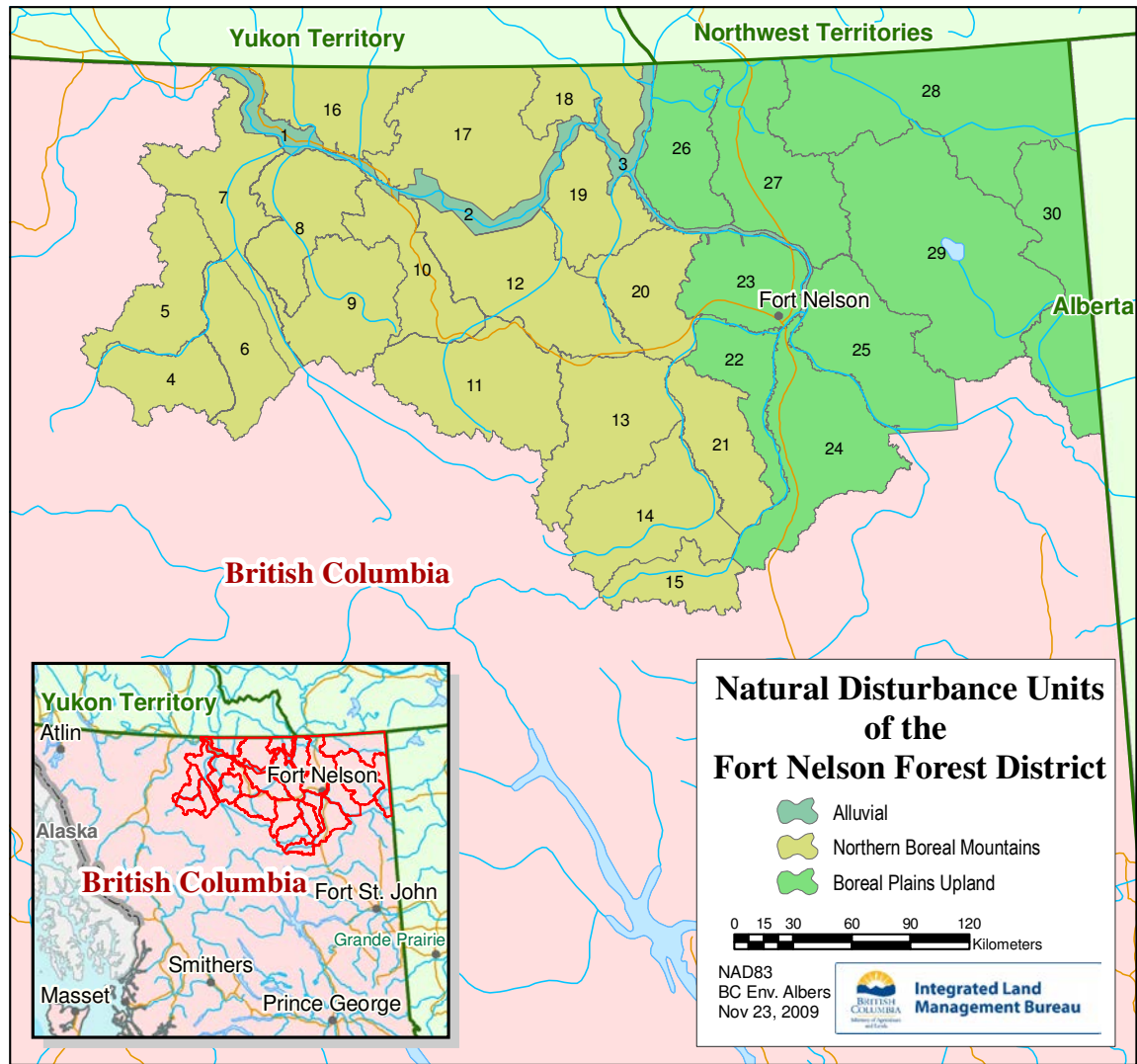
Cover Type	CFLB (ha)	THLB (ha)	NHLB (ha)	Baseline % of CFLB
Pure hardwoods	1,071,994	657,375	414,619	19.0%
Hardwood-leading mixed	452,116	205,060	247,055	8.0%
Pure conifers	3,583,672	1,123,399	2,460,273	63.6%
Conifer-leading mixed	532,327	302,898	229,428	9.4%
<b>Total Area</b>	<b>5,640,109</b>	<b>2,288,732</b>	<b>3,351,375</b>	<b>100%</b>

\*From 2011 SFMP analysis.

Table 7: Required Percentage of Retention in the DFA

Natural Disturbance Unit	Landscape Units	Age-of-old	Minimum-%-of-CFLB retained as Old Forest
Alluvial	1-Liard-River 2-Liard-River-Corridor-Park 3-Nelson-Forks	Conifer-----140 Deciduous----100	44
Northern Boreal Mountains	4-Sharktooth 5-Major-Hart 6-Boreal 7-Kechika 8-Rabbit 9-Netson 10-Muncho 11-Churchill 12-Sulpher/8-Mile 13-Tuchodi 14-Gathto 15-Prophet 16-Smith 17-Hyland 18-Beaver 19-Irene 20-Kledo 21-Holden	140	37
Boreal Plains Uplands	22-Klowee 23-Cridland 24-Klua 25-Clarke 26-Sandy 27-Kiwigana 28-Petitot 29-Kotcho 30-Shekilie	Conifer-----140 Deciduous----100	17

**Figure 8: Natural Disturbance Units of the Fort Nelson DFA**



**Table 8: Current Percentage of Old Seral Stage by NDU\***

NDU	< 40yrs		40-100yrs		100-140yrs		>140yrs		Target	Surplus / Deficit	Total Forested area
	(ha)	%	(ha)	%	(ha)	%	(ha)	%			
<b>Conifer &amp; Deciduous</b>											
<b>Northern Boreal Mountains NDU</b>											
Beaver	17,012	15%	14,172	13%	36,605	32%	44,893	40%			112,682
Boreal	0	0%	7,624	15%	13,400	27%	28,266	57%			49,290
Churchill	66	0%	10,264	24%	13,622	31%	19,512	45%			43,464
Gathto	1,726	2%	56,147	51%	22,220	20%	29,184	27%			109,276
Holden	9,825	7%	94,254	63%	23,601	16%	22,280	15%			149,960
Hyland	16,504	7%	96,524	42%	66,963	29%	50,859	22%			230,849
Irene	7,361	6%	9,286	8%	62,046	54%	35,607	31%			114,300
Kechika	35,886	13%	67,219	25%	73,804	27%	95,064	35%			271,973
Kledo	21,267	16%	21,153	16%	68,417	51%	23,410	17%			134,247
Major Hart	0	0%	22,383	24%	24,404	26%	45,306	49%			92,093
Muncho	245	0%	38,476	59%	9,881	15%	16,074	25%			64,676
Netson	0	0%	8,229	8%	29,432	27%	69,838	65%			107,499
Prophet	0	0%	7,470	21%	2,487	7%	25,777	72%			35,734
Rabbit	6,148	3%	120,360	56%	31,421	15%	55,216	26%			213,144
Sharktooth	0	0%	2,817	10%	9,012	31%	16,944	59%			28,774
Smith	44,114	20%	93,443	42%	43,432	19%	43,029	19%			224,018
Sulpher/8mile	12,068	8%	43,523	27%	43,580	28%	59,285	37%			158,456
Tuchodi	1,058	1%	39,966	46%	16,989	19%	29,443	34%			87,457
<b>Northern Boreal Mountains Total</b>	<b>173,280</b>	<b>8%</b>	<b>753,312</b>	<b>34%</b>	<b>591,315</b>	<b>27%</b>	<b>709,988</b>	<b>32%</b>	<b>37%</b>	<b>-114,333</b>	<b>2,227,894</b>
<b>Coniferous</b>											
<b>Alluvial</b>											
Alluvial	35,910	35%	15,074	15%	10,170	10%	42,071	41%			103,225
Aluvial_MK	453	2%	13,838	46%	3,179	11%	12,373	41%			29,843
<b>Alluvial Total</b>	<b>36,363</b>	<b>27%</b>	<b>28,912</b>	<b>22%</b>	<b>13,349</b>	<b>10%</b>	<b>54,444</b>	<b>41%</b>	<b>44%</b>	<b>-4,106</b>	<b>133,068</b>
<b>Coniferous</b>											
<b>Boreal Plains NDU</b>											
Clark	2,885	4%	22,634	35%	20,761	32%	18,267	28%			64,548
Cridland	15,692	30%	6,930	13%	17,631	34%	11,818	23%			52,071
Kiwigana	2,770	5%	20,424	35%	17,903	30%	18,073	31%			59,170
Klowee	11,430	22%	8,733	17%	20,335	39%	12,235	23%			52,732
Klua	4,883	5%	31,909	33%	33,033	35%	25,603	27%			95,429

NDU	< 40yrs		40-100yrs		100-140yrs		>140yrs		Target	Surplus / Deficit	Total Forested area
	(ha)	%	(ha)	%	(ha)	%	(ha)	%			
Kotcho	9,447	7%	75,283	55%	31,556	23%	21,019	15%			137,306
Petitot	290	0%	53,007	61%	20,850	24%	13,294	15%			87,441
Sandy	7,991	15%	14,587	27%	19,476	36%	11,641	22%			53,695
Shekilie	8,747	13%	29,113	42%	17,130	25%	14,722	21%			69,711
<b>Boreal Plains Total</b>	<b>64,135</b>	<b>10%</b>	<b>262,620</b>	<b>39%</b>	<b>198,675</b>	<b>30%</b>	<b>146,671</b>	<b>22%</b>	<b>17%</b>	<b>32,414</b>	<b>672,102</b>
<b>Deciduous</b>											
<b>Alluvial</b>											
Alluvial	14,690	26%	10,600	19%	0	0%	31,459	55%			56,749
Aluvial_MK	2,269	7%	12,168	37%	12,738	39%	5,905	18%			33,080
<b>Alluvial Total</b>	<b>16,958</b>	<b>19%</b>	<b>22,768</b>	<b>25%</b>	<b>12,738</b>	<b>14%</b>	<b>37,364</b>	<b>42%</b>	<b>44%</b>	<b>10,578</b>	<b>89,829</b>
<b>Deciduous</b>											
<b>Boreal Plains NDU</b>											
Clark	5,942	5%	80,747	73%	0	0%	23,709	21%			110,397
Cridland	9,221	11%	28,119	34%	0	0%	44,777	55%			82,116
Kiwigana	1,511	1%	80,563	69%	0	0%	35,514	30%			117,589
Klowee	11,414	19%	17,578	30%	0	0%	30,484	51%			59,476
Klua	5,597	5%	69,701	62%	0	0%	36,444	33%			111,742
Kotcho	13,848	7%	167,147	85%	0	0%	14,821	8%			195,816
Petitot	651	1%	81,411	87%	0	0%	11,288	12%			93,350
Sandy	1,976	3%	36,751	56%	0	0%	26,486	41%			65,213
Shekilie	11,748	11%	90,362	82%	0	0%	7,686	7%			109,795
<b>Boreal Plains Total</b>	<b>61,907</b>	<b>7%</b>	<b>652,380</b>	<b>69%</b>	<b>0</b>	<b>0%</b>	<b>231,208</b>	<b>24%</b>	<b>17%</b>	<b>70,474</b>	<b>945,494</b>

\*From 2011 SFMP analysis.

**Table 9: Current Stand Level Retention Percentage\***

Canfor			BCTS		
LU #	% THLB in WTP	*FSP Retention Target %	LU #	% THLB in WTP	FSP Retention Target %
3	16.2	7	9	9.30	3
19	6.8	7	12	4.56	3
20	4.38	7	14	5.05	5
24	0	7	15	6.73	6
25	4.82	7	16	8.71	4
26	8.8	7	17	4.38	2
			19	5.03	4
			20	9.47	6
			22	5.50	7
			23	12.34	6
			38	4.23	6
			39	3.09	4
			66	8.00	10
All LUs combined retention	7.8				

\*From 2013WTP retention analysis.

FSP retention targets revised in February 2013 to reflect the consolidated landscape units.

**Table 10: Area in Stands Less than 20 Years Old and Polygons labeled as Shrub Area\***

	CFLB (ha)	THLB (ha)	NHLB (ha)
Stands < 20 years old	52,987.3 (100%)	4,021.5 (81.2%)	9965.8 (18.8%)
TSA Total Area (ha)	5,741,211.7 (100%)	1,432,268.4 (24.9%)	4,308,943.3 (75.1%)
% of total area in stands <20 years old	0.92%	0.75%	0.17%

\*From 2011 SFMP analysis.

These numbers will become the new baseline data as they are based on the 2013 VRI data set and TSR 3 data.

**Table 11: Areas in Stands with the Label NPr\***

	<b>CFLB (ha)</b>	<b>THLB (ha)</b>	<b>NHLB (ha)</b>
Stands labeled Shrub low and shrub tall	8,601.6 (100%)	9,425.1 (61.3%)	3,329.3 (38.7%)
% of total area in stands labelled Shrub- low and Shrub-high	0.0015%	0.0066%	0.0008%

\*From 2011 SFMP analysis.

Please note in the 2011 VRI data it appears that the designation of NPr (Non-commercial brush) has been combined with Shrub Low and Shrub High.



## **Appendix 3 – Criterion 2 Supporting Data**

Table 12: Summary of Free Growing Data Blocks with Free Growing Date in 2013

Table 14: Regen Delay Population January 1, 2013 – December 31, 2013

Table 14: Plantation Pest Severity Ranking

Table 16: Action Plan Summary for 2012 Burned Reforestation Obligations

Table 16: Total Deletions from the Forested Landbase

Table 18: Oil and Gas Impact Risk Assessment

**Table 12: Summary of Free Growing Data Blocks with Free Growing Date in 2014**

<u>Licence</u>	<u>CP/TSL</u>	<u>Block</u>	<u>SU</u>	<u>Area</u>	<u>Late Free Growing Date</u>	<u>Milestone Met</u>
A17007	109	1881	1	52.4	01/01/2014	Yes
A17007	109	1888	1,2	42.7	01/01/2014	Yes
A17007	112	1953	1,2	4.3	27/11/2014	Yes
A17007	119	4579	1	25.4	27/02/2014	Yes
A17007	128	4593	1	16.2	01/01/2014	Yes
A17007	152	2013	1,2	55	01/11/2014	Yes
A17007	153	4969	A	7.4	14/12/2014	Yes
A17007	155	4903	1A, 1B	40.5	30/11/2014	Yes
A17007	157	90	1,2,3	35.5	03/08/2014	Yes
A17007	171	5900	1	45.6	01/01/2014	Yes
A17007	171	5901	2	38.3	01/02/2014	Yes
A17007	187	2344	1	49.1	02/12/2014	Yes
A17007	187	2347	1	49.8	19/12/2014	Yes
A17007	189	2343	1	53.3	07/12/2014	Yes
A17007	190	907D	1	2.9	14/12/2014	Yes
A17007	350	1807	1	16.8	13/11/2014	Yes
A17007	201	2114	1	8	13/12/2014	Yes
A17007	350	1809	1	42.2	01/11/2014	Yes
A17007	350	1811	3	9.9	29/11/2014	Yes
A17007	350	1812	1	59.6	24/11/2014	Yes
A17007	371	3343	1	24.7	03/12/2014	Yes
A17007	401	161B	1	11	01/01/2014	Yes
A17007	416	801A	1	17.7	02/12/2014	Yes
A17007	416	801B/C	1	8.9	20/12/2014	Yes
A17007	451	2611	2	21.1	29/11/2014	Yes
A17007	452	2613	2	17	06/12/2014	Yes
A17007	499	902F	2,3	65.6	01/02/2014	Yes
A17007	499	902I	1	0.3	01/03/2014	Yes
A17007	500	903B	2	3.9	01/01/2014	Yes
A17007	533	221	A	223.8	01/12/2014	Yes
A17007	540	528	2	16	01/12/2014	Yes
A17007	541	530	1	14.6	01/12/2014	Yes
A17007	585	3113B	1	11.4	01/02/2014	Yes
A17007	589	251	1	10.8	18/12/2014	Yes
A17007	589	3099	2&3	42.9	01/02/2014	Yes

A17007	595	454	1	3.1	01/03/2014	Yes
A17007	599	3009	2	12.6	01/01/2014	Yes
A17007	601	593	1	145.9	01/01/2014	Yes
A17007	601	598	1	139.2	01/12/2014	Yes
A17007	62	600A	A	76.3	01/01/2014	Yes - Sec 108
A17007	67	286A	1	78.3	01/10/2014	Yes
A22797	309	304	2	11.2	01/11/2014	Yes
A56315		P247	1	19.1	01/01/2014	Yes
A56826		P253	2	29	01/01/2014	Yes
A56827		P243	1	20.7	20/11/2014	Yes
A56831		P146	1	7.4	01/02/2014	Yes
A56834		P200	2	14.6	01/01/2014	Yes
A56834		P206	1	13.8	01/01/2014	Yes
A56835		P099	2	2.9	05/08/2014	Yes
A56835		P102	1	18	05/08/2014	Yes
A56837		P356A	2	14.3	12/08/2014	Yes
A56837		P814	1	3.1	04/11/2014	Yes
A56837		P815	2	18.6	12/10/2014	Yes
A56843		P89A	2	16.4	15/08/2014	Yes
A61535		P811	2	31.2	01/12/2014	Yes
A61535		P812	2	36.9	01/12/2014	Yes
A62080		P6061	2	46.8	19/12/2014	Yes
A65237		P105	1	7.3	01/01/2014	Yes
A65237		P117	1	35.3	01/01/2014	Yes
A67174		P887	3	49.3	11/11/2014	Yes
A67208		P920	1	61.1	01/01/2014	Yes
A67208		P995	1	51.2	07/02/2014	Yes
A67213		P73	1	51.2	07/02/2014	Yes
A67220		P2110	1	72.9	01/01/2014	Yes
A69682		P3327	1	17.1	01/02/2014	Yes
A69683		P929	1	61.8	23/11/2014	Yes

**Table 13: Regen Delay Population January 1, 2014 – December 31, 2014**

<u>CP/TSL</u>	<u>Block</u>	<u>Area</u>	<u>Regen Delay Date</u>	<u>Milestone Met</u>
A65232	NDD121	50.8	20/12/2014 ??	Yes
374	KLD1756	3	08/03/2014 ??	Yes
461	OBL026	16.5	19/12/2014	Yes
A74703	TSO002	17.4	07/01/2014	Yes
	<b>Total</b>	<b>87.7</b>		

**Table 14: Plantation Pest Severity Ranking\***

<b>Plantation Pests</b>	<b>Code</b>	<b>Potential Severity Ranking</b>
Eastern spruce budworm	IDE	Very High
White pine weevil	IWS	Low-Medium
Venturia spp.	DLV	Low
Harwood Truck Rot	DDH	Very low
Red ring rot	DDP	Very low
Aspen Truck Rot	DDT	Very low
Tomentosus root rot	DRT	Very low
Stem Disease	DS	Very low
Warren's root collar weevil	IWW	Very low (due to small % of planted PL)

\*From 2011 SFMP analysis.

**Table 15: Action Plan Summary for 2012 Burned Reforestation Obligations**

<u>CP/TSL</u>	<u>Block</u>	<u>SU</u>	<u>Area</u>	<u>Area Burned</u>	<u>Action Plan</u>
76	592	2	4.50	4.50	Apply for relief of obligation under FRPR Section 108 in 2013
601	593	1	145.90	145.90	Apply for relief of obligation under FRPR Section 108 in 2013
601	598	1	139.20	139.20	Apply for relief of obligation under FRPR Section 108 in 2013
63	597A	1	81.00	81.00	Apply for relief of obligation under FRPR Section 108 in 2013
62	999ABC	1	15.10	15.10	Apply for relief of obligation under FRPR Section 108 in 2013
88	1050	1	27.70	27.70	Apply for relief of obligation under FRPR Section 108 in 2013
88	3220	1	17.00	17.00	Apply for relief of obligation under FRPR Section 108 in 2013
88	3219A	1	23.10	23.10	Apply for relief of obligation under FRPR Section 108 in 2013
139	KLU2321	A	30.30	4.00	Fill-plant burned area 2014
62	600B	2	5.80	5.80	Apply for relief of obligation under FRPR Section 108 in 2013
62	600A	A	76.30	76.30	Apply for relief of obligation under FRPR Section 108 in 2013
542	536B	1	25.50	4.00	Fill-plant burned area 2014
<b>Total Area</b>			<b>591.4</b>	<b>543.6</b>	

**Table 16: Total Deletions from the Forested Landbase\***

<b>Category of deletion</b>	<b>Hectares</b>
Permanent roads	48,381
Landings	2001
Transmission Lines	767
Seismic	103,648
Landslides resulting from forest management activities	0
Pipelines	7,635
Urban & camps	1,779
<b>GRAND TOTAL</b>	<b>164,211</b>
CFLB	5,741,212
% of CFLB deleted from all industrial activities	2.86%
<b>% of CFLB deleted from forest management activities</b>	<b>.87%</b>

\*From 2011 SFMP analysis.

**Table 17: Oil and Gas Impact Risk Assessment**

2011/12 Fiscal Year	Total Area (ha)	Total Volume (m3)
<b>Oil &amp; Gas Harvest Activity</b>		
Total New Cut Area - Oil & Gas	979.1	
Total Merchantable Volume Cut - Oil and Gas		149,071.51
<b>Potential Forest Licensee Harvest Activity</b>		
Total Annual Cut Area - BCTS & Canfor	4502.72	
Total Merchantable Volume Cut - BCTS & Canfor		1,463,384.00

Data provided by OGC Nov 26, 2012

TSA Impact - Classification	Total Area (ha)	Total Volume (m3)	O&G Cut % of Area	O&G Cut % of AAC	Participants Cut % of Area	Participants Cut % of AAC
TSA area	<b>9,868,067</b>		0.010%		0.046%	
Area not in DFA (private, federal, indian, woodlots, etc)	29,927					
Area managed by MFLNRO (DFA)	<b>9,838,140</b>		0.010%		0.046%	
non productives areas (non forest, alpine, existing roads and trails, non commercial cover)	4,096,928					
Productive crown forest landbase	<b>5,741,212</b>		0.017%		0.078%	
NHLB area	4,308,943					
THLB area	<b>1,432,269</b>		0.068%		0.314%	
TSA AAC		<b>1,625,000</b>		9%		90.1%
Non certified tenures AAC		101,000				
Certified tenures						
BCTS AAC		299,668				
Canfor AAC		1,163,716				
Total Certified Participants AAC	979.1	<b>1,463,384</b>		10%		100%

**Discussion:**

O&G harvest activity averages approximately 979 ha per year of a combination of NHLB and THLB CFLB. This area includes road construction, well sites, seismic areas and pipeline areas. O&G timber harvest impact on DFA amounts to 0.01 % of the total DFA area annually. This is compared to forest industry impact on the DFA of 0.05% of the total DFA which is primarily comprised of THLB area.

When Canfor is operating, the majority of merchantable timber harvested by O&G is purchased by Canfor, which serves to reduce the total volume harvested under Canfor's forest tenures. Therefore the impact on the AAC is minimal. Of the 2 non certified tenures identified in the AAC apportionment, no forest planning has occurred consequently, no forest harvesting has occurred. No harvest activity is expected under these non certified tenures.

**Conclusion:**

Given the small annual impact on the total DFA area from O&G activity, there is little risk to the participant's of not achieving SFMP landscape level ecological commitments as a result of O&G harvest activity.

## **Appendix 4 – Criterion 4 Supporting Data**

Table 18: Summary of ecosystem carbon storage in the forested landbase over a 250 year period

Table 19: Average carbon sequestration rate in the forested landbase over a 250 year period



**Table 18: Summary of ecosystem carbon storage in the forested landbase over a 250 year period**

Carbon Pool	Current Carbon (MT)	Average Carbon Over 250 Years (MT)	Minimum Carbon (MT)	% Difference from Current Carbon	Year at Minimum	Maximum Carbon (MT)	% Difference from Current Carbon	Year at Maximum
Tree-aboveground	473	466	416	-12%	125	526	11%	50
Tree-belowground	112	109	97	-13%	125	123	10%	50
Deadwood	265	312	265	0%	0	342	29%	60
Litter	90	95	88	-2%	5	100	11%	50
Soil	811	916	811	0%	0	998	23%	250
<b>Total</b>	<b>1,752</b>	<b>1,898</b>	<b>1,752</b>	<b>0%</b>	<b>0</b>	<b>2,005</b>	<b>14%</b>	<b>240</b>

**Table 19: Average carbon sequestration rate in the forested landbase over a 250 year period**

Carbon Pool	Current Sequestration Rate <sup>1,2</sup>	Base Case	Harvest without Natural Disturbance	No Harvest with Natural Disturbance	Base Case with Modified Natural Disturbance
Timber Harvesting Land Base	0.93	0.07 to 0.93 (-92% to 0%)	0.07 to 0.93 (-92% to 0%)	0.38 to 1.43 (-73% to 1%)	0.25 to 4.56 (-95% to 0%)
Non-Harvestable Land Base	0.55	-4.53 to 4.29 (-929% to 685%)	1.52 to 6.53 (-70% to 24%)	-6.79 to 4.26 (-908% to 408%)	0.08 to 0.93 (-92% to 0%)
<b>Total Forested Land Base</b>	<b>1.47</b>	<b>-3.96 to 5.00</b> <b>(-369% to 239%)</b>	<b>1.70 to 7.02</b> <b>(-72% to 16%)</b>	<b>-5.66 to 5.69</b> <b>(-349% to 151%)</b>	<b>0.13 to 3.63</b> <b>(-97% to 0%)</b>

## **Appendix 5 – Criterion 5 Supporting Data**

Table 20: Recreation sites and trails in the Fort Nelson DFA

Figure 9: Fort Nelson Visual Quality Objectives

Table 21: Visual Quality Objective Class

Table 22: Maximum Allowable Disturbance Percentage by VQO Class

Table 23: Percent Denudation for Established VQOs

Table 24: Canfor Direct and Induced Employment

Table 25: Indirect and Induced Employment multipliers from 2006 TSR

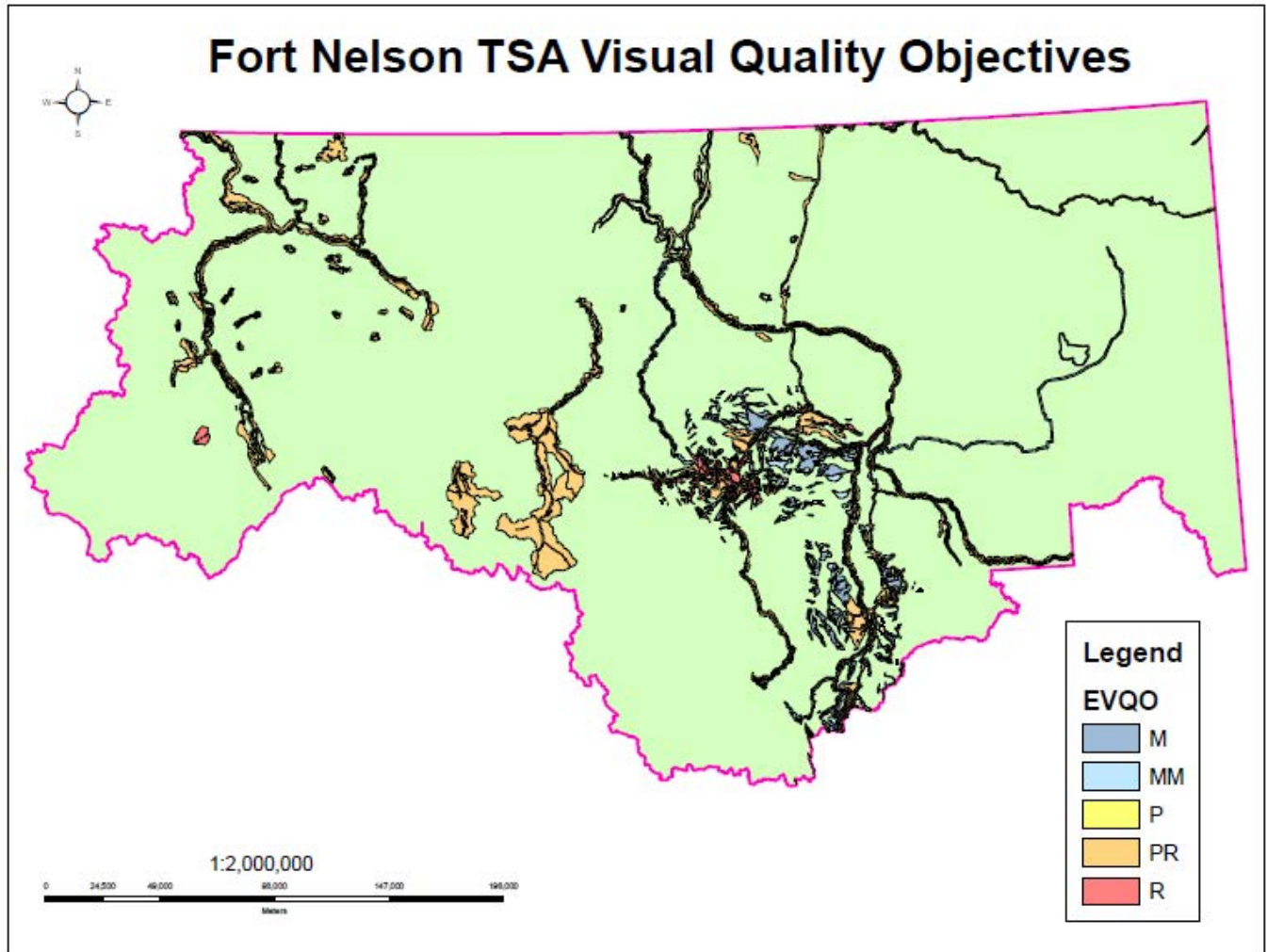
Table 26: Number of Opportunities offered to First Nations by year

Table 28: Proportion of Local Spend

**Table 20: Recreation sites and trails in the Fort Nelson DFA**

Recreation Sites	Recreation Trails
West Lake	Teetering Rock trail
Muskwa Boat Launch	Tetsa Bridge #1 trail
Tuchodi River	Stone Mountain Park trails
Gathto Creek	MacDonald Creek trail
Beaver Lake	Babba Creek Trail
Fort Nelson Recreation Demonstration Forest	Wokpash trail
Parker Lake	Boulder Canyon trail
Recreational Motorized Routes	Peterson Canyon trail
Wokpash Corridor	Muncho Lake trails
Yedhe Trail	Mineral Lick trail
West Toad Corridor	Teeter Creek trail
Nonda Creek Corridor	Smith River Falls trail
Liard River Corridor	Tsimeh Lakes trail
Mould Creek Tower Road	Fort Nelson Community Forest trails
Smith River Road	Dunedin trail
Fort Nelson Snowmobile Trails	Summit Ridge trail
	Summit Peak trail
	Erosion Pillar trail
	"The Cutt" trail
	Red Rock Canyon trail
	Old Alaska Highway trail
	Stone's Sheep trail

Figure 9: Fort Nelson Visual Quality Objectives



**Table 21: Visual Quality Objective Class**

<b>Visual Quality Objective Class</b>	<b>TSA Area (ha)*</b>	<b>Crown Forested Land Base Area (ha)</b>	<b>Timber Harvesting Land Base Area (ha)</b>
Established Preservation VQO	879	814	99
Established Retention VQO	32,518	25,470	6483
Established Partial retention VQO	502,325	357,716	113,431
Established Modification VQO	127,342	105,816	38,080
Established Maximum modification VQO	14,028	11,661	4,410
<b>Subtotal:</b>	<b>677,090</b>	<b>501,477</b>	<b>162,503</b>
Recommended Preservation VQO	0	0	0
Recommended Retention VQO	19,528	7,268	113
Recommended Partial retention VQO	8,246	5,172	2,083
Recommended Modification VQO	168,037	87,778	15,056
Recommended Maximum modification VQO	31,625	14,151	7,242
<b>Subtotal:</b>	<b>195,811</b>	<b>100,219</b>	<b>17,252</b>
<b>Total:</b>	<b>872,902</b>	<b>601,696</b>	<b>179,755</b>

**Table 22: Maximum Allowable Disturbance Percentage by VQO Class**

Resource Emphasis Zone	Total Crown forest area (ha)	Timber harvesting land base (ha)	Maximum allowable disturbance (%)	Applies to:
Established Preservation VQO	879	814	0	CFLB
Established Retention VQO	32,518	25,470	1.1 – 5	CFLB
Established Partial retention VQO	502,325	357,716	5.1 – 15	CFLB
Established Modification VQO	127,342	105,816	15.1 – 25	CFLB
Established Maximum modification VQO	14,028	11,661	25.1 – 40	CFLB
Recommended Preservation VQO	0	0	0	CFLB
Recommended Retention VQO	19,528	7,268	1.1 – 5	CFLB
Recommended Partial retention VQO	8,246	5,172	5.1 – 15	CFLB
Recommended Modification VQO	168,037	87,778	15.1 – 25	CFLB
Recommended Maximum modification VQO	31,625	14,151	25.1 – 40	CFLB

**Table 23: Percent Denudation for Established VQOs**

VQO Category	Percent Denudation Range	Low VAC	Medium VAC	High VAC
Preservation	0 – 1	0.25	0.5	0.75
Retention	1.1 – 5	2.07	3.05	4.02
Partial Retention	5.1 – 15	7.57	10.05	12.52
Modification	15.1 – 25	17.57	20.05	22.52
Maximum Modification	25.1 – 40	28.82	32.55	36.27

**Table 24: Canfor Direct and Induced Employment**

Canfor Direct Employment as on March 31, 2014	Indirect and induced employment multiplier	Total jobs; direct, indirect and induced
4	1.25	5
Baseline from 2014 Annual Report	Indirect employment multiplier	Total jobs; direct, indirect and induced
4	1.25	5

**Table 25: Indirect and Induced Employment multipliers from 2006 TSR\***

	<b>Indirect and Induced Employment Ratio</b>	<b>Indirect Employment Ratios</b>
Logging	1.25	1.15
Wood Manufacturing	1.35	1.20
Mining	1.34	1.25
Agriculture	1.17	1.11
Tourism	1.12	1.09
Public Sector	1.19	1.13
Construction	1.22	1.14

BC Stats, 2001a. The indirect and induced employment ratio assumes no migration with safety net in place.

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