

Vanderhoof Sustainable Forest Management Plan 2015/16 Annual Report

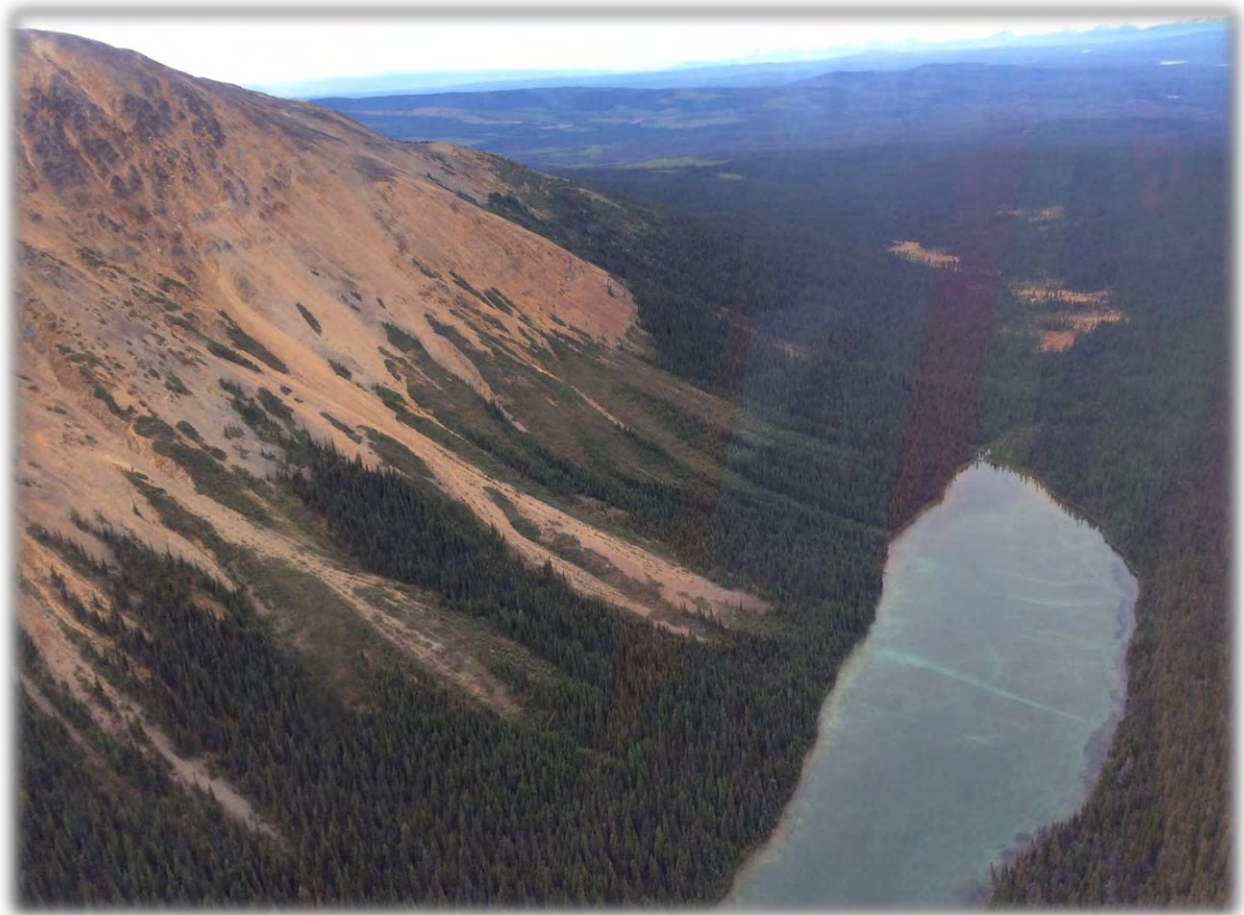


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1.0 Introduction

Canadian Forest Products Ltd. (Vanderhoof) has achieved SFM certification under the CSA Z809-08 standard. This annual report, for the period April 1, 2015 to March 31, 2016, contains the performance results relative to the Vanderhoof SFMP, its associated DFA and the forest operations of Canfor.

The SFMP is an outline of how Canfor conducts operations in order to meet the CSA Z809-08 standard. One requirement of the standard is public involvement in the plan. The primary public participation method proposed in the CSA SFM standard is a Public Advisory Group (PAG), which allows continual local input from a broad range of interested parties. The Vanderhoof SFMP PAG originally assisted in identifying quantifiable local level indicators and objectives. This annual report summarizes the status of the 43 indicators that were identified through the PAG process and established under the SFMP. For clarification of the intent of the indicators, objectives or the management practices employed, refer to the Vanderhoof Sustainable Forest Management Plan document available for public viewing online at three locations.

The SFMP is not intended to be a static document. It should evolve, adapting to local landscape conditions, forest management practices, research findings and public values.. The licensee and public advisory group will facilitate this transition. New indicators and targets can be expected and will be guided by core indicators and mandatory discussion topics. Given the severe impact Mountain Pine Beetle has had within the DFA, some indicator development will prove challenging.

The SMFP can be found here http://www.canfor.com/documents/2014/sfmp_vhf_dfa_dec_11_2014.pdf

1.1 List of Acronyms

Below is a list of common acronyms used throughout this annual report. For those wishing a more comprehensive list should consult the Prince George Sustainable Forest Management Plan.

BCTS – BC Timber Sales
 BEC – Biogeoclimatic Ecosystem Classification
 CSA – Canadian Standards Association
 CE & VOIT- Criterion, Element & Value Objective Indicator Target
 DFA – Defined Forest Area
 FPPR – Forest Planning and Practices Regulation
 LOWG – Landscape Objectives Working Group
 MoFR – Ministry of Forest and Range
 NDU – Natural Disturbance Unit
 PAG – Public Advisory Group
 PG – Prince George
 PG TSA – Prince George Timber Supply Area
 SAR – Species at Risk
 SFM – Sustainable Forest Management
 SFMP – Sustainable Forest Management Plan

1.2 Executive Summary

Refer to Table 1 for a summary of which indicators were met and not met. For each off-target indicator, a corrective and preventative action plan is included in the indicator discussion.

Table 1: Summary of Indicator Status

Ref #	Indicator	Indicator Statement	Target Met	Pending	Target Not Met
1	1.1.1	Retention of rare ecosystems groups across the DFA	X		
2	1.1.2	Percent distribution of forest type (treed conifer, treed broadleaf, treed mixed) >20 years old across DFA	X		
3	1.1.3	Percent old non-pine forest across the DFA.	X		
4	1.1.4(a)	Percent of stand structure retained across the DFA in harvested areas	X		

Ref #	Indicator	Indicator Statement	Target Met	Pending	Target Not Met
5	1.1.4(b)	Percent of cut blocks harvested consistent with riparian management area strategies identified in Site Plans			X
6	1.2.1 & 1.2.2	Percent of forest management activities consistent with management strategies for Species of Management Concern	X		
7	1.2.3 & 1.3.1	Regeneration will be consistent with provincial regulations and standards for seed and vegetative material use.	X		
8	1.4.1	Percent of forest management activities consistent with management strategies for sites of biological significance.	X		
9	1.4.2	% of identified Aboriginal and non- aboriginal heritage forest values, knowledge and uses considered in forestry planning processes	X		
10	2.1.1	Average regeneration delay for stands established annually	X		
11	2.2.1	Percentage of gross forested land base in the DFA converted to non-forested land use through forest management activities.	X		
12	2.2.2 & 5.1.1 (a)	Percent of volume harvested compared to allocated harvest level.	X		
13	3.1.1	Percent of harvested blocks meeting legal soil disturbance objectives.	X		
14	3.1.2	Percent of harvested blocks audited where post-harvest CWD BMP's are followed	X		
15	3.2.1(a)	Sensitive watersheds will have further evaluation and appropriate management strategies implemented.	X		
16	3.2.1(b)	In Sensitive Watersheds - the % of drainage structures (with identified water quality concerns) where mitigation strategies are implemented as scheduled	X		
	4.1.1.(c)	See 2.2.1	(refer to related indicators)		
17	4.1.1 (d)	Percent of annual LT harvest directed at mitigating the impact of mountain pine beetle to forests within the DFA.	X		
	4.2.1	See 2.2.1	(refer to related indicators)		
18	5.1.1(b)	The percent of forest management operations consistent with the conservation of range resources identified in Site Plans	X		
19	5.1.1(c)	The percent of forest management operations consistent with the conservation of Visual Quality Objectives.	X		
20	5.1.1(d)	The percent of LT conformance with the Vanderhoof Access Management Plan for Forest Recreation.	X		
21	5.1.1(e)	Smoke Management: The percent of prescribed burns that follow the smoke management guidelines	X		
22	5.2.1	Investment in local communities	X		
23	5.2.2	Training in environmental & safety procedures in compliance with company training plans	X		
24	5.2.3	Level of direct & indirect employment	X		
25	5.2.4	Number of opportunities for Aboriginals to participate in the forest economy	X		
26	6.1.1	Employees will receive Aboriginal awareness training	X		
27	6.1.2	Evidence of best efforts to share interests and plans with Aboriginal communities	X		
28	6.1.3	Percent of forest operations in conformance with operational/site plans developed to address Aboriginal forest values, knowledge and uses.	X		
	6.2.1	(see 1.4.2)	(refer to related indicators)		
29	6.3.1(a)	Primary and by-products, support opportunities and business relationships that are bought, sold, traded, or donated with other forest dependent businesses, forest users and the local community.	X		
30	6.3.1(b)	% of identified tenure holders, stakeholders and residents' forest values, knowledge and uses considered in the forestry planning processes.	X		
31	6.3.2 & 6.3.3	Implementation and maintenance of a certified safety program	X		

Ref #	Indicator	Indicator Statement	Target Met	Pending	Target Not Met
32	6.4.1	PAG established and maintained, and satisfaction survey implemented according to the Terms of Reference	X		
33	6.4.2	Number of educational opportunities for information/training that are delivered to the PAG	X		
	6.4.3	See 6.1.2	(refer to related indicators)		
34	6.5.1	The number of educational opportunities provided.	X		
35	6.5.2	SFM monitoring report made available to the public.	X		
Totals			34	0	1

1.3 SFM Performance Reporting

This annual report will describe the success of the licensee in meeting the indicator targets over the DFA. The report is available to the public and will allow for full disclosure of forest management activities, successes, and failures. Each signatory to the SFMP has reported individual performance within its traditional operating areas as well as performance that contributes to shared indicators and targets across the plan area. Each signatory to the plan is committed to work together to fulfill the PG SFMP commitments including data collection and monitoring, participation in public processes, producing public reports, and continuous improvement.

2.0 SFM Indicators, Targets and Strategies

1 Indicator 1.1.1 Ecosystem area by type

Indicator Statement	Target and Variance
Retention of rare ecosystems groups across the DFA	<u>Target:</u> 0 hectares <u>Variance:</u> Access construction where no other practical route is feasible.
Methodology of Measurement	WIM REPORT – report created that pulls site series from SP's from blocks that were harvested in the reporting period. These are reviewed to see if any rare sites (pure and mappable) have been harvested

Was the Target Met? Yes.

There were no rare ecosystem groups harvested.

2 Indicator 1.1.2 Forest area by type or species composition

Indicator Statement	Target and Variance
Percent distribution of forest type (treed conifer, treed broadleaf, treed mixed) >20 years old across DFA	<u>Target:</u> Treed conifer: No target; Treed Broadleaf: 1.6-5%; Treed Mixed: 3.9-9% <u>Variance:</u> None below proposed targets
Methodology of Measurement	TSR – This indicator will remain static until the next Timber Supply Review happens (every 5 years). This indicator will be updated with the new information at that time.

Was the Target Met? Yes

Reported out every 5 years (2012 – 2017). The table below shows the 2012 baseline data. This data will be updated in 2018.

Forest Type	Forest Area (ha)	Forest Area (%)
Coniferous	833,753	94.6
Broadleaf	13,792	1.6
Mixed	34,177	3.9
Total	881,722	100

3 Indicator 1.1.3 Forest area by seral stage or age class (late seral)

Indicator Statement	Target and Variance
Percent old non-pine forest across the DFA.	<u>Target:</u> As per the "Landscape Biodiversity Objectives for the PG TSA" (applicable to operating areas within the Vanderhoof District. The target is to manage to the mean <u>Variance:</u> To the minimum levels in the order
Methodology of Measurement	LOWG REPORT – The LOWG group produces the official data to analyze performance towards the Old Growth Order for all Districts in the PG TSA. Report on the most current data available

Was the Target Met? Yes

See table below for 2015 LOWG Data. All units are above target.

Table 2: Old Forest by Natural Disturbance Unit Merged BEC

Natural Disturbance Unit (NDU)	NDU / Merged BEC ¹	Total CFLB (ha)	Old Forest Target		Current Status		
			%	Hectares	Current Area (ha)	% of CFLB	Licensee Action
Moist Interior - Mountain ESSFmv 1	D1	129,033	29%	37,420	48,717	38%	no action
Moist Interior - Plateau SBPSmc	D2	47,275	17%	8,037	23,578	50%	no action
Moist Interior - Plateau SBS dk	D3	166,537	17%	28,311	52,808	32%	no action
Moist Interior - Plateau SBS dw 2	D4	47,462	12%	5,695	13,290	28%	no action
Moist Interior - Plateau SBS dw 3	D5	205,951	17%	35,012	58,252	28%	no action
Moist Interior - Plateau SBS mc 2	D6	240,223	12%	28,827	76,823	32%	no action
Moist Interior - Plateau SBS mc 3	D7	212,811	12%	25,537	70,494	32%	no action

4 Indicator 1.1.4 (a) Degree of within-stand structural retention (stand-level retention)

Indicator Statement	Target and Variance
Percent of stand structure retained across the DFA in harvested areas	<u>Target:</u> Average of 10% annually for blocks harvested within the DFA
Methodology of Measurement	WIM REPORT – report created that pulls retention levels from SP's from blocks harvested within the reporting period

Was the target met? Yes

Stand level retention consists primarily of wildlife tree patches (WTP) and riparian management areas. WTP are forested patches of timber within or adjacent to a harvested cutblock while riparian management areas are associated with water features within or adjacent to the harvest cutblock. Stand retention provides a source of habitat for wildlife, sustains local genetic diversity, and protects important landscape or habitat features, such as mineral licks and raptor nesting sites. Maintenance of habitat through stand retention contributes to conservation of ecosystem diversity by conserving a variety of forest age classes, stand structure and unique features at the stand level.

Licensees manage stand level retention for each cut block. Retention levels in each block are documented in the associated Site Plan, recorded in the Licensee database systems and reported out in RESULTS (Ministry of Forests and Range data base) on an annual basis.

The current status for average stand level retention is found in Table 7.

¹ See Appendix 1 for BEC description and NDU / Merged BEC Maps

Table 7: Stand Level Retention

Total Gross area harvested between April 1 st and March 31 st	Total retention in blocks harvested between April 1 st and March 31 st	Percentage
3,850.2	733.4	19.05%

Average % Retention = (Total WTRA / Total Block Area) X 100

5 Indicator 1.1.4 (b) Degree of within-stand structural retention (riparian management requirements)

Indicator Statement	Target and Variance
Percent of cut blocks harvested consistent with riparian management area strategies identified in Site Plans	<u>Target:</u> 100% <u>Variance:</u> 0
Methodology of Measurement	WIM REPORT – report created that pulls the number of Riparian features associated with a block from the SP for blocks harvested within the reporting period ITS – ITS was reviewed to check for any issues related to Riparian features.

Was the target met? No.

Blocks with RMA's in SP	# blocks RMA that were in Conformance
37	36

There was an accidental trespass on one of these blocks as reported in ITS. At the start of the RoW accessing the block, the buncher operator incorrectly thought that the block started right at an old cutblock edge, whereas in fact the cutblock started 350m into the timber at the end of a permitted road section of new construction. A 0.65 ha patch of timber was accidentally cut beside a 0.1 ha non-classified wetland (NCW). It is worth noting that due to it's small size, there was no legal requirement for an RMA. And because it was not in the planned harvest area, there were no management strategies developed related to it. However, it was considered to meet the intent of this indicator.

All blocks in the reporting period have been spatially analyzed in reference to the intent of the Vanderhoof Draft Lakeshore Management Plan (DLMP). There were six blocks harvested adjacent to lakes in the DLMP. All six blocks met the intent of the DLMP.



Figure 1: Trespass on BED011

6 Indicator 1.2.1 Degree of habitat protection for selected focal species, including species at risk

6 Indicator 1.2.2 Degree of suitable habitat in the long term for selected focal species, including species at risk

Indicator Statement	Target and Variance
Percent of forest management activities consistent with management strategies for Species of Management Concern	Target: 100% Variance: 0%
Methodology of Measurement	WIM REPORT – report created that pulls SAR information from SPs for blocks harvested within the reporting period. ITS – ITS was reviewed to check for any issues related to SAR.

Was the target met? Yes

This indicator evaluates the success of implementing specific management strategies for Species of Management Concern, including Species at Risk, as prescribed in operational plans. Appropriate management of these species and their habitat is crucial in ensuring populations of flora and fauna are sustained in the DFA.

Canfor must ensure:

- Key staff are trained in Species at Risk (SAR) identification;
- SAR listings are reviewed and management strategies are updated periodically
- Strategies are implemented via operational plans.

Table 56: Forest Operations Consistent with Species and Risk and Sites of Biological Importance, 2013/14

Number of forest operations with management strategies for Species of Management Concern					Forest operations consistent with identified strategies	% in DFA*	* = (# of operations in accordance with identified strategies/ total operations with Species at Risk management strategies) X 100
Planning / Permitting / Fieldwork	Roads	Harvesting	Silvi-culture	Total			
0	0	1	12	13	13		

Canfor currently have systems in place to evaluate the consistency of forest operations with operational plans. Tracking this consistency will ensure problems in implementation are identified and corrected in a timely manner.

One block with SAR strategies identified in SP's: TOP001 was harvest complete during the reporting period. TOP001 was not identified in ITS as having strategies not met.

There were 12 blocks where in-block roads were planted in an attempt to avoid creating long term access corridors for wolves for the benefit of caribou.

7 Indicator 1.2.3 Proportion of regeneration comprised of native species

7 Indicator 1.3.1 Genetic diversity (not a core indicator)

Indicator Statement	Target and Variance
Regeneration will be consistent with provincial regulations and standards for seed and vegetative material use	Target: 100% Variance: -5%
Methodology of Measurement	INFOVIEW REPORT – WIM has created a standard work document to outline how to run the info view report that will pull this information.

Was the Target Met? Yes

Adherence to the Chief Forester's Seed Use Standards is crucial for sustainable forest management as the standards are designed to establish healthy stands composed of ecologically and genetically appropriate trees. Planting unsuitable genetic stock could result in stands that will not meet future economic and ecological objectives.

Table 15 details the seedlings planted within the DFA in accordance with the Chief Forester's Standards for Seed Use for this reporting period.

Table 15: Compliance with Chief Forester's Standards for Seed Use

Licensee	Total Area Planted Seedlings	Area Planted in Accordance with Chief Forester's Standards*	Total % DFA**
Canfor	9,156,182	9,903,505	99.3%

* Measured in terms of number of trees purchased **% = (Area planted in accordance with Chief Forester's Standards for Seed Use / total area planted) X 100

8 Indicator 1.4.1 Proportion of identified sites with implemented management strategies

Indicator Statement	Target and Variance
Percent of forest management activities consistent with management strategies for sites of biological significance	<u>Target:</u> 100% <u>Variance:</u> 0%
Methodology of Measurement	WIM REPORT – WIM has created a summary from the task tab where blocks will have any features of biological significance identified. SP REVIEW – For the blocks identified, the SP is reviewed to specify the management strategies implemented. ITS REVIEW – ITS is checked for any issues related to blocks where management strategies were not met.

Was the target met? Yes

Total Number of Blocks with Management Strategies for Sites of Biological Significance	Number of Blocks Harvested in Accordance with identified Management Strategies for Sites of Biological Significance
1	1

Includes delineation of protected areas (eg. parks, ecological reserves) to achieve the geographic and ecological goals of provincial Protected Areas Strategies (PAS), through representation of a cross-section of ecosystems and old forest attributes. At the stand level, sites of biological significance include fisheries sensitive features (e.g. waterfalls, staging area, spawning area); significant mineral licks and wallows; bird stick nests (e.g. Bald Eagle, Osprey, Great Blue Heron, Goshawk); bat hibernating and roosting areas; dens (e.g. bear, fisher, wolverine); hot springs; goat cliff and avalanche chutes. Unique areas of biological significance are identified in the field during the planning phase and are managed through avoidance (either by relocating the road and/or harvest area or by protecting it with a wildlife tree retention area) or using an appropriate conservation management strategy such as timing of harvest.

Block	Issue	Management Strategy Implemented?
TOP001	Caribou Habitat management strategies	y

9 Indicator 1.4.2 Protection of identified sacred and culturally important sites

9 Indicator 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

Indicator Statement	Target and Variance
% of identified Aboriginal and non-aboriginal heritage forest values,	<u>Target:</u> 100% of known forest values, knowledge and uses considered <u>Variance:</u> 0%

knowledge and uses considered in forestry planning processes	
Methodology of Measurement	WIM REPORT– WIM has created a report that summarizes SP Cultural Heritage Comments, Activity Comments for Info Sharing and Arch, and any Task Tab comments. These are all reviewed to identify heritage forest values. ITS REVIEW – review ITS for any incidents where the issue is related to identified when management strategies related to heritage values not being achieved.

Was the target met? Yes

Blocks where heritage forest values identified	Number of these operations with consideration and identification of this value in plans	Method Used to Query/Collect Data
1	0	Review of Info sharing comments, SP's & ITS

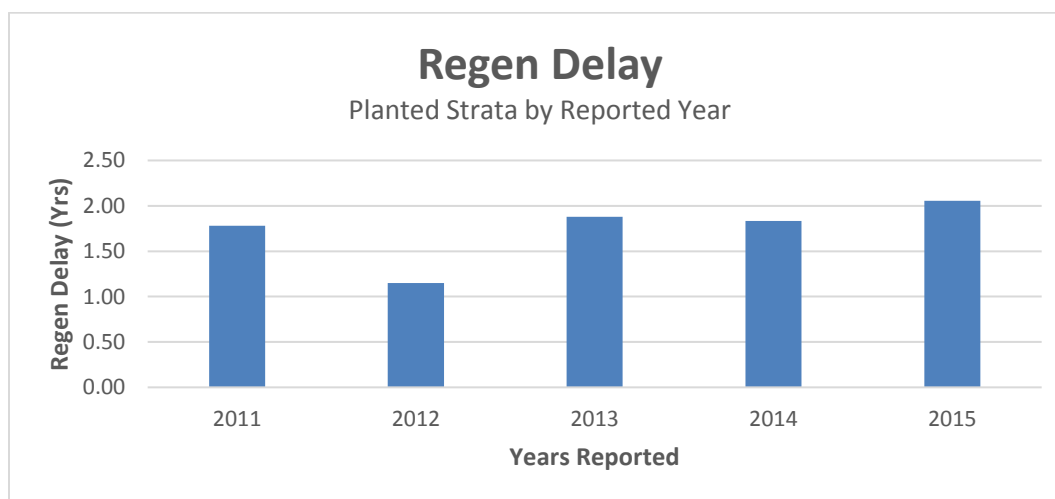
A lithic site was accidentally harvested on one block (SNK005). Since the lithic site was described as being outside of the road subgrade, the harvesting supervisor preworked the contractor to start falling the roadway but failed to specifically mention to only fall the roadway. By the time the report with the mapped lithic site was received by Canfor, the trees on the lithic site had been felled. Fortunately the ground on the site had not been disturbed – only the trees had been felled.

10 Indicator 2.1.1 Reforestation success (regeneration delay)

10 Carbon Update and Storage

Indicator Statement	Target and Variance
Average regeneration delay for stands established annually	<u>Target:</u> Regeneration established in 3 years or less <u>Variance:</u> + 1 year
Methodology of Measurement	WIM REPORT– WIM has created a summary for the reporting year that also generates the graph below.

Was the target met? Yes



11 Indicator 2.2.1 Additions and deletions to the forest area

Indicator Statement	Target and Variance
Percentage of gross forested land base in the DFA converted to non-forested land use through forest management activities.	<u>Target:</u> <3.3% of the gross land base in the DFA <u>Variance:</u> 0.25%
Methodology of Measurement	TSR – This indicator will remain static until the next Timber Supply Review happens (every 5 years). This indicator will be updated with the new information at that time (2017)

Was the target met? Yes

Gross Forest area = 959,268 ha.	Current Status
Permanent Access Structures (Ha.)	15,486 ha.
PCT of Gross Forest Area	1.6%

This shows current state based on 2012 data for DFA / DVA.

12 Indicator 2.2.2 Proportion of the calculated long-term sustainable harvest level that is actually harvested (CI 5.1.1 a)

Indicator Statement	Target and Variance
Percent of volume harvested compared to allocated harvest level	<u>Target:</u> Canfor (2,941,115) 100% over 5 years <u>Variance:</u> +10%
Methodology of Measurement	CUT CONTROL DOCUMENT – the legal summary provided from the government is the one used to summarize the performance on that license. The target will be considered met until the 5 year cut is exceeded by the variance, or the 5 year period is completed with an undercut.

Was the target met? Yes

Based on license A18157 billed volume. This license is a Vanderhoof based license and best represents the DFA.

2011	2012	2013	2014	2015	Rolling average	AAC
0	857,546	0	634,080	449,460	388,217	588,223

13 Indicator 3.1.1 Level of soil disturbance

Indicator Statement	Target and Variance
Percent of harvested blocks meeting legal soil disturbance objectives.	<u>Target:</u> 100% of blocks meet soil disturbance objectives <u>Variance:</u> 0%
Methodology of Measurement	ITS REVIEW – ITS was reviewed for issues related to site disturbance on blocks harvested in the reporting year.

Was the target met? Yes

No ITS incidents reported for Canfor based 43 blocks harvested related to site disturbance.

14 Indicator 3.1.2 Level of downed woody debris

Indicator Statement	Target and Variance
Percent of harvested blocks audited where post-harvest CWD BMP's are followed	<u>Target:</u> 100% of blocks harvested annually will meet targets <u>Variance:</u> -10%
Methodology of Measurement	ITS REVIEW – ITS was reviewed for issues related to coarse woody debris on blocks harvested in the reporting year.

Was the target met? Yes

No ITS incidents reported for Canfor based on 43 blocks harvested.

The following represents a range of Best Management Practices (BMP's) for CWD that will be implemented where these CWD attributes are achievable in harvest openings:

- To retain standing deciduous trees where operationally feasible; otherwise, left where felled;
- Same as above for Douglas-fir, especially veteran trees;
- To leave non-merchantable stems and under-utilization stems on the block;
- To retain clumps of viable natural regeneration;
- To retain existing CWD in wildlife tree patches and reserve areas will also contribute to the target;
- Use of stub trees as anchors to be retained to varying degrees along riparian areas, machine free zones, and other special features;
- Build loosely constructed piles around stubs. Generally, target 1 pile in every 5 ha, in blocks greater than 15 ha, if there are enough features in the harvest area;
- Radiate some longer pieces of CWD out from the pile(s);
- Retain CWD in clumps;
- Keep longer logs intact to the extent possible; and
- Jackstraw – haphazard orientation.

Objectives and targets specific to CWD will be achieved through the possible application of the following procedures and controls:

- Conduct periodic training for key licensee staff and contractors (in conjunction with pre-works) specific to CWD management and best management practices (including silviculture);
- Adhering to legislative requirements specific to CWD;
- Harvesting pre-works and inspections;
- Conducting implementation monitoring to assess success of implementation of controls and possible opportunities for improvement; and
- Conducting effectiveness monitoring to assess if controls are effective at achieving the desired results.

15 Indicator 3.2.1(a) Proportion of watershed or water management areas with recent stand-replacing disturbance

Indicator Statement	Target and Variance
Sensitive watersheds will have further evaluation and appropriate management strategies implemented.	<u>Target:</u> 100% <u>Variance:</u> 0%
Methodology of Measurement	ITS REVIEW – ITS was reviewed for related issues on blocks harvested in the reporting year.

Was the target met? Yes

All of the sensitive watersheds identified in the SFMP have had evaluations completed. The management practices recommended in the evaluations have been incorporated into a sensitive watershed BMP document.

These practices were followed on the 17 blocks harvested within sensitive watersheds during the reporting period.

While the BMP's were implemented, there was an opportunity found for improvement of the awareness and documentation of these BMP's. Through awareness training and communication, the knowledge of the BMP's will be enhanced throughout the operation.

16 Indicator 3.2.1(b) Proportion of watershed or water management areas with recent stand-replacing disturbance

Indicator Statement	Target and Variance
In Sensitive Watersheds - the % of drainage structures (with identified water quality concerns) where mitigation strategies are implemented as scheduled	<u>Target:</u> 100% <u>Variance:</u> 0%
Methodology of Measurement	DISCUSSION WITH OPERATIONS – For blocks harvested in sensitive watersheds in the reporting period, talk to operations supervisors to determine what major structures were installed, and what mitigative strategies were implemented.

Was the target met? Yes

A project was initiated in the Fall of 2016 to take inventory of existing major structures in sensitive watersheds. As an ongoing initiative in the next years, all existing crossings should be evaluated, with new crossings being evaluated on an ongoing basis thereafter. This evaluation is called Stream Crossing Quality Index (SCQI). It evaluates the sedimentation potential and risk to fish habitat at crossing with structures in place. If a crossing is found to have a High to Very High sedimentation risk coupled with a high potential impact to fish habitat, mitigation strategies will be developed and implemented.

There were 8 major drainage structures installed in sensitive watersheds within the reporting period. All but 1 were temporary and have subsequently been removed. The one remaining structure was captured in the SCQI assessment (0.2 km on the GRC019.1000 was assessed in October, 2016). The SCQI survey ranked the structure as low risk to deposit sediment into the stream.

17 Indicator 4.1.1(d) Net Carbon Uptake

Indicator Statement	Target and Variance
Percent of annual harvest directed at mitigating the impact of mountain pine beetle to forests within the DFA.	<u>Target:</u> >65% or greater LT harvest consists of PI <u>Variance:</u> 0%
Methodology of Measurement	HBS SUMMARY – review HBS to calculate the % pine harvested by VHF Operations for blocks in the VHF DFA

Was the target met? Yes

The amount of pine harvested by Canfor in DVA was 80.7% pine based on Harvest Billing System volume billed in 2015

18 Indicator 5.1.1(b) Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA

Indicator Statement	Target and Variance
The percent of forest management operations consistent with the conservation of range resources identified in Site Plans	<u>Target:</u> Sustain 100% consistency between forest management operations and measures to conserve range resources identified in Site Plans. <u>Variance:</u> -5
Methodology of Measurement	ITS REVIEW – ITS was reviewed for issues related to range

Was the target met? Yes

There were no blocks harvested that had range specific values to conserve.

19 Indicator 5.1.1(c) Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA

Indicator Statement	Target and Variance
The percent of forest management operations consistent with the conservation of Visual Quality Objectives.	<u>Target:</u> Sustain 100% consistency between forest mgmt operations and strategies identified in the Site Plan to conserve VQO's <u>Variance:</u> -5%
Methodology of Measurement	WIM REPORT – A report identifies all blocks that have VQO comments in the SP ITS REVIEW – ITS was reviewed for related issues

Was the target met? Yes

Blocks harvested between April 1, and March 31 within designated Scenic Areas	# Blocks where exemptions to VQO's are applied for.	Harvested blocks consistent with SP strategies to meet the desired VQO's.
2	0	2

TOP002 and TOP012 are within a visual corridor. It was stated in the SP that the block design met the VQO.

20 Indicator 5.1.1(d) Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA

Indicator Statement	Target and Variance
The percent of conformance with the Vanderhoof Access Management Plan for Forest Recreation (VAMP).	<u>Target:</u> Sustain 100% consistency between forest mgmt operations and strategies identified in the Site Plan to conserve VQO's <u>Variance:</u> -5%
Methodology of Measurement	WIM REPORT – A report identifies all blocks that are in the VAMP areas ITS REVIEW – ITS was reviewed for related issues

Was the target met? Yes

Canfor Operating Areas overlapping with AMP polygons	
Access Management polygons (C & D) where active operations occurred	2
Total Conformance to these Access Mgmt Polygon areas	2
Access Control Points removed and replaced	0
Percentage Access Areas in Conformance in DFA	100

Canfor conducted operations within VAMP C – Semi Primitive Non-Motorized (SPNM) Access Management and VAMP D – Functionally Non-Roaded (FNR) Access Management Polygons where harvesting was completed within the time period relative to this annual report.

The majority of 45D003 fell within either SPNM and FNR areas. The site plan managed for access by strategic placement of access barriers as well as an obliteration of a non-tenured trail, which met the intention of the VAMP.

Only 0.3 ha of GRC018 (319.9 ha) overlapped with the SPNM polygon. No roads fell within the VAMP area.

21 Indicator 5.1.1(e) Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA

Indicator Statement	Target and Variance
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Smoke Management: The percent of prescribed burns that follow the smoke management guidelines.	<u>Target:</u> 100% of prescribed burns follow the smoke management guidelines <u>Variance:</u> -10%
Methodology of Measurement	RESOURCES REPORT – Use the Query Builder reports function in Resources to list the blocks that were burnt in in the Reporting Period. ITS REVIEW – Review ITS for related issues

Was the target met? Yes

Number of Burns Between April 1 st and March 31 st (piles and prescribed)	Number of Those Burns within Smoke Management Guidelines
49	49

% = (Number of Burns within Smoke Management Guidelines / Number of Burns Completed) X 100

22 Indicator 5.2.1 Level of investment in initiatives that contribute to community sustainability

Indicator Statement	Target and Variance
Investment in local communities	<u>Target:</u> >=55% of dollars spent in local communities (5 year rolling average) <u>Variance:</u> -10%
Methodology of Measurement	NCI SURVEY – An accounting report called the NCI survey outlines the spending by location. This is compared with the total spending by the operation to determine the %. Speak with divisional accountants for this information.

Was the target met? Yes

2011	2012	2013	2014	2015	Average
86%	77%	69%	55%	59%	68%

The numbers are based on Vanderhoof division spend, not DFA spend. The accounting system does not break down by supply block or area. Based on the percentage being well over target the indicator was inferred to be met. Postal codes are used to define “local” communities and those are defined as Vanderhoof, Engen, Fort Fraser, Fraser Lake for the purpose of this indicator. With Vanderhoof Operations activities shifting heavily to Fort St James, Nadina, Mackenzie and other areas, combined with BCTS’s departure from the plan; this target may have to be revised in the future.

23 Indicator 5.2.2 Level of investment in training and skills development

Indicator Statement	Target and Variance
Training in environmental & safety procedures in compliance with company training plans	<u>Target:</u> 100% of company employees and contractors will have both environmental & safety training. <u>Variance:</u> -5%
Methodology of Measurement	TRAINING SUMMARY – Normally run by admin staff when scheduling training. Have them run it for staff and note any deficiencies. TRAINING MATRIX – If deficiencies are found, compare against the training matrix found on FMG SharePoint to see if the training is required.

Was the target met? Yes

723 modules were completed by 33 FMG staff (full time and seasonal).

Training records showed that there were 6 courses by 3 staff that were required in the training matrix that were not taken.

No contractor deficiencies found out of 28 contractors.

Result by course: = 723 modules completed/729 modules required = 99.2% complete (staff only)

24 Indicator 5.2.3 Level of direct and indirect employment

Indicator Statement	Target and Variance
Level of direct and indirect employment	<u>Target:</u> Cut control volume harvested, multiplied by most current local direct and indirect employment multiplier (3.26), as a five-year rolling average (4600) <u>Variance:</u> -700
Methodology of Measurement	CUT CONTROL DOCUMENT – to summarize the volume from FL A18157 LOGS PROD REPORT 'R020A' – to summarize total volume delivered to Plateau and IP. Can be run, or requested from accounting.

Was the target met? Yes

Canfor's Vanderhoof Mills (i.e. Plateau & Isle Pierre) consume approximately 2,600,000 m3 per year which requires wood from outside the Vanderhoof DFA to supplement these requirements. For the volume outside the DFA a multiple of 1.63 (half – consistent with 2006 BC statistics – 1.33 for manufacturing alone) was used to cover milling employment contributions and a portion of the harvesting and trucking. The assumption is that other volume outside this DFA would contribute to employment in other areas.

Area	2011	2012	2013	2014	2015	Rolling average	Jobs
A18157	392,391	857,500	1,368,347	653,215	448,390	743,969	2,425
Other	2,207,000	1,742,500	416,224	1,417,926	1,890,816	1,534,893	2,502
Total	2,599,391	2,600,000	1,784,571	2,071,141	2,339,206	2,278,862	4,927

25 Indicator 5.2.4 Level of Aboriginal participation in the forest economy

Indicator Statement	Target and Variance
Number of opportunities for Aboriginals to participate in the forest economy.	<u>Target:</u> > 3 local Aboriginal business relationships or opportunities <u>Variance:</u> -1 of baseline
Methodology of Measurement	DISCUSSION WITH OPERATIONS AND SILVICULTURE – Provide ops and silv supervisors with the list below, as it represents some of the longer term agreements. Ask if there are any others to include, or should not be included.

Was the target met? Yes

There are 5 First Nation Contracts with Canfor Vanderhoof for work in the Vanderhoof DFA for the reporting year.

1. Selkin – logging.
2. Spectrum – Brushing (in conjunction with the Binche Band)
3. Spectrum – Burning (in conjunction with the Binche Band)
4. Ne Ke Yoh – Brushing
5. Nulki Hills – Burning

26 Indicator 6.1.1 Evidence of a good understanding of the nature of Aboriginal title and rights

Indicator Statement	Target and Variance
Employees will receive Aboriginal awareness training	<u>Target:</u> 100% <u>Variance:</u> -10%
Methodology of Measurement	TRAINING MATRIX – Check to make sure everyone who is required to take the training has completed it.

Was the target met? Yes

100% of employees who require the training have received it.

Canfor training requirements are reviewed annually. All applicable staff complete training as per matrix.

27 Indicator 6.1.2 Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans

27 6.4.3 Evidence of efforts to promote capacity development and meaningful participation for Aboriginal communities

Indicator Statement	Target and Variance
Evidence of best efforts to share interests and plans with Aboriginal communities.	<u>Target:</u> 100% <u>Variance:</u> 0%
Methodology of Measurement	ITS REVIEW – Check ITS to see if any blocks had issues with Information Sharing or were harvested without CP's. Typically there will not be any as CP's are not issued unless information sharing has been completed. Report the number of blocks harvested in the reporting period.

Was the target met? Yes

All harvested blocks were permitted and permits were not issued without completion of information sharing.

Blocks harvested	Number of these operations with completed info sharing
43	43

28 Indicator 6.1.3 Level of management and/or protection of areas where culturally important practices and activities (hunting, fishing, gathering) occur

Indicator Statement	Target and Variance
Percent of forest operations in conformance with operational/site plans developed to address Aboriginal forest values, knowledge and uses.	<u>Target:</u> 100% <u>Variance:</u> -0%
Methodology of Measurement	WIM REPORT– WIM has created a report that summarizes SP Cultural Heritage Comments, Activity Comments for Info Sharing and Arch, and any Task Tab comments. These are all reviewed to identify heritage forest values. ITS REVIEW – review ITS for any incidents where the issue is related to identified when management strategies related to heritage values not being achieved.

Was the target met? Yes

Blocks harvested	Number of these operations completed consistent with plan commitments
43	43

There was one block, SNK005, where a lithic site was harvested accidentally. This site, however, is archaeological in nature, and not related to current use and values. Therefore, this incident will not be used against this indicator.

29 Indicator 6.3.1 (a) 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

Indicator Statement	Target and Variance
The number of donations made in Vanderhoof and surrounding communities	<u>Target:</u> 10 <u>Variance:</u> -2
Methodology of Measurement	DISCUSSION WITH OPS MANAGER – This will determine the currency of the primary and by-products listed below. Bring the manager the list, to see if anything should be added or removed. DISCUSSION WITH ADMIN STAFF – To determine the number of community support opportunities. CORPORATE DONATION SUMMARY – This report, obtained from corporate office, will summarize the donations made to the local community.

Was the target met? Yes

This indicator was revised in 2015 to report ONLY the number of community donations in and around Vanderhoof, rather than the mixed measures of by-products and business relationships.

The following table summarizes Canfor performance for 2015 – 2016 reporting Period.

Donations	8	Vanderhoof Community Services (firewood) Nadleh Whut'en School District 91 (NVSS Dry Grad) Vanderhoof and District Minor Hockey Association Canada Day in Vanderhoof Nechako White Sturgeon Recovery Initiative Vanderhoof Community barbeque United Way (represents many more charities)
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30 Indicator 6.3.1 (b) 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

Indicator Statement	Target and Variance
% of identified tenure holders, stakeholders and residents' forest values, knowledge and uses	<u>Target:</u> 100% <u>Variance:</u> 0

considered in the forestry planning processes.	
Methodology of Measurement	INFOVIEW REPORTS – Run an infoview report to summarize all stakeholder communication for the reporting period. Report the number of communications ITS REVIEW – Review ITS to see if there are any stakeholder interest related issues identified.

Was the target met? Yes

There were 236 letters, e-mails or outgoing calls and 63 in coming e-mails, calls or letters. There were no ITS incidents related to stakeholder commitments.

31 Indicator 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-related workplaces and affected communities

31 6.3.3 Evidence that a worker safety program has been implemented and is periodically reviewed and improved

Indicator Statement	Target and Variance
Implementation and maintenance of a certified safety program	<u>Target:</u> 100% <u>Variance:</u> 0%
Methodology of Measurement	Canfor is SAFE certified. No ongoing verification required. Canfor Contractors are verified prior to preworks. DISCUSSION WITH SAFETY MANAGER – check in with the FMG Safety Manager to ensure the requirements are current.

Was the target met? Yes

32 Indicator 6.4.1 Level of participant satisfaction with the public participation process

33 Indicator 6.4.2 Evidence of efforts to promote capacity development and meaningful participation in general

Indicator Statement	Target and Variance
Number of educational opportunities for information/training that are delivered to the PAG	<u>Target:</u> >= 2 <u>Variance:</u> 0
Methodology of Measurement	PAG MEETING MINUTES– These documents found on the PGTSA SFMP website will summarize the meeting minutes. Tally the number of training sessions given to the PAG for the reporting period.

Was the target met? Yes

(3) At the December, 2015

- Presentation on how Canfor selects recipients of public donations. Special attention was given to the United Way who use Canfor funds to distribute to local causes in the community.
- Presentation on Canfor's leading approach to the Migratory Convention Act (MBCA) and how we plan to manage for migratory birds in our operating areas.
- Presentation on Coarse Woody Debris, Canfor's strategy, training and a discussion of current practice.

34 Indicator 6.5.1 Number of people reached through educational outreach

Indicator Statement	Target and Variance
The number of educational opportunities provided	<u>Target:</u> = 5 <u>Variance:</u> -2
Methodology of Measurement	DISCUSS WITH PERMITTING COORDINATOR – Verify any staff involvement with community educational initiatives.

	DISCUSS WITH MILL SUPERINTENDENTS – Summarize any mill tours given to the community.
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Was the target met? Yes

8 opportunities for educational outreach to the community were identified in this timeframe.

Date	Location	Description	Method Used to Query/Collect Data
MAY 2015	Vanderhoof Arena	Trade show booth geared to educate public on our business from forestry management to manufacturing to sales.	Conversation with local Plateau Staff
JUN 2015	Riverside Park Vanderhoof	Community BBQ held to thank the community with a special address from managers.	Conversation with local Plateau Staff
JUN 2015	NVSS	Canfor organized and sponsored a safety talk at NVSS. "Drop-It-And-Drive" spoke to the students about the folly of distracted driving. Canfor rep highlighted the importance of this in our forest management activities.	Conversation with local Plateau Staff
JUL 2015	Vanderhoof Office	Hired 2 highschool students into FMG positions specifically geared towards getting youth interested in forestry.	Conversation with local Plateau Staff
SEP 2015	Willow River Trail	Vanderhoof FMG staff helped lead a "Walk in the Woods" during National Forest Week in Prince George.	Conversation with local Plateau Staff
OCT 2015	Plateau Sawmill	Sawmill tour for Swedish delegates.	Conversation with local Plateau Staff
OCT 2015	Peterson's Beach, Fraser Lake	COFI Natural Resource Management Camp: 2-Day Event geared to educate youth on basic forestry field work.	Conversation with local Plateau Staff
JAN 2016	CNC Prince George	FMG harvesting supervisor for Plateau was guest speaker at a CNC heavy equipment course. He spoke to what it was like to be in the logging workforce. Attendance for the course came from Prince George to Takla Landing.	Conversation with local Plateau Staff

35 Indicator 6.5.2 Availability of summary information on issues of concern to the public

Indicator Statement	Target and Variance
SFM Annual report made available to the public.	<u>Target:</u> SFM monitoring report available to public annually via the web. <u>Variance:</u> None
Methodology of Measurement	CANFOR EXTERNAL WEBSITE – Check to ensure reports are posted as required.

Was the target met? Yes

2014/2015 Annual Report posted on the external Canfor website

APPENDIX 1.0: NDU Merged BEC Descriptions and Maps

Natural Disturbance Unit (NDU)	NDU/ Merged BEC	Description
Moist Interior	D1	Moist Interior - Mountain ESSFmv 1
Moist Interior	D2	Moist Interior - Plateau SBPSmc
Moist Interior	D3	Moist Interior - Plateau SBS dk
Moist Interior	D4	Moist Interior - Plateau SBS dw 2
Moist Interior	D5	Moist Interior - Plateau SBS dw 3
Moist Interior	D6	Moist Interior - Plateau SBS mc 2
Moist Interior	D7	Moist Interior - Plateau SBS mc 3