Morice Sustainable Forest Management Plan



2016/17 Annual Report

Prepared by:

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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 2016/17 Annual Report for the Morice Sustainable Forest Management Plan (SFMP), covering the reporting period of April 1, 2016 to March 31, 2017. 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 standard. The current signatory to the plan is:

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

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.

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. The SFMP is developed according to the CSA standard sets of 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.

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 beginning of 2015 Canfor has increased the size of the DFA within the Morice Timber Supply Area (TSA). The significant addition in area includes locations south of Houston including Nadina Lake, Whitesail Lake, Andrew Bay and Tahtsa Reach. These new areas have been incorporated into this reporting period. Some of the changes overlap with this reporting year.

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 for 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

1.2 Executive Summary

Of the 33 indicators listed in Table 1; 31 indicators were met within the prescribed variances and 2 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			x
1.1.3 & 4.1.1	Percent late seral distribution by ecological unit across the DFA. & Maintain the retention of existing (or replacement of) old	x		
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	х		
1.1.4(c)	Number of non-conformance where forest operations are not consistent with riparian management requirements as identified in operational plans	Х		
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.	Y		
1.2.3 &	Regeneration will be consistent with provincial regulations and standards for seed and vegetative material use.	<u>х</u>		
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.	Х		
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.	Х		
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		
3.2.1(b)	Percentage of high hazard drainage structures in sensitive watersheds with identified water quality concerns that have mitigation strategies implemented.	х		
4.1.1	See 1.1.3			(refer to related indicators)
4.2	See 2.2.1	(refer to related indicators)		

Indicator Number	Indicator Statement	Target Met	Pending	Target Not Met	
5.1.1(a)		(refer to related			
	See 2.2.2	indicators)			
5.1.1(b)	Conformance with strategies for non-timber benefits				
	identified in Plans.	X			
5.2.1(a)	Investment in local communities	X			
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	Х			
5.2.3	Level of direct & indirect employment	Х			
5.2.4	Number of opportunities for Aboriginals to participate in the	x			
611	Employees will receive Aboriginal awareness training	X Y			
612	Evidence of best efforts to obtain accentance of	Λ			
0.1.2	management plans based on Aboriginal communities				
	having a clear understanding of the plans.	х			
6.1.3	Percent of forest operations in conformance with				
	operational/site plans developed to address Aboriginal				
	forest values, knowledge and uses	Х			
6.2.1		(refer to related			
	(see 1.4.2)	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 &	Implementation and maintenance of a certified safety				
6.3.3	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	Х			
6.4.3	(See 1.4.2)	(refer to related			
	Number of seconds to unberge advectional appoint with a sur-	indicators)			
6.5.1	provided.	x			
6.5.2	SFM monitoring report made available to the public.	X		1	
	Totals	31		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	Ecosy	/stem	area	by	type

Indicator Statement	Target and Variance
Total hectares logged in rare and uncommon ecosystems	Target: Rare ecosystems groups as identified in the previous table will 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.

Was the Target Met? Yes

There were three blocks with rare ecosystems identified 2012NAD19, NOBA0155, and VALL0119 these areas were either part of a site complex, in areas that were less than 2.0ha in size, or were incorporated into Wildlife Tree Reserves

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? No

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							
	Coniferous	94.0%					
2016/17	Broadleaf	2.3%					
	Mixed	3.7%					

A new inventory indicates slightly different results from last year. Broad leaf decreased from 2.4% to 2.3% and Mixed increased from 3.5 to 3.7%. Conifer sliped from 94.1 to 94.0%. Broadleaf is slight below target based on updates to the inventory and adjustment to the DFA. With final corrections to the DFA area compete and incorporation of new inventory also complete, new targets can be set in the new plan for next year. There is a further inventory update occurring in 2018 that could also shift harvesting. Deciduous are currently excluded from harvest and form part of Canfors retention strategy.

This target has been addressed in the new 2016 standard.

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

An inventory update in the spring of 2017 had a dramatic impact on age class. There were 11 of the landscape units Bec variants below that had a increase in old forest due to the new inventory. However, the majority of the units had dramatic drops in the amount of old forest. A stand that was classified as age class 8 in the old inventory was classified as age class 7 in the new inventory. This stand likely still contains many old trees, but due to the natural cycling of stand mortality with younger trees filling in the gaps, the average age in many stands has dropped.

An example of this drop is well illustrated in the Morice Lake landscape unit and the ESSFmk BEC unit. The unit is mainly protected in the Park or no harvest areas. The old in last years report was 83.5% and dropped to 43.6% in this years report. The area had no harvesting or fires.

Figure 1: Inventory comparison for age class



In all areas of old forest deficit, from last years report, no harvesting was conducted in old forests. All old forest as known was maintained.

These targets have been based on the Provincial Old Growth Order. Next years report must be based on the targets set in the Morice Biodiversity Order as that order came in effect on September 29, 2016. Licensees have one year to incorporate into their Forest stewardship plans.

Londoono	BEO	Ν	BEC	Seral Stage	Target	Target Drawn Down	Actual
Unit	(Biodiversity Emphasis	D	Variants	(Years)	varget		May
	Option)	т				by 2/3 %	2010
		2	ESSFmc	>250	>9	>3	<mark>1.0</mark>
Buck	Low	3	SBSdk	>140	>11	>3.7	<mark>12.2</mark>
		3	SBSmc2	>140	>11	>3.7	<mark>26.2</mark>
Burnie	High	2	ESSFmk	>250	>13		<mark>61.0</mark>
Fulton	Low	2	ESSFmc	>250	>9	>3	1.1
Fulton	LOW	3	SBSmc2	>140	>11	>3.7	<mark>27.9</mark>
	Intermediate	2	ESSFmc	>250	>9		<mark>35.1</mark>
Gosnel		2	ESSFmk	>250	>9		<mark>62.7</mark>
		3	SBSmc2	>140	>11		<mark>27.9</mark>
Oreniele	1	2	ESSFmc	>250	>9	>3	0.0
Granisie	LOW	3	SBSmc2	>140	>11	>3.7	<mark>29.1</mark>
Houston Tommy		2	ESSFmc	>250	>13		<mark>20.4</mark>
	High	3	SBSdk	>140	>16		<mark>9.5</mark>
		3	SBSmc2	>140	>16		<mark>34.3</mark>
Kidprice	Intermediate	2	ESSFmc	>250	>9		<mark>8.8</mark>

Table 2: Old Forest by Natural Disturbance Unit Merged BEC

		2	ESSFmk	>250	>9		<mark>19.0</mark>
		3	SBSmc2	>140	>11		37.2
		2	ESSFmc	>250	>13		<mark>19.2</mark>
Lake	High	2	ESSFmk	>250	>13		<mark>46.6</mark>
		3	SBSmc2	>140	>16		<mark>67.7</mark>
Morrison	Intermediate	2	ESSFmv3	>250	>9		<mark>10.7</mark>
	internetate	3	SBSmc2	>140	>11		35.6
		2	ESSFmc	>250	>9		<mark>5.6</mark>
Nadina	Intermediate	3	SBSdk	>140	>11		13.8
		3	SBSmc2	>140	>11		<mark>31.4</mark>
Nanika	High	2	ESSFmk	>250	>13		<mark>47.1</mark>
		2	ESSFmv3	>250	>9	>3	<mark>1.9</mark>
North Babine	Low	3	SBSdk	>140	>11	>3.7	<mark>6.0</mark>
Babillo		3	SBSmc2	>140	>11	>3.7	<mark>25.8</mark>
		2	ESSFmc	>250	>9		<mark>3.5</mark>
Owen	Intermediate	3	SBSdk	>140	>11		<mark>21.8</mark>
		3	SBSmc2	>140	>11		<mark>34.1</mark>
		2	ESSFmc	>250	>9	>3	0.1
Parrotts	Low	3	SBSdk	>140	>11	>3.7	20.9
		3	SBSmc2	>140	>11	>3.7	<mark>17.2</mark>
		2	ESSFmk	>250	>13		<mark>51.6</mark>
Sibola	High	3	SBSmc2	>140	>16		70.0
		2	ESSFmc	>250	>9	>3	7.1
Tahtsa	Low	3	SBSdk	>140	>11	>3.7	12.7
		3	SBSmc2	>140	>11	>3.7	32.4
		2	ESSFmc	>250	>13		6.1
Thautil	High	3	SBSmc2	>140	>16		49.4
		2	ESSFmv3	>250	>9		4.7
Tochcha	Intermediate	3	SBSmc2	>140	>11		38.4
Natowite		3	SBSwk3	>140	>11		41.1
		2	ESSFmc	>250	>9	>3	1.1
lopley	Low	3	SBSmc2	>140	>11	>3.7	<mark>7.5</mark>
		2	ESSFmc	>250	>13		57.3
Triotsa	High	2	ESSFmk	>250	>13		<mark>42.3</mark>
		3	SBSmc2	>140	>16		90.7
		2	ESSFmc	>250	>9		<mark>10.8</mark>
Valley	Intermediate	3	SBSdk	>140	>11		5.0
		3	SBSmc2	>140	>11		<mark>23.9</mark>

Whitesail	Intermediate	2	ESSFmc	>250	>9	<mark>23.6</mark>
		3	SBSdk	>140	>11	<mark>21.9</mark>
		3	SBSmc2	>140	>11	<mark>52.3</mark>

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 with completed harvesting between April 1, 2015 and March 31, 2016 in the DFA is found in Table 2.

Table 2: Stand Level Retention in Harvested Areas, 2016/17

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	6,859.3	935.6	13.64%
Average % Retention = (Total W	TRA / Total Block Area) X 100		

There was another small decrease in WTP retention over last years reported numbers and there has be a steady increase in the non timber harvest landbased for selection of WTP's. The highest level of retention in a landscape unit was in Kidprice at 21.96% due to the draft fisheries sensitive watershed status and high levels of pine salvage that has historically occurred.

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 <u>Variance</u> : 0	
Was the target met? Yes	

Table 3: Dispersed Stand Level Retention in Harvested Areas, 2015/16

Licensee	Number of blocks with dispersed retention	No. those Blocks that were in Conformance	Percent
Canfor	13	13	100

All the blocks with dispersed retention had the retention identified to help meet riparian area retention requirements along S4 and S6 streams. 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	Target: 100% of the blocks Variance: 0
Was the target met? Yes	

There where 541 riparian features managed for and all retention requirements were met.

Riparian Class	Features managed for
L1	13
L3	9
NCD	116
NCL	7
NCW	52
S1	6
S2	21
S3	47
S4	94
S6	44
W1	42
W3	58
W5	32
Grand Total	541

These features are often just outside block boundaries as these features become natural boundaries for management.

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	Target: Trending toward
BEC variant by licensee.	<u>Variance</u> : None
Was the target met? No	

Table 4: Current status by patch type and class and BEC, 2015/16

BEC Variant	Patch Size Class (ha)	Current Status (2014/2015)	Current Status (2015/2016)	Current Status (2016/2017)	Target	Trend
FSSE	Large	47.2%	47.1%	47.4%	50% - 60%	Away
2001	Small	15.7%	14.4%	12.6%	15% - 25%	Away
SBS dk	Large	63.5%	67.4%	43.9%	50% - 60%	Away
	Small	9.2%	9.7%	17.6%	20% - 30%	Toward
SBS mc &	Large	62.7%	63.6%	60.3%	50% - 60%	Toward
wk3	Small	8.8%	8.2%	8.8%	20% - 30%	Toward

Both SBS medium patch categories were in target and the ESSF medium was moving away.

Age criteria for patch types are as follows:

• Early <=20 year old forest.

Patch size classes are as follows:

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

The data is for the entire TSA in order to be consistent with legal commitments. There are improvements in the SBS large as it has started to move toward the target. The SBS mc is forecast to move in target in the next few years. The SBS small continues to be a concern and has been the focus of Canfor block design. Short term

forecasting forward shows the small patch starting to trend toward target in the SBS. These general improvements relate to salvage operations starting to wind down. The FSP has been amended and Canfor will no longer be using LRMP blended targets. The legal requirement is to follow natural disturbance patterns. The LRMP targets are inconsistent with the biodiversity guidebook and data on natural disturbance patterns.

The patch indicator was modelled using a timber supply model program referred to patchworks. After modelling the targets above for 200 year the model was unable to achieve the SBS target over the entire period. Modelling consistent with the biodiversity guidebook targets is achievable.

In going to the new standard this indicator has been a on going discussion. It is expected that a new approach will be used for this non core indicator.

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	Target: 100%
consistent with current Best Management	Variance: 0%
Practices for Species of Management Concern	
Was the target met? Yes	

There was special management for 9 caribou areas, 6 goat areas, 1 mineral lick, 2 bull trout and 1 stick nests.

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, 2015/16

Licensee	Total Planted Seedlings	Planted in Accordance with Chief Forester's Standards*	Total % DFA**
Canfor	6,671,375	6,671,375	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	

There were a number of sites identified including bear dens, stick nests and areas identified for goshawk management. There were no ITS incidents or issues with the management of these sites.

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 heritage resource assessment.
processes	Variance: 0%
Was the target met? Yes	

41 blocks had identified values. For the majority of blocks the area was excluded from harvest. CMT's were flagged for stubbing and marked on SP maps in cases where they were not excluded from the block. There were no incidents around this indicator.

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 1.96 years.

Year	Average years to declare regeneration delay following the start of harvesting.
2016	Canfor 1.96

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	

According to the data we are currently sitting at 2.09%.

In the previous year it was identified that there were a number of roads that were not part of the data set, this has been rectified and all roads are now part of the data, The current state of these roads still need to be reviewed to determine if they can be removed as they become completely revegetated or rehabilitated.

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

Year	2013	2014	2015	2016	Total
Harvest volume	1,184,956	933,819	1,236,984	1,461,816	4,817,575
Cut control	1,021,549	1,264,924	1,264,924	1,264,924	4,816,321

Canfor is currently at 100.02% of cut control after 4 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 for license A91846 expired 2015 and A16828 in 2016.

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 with two block TOCH0656 and TOCH0667 that there was concern about. A survey was completed and both meet disturbance limits.

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	

There were no incidents related to CWD and no issues identified in audits. A best practices refresher was also provided to harvesting contractors in 2017.

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	

All sensitive watersheds dropped below thresholds in the last year. In Lamprey/Pimpernel watersheds mitigation measure were still being implemented.

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	<u>Target:</u> 100% <u>Variance</u> : 0%

implemented.	
Was the target met? Yes	

Two bridges were installed in sensitive watersheds. One has already been removed. Seeding and erosion control measures were also implemented on the sites.

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 indicator 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 indicator 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	

For this sample year there were 125 sample blocks. 29 non timber value commitments where documented in those plans:

Type of commitment	Number
Wildlife	16
Range	2
Trapper	2
Temperature sensitive streams	4
Wildlife feature	1
Trail	1
Botanical products	1
Lodge holders	2

This is in addition to the commitments in 6.1.3. Staff noted that the wildlife features is underestimated because they are often kept confidential.

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

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

2012 2013 2014 2015 2016 Average Licensee Status Status Status Status Status Canfor 74.70% 56.90% 55.40% 58.50% 55.1% 60.1%

Overall percentage decreased from 65.1% to 60.1%.

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	<u>Target:</u> \$38,000 3-year rolling average <u>Variance</u> : -10%		

Was the target met? Yes

Licensee	2014 Status	2015 Status	2016 status	3-yr rolling average
Canfor	\$46,257.78	\$98,995.08	\$40,171.72	\$61,808.19

After a number of years not meeting this indicator we had consistent results exceeding the target and are well over the target for a 3 year rolling average.

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%

Licensee	2015 Status	Target
Canfor Employees	97.8%	100%
Canfor Contractors	100%	100%

On average each employee has 39 training sessions to complete. All the certification related training was completed. Note the contractor training report is a report on manaditory training that we facilitate to contractors.

Indicator 5.2.3 Level of direct and indirect employment

Indicator Statement	Target and Variance
Maintain average level of direct and indirect employment	Target: Canfor: = 1,264,924m ³ * 2.65jobs/1000m ³ = 3,357 direct and indirect jobs Variance: Canfor: -10% or 249 jobs per year

Was the target met? Yes

Canfor volume:

	2016	Percent
AAC	1,264,924	
Total Cut	1,461,816	115.6%

The equation for 2016 is as follows (AAC) 1,264,924 * 2.65 jobs/1000m3= 3,357 (jobs). Based on the total harvest in 2016 the calculation equaled 3,880 which is above the baseline of 3,357.

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	2014 Status	2015 Status	2016 status	Target
Canfor	7	9	9	≥8

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? Yes	

Licensee	2016	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 extensive efforts to build relationships and share plans. A total of 894 communication records are in our COPI system for the reporting period. All the band had more than 3 communication 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	2016 Status	Target
Canfor	100%	100%

A total of 99 blocks had archaeological assessments with 27 blocks with values found. All high potential areas were dropped from harvest areas. No alteration permits where used. Post 1846 culturally modified trees were protected in wildlife tree patches or flagged and stubbed.

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
Logs	17	Decker Lake, HPLP, Hunky Dory, Tahtsa Timber, LBN. Lowell Johnson,Babine Barge, Buck River Timber, Dungate Community Forest, John Henry Contracting, Morice Mountain Nordic Ski Club, Mt. Davis Logging, R+B Silviculture, Red Dog Logging, Carl Sydlic, Tutshi Ventures.
Trim Blocks	3	Kyah, DH, Brinks/PVR
Sawdust/shavings	1	Houston Pellet (HPLP)
Chips	1	Canfor Pulp limited Partnership
Total	22	

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. Houston had an onsite audit in the summer of 2016.

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
86 to 87 June 28 and Oct 25	4.3

Scores varied from 4.2 to 4.3 in the two meetings. The terms of reference was updated to include the standard Canfor PAG survey process.

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	<u>Target:</u> >= 1 (annual) <u>Variance</u> : None

the Public Advisory Group	
Was the target met? Yes	

There were 2 training opportunities provided, Heidi Schindler on Moose and Jocelyn Campbell on Caribou.

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	

A COFI field trip was conducted on October 5, 2016 with an estismated 55 individuals.

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.	Target: SFM monitoring report available to public annually via the web. Variance: None
Was the target met? Yes	

This report was completed by November 27th and presented to the PAG group and posted on line. The PAG group will have until the next meeting to bring forward comments or concerns.

