

Prince George

Sustainable Forest Management Plan



2012/13 Annual Report



TABLE OF CONTENTS

1.0 Introduction.....	4
1.1 List of Acronyms.....	4
1.2 Executive Summary.....	5
1.3 SFM Performance Reporting.....	6
2.0 SFM Indicators, Targets and Strategies	6
Indicator 1.1.1 Ecosystem area by type	6
An analysis of ecosystem representation across all Canfor and BCTS operations in British Columbia was conducted in 2011. This analysis determined the abundance and representation of ecosystem groups within four distinct regions and 13 management units. The Prince George DFA is mostly within the North – East Mountains region and a portion of the West – Central region and comprises 23 unique forested ecosystem groups.	7
Indicator 1.1.2 Forest area by type or species composition.....	8
Indicator 1.1.3(a) Forest area by seral stage or age class (late seral)	8
Indicator 1.1.3(b) Forest area by seral stage or age class (young patch).....	11
<u>Strategy to Achieve Objective</u>	12
Indicator 1.1.4(a) Degree of within-stand structural retention (stand-level retention).....	13
Indicator 1.1.4(c) Degree of within-stand structural retention (riparian management requirements)	14
Indicator 1.2.1 Degree of habitat protection for selected focal species, including species at risk.....	14
Indicator 1.2.2 Degree of suitable habitat in the long term for selected focal species, including species at risk	14
Indicator 1.2.3 Proportion of regeneration comprised of native species	15
Indicator 1.3.1 Genetic diversity (<i>not a core indicator</i>).....	15
Indicator 1.4.1 Proportion of identified sites with implemented management strategies	15
Indicator 1.4.2 Protection of identified sacred and culturally important sites	16
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	16
Indicator 2.1.1(a) Reforestation success (regeneration delay).....	17
Indicator 2.1.1(b) Reforestation success (free growing requirements)	18
Indicator 2.2.1(a) Additions and deletions to the forest area.....	19
Indicator 2.2.2 Proportion of the calculated long-term sustainable harvest level that is actually harvested	19
Indicator 3.1.1 Level of soil disturbance.....	20
Indicator 3.1.2 Level of downed woody debris	21
Indicator 3.2.1(a) Proportion of watershed or water management areas with recent stand-replacing disturbance.....	21
Indicator 3.2.1(b) Proportion of watershed or water management areas with recent stand-replacing disturbance.....	22
Indicator 3.2.1(c) Proportion of watershed or water management areas with recent stand-replacing disturbance	22
Indicator 4.1.1(a) Net Carbon Uptake	23
Indicator 5.1.1(b) Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA	24
Indicator 5.2.1(a) Level of investment in initiatives that contribute to community sustainability.....	25
Indicator 5.2.1(b) Level of investment in initiatives that contribute to community sustainability.....	25
Indicator 5.2.2 Level of investment in training and skills development	26
Indicator 5.2.3 Level of direct and indirect employment.....	26
Indicator 5.2.4 Level of Aboriginal participation in the forest economy.....	27
Indicator 6.1.1 Evidence of a good understanding of the nature of Aboriginal title and rights	28
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	28
Indicator 6.1.3 Level of management and/or protection of areas where culturally important practices and activities (hunting, fishing, gathering) occur	29
Indicator 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.....	30
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.....	31
Indicator 6.4.1 Level of participant satisfaction with the public participation process	31

Indicator 6.4.2 Evidence of efforts to promote capacity development and meaningful participation in general32

Indicator 6.5.1 Number of people reached through educational outreach32

Indicator 6.5.2 Availability of summary information on issues of concern to the public.....33

1.0 Introduction

This is the 2012/13 Annual Report for the Prince George Sustainable Forest Management Plan (SFMP), covering the reporting period of April 1st 2012 to March 31st 2013.

The SFMP currently represents Canadian Forest Products Ltd.'s (Canfor's) efforts to maintain Canadian Standards Association (CSA) certification to the CSA Z809-08 standard.

Between 2004 and 2006, major forest tenure holders ("licensees") operating in the Prince George Defined Forest Area (DFA) worked with a group of public and Aboriginal representatives (the SFM Public Advisory Group) to develop a Sustainable Forest Management Plan (SFMP). Earlier, in 2000, a similar Public Advisory Group worked with Canfor to develop a SFMP for Canfor's Tree Farm License 30 (TFL30). Members of the SFM Public Advisory Groups (PAG) for both the DFA and TFL30 represented a cross-section of local interests including recreation, tourism, ranching, forestry, conservation, water, community and Aboriginals.

In the fall of 2010, the licensees on the DFA and TFL30 agreed to merge the two SFM Plans into one document and one Defined Forest Area as part of the transition to the Canadian Standards Association (CSA) Sustainable Forest Management (CSA Z809-08) standard.

Over the years, many of the original signatories to the SFMP left the CSA SFM standard, with the most recent being BC Timber Sales-Prince George Business Area in the summer of 2012. This is the first annual report since the departure of BCTS-PG, with Canfor the sole signatory licensee.

The SFMP includes a set of values, objectives, indicators and targets that address environmental, economic and social aspects of forest management in the Prince George Defined Forest Area. An SFMP developed according to the CSA standard sets performance objectives and targets over a defined forest area (DFA) to reflect local and regional interests. Consistent with most certifications, and as a minimum starting point, the CSA standard requires compliance with existing forest policies, laws and regulations. Changes to this annual report reflect the 2008 (CSA Z809-08) standard requirements as embodied in the Prince George Defined Forest Area SFMP – July 2012.

It is important to note that the Prince George SFMP is a working document and is subject to continual improvement. Over time, the document will incorporate new knowledge, experience and research in order to recognize society's environmental, economic and social values.

This Annual Report measures Canfor's performance in meeting the indicator targets outlined in the SFMP over the Prince George Defined Forest Area (DFA). The DFA is the Crown Forest landbase within the Prince George Forest District and Canfor's operating areas, excluding woodlots, parks, protected areas and private land. The intent of this Annual Report is to have sustainable forest management viewed by the public as an open, evolving process that is taking steps to meet the challenge of managing the forests of the Prince George DFA for the benefit of present and future generations.

The following Table summarizes the results for the current reporting period. For clarification of the intent of the indicators, objectives or the management practices involved, the reader should refer to the Prince George Sustainable Forest Management Plan document (July 2012).

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.

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

Of the 35 indicators listed below, 29 indicators were met within the prescribed variances, 1 is pending, and 5 indicators were not met within the prescribed variances. For each off-target indicator, a corrective and preventative action plan is included in the indicator discussion.

Summary of Indicator Status, April 1st 2012 to March 31st 2013

Indicator Number	Indicator Statement	Target Met	Pending	Target Not Met
1.1.1	Total hectares logged in rare and uncommon ecosystems	X		
1.1.2	Percent distribution of forest type (treed conifer, treed broadleaf, treed mixed) >20 years old across DFA	X		
1.1.3(a)	Percent late seral distribution by ecological unit across the DFA			X
1.1.3(b)	Maintain a variety of young patch sizes in an attempt to approximate natural disturbance.			X
1.1.4(a)	Percent of stand structure retained across the DFA in harvested areas	X		
1.1.4(c)	Number of non-conformances where forest operations are not consistent with riparian management requirement as identified in operational plans	X		
1.2.1 & 1.2.2	Percent of forest management activities consistent with current Best Management Practices for Species of Management Concern	X		
1.2.3 & 1.3.1	Artificial regeneration will be consistent with provincial regulations and standards for seed and vegetative material use.	X		
1.3.1	See 1.1.2, 1.1.3(a), 1.1.3(b), 1.2.1, 1.2.3, 1.4.1	(refer to related indicators)		
1.4.1	Percent of forest management activities consistent with management strategies for protected areas and sites of biological significance, as contained in operational plans.	X		
1.4.2	% of identified Aboriginal forest values, knowledge and uses considered in forestry planning processes	X		
2.1.1(a)	The regeneration delay, by area, for stands established annually	X		
2.1.1(b)	The % of block area that meets free growing requirements as identified in site plans.	X		
2.2.1(a)	The % of gross land base in the DFA converted to non-forested land use through forest management activities.	X		
2.2.2	Percent of volume harvested compared to allocated harvest level.		X	
3.1.1	Percent of harvested blocks meeting soil disturbance objectives identified in plans.	X		
3.1.2	% of cut blocks where post harvest CWD levels are within the targets contained in Plans.	X		
3.2.1(a)	The percentage of watersheds with active operations that have had a watershed assessment completed.	X		
3.2.1(b)	The percentage of active operations within high risk watersheds that implement the recommendations of a hydrologic assessment.			X
3.2.1(c)	Percentage of high hazard drainage structures in watersheds with identified water quality concerns that have mitigation strategies implemented.	X		
4.1.1 (a)	Areas with stand damaging agents will be prioritized for treatment [see also 1.1.3(a), 1.1.3(b), 2.1.1(a), 2.1.1(b), 2.2.1(a)]	X		

Indicator Number	Indicator Statement	Target Met	Pending	Target Not Met
4.2.1	See 2.2.1(a)			
5.1.1(a)	See 2.2.2, 4.1.1(a)	(refer to related indicators)		
5.1.1(b)	Conformance with strategies for non-timber benefits identified in plans	X		
5.2.1(a)	Percent of money spent on forest operations and management in the DFA provided by North Central Interior suppliers and contractors	X		
5.2.1(b)	Number of donations to the local community - applies to Canfor only	X		
5.2.2	Training in environmental & safety procedures in compliance with company training plans			X
5.2.3	Level of direct & indirect employment	X		
5.2.4	Number of opportunities for Aboriginals to participate in the forest economy	X		
6.1.1	Employees will receive Aboriginal awareness training			X
6.1.2	Evidence of best efforts to share interests and plans with Aboriginal communities	X		
6.1.3	Percent of forest operations in conformance with operational/site plans developed to address Aboriginal forest values, knowledge and uses, communicated through information-sharing and cultural heritage evaluations.	X		
6.2.1	(see 1.4.2)	(refer to related indicators)		
6.3.1(a)	Primary and by-products that are bought, sold, or traded with other forest-dependent businesses in the local area	X		
6.3.2 & 6.3.3	Implementation and maintenance of a certified safety program	X		
6.4.1	PAG established and maintained, and satisfaction survey implemented according to the Terms of Reference	X		
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)		
6.5.1	The number of people who attend the educational opportunities provided	X		
6.5.2	SFM monitoring report made available to the public.	X		
	Totals	29	1	5

1.3 SFM Performance Reporting

This annual report will describe the success of Canfor 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.

2.0 SFM Indicators, Targets and Strategies

Indicator 1.1.1 Ecosystem area by type

Indicator Statement	Target and Variance
Total hectares logged in rare and uncommon ecosystems	<u>Target:</u> 0 hectares <u>Variance:</u> Based on assessments completed by professionals, those ecosystems deemed poor representation of the rare ecosystem can be harvested
Was the Target Met? Yes	

Maintaining representation of a full range of ecosystem types is a widely accepted strategy to conserve biodiversity. Ecosystem conservation represents a coarse-filter approach to biodiversity conservation. It assumes that by maintaining the structure and diversity of ecosystems, the habitat needs of various species will be provided. For many species, if the habitat is suitable, populations will be maintained.

Rare ecosystems are frequently identified as focal points for conservation concern. Provincially, ecosystems are listed based largely on frequency of occurrence or rarity. There are at least three broad reasons for creating local lists, including:

- to help assess the status of an ecosystem throughout a planning area;
- to focus attention and tracking on ecosystems that merit conservation concern; and
- to help rank allocation of resources to conservation efforts, such as parks, Wildlife Habitat Areas, Old Growth Management Areas (OGMA's) or Wildlife Tree Patches (WTPs).

An analysis of ecosystem representation across all Canfor and BCTS operations in British Columbia was conducted in 2011. This analysis determined the abundance and representation of ecosystem groups within four distinct regions and 13 management units. The Prince George DFA is mostly within the North – East Mountains region and a portion of the West – Central region and comprises 23 unique forested ecosystem groups.

The target of 0 hectares of rare and uncommon ecosystems logged per reporting period was selected as a proactive measure to identify and conserve rare and uncommon ecological communities. Rare or uncommon ecosystem groups were identified by mapping at the BEC variant level or Predictive Ecosystem Mapping (PEM) site series level. If these site series are encountered during field layout, they are assessed and reserved from harvest either through exclusion from the harvest area or designation of reserves around the site.

As illustrated by the following tables, whereas PEM indicates the potential presence of rare sites within proposed harvest areas, ground confirmation is used to either place the confirmed rare sites within reserves, or confirms that the PEM data is not accurate and the sites are correctly typed as more common sites.

Trend: Rare ecosystems located within reserves as per Predictive Ecosystem Mapping (hectares)

Reporting Period	PG DFA	TFL30 DFA	Total Predicted for Period:
2010/11	3.1		3.1
2011/12	2.8	11.5	14.3
2012/13	0.3	60.6	60.9
Predicted Total:	6.2	72.1	78.3

Trend: Rare ecosystems harvested as per Predictive Ecosystem Mapping (hectares)

Reporting Period	PG DFA	TFL30 DFA	Total for Period:
2010/11	42.1		42.1
2011/12	16.3	7.2	23.5
2012/13	1.2	243.6	244.8
Total:	59.6	250.8	310.4

Trend: Harvest of rare ecosystems, as per ground-based eco-typing (hectares)

Reporting Period	PG DFA		TFL30 DFA	
	Area harvested	Rare sites harvested	Area harvested	Rare sites harvested
2010/11	6484.7	0		
2011/12	5909.1	0	1001.3	0
2012/13	6490.0	0	1475.9	0
Total:	18,883.8	0	2477.2	0

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: 70-90%; Treed Broadleaf: 1.5-6%; Treed Mixed: 5-15% <u>Variance:</u> None below proposed targets
Was the Target Met? Yes	

Forest area by type is a refinement of the previous indicator – ecosystem area. Tree species composition, stand age, and stand structure are important variables that affect the biological diversity of a forest ecosystem - providing structure and habitat for other organisms. Ensuring a diversity of tree species within their natural range of variation improves ecosystem resilience and productivity and positively influences forest health. The diversity of plant species also directly correlates to genetic diversity within a plant community. Reporting on this indicator is intended to illustrate the distribution of three broad classes of forest types (aspatial) and provide high level overview information on area covered by broad forest type, forest succession and management practices that might alter species composition.

Although this indicator status is to be updated every five years or so, as the Timber Supply Review (TSR) is completed for the management unit, it has been updated for the purposes of this Annual Report in order to reflect the change in areas resulting from the departure of BCTS-PG from this SFM Plan.

Current State, as per Internal Analysis by Canfor (December 2013)

Forest Type	Canfor's Operating Areas within the PG District (ha)	Canfor's TFL30 (ha)	Park Apportionment	Forest Area (ha)	Forest Area (%)
Coniferous	865,739	109,548	53,336	1,028,623	90.6
Broadleaf	16,550	1,908	567	19,025	1.7
Mixed	79,134	5,338	3,576	88,048	7.8
Total	961,423	116,794	57,479	1,135,696	100%

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

Indicator Statement	Target and Variance
Percent late seral distribution by ecological unit across DFA	<u>Target:</u> As per the "Landscape Biodiversity Objectives for the PG TSA" (applicable to operating areas within the PG District); and as per the Provincial Non-Spatial Old Growth Objective (applicable to TFL30). The target is to manage to the science mean with a variance to the minimum of the legal objectives. <u>Variance:</u> As above.
Was the Target Met? No	
Action Plan: NDU's in deficit: McGregor, Moist Interior, Wet Mountain and Wet Trench As identified in the late November 2011 Licensee Landscape Objective Working Group (LLOWG) analysis, and as per the September 2012 analysis, Merged BEC Units A4, A5, A15, A18, A24 and A25 were identified as having a deficit of Old Forest. Recruitment strategies were developed by the Licensee LOWG, and approved by the relevant government agency in March 2012. The 2012/13 LLOWG analysis indicates that A25 has now moved out of a deficit position, and that within the PG District, there is a net increase of Old Forest (25,622 ha) since the 2011/12 reporting period.	

This indicator is intended to quantify, at a point in time, the amount of landscape occupied by "old forests". Maintenance of old forest stands is crucial to forest management for the conservation of landscape ecosystem biodiversity. The Mountain Pine Beetle epidemic presents its own challenges, as older pine-leading stands are the most susceptible to infestation.

The Landscape Objectives Working Group (LOWG), which has representation from the Ministry of Forests, Lands and Natural Resource Operations (formerly the Ministry of Agriculture and Lands - Integrated Land Management Bureau (ILMB), and Ministry of Forest and Range) and timber licensees, has developed Landscape Biodiversity Objectives and Old Forest Retention requirements for the Prince George Timber Supply Area (PG TSA), which includes the Prince George Forest District.

The current status of Old Forest within the DFA is shown in Table 1 below.

In March of 2009 the Licensee LOWG proceeded with the 2009 analysis using the newest Vegetative Resource Inventory (VRI) data. The new VRI (projected to Jan 1, 2007) utilized in this analysis is the same data set used in the Timber Supply Review IV (TSR IV) for the Prince George Timber Supply Area. The Crown Forest Land Base (CFLB) for the 2011 analysis was based on the new definition of the CFLB from the TSR IV, as released in October 2010.

Table 1: PG District – Variance - Old Forest by Natural Disturbance Unit Merged BEC (Legal Objective)

Natural Disturbance Unit (NDU)	NDU / Merged BEC ¹	Total CFLB (ha)	Target: Science Mean		Variance: Legal Objective		Current Status			
			%	Hectares	%	Hectares	Current Area (ha)	% of CFLB	Surplus / Deficit	Licensee Action
Boreal Foothills	A1	7,031	n/a	n/a	33%	2,320	5,579	79%	3,259	communicate
McGregor	A2	15,782	52%	8,207	26%	4,103	7,326	46%	3,223	communicate
McGregor	A3	69,757	52%	36,274	12%	8,371	26,703	38%	18,333	no action
McGregor	A4	227,722	52%	118,416	26%	59,208	58,389	26%	(819)	lockdown
Moist Interior	A5	14,085	51%	7,183	29%	4,085	3,883	28%	(202)	lockdown
Moist Interior	A6	16,388	51%	8,358	29%	4,752	7,338	45%	2,585	communicate
Moist Interior	A7	4,268	25%	1,067	17%	726	1,303	31%	577	communicate
Moist Interior	A8	9,306	25%	2,327	12%	1,117	2,088	22%	972	communicate
Moist Interior	A9	34,157	25%	8,539	12%	4,099	5,301	16%	1,202	communicate
Moist Interior	A10	40,565	25%	10,141	17%	6,896	14,475	36%	7,579	no action
Moist Interior	A11	129,857	25%	32,464	12%	15,583	31,809	24%	16,226	no action
Moist Interior	A12	161,537	25%	40,384	12%	19,384	34,159	21%	14,775	no action
Moist Interior	A13	361,246	25%	90,312	12%	43,350	94,312	26%	50,963	no action
Wet Mountain	A14	124,795	87%	108,573	50%	62,398	101,185	81%	38,787	no action
Wet Mountain	A15	16,375	87%	14,246	84%	13,755	11,286	69%	(2,469)	lockdown
Wet Mountain	A16	35,545	87%	30,924	26%	9,242	14,878	42%	5,637	no action
Wet Mountain	A17	120,103	87%	104,493	50%	60,052	85,614	71%	25,562	no action
Wet Trench	A18	2,212	84%	1,859	80%	1,770	1,741	79%	(29)	lockdown
Wet Trench	A19	63,629	84%	53,448	48%	30,542	52,537	83%	21,996	no action
Wet Trench	A20	97,570	84%	81,960	80%	78,056	83,941	86%	5,884	no action
Wet Trench	A21	116,871	84%	98,172	48%	56,098	69,231	59%	13,650	no action
Wet Trench	A22	28,287	80%	22,630	53%	14,992	18,642	66%	3,650	no action
Wet Trench	A23	151,965	80%	121,572	53%	80,541	96,695	64%	16,154	no action
Wet Trench	A24	135,470	80%	108,376	30%	40,641	36,609	27%	(4,032)	lockdown
Wet Trench	A25	159,117	80%	127,294	46%	73,194	74,241	47%	1,047	communicate
Totals		2,143,640		1,237,219		695,273	939,266		243,993	

Thresholds for Action in Other NDU's

The following definitions are paraphrased from the LLOWG Memorandum of Understanding:

1. If a **large amount** of surplus old and interior forest exists within the NDU/BEC (200% surplus or >5000 ha surplus), licensees can proceed with planned and new development with no communication or interaction required with other signatory licensees.
2. If a **moderate amount** of surplus old and interior forest exists within the NDU/BEC (150% surplus or 1000-5000 ha), licensees can proceed with planned and new development with little communication or

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

- interaction expected. However, if a large amount of new development is planned prior to the next updating of LOWG data, the licensee will query other licensees in the unit to establish whether the combination of harvest activities will result in a deficit, and determine a means to resolve the deficiency.
- If only a **small amount** of surplus old and interior forest exists within the NDU/BEC (<150% or <1000 ha), licensees may only proceed with planned development (that which has already been included in the most recent LOWG analysis). If a deficiency was forecast due to new harvest planning, the proponent would either resolve the deficiency with other signatory licensees in the unit, or develop and seek approval from the applicable Ministry for a recruitment strategy.
 - Where a **deficiency** in old or interior forests exists within the NDU/BEC, licensees will not apply for new cutting permits until the deficiency is resolved, or a recruitment strategy is approved for the unit.

Table 2: TFL30 - Old Forest by Natural Disturbance Unit Merged BEC (Legal Objective), as at April 1st 2013

Landscape Unit	NDT	BEC Subzones	Old Forest Stage (years)	Status (%) as at Apr. 1st 2013	Target %	Target Drawn Down by 2/3
Averil	3	SBSwk1, mk1	Old>140	25%	> 11%	>3.7%
	1	ICHvk2 ¹ (SBSvk)	Old>250	28.4%	> 13%	>4.3%
	1	ESSFwk2	Old>250	0%	> 19% (2026)	>6.3%
Seebach	2	SBSvk	Old > 250	2.2%	> 9%	>3%
	3	SBSwk1	Old > 140	52.0%	> 11%	>3.7%
	1	² ICHvk2	Old > 250	n/a	> 13%	>4.3%
	1	ESSFwk2, wc3	Old > 250	3.6%	> 19% (2031)	>6.3%
Woodall	2	SBSvk	Old > 250	0.5%	> 9%	>3.7%
	1	ICHvk2	Old > 250	5.9%	> 13% (2016)	>4.3%
	1	³ ESSFwk2, wc3 (wcp)	Old > 250	2.6%	> 19% (2071)	>6.3%

A timber supply analysis was recently conducted on TFL30. The results indicated very little area that is currently greater than 250 years in age, suggesting that either these types of stands do not naturally occur, they occurred only on more productive sites within the THLB and that many of these sites have been harvested, or that the inventory is not accurately representing these stands. As the first two possibilities would be very difficult to test, an inventory analysis was completed to test the third possibility. This analysis indicated that a wide range of individual tree ages exist in stands with an inventory age of 120 and greater, and that these stands generally contain trees that are substantially older than the inventory age. A consulting landscape ecologist reviewed the analysis and recommended the following:

- Stands with an adjusted inventory age of 140 and greater should be used to meet old seral stage requirement for the purpose of timber supply modeling and if spatial identification of old forest areas are conducted then 120 – 140 yr old stands should be used if these stands can help form a large contiguous area; and
- When the VRI is updated, Canfor should explore opportunities to use tree ages within a stand to create a separate attribute that reflects structural stage and that if trees are present that are over 200 yrs than these should be assigned to a “old forest” structural stage and that these stands be used to meet the old seral requirement.

As of November 2013, Canfor is in the public and First Nations review and comment stage of proposing an amendment to its Forest Stewardship Plan to implement the first part of this recommendation, via spatial identification of Draft Old Growth Management Areas (OGMA's) on TFL30, using the stand age of 140 years to identify old forest characteristics. Stands that are 120 to 140 years of age may be included in the Draft OGMA's if the younger stands help to form a large contiguous area.

¹Note: BEC overlays indicate the presence of SBSvk within the Averil Landscape Unit, rather than ICHvk2. Therefore, the percentage of Old Forest in the SBSvk is reported in the above table.

²Note: BEC overlays do not indicate the presence of ICHvk2 within the Seebach Landscape Unit.

³Note: BEC overlays indicate the presence of ESSFwcp within the Woodall Landscape Unit.

Indicator 1.1.3(b) Forest area by seral stage or age class (young patch)

Indicator Statement	Target and Variance
Maintain a variety of young patch sizes in an attempt to approximate natural disturbance	Target: As per the "Landscape Biodiversity Objectives for the PG TSA" (PG District); and to trend towards the achievement of the young forest patch size targets by NDU as per Table in the SFMP Variance: As per Targets.
Was the Target Met? No	
Action Plan: As presented in text and tables below	

The indicator addresses the pattern of young forest patches distributed across the landscape, where young forests are defined as stands 0 to 20 years of age. In order to remain within the natural range of variability of the landscape and move toward sustainable management of the forest resource, it is important to develop and maintain young patch size targets based on historical natural disturbance patterns. This indicator monitors the consistency of harvesting patterns compared to the natural patterns of the landscape.

Table 3: PG DFA - Young Patch Distribution

PATCH SIZE	Current Status as of March 31st 2010 (to be updated next in 2015)					Future Patch Size Trending
	< 50	50-100	100 - 1000	> 1000	Total	
Moist Interior Plateau Target	5%	5%	20%	70.0%	100%	Target larger patches
PG (ha)	11,642	13,941	27,615	140,977	194,175	
PG (%)	6.0%	7.2%	14.2%	72.6%	100.0%	
Moist Interior Mtn Target	20%	10%	30%	40%	100%	Trend toward small / larger / large patches
PG (ha)	590.5	1,376.6	1,277.6	1,301.2	4,546	
PG (%)	13.0%	30.3%	28.1%	28.6%	100.0%	
McGregor Plateau Target	10%	5%	45%	40%	100%	Trend toward larger / Large patches
PG (ha)	4,919	8,903	15,269	15,714	44,804	
PG (%)	11.0%	19.9%	34.1%	35.1%	100%	
Wet Trench Valley Target	20%	10%	60%	10%	100%	Trend toward small / larger / large patches
PG (ha)	7,766	11,472	19,751	3,163	42,152	
PG (%)	18.4%	27.2%	46.9%	7.5%	100%	
Wet Trench Mtn Target	20%	10%	60%	10%	100%	Trend toward small / larger patches
8463)PG (ha)	2,410	4,917	5,934	2,403	15,664	
PG (%)	15.4%	31.4%	37.9%	15.3%	100%	
Wet Mtn Target	20%	10%	60%	10%	100%	Trend toward small / larger / large patches
PG (ha)	2,833	6,929	6,999	1,294		
PG (%)	15.7%	38.4%	38.8%	7.2%	100%	

According to the 5 year patch analysis results delivered in 2011, one NDU within the PG District does not meet the trending rules as agreed to by the LLOWG under the rules of the Prince George Landscape Biodiversity

Order. As the Wet Mountain NDU does trend toward the targets, the following rationale was developed by the LLOWG for this NDU:

The rationale for not trending towards the target within the Wet Mountain NDU can be broken into the following categories:

Harvest Activity:

Harvesting within the Wet Mountain NDU was limited to the first four years (2004 to 2007), after which no further harvesting took place. The primary reason for this, was that during these initial years, mountain pine salvage was taking place elsewhere in the Timber Supply Area. During 2007, harvesting within this area stopped as most of the remaining volume is non pine species. As harvesting within the TSA was focused on mountain pine beetle (MPB) salvage, and MPB salvage operations within the Wet Mountain NDU were limited, the ability to manage for the Order's patch size objective was in itself very limited.

Conflicting Management Objectives:

As noted above, with the current harvest priorities focused on the mountain pine beetle killed timber, managing for patch size has, to a certain degree, become a conflicting management objective.

When taking into consideration the multitude of constraining objectives (i.e. visual management, species at risk and midterm timber supplies), the ability to manage for patch size becomes increasingly difficult. In addition, it has been a major focus for Government as well as Licensees to salvage as much MPB killed timber as possible. In doing this, patch distribution becomes more of a function of species distribution. With the recently announced Annual Allowable Cut (AAC) partition within the PGTSA (January 2011), the licensees' ability to manage for the patch size objective has become even more of a challenge.

Strategy to Achieve Objective

As already noted, with the recent partition announcement within the PGTSA, impacts to patch size will mainly be a result of natural occurrences (i.e. young patches aging and moving out of the "young" category). Therefore, trends within this NDU may not be influenced by harvesting activities until late in the next reporting period (2010–2015) or quite possibly not until the reporting period after that (2015–2020) when harvesting switches back to primarily green timber.

Table 4: TFL30 DFA - Young Patch Distribution, 2012/13

Landscape Unit	Patch Size Category	Patch Size Class (ha)	Target Distribution Range (%)	2004 Status (%)	2006 Status (%)	2012 Status (%)	2013 Status (%)	Trend:	Actions:
Averil	Small	<40	10-20	6.5	9.5	11.2	11.2	Achieving	Create more large patches to offset medium - without creating XL patches. Conduct annual analysis to determine re-distribution and to ensure categories trend towards target ranges.
	Medium	40-249	10-20	46.3	56.0	51.5	42.8	Toward	
	Large	250-1000	60-80	32.7	26.9	17.4	27.9	Toward	
	Extra Large	>1000	0	14.4	7.6	20.0	18.2	Toward	
Seebach	Small	<40	30-40	4.8	3.8	9.4	12.2	Toward	Create a few more small patches

	Medium	40-79	30-40	17.2	17.2	39.3	41.8	Away	Create more large patches to offset medium - without creating XL patches. Conduct further analysis to determine re-distribution and to ensure categories trend towards target ranges.
	Large	80-250	20-40	29.1	33.4	40.2	34.7	Achieving	
	Extra Large	>250	0	48.9	45.7	11.1	11.3	Away	
Woodall	Small	<40	30-40	5.4	13.7	22.7	22.9	Toward	Create more large patches to offset medium, conduct further analysis to determine re-distribution and to ensure categories trend towards target ranges.
	Medium	40-79	30-40	19.6	30.8	61.3	55.4	Toward	
	Large	80-250	20-40	29.3	16.2	16.0	21.7	Achieving	
	Extra Large	>250	0	45.6	39.4	0.0	0.0	Achieving	

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	<p><u>Target:</u> Average of 7% annually for blocks harvested within the DFA, with a minimum of 3.5%</p> <p><u>Variance:</u> For BCTS: As retention areas may relate to more than one cut block within a timber sale license, the minimum retention on one block may be as low as 0% as long as the average on the TSL is 7%.</p>
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.

Retention levels in each block are documented in the associated Site Plan, recorded in the Licensee/ BCTS database systems and reported in RESULTS (Ministry of Forests and Range data base) on an annual basis.

The current status for average stand level retention for all cutblocks > 15ha with completed harvesting between April 1, 2012 and March 31, 2013 in the DFA is found in Table 5.

Table 5: Stand Level Retention in Harvested Areas, 2012/13

DFA	Gross Block Area (ha)*	Associated Total Retention (ha)**	Average % Retained	Total Number of Blocks	Blocks Achieving 3.5% Min. ***	% of Blocks Achieving 3.5% Minimum
Prince George District	5,828.4	611.9	11.2%	78	78	100%
TFL30	1,329.0	164.3	12.4%	21	21	100%
TOTAL	7,157.4	776.2	11.5%	99	99	100%

* Only blocks >15 ha with completed harvesting measured

** Associated total retention includes wildlife tree patches, riparian and dispersed tree retention

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

Indicator Statement	Target and Variance
Number of non-conformances where forest operations are not consistent with riparian management requirements as identified in operational plans	Target: 0 Variance: 0
Was the target met? Yes	

Riparian management areas provide opportunities for connectivity of forested cover along waterways, which are generally areas with high value for wildlife habitat and movement. Operational plans influenced by riparian areas contain site specific commitments that range from 100% protection to 100% removal of merchantable trees, generally with efforts to manage existing understory trees and shrubs.

Canfor completed harvesting on 127 blocks during the reporting period, with no incidents relating to riparian requirements on any of the blocks.

Indicator 1.2.1 Degree of habitat protection for selected focal species, including species at risk**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 current Best Management Practices for Species of Management Concern	Target: 100% Variance: 0%
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.

Canfor currently has 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.

Table 6: Forest Operations Consistent with Species at Risk and Sites of Biological Importance, 2012/13

DFA	Number of forest operations with management strategies for Species of Management Concern					Forest operations consistent with identified strategies	% in DFA*
	Planning / Permitting / Fieldwork	Roads	Harvesting	Silvi-culture	Total		
PG District	3	0	0	0	3	3	
TFL30	4	0	0	0	4	4	
TOTAL	7	0	0	0	7	7	100%

* = (# of operations in accordance with identified strategies/ total operations with Species at Risk management strategies) X 100

WEE268 and SAL134 – Western Toads were sighted during block layout in July 2010 and June 2011 respectively. In accordance with Western Toad management strategies, proximal riparian features (wetlands and non-classified drainages) were associated with and protected by reserves, to protect the required habitat elements for this species.

PEL346 – This block contains the blue-listed SBSdw2-07 site series, which is potentially linked to the PISb – Red Stemmed Feathermoss Plant Community. At the time of field layout, the site was assessed, and a Species at Risk Conservation Decision Key was completed. As the Decision Key resulted in a ranking of “marginal conservation value” for the site, no conservation strategies were required and it was included within the harvest area.

Four blocks in TFL30 (West McGregor operating area) were predicted to contain a rare ecosystem site series. On one of the blocks, it was determined to be a poor representation of the SBSwk1-10 site series as it was estimated to make up 10% of a complex with SBSwk1-07 and -08; therefore, it was included in the harvest area as per identified strategies. On the other three blocks, the rare site series were encompassed within wildlife tree patches and external reserves.

Indicator 1.2.3 Proportion of regeneration comprised of native species

Indicator 1.3.1 Genetic diversity (*not a core indicator*)

Indicator Statement	Target and Variance
Artificial regeneration will be consistent with provincial regulations and standards for seed and vegetative material use	Target: 100% Variance: -5%
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 7 details the areas planted within the DFA in accordance with the Chief Forester's Standards for Seed Use for this reporting period.

Table 7: Compliance with Chief Forester's Standards for Seed Use, 2012/13

DFA	Total Area Planted (ha)	Area Planted in Accordance with Chief Forester's Standards* (ha)	Total % DFA**
PG (District)	7,366.3	7,311.8	99.3%
TFL30	251.8	251.8	100.0%
TOTAL	7,618.1	7,563.6	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

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 protected areas and sites of biological significance as contained in operational plans	Target: 100% Variance: 0%
Was the target met? Yes	

While ecosystem conservation is the coarse-filter approach to biodiversity management, species diversity is the fine-filter approach. For most species, forest managers can influence habitat only, not species populations. To account for the degree of habitat protection for selected focal species, including at risk species, this indicator

looks at the proper execution of operational plans where those plans contain management strategies for sites of biological significance.

Licensees participate in higher level and strategic planning that has delineated a series of protected areas (i.e. parks, ecological reserves) and draft old growth management areas within the DFA. This achieved the geographic and ecological goals of provincial Protected Areas Strategies (PAS), providing representation of the cross-section of ecosystems and of old forest attributes. Ecosystems of special biological significance have generally been given a high priority for inclusion in the protected area strategy. Timber harvesting, mining and hydroelectric development are usually not permitted within protected areas and other resource development activities, such as grazing and commercial tourism development, are permitted only in specified areas and under strict guidelines.

Table 8: Proportion of Identified Sites with Implemented Management Strategies, 2012/13

Category	# of forest management activities with prescribed management strategies for:	# of forest management activities consistent with management strategies for:
Protected areas	0	0
Sites of Biological Significance	1	1
Totals	1	1
Total %		100%

One block harvested during the reporting period (GOV231) is adjacent to Mule Deer Ungulate Winter Range, which is protected by Order (UWR #7U-013). Block layout and harvesting was conducted in accordance with the requirements of the Order; it was managed such that an external reserve on GOV231 has a slight overlap with the Range, and no harvesting or roadbuilding occurred within the Range.

Indicator 1.4.2 Protection of identified sacred and culturally important sites

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 forest values, knowledge and uses considered in forestry planning processes	Target: 100% of known forest values, knowledge and uses considered Variance: 0%
Was the target met? Yes	

Meaningful relationships and open communication with local Aboriginal communities help to ensure that areas of cultural importance are managed in a way that retains their traditions and values. This indicator recognizes the importance of managing and protecting culturally important resources and values during forestry operations. Aboriginals, with the benefit of local and traditional knowledge, may provide valuable information concerning the specific location and use of these sites as well as the specific forest characteristics requiring protection or management. The intent of the indicator is to manage and/or protect those truly important sites, thus there is a degree of reasonableness in identifying the sites.

Table 9: Percent of Identified Aboriginal Forest Values, Knowledge and Uses Considered, 2012/13

	# of Aboriginal forest values, uses & knowledge gathered during planning process	# of Aboriginal forest values, uses & knowledge considered during planning process
Knowledge	0	0
Uses	1	1
Values	0	0
Total	1	1
Total %		100%

Canfor staff met or corresponded with various First Nations throughout the reporting period, but no specific forest values, uses and knowledge were gathered during the planning process as a result of these interactions.

Features are more frequently identified by field staff or through archaeological impact assessments (AIA's). Management strategies included avoidance (ie. moving the harvest boundary to exclude culturally modified trees – CMT's), or stubbing or harvesting CMT's if they have been attacked by mountain pine beetle. In all instances, AIA's and proposed management strategies are referred to the relevant First Nations.

On one block harvested during the reporting period (MUS039), an Archaeological Impact Assessment had identified moving the harvest boundary at least 10 metres away from the Duzcho/Stuart-McLeod Lake Pack Trail. As there were also several clusters of culturally modified trees associated with the Trail, the harvest boundary was moved 30 metres to avoid both the modified trees and the Trail. On another block (PEL346), an area was identified as having high archaeological potential by a Preliminary Field Reconnaissance conducted by an archaeological consultant. This area was excluded from harvest via location of an external reserve.

Indicator 2.1.1(a) Reforestation success (regeneration delay)

Indicator Statement	Target and Variance
The regeneration delay, by area, for stands established annually	<u>Target:</u> 100% of Net Area Reforested (NAR) regenerated within 3 years (artificial) and 6 years (natural) from harvest commencement. <u>Variance:</u> 0%
Was the target met? Yes	

Prompt reforestation of harvested areas is a major component of sustainable forest management. Prompt reforestation ensures that the productive capacity of the forest land base to grow trees is maintained. Promptness also aids in providing young trees a head start against competing vegetation, helping to reduce the need for manual or chemical brushing treatments.

As is demonstrated in Table 10 during this reporting period, Canfor met the target of regenerating the Net Area to be Reforested within 3 years of harvest commencement. As all the areas were subject to planting (artificial regeneration), natural regeneration is not reported.

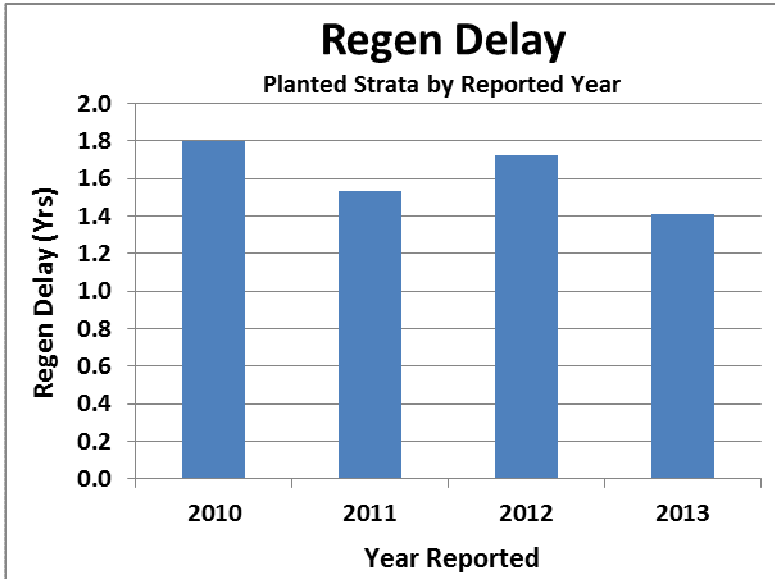
Canfor's average time (weighted by area) was 1.4 years from harvest start date to declaration of regeneration delay met.

Table 10: Percent of area regenerated within 3 years after the commencement of harvesting

DFA	Harvesting (ha) on NAR commenced from April 1, 2009 to March 31, 2010	Of the area harvested, net area regenerated (ha) * by reporting year (2012/13)	% in DFA**
PG District	10,391.7	10,391.7	
TFL30	294.6	294.6	
TOTAL	10,686.3	10,686.3	100.0%

* Area qualified as regenerated as soon as planting takes place

** % = (Total area regenerated/ total area harvested) X 100



Indicator 2.1.1(b) Reforestation success (free growing requirements)

Indicator Statement	Target and Variance
The percent of block area that meets free growing requirements as identified in site plans	<u>Target:</u> 100% <u>Variance:</u> 0%
Was the target met? Yes	

This indicator measures the percentage of harvested blocks that meet free growing obligations across the DFA. A free growing stand is a stand of healthy trees of a commercially valuable species, the growth of which is not impeded by competition from plants, shrubs or other trees (BC MOF 1995b). A free growing assessment is conducted on stands based on the time frame indicated by the site plan. If a survey indicates that the stand has not achieved free growing status by the required date, corrective actions will be prescribed immediately in order to remedy the situation while still meeting the late free growing deadline.

While this percentage is an important legal requirement, it is also important for sustainable forest management. Stands that meet free growing standards are deemed to have reached a stage where their continued presence and development is more assured. They are of a stand density, health, and height that make them less vulnerable to competition and more likely to reach maturity. Producing a free to grow stand means that the forest ecosystem will continue to evolve. It means that carbon sequestration will also continue, locking up additional green house gases as cellulose in the growing plantation.

For the reporting period of April 1, 2012 to March 31, 2013 the target for this measure was met as demonstrated in Table 11.

Table 11: Cut Block Area that Meets Free Growing Requirements as Identified in Site Plans

DFA	Cut Block Area Required to Meet Late Free Growing Status (ha)	Cut Block Area Meeting Free Growing Status (ha)	% in DFA*
PG District	5,736.3	5,736.3	100%
TFL30	1,044.0	1,044.0	100%
TOTAL	6,780.3	6,780.3	100%

* % = (Cut block area achieving free to grow status/ cutblock area required to meet free to grow status) X 100

Indicator 2.2.1(a) Additions and deletions to the forest area

Indicator Statement	Target and Variance
The % of gross land base in the DFA converted to non-forested land use through forest management activities	<u>Target:</u> <3% of the gross land base in the DFA <u>Variance:</u> 0%
Was the target met? Yes	

Forested land is converted to non-forested land as a result of forest operations through the development of permanent roads, bridges, landings, gravel pits and other similar structures in order to provide timber harvesting access. These structures remain in place after forest operations are complete. As roads are constructed, the ability of the landbase to support forests that contribute to ecosystem diversity, productivity as well as soil and water conservation is either eliminated or reduced. Minimizing the loss of total forest landbase contributes to the sustainable forest management of the forest ecosystem for the DFA.

Table 12: Percentage of Gross Land Base in the DFA converted to Non-Forest Land Use Through Forest Management Activities (2013)

Gross Area = 1,510,738 ha	Current Status	Forecast Future Status ¹
Ha	33,802	50,520
Percent of Gross Area	2.2%	1.9%

¹ Future Status is based on historic road construction of approximately 500 ha of roads per year, over a period of 20 years.

The areas in Table 12 are significantly different from those in 2011/12 report and the July 2012 SFM Plan, as Table 12 has been updated to reflect the removal of BCTS's operating area due to their departure from the Plan.

Indicator 2.2.2 Proportion of the calculated long-term sustainable harvest level that is actually harvested

Indicator Statement	Target and Variance
Percent of volume harvested compared to allocated harvest level	<u>Target:</u> 100% over 5 years <u>Variance:</u> +10%
Was the target met? Pending end of cut control periods	

To be considered sustainable, harvesting a renewable resource such as timber cannot deplete the resource on an ecological, economic or social basis. During the Allowable Annual Cut (AAC) determination, various considerations are examined including the long term sustainable harvest of the timber resource, community stability, wildlife use, recreation use, and the productivity of the DFA. The AAC is generally determined every five years by the Chief Forester of British Columbia, using extensive data and forecasts to assess the many resource values that need to be managed. On behalf of the Crown, the Chief Forester makes an independent determination of the rate of harvest that is considered sustainable for a particular Timber Supply Area (TSA). The Prince George DFA comprises about 44% of the larger Prince George TSA area.

The harvest level for a TSA must be met within thresholds that are established by the Crown. Maintaining the rate of harvest consistent with what is considered by the province to be sustainable ecologically, economically and socially within the DFA is considered sound forest management. The final review for this measure will be undertaken at the end of the cut control period.

Table 13: Cut Level Volumes Compared to Apportionment across the Timber Supply Area

Licence	Cut Control Period Start	Number of Years into Cut Control Period	5 year Total of AAC Volume	Total Volume Applied Against Cut Control	Overall % of 5 Year Cut Control for DFA**
A18165	2010	3	5,524,290	429,727	7.8%
A18157	2011	2	2,941,115	857,546	29.2%
A40873	2012	1	7,988,855	2,430,121	30.4%
TFL30	2010	3	1,535,190	346,859	22.6%

*Actual volume cut / 5 year volume apportioned

**% = (Actual cut level volume / AAC volume apportioned) X 100

Indicator 3.1.1 Level of soil disturbance

Indicator Statement	Target and Variance
Percent of harvested blocks meeting soil disturbance objectives identified in plans	Target: 100% of blocks meet soil disturbance objectives Variance: 0%
Was the target met? Yes	

Conserving soil function and nutrition is crucial to sustainable forest management. To achieve this, forest operations have limits on the amount of soil disturbance they can create. Soil disturbance is expected to some extent from timber harvesting or silviculture activities, but these activities are held to soil conservation standards outlined in site plans (where they are more commonly known as "soil disturbance limits"). The site plan prescribes strategies for each site to achieve activities and still remain within acceptable soil disturbance limits.

As shown in the table below, 100% of forest operations conducted between April 1, 2012 and March 31, 2013 within the DFA are consistent with soil conservation standards as identified in the operational plans.

Table 14: Harvested Blocks Meeting Soil Disturbance Objectives Identified in Plans, 2012/13

Forest Operations Consistent with Soil Conservation Standards		
DFA	Number of Blocks Harvested	
PG District & TFL30	114	
TOTAL	114	100%

* % = (Operations completed in accordance with soil conservation standards / total operations completed) X 100

Table 15: Trend of Harvested Blocks Meeting Legal Soil Disturbance Objectives

	2008/09 Status	2009/10 Status	2010/11 Status	2011/12 Status	2012/13 Status
PG	100%	100%	100%	100%	100%
TFL30	100%	100%	100%	100%	100%

Indicator 3.1.2 Level of downed woody debris

Indicator Statement	Target and Variance
Percent of cut blocks where post harvest CWD levels are within the targets contained in Plans	<u>Target:</u> 100% of blocks harvested annually will meet targets <u>Variance:</u> -10%
Was the target met? Yes	

Coarse woody debris (CWD) is defined as material with the following characteristics and dimensions: minimum of 2.0 meters in length and greater than 7.5 cm in diameter at one end, in all stages of decay and consists of above-ground logs, exposed roots and large fallen branches (FPPR Sec.68. 2005). CWD is a vital component of a healthy functioning forest ecosystem, providing habitat for plants, animals and insects. It is an important source of soil nutrients and aids in soil moisture retention. Targets for CWD requirements are identified in operational plans, typically the site plan for each specific cutblock.

Canfor has met the target of 100% consistency with CWD requirements in operational plans for the operating period of April 1, 2012 to March 31, 2013 (Table 16). Canfor will continue to implement contractor training, pre-work checklists, interim inspections, and final reviews to ensure targets continue to be met.

Table 16: Percent of Cut Blocks Where Post Harvest Coarse Woody Debris Levels are Within Targets Contained in Plans

Licensee	Total Number of Blocks Harvested with CWD Strategies*	Number of Blocks Harvested Consistent with CWD Strategies	Overall %**
Canfor	114	114	100%

* Blocks must be > 15 ha ** % = (Blocks harvested in accordance with prescribed strategies/total blocks harvested with CWD strategies) X 100

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

Indicator Statement	Target and Variance
The percentage of watersheds with active operations that have had a watershed assessment completed	<u>Target:</u> 100% <u>Variance:</u> 0%
Was the target met? Yes	

Water quality and quantity can be affected by stand-replacing disturbances (human and natural-caused). The effects are normally highest in the initial post-disturbance years and diminish over time as regenerating forest cover is established. The critical threshold at which the disturbance begins to affect water values varies according to topography, soil properties, vegetation types, and climate. Certain watersheds can be classified as more sensitive to the impacts of disturbance either because of their environmental and climatic attributes or because of their inherent value to aquatic life and communities that are dependent on the water. The peak flow of a watershed is directly influenced by the amount of area that is recently harvested or otherwise recently disturbed (Equivalent Clear-cut Area or ECA). These disturbed areas accumulate more snow and subsequently can deliver more water as the snow melts more rapidly in the spring.

Predicting the potential impacts of increased peak flow in a particular watershed requires an assessment of the factors that contribute to the sensitivity of the watershed. Watersheds in the northern interior of British Columbia have a wide range of sensitivity to peak flows. The sensitivity of a watershed can be evaluated by examining five parameters: peak flow buffering (lakes and wetlands), terrain stability, watershed relief, channel pattern and channel stability. A full assessment by a qualified professional may be warranted in some situations but the process is time consuming and costly. Employing this approach across the DFA would be cost prohibitive. The process described here can be completed as part of the planning for proposed harvesting in the DFA. It involves evaluating the risk to a particular watershed.

Where the Peak Flow Index (PFI) is expected to be above the threshold value as a result of a combination of past and proposed harvesting, licensees and BCTS will initiate a watershed sensitivity analysis as part of a risk

assessment procedure (Dobson 2009). This assessment will result in a risk rating for individual watersheds. If a the watershed risk ranks high through this process, a qualified professional will be consulted to provide a more thorough review and recommendations on proposed harvesting and road construction.

Table 17: Active Watersheds with Risk Evaluation Completed, 2012/13

DFA	Total Number of Watersheds With Active Operations	Total Number of Watersheds with Assessment Completed	DFA%
PG District	25	25	
TFL30	9	9	
TOTAL	34	34	100%

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

Indicator Statement	Target and Variance
The percentage of active operations within high-risk watersheds that implement the recommendations of a hydrologic assessment	<u>Target:</u> 100% <u>Variance:</u> 0%
Was the target met? No	
Action Plan: A qualified registered professional will be engaged in 2013 to review the high risk watersheds within Canfor's operating areas in the DFA, with the intent of implementing the resulting recommendations.	

Table 18: Percent of Active Operations Within High-Risk Watersheds that Implement the Recommendations of a Hydrologic Assessment

DFA	Total number of active operations within high risk watersheds	Number of high risk watersheds that have had a watershed assessment completed by a professional	Number of these operations that had implemented the recommendations of a hydrologic assessment	DFA%
PG District	2	0	0	0%
TFL30	0	n/a	n/a	n/a

During the 2012/13 reporting period, blocks were harvested within two watersheds that are deemed sensitive: the Government and Jacks. The current ECA in these watersheds is slightly over the target ECA. No further harvesting is planned within the Jacks area as it was subject to significant mountain pine beetle attack and salvage harvesting, which has been completed. As future operations are planned within the Government watershed, this will be the highest priority for assessment by a qualified registered professional.

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

Indicator Statement	Target and Variance
Percentage of high hazard drainage structures in watersheds with identified water quality concerns that have mitigation strategies implemented	<u>Target:</u> 100% <u>Variance:</u> 0%
Was the target met? Yes	

Sedimentation can damage water bodies by degrading spawning beds, increasing turbidity, and reducing water depths. Forest management activities may create unnatural inputs of sedimentation into water bodies. In addition to the effects of roads, sedimentation may also occur from slope failures as a result of forestry activities. Once sedimentation occurrences are detected, mitigating actions must be taken to stop further damage and rehabilitate the site. Tracking these mitigation actions contributes to sustainable forest management by evaluating where, when and how sedimentation occurs and the monitoring results of mitigation actions. Forestry personnel detect sedimentation occurrences during stream crossing inspections, road inspections, silviculture activities, and other general activities. To ensure consistency and quality of monitoring and mitigation, Canfor staff refer to an internal document, "Cutting Permit and Road Permit Erosion Control and Temporary Deactivation Standards", to guide their actions.

100% of the unnatural known sediment occurrences had mitigation actions taken as shown in Table 19.

Table 19: High Hazard Drainage Structures with Mitigation Strategies Implemented

DFA	Total Number of Unnatural Known Sedimentation Occurrences	Total Number of Mitigation Actions Required	Total Number of Mitigation Actions Taken	% DFA *
PG District	1	1	1	
TFL30	0	0	0	
TOTAL	1	1	1	100%

* % = (Total number mitigation actions taken/ total number of mitigation actions required) X 100

In 2012/13, eight structures were installed within the PG District portion of the DFA, and four within TFL30; however, none were installed within high risk watersheds.

During the Spring 2012 internal audit, a minor non-conformance was reported, as sedimentation resulting from the removal of a temporary bridge was observed on one block (WEE274). To address this finding, Operations staff conducted a Root Cause Analysis and completed the following actions:

- Canfor's harvesting supervisors received additional training on temporary bridge installation and deactivation in July 2012;
- Sediment and Erosion Control Training was delivered to harvesting contractors and supervisors (office and field components) in August 2012;
- Canfor's Roads and Major Structures Supervisor carried out individual Contractor Bridge Installation training throughout the summer of 2012, via presence on site during actual bridge installations; and
- A detailed document was developed and made available to all harvesting supervisors in BC and Alberta (Crossing Installation/Deactivation & Assurance Statement).

Indicator 4.1.1(a) Net Carbon Uptake

Indicator Statement	Target and Variance
Areas with stand damaging agents will be prioritized for treatment	<u>Target:</u> 100% <u>Variance:</u> -10%
Was the target met? Yes	

Prioritizing stands with damaging agents for treatment is part of an overall forest health strategy. Treatment of stands with damaging agents may take several forms. These may include silviculture treatments on plantations with blister rust problems or falling and burning individual stems to control bark beetles. However, the main treatment employed to manage stand damaging agents is harvesting dead or dying stands, followed by prompt reforestation where required.

Table 20 shows the areas with stand damaging agents that were prioritized for treatment between April 1, 2012 and March 31, 2013 within the DFA.

Table 20: Areas with Stand Damaging Agents Prioritized for Treatment

DFA	Total Area with Stand Damaging Agents Identified	Area with Stand Damaging Agents that are Prioritized for Treatment (ha)	% for DFA*
PG District	811,710.1	811,710.1	
TFL30	0	0	
TOTAL	811,710.1	811,710.1	100%

* % = (Area with damaging agents prioritized for treatment / total area with stand damaging agents identified) X 100

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
Conformance with strategies for non-timber benefits identified in Plans	<u>Target:</u> No non-conformances for site level plans <u>Variance:</u> 0
Was the target met? Yes	

Non-timber benefits can be assessed on a harvest unit-specific basis by assessing operational plan commitments designed to reduce any potential impact of the operation on other forest users and stakeholders. These plan commitments can include specific actions to assist ranchers, trappers, guides, resort owners, mineral rights holders, private land owners, etc. to manage their licensed obligations on shared public forest land. Actions within plans can also involve public expectations related to forest access, visual quality or specific recreational or ecotourism opportunities. Additionally, plan commitments can also include actions to manage or protect sites that are culturally important, sacred or spiritual to local Aboriginals, berry pickers and gatherers of other food, fibre or medicinal plants.

Strategies which were successfully implemented in 2012/13 included additional retention around a commercial recreation tenured area, post-harvest access management to minimize access to a hunting camp, field confirmation that removal of bridges would not compromise the use of recreation trails, and access management relating to a range tenure holder's concerns.

Table 21: Conformance with Strategies for Non-Timber Benefits Identified in Operational Plans, 2012/13

Value	Canfor		
	Plans ¹	Non-conformances ²	Percent
Guide	2	-	100%
Lakeshore	0	-	-
Range	1	-	100%
Recreation	1	-	100%
Trapper	0	-	-
Tenure/Private land	0	-	-
Terrain	0	-	-
VQO	3	-	100%
Other	0	-	-
Total	7	-	100%

¹ - Plans that have commitments identified.

² - Plans that did not meet their commitments.

Indicator 5.2.1(a) Level of investment in initiatives that contribute to community sustainability

Indicator Statement	Target and Variance
Percent of money spent on forest operations and management in the DFA provided by North Central Interior suppliers and contractors	<u>Target:</u> >=90% of dollars spent in local communities (5 year rolling average) <u>Variance:</u> -5%
Was the target met? Yes	

In addition to the many biological and ecological benefits provided by forests, social and economic benefits are also provided by forest management. Forests represent not only a return on investment (measured, for example, in dollar value, person-days, donations, etc.) for the organization but also a source of income and non-financial benefits for DFA-related workers, contractors, and others; stability and opportunities for communities; and revenue for local, provincial, and federal governments.

This target measures the amount of spending in forest related activities that occur on the DFA by local contractors/suppliers. For the purposes of this target, a local contractor or supplier is defined as one that resides within or in the vicinity of the DFA. In the PG SFMP, the North Central Interior is defined as including communities from 100 Mile House to Mackenzie (south to north) and from Smithers to McBride (west to east).

As can be seen in Table 22, this target was achieved for the reporting period of 2012/13

Table 22: Forest Operations and Management Provided by NCI Suppliers/Contractors, 2012/13

Licensee	% Money Spent in NCI*	
	2011/12	2012/13
Canfor	97.0%	95.7%

*** % Money spent in NCI does not include taxes

Indicator 5.2.1(b) Level of investment in initiatives that contribute to community sustainability

Indicator Statement	Target and Variance
Number of donations to the local community - applies to Canfor only	<u>Target:</u> >=6 donations <u>Variance:</u> 0
Was the target met? Yes	

This indicator documents how Canfor provides economic and social benefits to the public over and above wages, taxes and stumpage fees through donations and involvement in local community organizations. Types of support opportunities within the local community vary from providing personnel, equipment and/or facilities, to providing cash and product donations. This is an important component of a community's economic and social stability, but it is also difficult to quantify as support opportunities often go unrecorded.

During the reporting period, Canfor donated to many recipients within the local community, including but not limited to the following:

- Prince George Community Foundation
- University of Northern British Columbia
- United Way of Northern BC
- Lakeland Tragedy Fund
- St. Vincent de Paul Society
- Salvation Army Family Services
- Habitat for Humanity
- Prince George Downtown Business Association
- School District #57
- Prince George Rivers Day Committee
- Prince George Chamber of Commerce

- The Prince George Iceman
- Yellowhead Rotary Club – Adventures in Forestry program (staff time)

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%
Was the target met? No	
Action Plan: Canfor works continually to improve on the logistics of delivering and tracking training to almost 90 staff members annually, The number of mandatory environmental and safety training courses varies according to position. For example, there are 19 mandatory courses for Canfor's Field Operations staff, whereas five courses are mandatory for accountants. The eight individuals not meeting the full training plan requirements are all full-time, primarily office-based staff. Supervisors will be reminded of their responsibility to ensure all staff members have received each mandatory course, and that this training is documented appropriately.	

Sustainable forest management provides training and awareness opportunities for forest workers as organizations seek continual improvement in their practices. Investments in training and skill development generally pay dividends to forest organizations by way of a safer and more environmentally conscious work environment. Assessing whether forest contractors have received both safety and environmental training is a direct way of measuring this investment. Additionally, training plans should be in place for employees of the forest organizations who work in the forest. Measuring whether the training occurred in accordance with these plans will confirm an organization's commitment to training and skills development.

Table 23: Training in Environmental & Safety Procedures in Compliance with Company Training Plans, 2012/13

	# of individuals required to receive environmental & safety training	# of individuals who received environmental & safety training	% of individuals trained according to plan
Canfor	89	81	91%
Contractors	26	26	100%
Total:	115	107	93%

Indicator 5.2.3 Level of direct and indirect employment

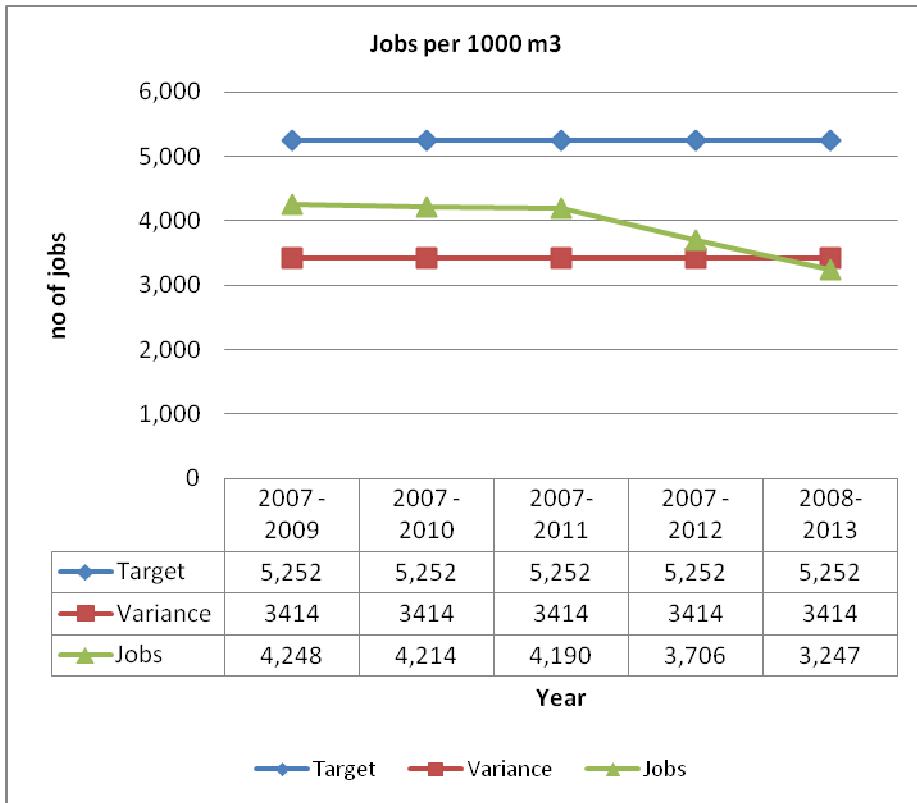
Indicator Statement	Target and Variance
Level of direct and indirect employment	<u>Target:</u> Cut control volume harvested, multiplied by most current local direct and indirect employment multiplier, as a five-year rolling average (5252) <u>Variance:</u> >=65% of the target (5252 jobs)
Was the target met? Yes	

Forests represent not only a return on investment (measured, for example, in dollar value, person-days, donations, etc.) for the organization but also a source of income and non-financial benefits for DFA-related workers, suppliers, local communities and governments.

Organizations contribute to direct and indirect employment within the region and to sustainable harvesting by adhering to their apportioned harvest volume within each respective TSA. Cut control regulations dictate the short-term harvest flexibility.

As per the following graph, the level of direct and indirect employment for 2012 is below target but within the acceptable variance. The number of generated jobs is forecast to drop below the acceptable variance within the

next five-year period (2008-2013) due to the shift in harvesting activities from the Prince George DFA to the Fort St. James DFA, in order to focus on harvesting mountain pine-beetle attacked stands.



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> >= number of realized opportunities from baseline assessment (3-year rolling average) <u>Variance:</u> -10% of baseline
Was the target met? Yes	

This indicator is focused on Aboriginal participation in the forest economy, evaluating licensees’ efforts to build capacity within Aboriginal communities on matters related to the forest industry. For the purposes of this indicator, a “realized” opportunity means timber sales licenses, direct employment, signed partnerships, joint ventures, co-operative agreements, memorandums of understanding or business contracts over a minimum value.

The following Aboriginal communities have interests in the DFA: Lheidli T’enneh First Nation, McLeod Lake Indian Band, West Moberly First Nation, Halfway River First Nation, Nak’azdli First Nation, Nazko First Nation, Lhtako Dene Nation (formerly Red Bluff Band), Lhoosk’uz Dene Government Administration, Saik’uz First Nation, and the Prince George Métis Community Association.

The baseline assessment is four realized opportunities (2011 data). The target is intended to recognize and respect that there may be occasions when Aboriginals, after being offered an opportunity, elect not to participate for a variety of reasons.

Table 24: Number of Opportunities for Aboriginals to Participate in the Forest Economy, 2012/13

Type of Opportunity	Number of Realized Opportunities in 2012/13	Number of Aboriginal Communities Involved in Realized Opportunities in 2012/13	3-year Rolling Average (note: 2012/13 constitutes the 3 rd year)
Manual Brushing	2		
Harvesting Contract	1		
Capacity Development	1		
Volume Contract	1		
Total	5		

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%
Was the target met? No	
Action Plan: One employee out of nine has not received Aboriginal awareness training within period of 2008-2012, although this individual did participate in a course offered in 2006. The required training will be completed by September 30 th , 2013.	

The first step toward respecting Aboriginal title and rights, and treaty rights is compliance with the law. Section 7.3.3 of the CSA Z809 Standard reinforces legal requirements for many reasons, including the reality that demonstrating respect for Aboriginal title and rights, and treaty rights, can be challenging in Canada's fluid legislative landscape. Therefore, it is important to identify these legal requirements as a starting point. It is important for companies to have an understanding of applicable Aboriginal title and rights, and treaty rights, as well as the Aboriginal interests that relate to the DFA.

Table 25. Number of Employees Receiving Aboriginal Awareness Training, 2008-2012

# of employees requiring training	# of employees receiving training	Percentage:
9	8	89%

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**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> >=3 approaches/Aboriginal community within the DFA, for 100% of management plans, as required <u>Variance:</u> None
Was the target met? Yes	

Open, respectful communication with local Aboriginal communities includes not only the organization understanding the Aboriginal rights and interests within their asserted traditional territory but for Aboriginals to understand the forest management plans of organizations. With this open dialogue, the two parties can then best work towards plans and operations that are mutually acceptable to both parties. The re-wording of the core

indicator statement to include the phrase “share interests and plans” is intended to demonstrate two-way communication, rather than one-way. The reference to “Aboriginal communities” corresponds to licensees interacting with the Natural Resources Office and Chief and Council (or equivalent positions).

For the purpose of this indicator, “management plans” include Forest Stewardship Plans (major amendments), TFL Management Plans, Pest Management Plans, block information sharing, and SFM Plans. “Clear understanding” is very difficult to measure, but will be considered as part of the continuum of relationship building between licensees and Aboriginal communities, and will be a qualitative measure based on the summary of interests and concerns. “Best Efforts” will consist of an initial attempt to contact by mail, a number of follow-up phone calls and an interest in meeting in person (if required).

Table 26: Evidence of Best Efforts to Share Interests and Plans with Aboriginal Communities, 2012/13

Aboriginal Community	2012/13 Status	
	# of Plans Shared	Forms of Communication Initiated
Lheidli T'enneh First Nation	12	Mailed letters & packages, emails, phone, face-to-face meetings
McLeod Lake (Tsekani) First Nation	8	Mailed letters & packages, emails, phone, face-to-face meeting
Nak'azdli Band	8	Mailed letters & packages, emails, phone, face-to-face meetings
Nazko Band	3	Mailed letters & packages, emails, phone, face-to-face meetings
Saik'uz First Nation	3	Letter, email
Halfway River First Nation	3	Letter, email
West Moberly First Nations	7	Mailed letters & packages, emails, phone, face-to-face meetings
Prince George Métis Community Association	Communications not yet initiated	

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, communicated through information-sharing and cultural heritage evaluations.	<u>Target:</u> 100% compliance with operational plans <u>Variance:</u> -0%
Was the target met? Yes	

Meaningful relationships and open communication with local Aboriginal communities help ensure that areas of cultural importance are managed in a way that retains their traditions and values. This indicator recognizes the importance of managing and protecting culturally important practices and activities during forestry operations. Aboriginals, with the benefit of local and traditional knowledge, may provide valuable information concerning the specific location and use of these sites as well as the specific forest characteristics requiring protection or management. The outcome of these discussions, and the means to manage/protect values and uses, are included in operational plans. The intent of the indicator statements are to manage and/or protect those truly important sites; thus, there is a degree of reasonableness in identifying the sites. The targets verify that consideration was given in plans, then follows through with assessing plan execution.

Table 26: Percent of Forest Operations in Conformance with Plans Developed to Address Aboriginal Forest Values, Knowledge and Uses, 2012/13

	Number of Instances Where Discussions Led to ID of Aboriginal Forest Values, Knowledge and Use that Required Specific Management or Protection	Number of Times Where Operational Plans Specified How Communicated Values, Knowledge and Use was Considered	% of Forest Operations in Conformance with Operational/Site Plans Developed to Address Aboriginal Forest Values, Knowledge and Use	Number of Requests Received from First Nations to Protect or Consider Site-Specific Management	Efforts to Accommodate
Canfor	0	0	n/a	0	n/a

Indicator 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

Indicator Statement	Target and Variance
Primary and by-products that are bought, sold, or traded with other forest-dependent businesses in the local area.	<u>Target:</u> Increasing number of purchase/sale/trade relationships <u>Variance:</u> +
Was the target met? Yes	

An economically and socially diverse community is often more sustainable in the long-term with its ability to weather market downturns of a particular sector. Support of efforts to increase diversity, the establishment of other enterprises and co-operation with other forest-dependent businesses and forest users is desirable.

Support for local communities through business relationships (defined for this indicator as purchases, sales, or trading of primary forest products and forest by-products) provides employment diversification and increased local revenue.

For the purposes of this target, local area is defined as including communities from 100 Mile House to Mackenzie (south to north) and from Smithers to McBride (west to east).

As this indicator is new to the SFMP as of July 2012, the following table will serve as the baseline to report in future years as to an increasing trend in purchase, sale and trade relationships with other forest-dependent businesses.

Table 27: Purchase, Sale and Trade Relationships with Other Forest-Dependent Businesses in DFA, 2012/13

Product	Number of opportunities by reporting period		Organizations (2012/13)
	2011/12	2012/13	
Log Sales	6	5	West Fraser, 550031 BC Ltd., Kermode Forest Products, Dunkley Lumber, BC Log Cabins, Conifex Mackenzie Forest Products Inc.
Log Purchase	5	6	Dollar Saver Lumber, Edgewater Holdings, Fortwood Homes, Lakeland Mills, Myatovic Brothers Logging, Winton Global
Pulp Log Purchase	3	12	0716324 BC Ltd., 0774748 BC Ltd., Carrier Lumber, City of Prince George, Double Bar H Ranch, EKO Logging, K & D Logging, Mackenzie Fibre, Sorine Winther Holdings, Summit Contracting,

			Surewood Forestry, TDB Consultants
Residual Fibre (Hog)	2	1	Edgewater Holdings Ltd.
Chips	1	1	Canfor Pulp Limited Partnership
Total	17	25	

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

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%
Was the target met? Yes	

BCTS and Canfor's first measure of success is the health and safety of their people. This philosophy is embraced and promoted from the mill floor to the executive offices. This commitment is reflected in the work practices and safety programs employed at all worksites.

All of BCTS and Canfor's forest operations are third party certified to a safety program that meets or exceeds provincial safety programs (the BC Forestry Safety Council's SAFE Certification program). Both parties have been SAFE certified since 2009.

Indicator 6.4.1 Level of participant satisfaction with the public participation process

Indicator Statement	Target and Variance
PAG established and maintained, and satisfaction survey implemented according to the Terms of Reference.	<u>Target:</u> PAG meeting satisfaction score of ≥ 4 <u>Variance:</u> 0
Was the target met? Yes	

The SFM Plan is an evolving document that will be reviewed for effectiveness and revised as needed with the assistance of the Public Advisory Group (PAG) to address changes in forest condition and local community values. Ensuring the continuing interest and participation of the PAG is an integral part of a dynamic and responsive SFM Plan. The ability of people to share information, discuss and solve problems, and set and meet objectives is key to achieving and maintaining meaningful public participation.

Table 28: Level of Participant Satisfaction with the Public Participation Process

	2008/09 Status	2009/10 Status	2010/11 Status	2011/12 Status	2012/13 Status
PG	4.4	4.1	4.2	4.5	4.0
TFL30 ¹	4.3	4.6	4.3		

¹ as of October 10, 2010 the TFL30 and PG PAGs merged into one PAG

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 (annual) <u>Variance:</u> None
Was the target met? Yes	

This indicator recognizes the importance of providing information and/or training opportunities to facilitate a more knowledgeable and effective Public Advisory Group (PAG). Members of the public provide local knowledge that contributes to the achievement of socially and environmentally responsible forest management. At times, public members may feel limited in their ability to contribute to discussions because they may lack the required technical forestry knowledge. Broadening this knowledge base enables better dialogue and helps contribute to balanced decisions and an SFM Plan acceptable to the majority of the affected public.

Table 29: Number of Educational Opportunities Delivered to the PAG

Reporting Period	Educational Opportunities Delivered to the PAG
2009/10	<ol style="list-style-type: none"> 1. Q&A session with Dave Bebb, KPMG auditor 2. Dr. Howie Harshaw, UBC – Public Opinion Survey results
2010/11	<ol style="list-style-type: none"> 1. Jeff Burrows, MNRO – PG TSA TSR 4 2. Dr. Greg Halseth, Canada Research Chair in Rural and Small Town Studies, UNBC – community development
2011/12	<ol style="list-style-type: none"> 1. Jim McCormack, Canfor – Canfor's Biodiversity Strategy 2. Neil Spendiff, Canfor - Brushing Treatments and use of Herbicides 3. Vince Day, Canfor - Seedling genetic diversity
2012/13	<ol style="list-style-type: none"> 1. Dr. Len Ritter – Professor Emeritus, School of Environmental Sciences, University of Guelph (toxicologist) – Glyphosate use, toxicity, and environmental interactions 2. PAG Field Tour – England Creek and TFL30 – riparian retention, silvicultural challenges, rare lichen species, caribou corridor, reserve maintained around plane wreck

Indicator 6.5.1 Number of people reached through educational outreach

Indicator Statement	Target and Variance
The number of people who attend the educational opportunities provided	<u>Target:</u> >=200 people and >=4 events <u>Variance:</u> -10
Was the target met? Yes	

Canfor is committed to working with directly affected stakeholders and members of the public on forest management issues and has a well-established history of participation in community meetings, including local planning processes. The sharing of knowledge with affected stakeholders contributes to informed, balanced decisions and plans acceptable to the majority of public. When informed and engaged, members of the public can provide local knowledge and support that contributes to socially and environmentally responsible forest management within the DFA.

Table 30: Number of People Reached Through Educational Outreach, 2012/13

Types of Opportunities	# of opportunities	# of attendees
PAG field tour	1	16
PAG meeting presentations	1	25
COFI Natural Resources Management Camp for high school students	1	25
Yellowhead Rotary Club's "Adventures in Forestry" program for high school students	1	32

Canadian Institute of Forestry's "Walk in the Woods" for elementary school students (part of National Forestry Week)	1	70
Association of BC Forest Professionals' 65 th AGM and Forestry Conference – high school student participation	1	28
UNBC Career Fair	1	100
Canada Day Seedling Giveaway, Fort George Park	1	30
Total opportunities	8	326

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
Was the target met? Yes	

Annual reporting of the Plan's performance measures to the advisory group and to the broader public provides an open and transparent means of demonstrating how issues of concern are being managed. It provides the public with an opportunity to respond to results and associated actions outlined in the annual SFM Monitoring report and make recommendations for improvement.

As per the July 2012 SFMP, the annual report is to be made publicly available by December 31st each year. The 2012/13 annual report was posted to Canfor's public website, and distributed to the Public Advisory Group members, by October 31st 2013.