Morice Sustainable Forest Management Plan



2014/15 Annual Report

Prepared by:

Canadian Forest Products Ltd. - Houston Division

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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
Indicator 1.1.2 Forest area by type or species composition	7
Indicator 1.1.3 Forest area by seral stage or age class (late seral)	7
Indicator 1.1.4(a) Degree of within-stand structural retention (stand-level retention)	8
Indicator 1.1.4(b) Degree of within-stand structural retention (block-level retention)	9
Indicator 1.1.4(c) Degree of within-stand structural retention (riparian management requirements)	9
Indicator 1.1.5 Degree of habitat connectivity (local indicator)	9
Indicator 1.2.1 Degree of habitat protection for selected focal species, including species at risk	10
Indicator 1.2.2 Degree of suitable habitat in the long term for selected focal species, including species at risk	10
Indicator 1.2.3 Proportion of regeneration comprised of native species	11
Indicator 1.3.1 Genetic diversity (not a core indicator)	11
Indicator 1.4.1 Proportion of identified sites with implemented management strategies	11
Indicator 1.4.2 Protection of identified sacred and culturally important sites	12
Indicator 2.1.1(a) Reforestation success (regeneration delay).	12
Indicator 2.2.1 Additions and deletions to the forest area	12
Indicator 2.2.2 Proportion of the calculated long-term sustainable harvest level that is actually harvested	12
Indicator 3.1.1 Level of soil disturbance	
Indicator 3.1.2 Level of downed woody debris	
Indicator 3.2.1(a) Proportion of watershed or water management areas with recent stand-replacing disturbance	
Indicator 3.2.1(b Proportion of watershed or water management areas with recent stand-replacing disturbance	
Indicator 4.1.1 Net Carbon Uptake	
Indicator 4.2 Forest Land Conversion	13
Indicator 5.1.1(b) Quantity and quality of timber and non-timber benefits, products, and services produced in the L	FA 14
Indicator 5.2.1(a) Level of investment in initiatives that contribute to community sustainability	14
Indicator 5.2.1(b) Level of investment in initiatives that contribute to community sustainability	14
Indicator 5.2.2 Level of investment in training and skills development	14
Indicator 5.2.3 Level of direct and indirect employment	15
Indicator 5.2.4 Level of Aboriginal participation in the forest economy	15
Indicator 6.1.1 Evidence of a good understanding of the nature of Aboriginal title and rights	16
Indicator 6.1.2 Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communi	ties
having a clear understanding of the plans	16
Indicator 6.4.3 Evidence of efforts to promote capacity development and meaningful participation for Aboriginal	
communities	16
Indicator 6.1.3 Level of management and/or protection of areas where culturally important practices and activitie	8
(hunting, fishing, gathering) occur	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	17
Indicator 6.3.1 Evidence that the organization has co-operated with other forest-dependent businesses, forest user	s, and
the local community to strengthen and diversify the local economy	17
Indicator 6.3.2 Evidence of co-operation with DFA-related workers and their unions to improve and enhance safe	ty
standards, procedures and outcomes in all DFA-related workplaces and affected communities	
Indicator 6.3.3 Evidence that a worker safety program has been implemented and is periodically reviewed and imp	roved
Indicator 6.4.1 Level of participant satisfaction with the public participation process	
Indicator 6.4.2 Evidence of efforts to promote capacity development and meaningful participation in general	
Indicator 6.5.1 Number of people reached through educational outreach	
Indicator 6.5.2 Availability of summary information on issues of concern to the public	19





Morice Timber Supply Area (Morice TSA and Lakes TSA form the Nadina Forest District) British Columbia, Canada.

Canadian Council of Forest Ministers' Criteria for SFM

- 1. Conservation of Biological Diversity
- 2. Maintenance and Enhancement of Forest Ecosystem Condition and Productivity
- 3. Conservation of Soil and Water Resources
- 4. Forest Ecosystem Contributions to Global Ecological Cycles
- 5. Multiple Benefits to Society
- 6. Accepting Society's Responsibility for Sustainable Development





Photos: hiway16.com.

1.0 Introduction

This is the 2014/15 Annual Report for the Morice Sustainable Forest Management Plan (SFMP), covering the reporting period of April 1, 2014 to March 31, 2015. The SFMP is a result of efforts of one major licensee (Canadian Forest Products Ltd.) and the public advisory group to achieve and maintain Canadian Standards Association (CSA) certification to the CSA Z809-08 standard¹. The current signatory to the plan is:

1. Canadian Forest Products Ltd. (Canfor), Morice Operations

As of September 2013 BCTS is no longer a signatory for the SFMP due to the fact they have moved to SFI certification.

The Morice SFMP includes a significant public involvement component. In developing the SFM Plans for the DFA, over 100 meetings were held with local participants who represented a wide range of stakeholder interests. Well over 200 people with an interest in how local resources are managed have contributed their knowledge and expertise to the development of the SFM Plans; they represented a cross-section of local interests including recreation, tourism, ranching, forestry, conservation, water, community and Aboriginals. These dedicated volunteers from the public have helped develop the goals, objectives and indicators needed to deliver the SFM Plans.

In the fall of 2010, the licensees (BCTS and Canfor) started the tranistion to the Canadian Standards Association (CSA) Sustainable Forest Management (CSA Z809-08) standard.

The SFMP includes a set of values, objectives, indicators and targets that address environmental, economic and social aspects of forest management in the Morice 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 Morice Defined Forest Area SFMP.

It is important to note that the Morice 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 the Canfor's performance in meeting the indicator targets outlined in the SFMP over the Morice Defined Forest Area (DFA). The DFA is the Crown Forest land base within the Nadina Forest District and the traditional operating areas of the signatory licensee, 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 Morice DFA for the benefit of present and future generations.

In the being of 2014 Canfor has increased the size of the DFA within the Morice Timber Supply Area (TSA). The significant addition in area area includes locations south of Houston including Nadina lake, Whitesale lake, Andrew Bay and Tathsa lake. These new areas have been incorporated into this reporting period.

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 Morice Sustainable Forest Management Plan document (December 2014).

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 Morice 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 MoFRLNRO – Ministry of Forest, Range, Lands and Natural Resource Operations NDU – Natural Disturbance Unit PAG – Public Advisory Group SAR – Species at Risk

SFM – Sustainable Forest Management

SFMP – Sustainable Forest Management Plan

1.2 Executive Summary

Of the 34 indicators listed in Table 1; 26 indicators were met within the prescribed variances and 7 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.

Indicator Number	Indicator Statement	Target Met	Pending	Target Not Met
1.1.1	Total hectares logged in rare and uncommon ecosystems	Х		
1.1.2	Percent distribution of forest type (treed conifer, treed broadleaf, treed mixed) >20 years old across DFA	Х		
1.1.3 & 4.1.1	Percent late seral distribution by ecological unit across the DFA.	x		
	& Maintain the retention of existing (or replacement of) old forest retention area.			
1.1.4(a)	Percent of stand structure retained across the DFA in harvested areas	X		
1.1.4(b)	Percent of blocks meeting dispersed retention levels as prescribed in the site plan/logging plan	X		
1.1.4(c)	Number of non-conformance where forest operations are not consistent with riparian management requirements as identified in operational plans	x		
1.1.5	Percent forest in each patch type by patch size class by BEC variant by licensee.			x
1.2.1 &1.2.2	Percent of forest management activities consistent with management strategies for Species of Management Concern.	x		
123&	Regeneration will be consistent with provincial regulations			
1.3.1	and standards for seed and vegetative material use.	Х		
1.4.1	Percent of forest management activities consistent with management strategies for protected areas and sites of biological significance.	х		
1.4.2	Percent of identified Aboriginal forest values, knowledge and uses considered in forestry planning processes.	X		
2.1.1	The regeneration delay, by area, for stands established annually	Х		
2.2.1	Percent of gross forested landbase in the DFA converted to non-forest land use through forest management activities	x		
2.2.2 & 5.1.1 (a)	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	Percent of cutblocks reviewed where post harvest CWD levels are within the targets contained in plans	x		
3.2.1(a)	Sensitive watersheds that are above Peak Flow targets will have mitigation measures instituted.	X		

Table 1: Summary of Indicator Status, April 1st 2014 to March 31st 2015

Indicator Number	Indicator Statement	Target Met	Pending	Target Not Met
3.2.1(b)	Percentage of high hazard drainage structures in sensitive watersheds with identified water quality concerns that have mitigation strategies implemented.	x		
4.1.1	See 1.1.3			(refer to related indicators)
4.2	See 2.2.1	(refer to related indicators)		
5.1.1(a)	See 2.2.2	(refer to related indicators)		
5.1.1(b)	Conformance with strategies for non-timber benefits identified in Plans.	x		
5.2.1(a)	Investment in local communities	Х		
5.2.1(b)	Benefits directed into local communities by licensee (Local Indicator).	X		
5.2.2	Training in environmental & safety procedures in compliance with company training plans	X		
5.2.3	Level of direct & indirect employment			Х
5.2.4	Number of opportunities for Aboriginals to participate in the forest economy	x		
6.1.1	Employees will receive Aboriginal awareness training	Х		
6.1.2	Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans.	x		
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)		
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	Numbers of educational opportunities for information and/or training that are delivered to the Public Advisory Group	x		
6.4.3	(See 1.4.2)	(refer to related indicators)		
6.5.1	Number of people to whom educational opportunities are provided.	X		
6.5.2	SFM monitoring report made available to the public.	X		
	Totals	31	0	2

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. The sole 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. Canfor is committed to work together to fulfill the Morice SFMP commitments including data collection and monitoring, participation in public processes, producing public reports, and continuous improvement.

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	Target: Rare ecosystems groups as identified in the previous table will
uncommon ecosystems	not be harvested.
	Variance: Harvesting may occur in rare ecosystems for access, forest

health, or safety issues as rationalized and documented by a qualified professional.
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Was the Target Met? Yes

Parr0183 had a predicted rare ecosystem but field confirmation determined it was not. No rare ecosystems were harvested.

Indicator 1.1.2 Forest area by type or species composition

Indicator Statement	Target and Variance
Percent distribution of forest type	Target: (Treed conifer: 85-95%; Treed Broadleaf: 2.5-7.5%; Treed
(treed conifer, treed broadleaf, treed	Mixed: 2.5-7.5%)
mixed) >20 years old across DFA	Variance: None below proposed targets

Was the Target Met? Yes

Table 1: Forest area by type

Percent distribution of forest type (coniferous, broadleaf, mixed) >20 years old across the DFA				
Report Year Forest type Canfor				
2014	Coniferous	93.0%		
	Broadleaf	2.7%		
	Mixed	4.3%		

Indicator 1.1.3 Forest area by seral stage or age class

Indicator Statement	Target and Variance
Maintain the retention of existing (or	Target: As per table.
replacement of) old forest retention	Variance: As per table.
area.	

Was the Target Met? Yes

The target for certain SBSdk, ESSF mc, ESSFmv3 BEC zones are below target. These are historic deficits are not related to any current harvesting. The ESSF have losts of stands with old attributes and trees older than 250 years, but during inventory they are not getting picked up as age class 9 due to natural recycling events. All old forests or replacement areas where maintained in any deficit areas. This indicator has been called met because the old forestor or replacement areas are being maintained.

Table 2: Old Forest by Natural Disturbance Unit Merged BEC

Landscape Unit	BEO (Biodiversity Emphasis Option)	N D T	BEC Variants	Seral Stage (Years)	Target %	Target Drawn Down by 2/3 %	Actual May 2015
		2	ESSFmc	>250	>9	>3	3.13
Buck	Low	3	SBSdk	>140	>11	>3.7	29.39
		3	SBSmc2	>140	>11	>3.7	36.96
Burnie	High	2	ESSFmk	>250	>13		89.4
F H	2	ESSFmc	>250	>9	>3	27.7	
Fuiton	LOW	3	SBSmc2	>140	>11	>3.7	31

General Intermediate 2 ESSFmk ->250 >9 - 64.9 Granisle Low 3 SBSmc2 >140 >11 53.9 Granisle Low 3 SBSmc2 >140 >11 >3.7 Z8.38 Houtdon Tommy High 2 ESSFmc >200 >13 40.06 Tommy High 3 SBSmc2 140 >16 16.53 Tommy High 2 ESSFmc 220 >9 12.79 Kidprice Intermediate 2 ESSFmc 250 >9 24.82 Morice High 2 ESSFmc 250 >13 23.91 Kidprice High 2 ESSFmc 250 >13 23.91 Morice Like SBSmc2 >140 >11 23.91 23.91 Morice Intermediate 3 SBSmc2 >140 >11 23.73 Nadina			2	ESSFmc	>250	>9		40.34
	Gosnel	Intermediate	2	ESSFmk	>250	>9		64.9
Granisle Low 2 ESSFine >20 >9 >3 1 Houston Tommy High 3 SBSmc2 >140 >11 >3.7 28.38 Houston Tommy High 2 ESSFmc >250 >13 40.06 3 SBSmc2 >140 >16 16.63 37.26 Kidprice Intermediate 2 ESSFmc >250 >9 12.79 Kidprice Intermediate 2 ESSFmc >250 >9 24.82 3 SBSmc2 >140 >11 35.94 23.91 Morice Lake High 2 ESSFmc >250 >13 83.48. 3 SBSmc2 >140 >16 64.10 64.10 Morrison Intermediate 3 SBSmc2 >140 >11 22.68 Nadia Intermediate 3 SBSmc2 >140 >11 22.68 Namia High 2 ESSFmv3			3	SBSmc2	>140	>11		53.9
Oralised Low 3 SBSmc2 >140 >11 >3.7 28.38 Houston Tormmy High 3 SBSmc2 >140 >16 16.63 3 SBSmc2 >140 >16 16.63 37.26 Kidprice Intermediate 2 ESSFmc >250 >9 12.79 Kidprice Intermediate 2 ESSFmc >250 >9 24.82 3 SBSmc2 >140 >11 10 35.94 Morice High 2 ESSFmc >250 >13 23.91 Morison Intermediate 3 SBSmc2 >140 >16 64.10 Morrison Intermediate 3 SBSmc2 >140 >11 22.68 Nadina Intermediate 3 SBSmc2 >140 >11 22.68 Namia High 2 ESSFmc3 22.60 >13 50.00 Nadina High 2 ESSFmc3	Creatiele	L eur	2	ESSFmc	>250	>9	>3	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Granisie	LOW	3	SBSmc2	>140	>11	>3.7	28.38
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			2	ESSFmc	>250	>13		40.06
	Houston Tommy	High	3	SBSdk	>140	>16		16.63
Kidprice Intermediate 2 ESSFmc >250 >9 12.79 Kidprice Intermediate 2 ESSFmk >250 >9 24.82 3 SBSmc2 >140 >11 35.94 Morice Lake High 2 ESSFmc >250 >13 23.91 Morison Intermediate 2 ESSFmk >250 >13 83.43 Morison Intermediate 2 ESSFmc >250 >13 83.43 Morison Intermediate 2 ESSFmc >250 >9 0.75 Nadina Intermediate 3 SBSmc2 >140 >11 45.85 Nadina Intermediate 3 SBSmc2 >140 >11 37.23 Narth High 2 ESSFmk >250 >13 50.02 North Low SBSmc2 >140 >11 >3.73 32.69 Owen Intermediate 3 SBSmc2	. ,		3	SBSmc2	>140	>16		37.26
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	Kidprice	Intermediate	2	ESSFmk	>250	>9		24.82
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			3	SBSmc2	>140	>11		35.94
$ \begin{array}{ c c c c c c } \mbox{Morice} \\ \mbox{Lake} & \mbox{High} & \mbox{2} & \mbox{ESSFmk} & \mbox{2} & \mbox{2} & \mbox{3} & \mbox{SBSmc2} & \mbox{3} & $			2	ESSFmc	>250	>13		23.91
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Morice Lake	High	2	ESSFmk	>250	>13		83.48
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			3	SBSmc2	>140	>16		64.10
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Morrison	Intermediate	2	ESSFmv3	>250	>9		0.75
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	WOTTSOT	Internetiate	3	SBSmc2	>140	>11		45.85
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Nadina Intermediate		2	ESSFmc	>250	>9		5.65
$ \begin{array}{ c c c c c c c c } \hline & 3 & SBSmc2 & >140 & >11 & & 37.23 \\ \hline Nanika & High & 2 & ESSFmk & >250 & >13 & & 50.02 \\ \hline North Babine & Low & 2 & ESSFmv3 & >250 & >9 & >3 & 1.77 \\ \hline Babine & Low & 2 & ESSFmv3 & >250 & >9 & >3 & 1.77 \\ \hline & 2 & ESSFmv3 & >250 & >9 & >3 & 1.77 \\ \hline & 3 & SBSok & 5144 & 511 & 53.7 & 32.69 \\ \hline & 3 & SBSok & >140 & >11 & >3.7 & 32.69 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 29.32 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 29.32 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 29.32 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 39.67 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 39.67 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 39.67 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 39.67 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 28.19 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.56 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.56 \\ \hline & 3 & SBSmc2 & >140 & >16 & & 79.25 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >11 & & 3.77 & 23.18 \\ \hline & 3 & SBSmc2 & >140 & >16 & & 43.7 \\ \hline & That High & 1gh & 2 & ESSFmv & & & 250 & & & & & & & \\ \hline & 1 & Tochcha \\ \hline & Natowite & Intermediate & 2 & ESSFmv3 & $		Intermediate	3	SBSdk	>140	>11		22.68
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	North Babine		3	SBSdk	>140	<mark>>11</mark>	>3.7	<mark>5.87</mark>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			3	SBSmc2	>140	>11	>3.7	32.69
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Inautil High 3 SBSmc2 >140 >16 43.7 Tochcha Natowite Intermediate 2 ESSFmv3 >250 >9 1.57 3 SBSmc2 >140 >11 35.22	Tahtsa	High	2 3 2 3 3	SBSmc2 ESSFmc SBSdk SBSmc2	>140 >250 >140 >140 >140	>16 >9 >11 >11	>3 >3.7 >3.7	79.25 4.1 23.18 34.11
Tochcha NatowiteIntermediate2ESSFmv3>250>91.573SBSmc2>140>1135.22	Tahtsa	Low	2 3 2 3 3 2	ESSFIRK SBSmc2 ESSFmc SBSdk SBSmc2 ESSFmc	>230 >140 >250 >140 >140 >250	>16 >9 >11 >11 >11 >13	>3 >3.7 >3.7	79.25 4.1 23.18 34.11 20.29
Natowite Intermediate 3 SBSmc2 >140 >11 35.22	Tahtsa	High Low High	2 3 2 3 3 2 3 3	ESSFIIIK SBSmc2 ESSFmc SBSdk SBSmc2 ESSFmc SBSmc2	>230 >140 >250 >140 >140 >250 >140 >250 >140	>16 >9 >11 >11 >13 >16	>3 >3.7 >3.7	79.25 4.1 23.18 34.11 20.29 43.7
	Tahtsa Thautil Tochcha	High Low High	2 3 2 3 3 2 3 2 3 2	ESSFILIK SBSmc2 ESSFmc SBSdk SBSmc2 ESSFmc SBSmc2 ESSFmv3	>230 >140 >250 >140 >140 >250 >140 >250 >140	>16 >9 >11 >11 >13 >16 >9	>3 >3.7 >3.7	79.25 4.1 23.18 34.11 20.29 43.7 1.57

		3	SBSwk3	>140	>11		47.43
Taplay		2	ESSFmc	>250	>9	>3	1.13
ropiey	LOW	3	SBSmc2	>140	>11	>3.7	18.76
		2	ESSFmc	>250	>13		36.04
Triotsa	High	2	ESSFmk	>250	>13		54.02
		3	SBSmc2	>140	>16		90.76
		2	ESSFmc	>250	>9		22.49
Valley	Intermediate	3	SBSdk	>140	>11		9.42
		3	SBSmc2	>140	>11		29.34
		2	ESSFmc	>250	>9		23.58
Whitesail	Intermediate	3	SBSdk	>140	>11		65.65
		3	SBSmc2	>140	>11		53.13

Canfor is managing SBS dk sites so that percentages will be up to target levels by 2019. For example the Valley is just below target at 10.74% (target is 11%) and is forecast to be at 12.7% by 2019. The Houston Tommy was under target last year and is now at 16.63% which is above target.

The ESSF units that are under target are being managed for. The bigger issue is hitting the age class 9 (250 years) status with natural factors creating a downward pressure on age through mortality of older stems. This is a common issue through most areas of the interior where is very difficult to get natural occurring stands that live to 250 years. The age class 8 stands have stems older than 250 years and exhibit the old growth characteristics that this indicator is trying to maintain.

The solution in other areas (e.g. PG TSA) has been to have both age class 8 and 9 stands contribute to old sera in the ESSF as it does in the SBS. It is expected this issue will get addressed with the pending Biodiversity Order for the Morice TSA.

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

Indicator Statement	Target and Variance
Percent of stand structure retained across the DFA in harvested areas	Target: Landscape level target of 7%
Was the target met? Yes	

The current status for average stand level retention for all cutblocks completed harvesting between April 1, 2014 and March 31, 2015 in the DFA is found in Table 2.

Table 2: Stand Level Retention in Harvested Areas, 2014/15

Licensee	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
Canfor	6,674.3	1065.8	16.0

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

Concerns were raised by auditors about the high level of retention prescribed. It was found that roughly half of the WTP's where non THLB. For example, they may overlap with existing legal reserves, legal orders or non productive areas. Old growth management area overlap was also occurring. These are not legal at this point and contribute to the THLB, but are being respected.

Prescriptions are being reviewed looking for opportunities for less WTP designation. Future Forest Stewardship amendments will look to see if a more flexible systems based on landscape level accounting can be developed.

Indicator 1.1.4(b) Degree of within-stand structural retention

Indicator Statement	Target and Variance
Percent of blocks meeting dispersed retention	Target: 100% of the blocks
levels as prescribed in the site plan/logging plan	Variance: 0
Was the target met? Yes	

Table 3: Dispersed Stand Level Retention in Harvested Areas, 2014/15

Licensee	Number of blocks with dispursed retention	No. those Blocks that were in Conformance	Percent
Canfor	1	1	100

Canfor developed plans for MR05 to have dispersed Stand Level Renetion along a stream (ad-r1-s6) to provide a buffer to riparian habitat. The outcome met the objectives.

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

Indicator Statement	Target and Variance
Number of non-conformance where forest operations are not consistent with riparian management requirements as identified in operational plans	<u>Target:</u> 100% of the blocks <u>Variance</u> : 0
Was the target met? Yes	

No ITS icidents where recorded. For the reporting year we were consistent with requirements in operational plans.

Indicator 1.1.5 Degree of habitat connectivity (local indicator)

Indicator Statement	Target and Variance
Percent forest in each patch type by patch size class by BEC variant by licensee.	<u>Target:</u> Trending toward <u>Variance</u> : None
Was the target met? No	

Table 4: Current status by patch type and class and BEC, 2014/15

BEC Variant	Patch Size Class (ha)	Current Status (2013/2014)	Current Status (2014/2015)	Target	Trend
ESSE	Large	55.8%	53.0%	50% - 60%	In target
L001	Small	9.9%	12.0%	15% - 25%	Toward
SDS di	Large	74.7%	85.2%	50% - 60%	Away
SDS UK	Small	8.1%	3.55	20% - 30%	Away
SBS mc &	Large	63.4	82.4%	50% - 60%	Away
wk3	Small	8.8	3.3%	20% - 30%	Away

Age criteria for patch types are as follows:

• Early <= 2 0 year old forest.

Patch size classes are as follows:

- Small >1 and <=40
- Medium >40 and <=250 No targets set.

Large >250

Canfor is trending away from target in the SBS and toward or is in target in the ESSF. Salvage of mountain pine beetle stands has determined where harvesting occurs not patch size. Salvage is winding down and patch will be managed for where salvage is not required. This shift is already occurring in the the SBS dk as forecasting based on planned blocks is showing a trend toward targets in the next five years. This trend will also start to occur in the SBS mc and wk3 BEC zones.

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	<u>Target:</u> 100% <u>Variance</u> : 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.

Practices were consistent with commitments for species of management concern. An opportunity for improvement was identified for pre-work communitcation on deactivation requirements for goat habitat.

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
Regeneration will be consistent with provincial regulations and standards for seed	<u>Target</u> : 100%
and vegetative material use.	Variance: none

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

Table 5: Compliance with Chief Forester's Standards for Seed Use, 2014/15

Licensee	Total Planted Seedlings	Planted in Accordance with Chief Forester's Standards*	Total % DFA**
Canfor	7,458,026	7,458,026	100.0%

Reported based on the number of seedlings planted.

There were no blocks with seedlings outside the transfer limits

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%
Was the target met? Yes	

Canfor currently has a 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.

No incidents or conformance issues reported.

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	Target: 100% of blocks and roads have consultation
and uses considered in forestry planning	and a cultural hertitage resource assessment.
processes	Variance: 0%
Was the target met? Yes	

34 blocks had identified values. For the majority of blocks the area was excluded from harvest. CMT's were flagged for stubbing and maked on SP maps in cases were not excluded from the block.

Indicator 2.1.1 Reforestation success (regeneration delay)

Indicator Statement	Target and Variance
Average regeneration delay for stands established	Target: less or equal 2.5 years
annual	Variance: +0.5 years
Was the target met? Yes	

The weighted average regen delay for this last reporting year was 2.05 years. This includes a half dozen older blocks that brought up the average.

Year	Average years to declare regeneration delayfollowing the start of harvesting.
2014/15	Canfor 2.05

Canfor is well under target.

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-forest land use through forest management activities	<u>Target:</u> <2.2% <u>Variance</u> : None	
Was the target met? Yes		

Canfor reported 1.76% for 2014/15. This is the total non forest from roads, landings and gravel pits divided by the total crown forested landbase. Last year the number reported was based on total DFA hectares. The difference is about 0.2%.

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	Target: 100% over cut control period as defined by
allocated harvest level	Timber supply forecast harvest flow.
	Variance: 10%
Was the target met? Yes	

Year	2012	2013	2014	Total
Harvest volume	947,396	1,184,956	1,016,171	3,148,523
Cut control	940,424	1,021,549	1,264,924	3,226,897

Canfor is currently at 98% of cut control after 3 years. Note A91846 was acquired in October of 2013 so one quarter of 324,500 was added to the 2013 AAC. The cut control period in our new license A91846 expires next year and the A16828 the year after.

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	

There was one ITS incident in PARR0177. A 75 cm snow pack turned to water underneath. Further harvesting was shut down and wood on the ground was cleaned up. A formal independent survey was completed and the results were well under the limits. Clean up will be conducted in the portions impacted.

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	Target: 100% of blocks harvested annually will meet targets Variance: -10%
Was the target met? Yes	

Canfor was 100% compliant.

Indicator 3.2.1(a) Proportion of watershed or water management areas with recent standreplacing disturbance

Indicator Statement	Target and Variance
Sensitive watersheds that are above Peak Flow targets will have mitigation measures instituted.	<u>Target:</u> 100% <u>Variance</u> : 0%
Was the target met? Yes	

Currently there is just Pimpernel creek where mitigation measure need to be implemented. This is a significant change from last year's result of 7 watersheds over thresholds, therefore an explanation was warranted. A re-inventory was done and the process reviewed with hydrologists Michael Milne and Pierre Beaudry. There are three key changes to the way the analysis is being conducted.

- 1. Calculations for stand height and hydrologic recovery had been calculated with 3 m stands being 25% recovered, 6 m stands being 50% recovered and 9 m stands being 90% recovered. With this method of calculation a 2.9 m stand would be 0% recovered. A curve is now being used that calculates a progressive recovery.
- 2. The H60 line was an average elevation that represented 60% of the watershed. This elevation line would be used to adjust the clearcut area upwards by 50%. For example, a 10 ha opening above the

h60 line would count as 15 ha of new harvesting. This adjustment is no longer an excepted practice with hydrologists. This calculation is no longer done in our annual analysis.

3. Adjustments had been made for areas of high pine content in the inventory. This adjustment was only intended where mountain pine beetle had an impacted the majority of the watershed. With pine salvage winding down this adjustment is no longer appropriate or valid.

Previous methods had been overstating the impact from harvesting. This new method provides a more accurate measure of the current impact and balancing recovery from a hydrological perspective.

Indicator 3.2.1(b) Proportion of watershed or water management areas with recent standreplacing disturbance

Indicator Statement	Target and Variance
Conduct inventory of high hazard drainage structures within sensitive watersheds and develop mitigation strategy for each of the structures. Action plans with respect to the identified drainage structures are being implemented.	<u>Target:</u> 100% <u>Variance</u> : 0%
Was the target met? Yes	

Canfor did not have any high hazard drianage structures in sensitive watersheds installed for this last reporting year.

Indicator 4.1.1 Net Carbon Uptake

Indicator Statement	Target and Variance
Maintain the retention of existing (or replacement of) old forest retention area	Target: As per inidicator 1.1.3 Variance:
Was the target met? See indicator 1.1.3	

Indicator 4.2 Forest Land Conversion

Indicator Statement	Target and Variance
Maintain the retention of existing (or replacement of) old forest retention area	Target: As per inidicator 2.2.1 Variance:
Was the target met? See indicator 2.2.1	

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	

We had five requests from the Houston Hikers Society, two range barriers and four requests to follow up with visual results.

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

Indicator Statement	Target and Variance
Investment in local communities	Target: >=45% Variance: -10%
Was the target met? Yes	

2010 2011 2012 2013 2014 Average Licensee Status Status Status Status Status Canfor 48.0% 79.8% 74.7% 56.9% 55.4% 62.9%

Overall percentage increased from 60.7% to 62.9%.

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

Indicator Statement	Target and Variance	
Amount of benefits directed into local communities	Target: \$38,000 3-year rolling average Variance: -10%	
Was the target met? Yes		

Was the target met? Yes

Licensee	2012 Status	2013 Status	2014 Status	3-yr rolling average
Canfor	\$53,218.88	\$28,690.42	\$46,257.78	\$42,722.35

This indicator had been reported as not met in previous reporting years. Divisional donations where only accounted for. After including corporate donations to the Houston area the threshold for this indicator is exceeded.

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? Yes

Licensee	2014 Status	Target
Canfor Employees	99%	100%
Canfor Contractors	100%	100%

The database tracking training was difficult to see at a glance what was not completed. A new tracking system will be implemented and everyone responsible updating records as they complete training.

Indicator 5.2.3 Level of direct and indirect employment

Indicator Statement Target	et and Variance
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Was the target met? No

Canfor volume:

	2014	Percent
AAC	1,264,924	
Total Cut	1,016,171	80%

Note these cut control numbers are not final. They were the most current for A16828 and A91846 at the time of reporting. If these number change significantly this indicator will be updated.

The equation for 2014 is as follows (total cut) 1,264,924 * 2.65 jobs/1000m3= 3,357 (jobs). Based on the harvest in 2014 the calculation is 2,692 which is outside the 10% variance.

Canfor will meet cut control requirements by harvesting quota volume available. Transfer to other licenses can upset the numbers for our two primary licenses on an annual basis. The volume is still providing the work to the standard contractors, employees and suppliers.

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

Licensee	2012 Status	2013 Status	2014 Status	Target
Canfor	5	8	7	≥5

Indicator 6.1.1	Evidence of a good und	lerstanding of the nature	of Aboriginal title and rights

Indicator Statement	Target and Variance
Employees will receive Aboriginal awareness training	Target: 100% Variance: -10%
Was the target met? Yes	

Licensee	2014	Target
LICENSEE	Status	
Canfor	100%	100%

Canfor staff were trained as per training matrix.

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

Indicator 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 obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans.	<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	

COPI records and arch/cultural reports demonstrate communication and assessment efforts.

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	Target: 100% compliance with operational plans and corresponding results and strategies. 100% of blocks and roads that have had a CHR assessment completed. 100% of blocks and roads have a completed consultation record. Variance: -0%

Was the target met? Yes

Licensee	2014 Status	Target
Canfor	100%	100%

A total of 34 blocks had some post or pre 1846 feature identified or an area of high potential identified. For the most part these areas where excluded from the harvesting and added to a wildlife tree patch.

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> Maintain >=13 relationships <u>Variance</u> : -20%
Was the target met? Yes	

Product Number of opportunities Organization Decker Lake, HPLP, Hunky Dory, Tahtsa 7 Logs Timber, LBN. Lowell Johnson, WFN . Trim Blocks 3 Kyah, DH, Brinks/PVR Sawdust/shavings 1 Houston Pellet (HPLP) 1 Chips Canfor Pulp limited Partnership 12 Total

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	

Canfor has maintained safe certification.

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	

PAG Meeting Number - Date	Average Meeting Score
78 to 81 April 14 to Nov 14	4.3

Scores varied from 4.0 to 4.4 in the four meetings.

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

Indicator Statement	Target and Variance
Numbers of educational opportunities for information and/or training that are delivered to the Public Advisory Group	<u>Target:</u> >= 1 (annual) <u>Variance</u> : None
Was the target met? Yes	

There were 3 training opportunities provided, Frank Doyle on small mammals, a field tour and mill tour.

Indicator 6.5.1 Number of people reached through educational outreach

Indicator Statement	Target and Variance
Number of people to whom educational opportunities are provided.	<u>Target:</u> =50 people <u>Variance</u> : -10
Was the target met? Yes	

In the fall of 2014 3 Canfor employees went to classes in both high schools to present on forestry and careers in forestry. In excess of 50 people where provided this education.

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	

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

This report was completed and posted on the public web site by September 30th. The report will be presented to the PAG group on Octoober 6th, 2015.

