

# Sustainable Forest Management Plan

# 2014 ANNUAL PERFORMANCE REPORT

Radium Defined Forest Area

Reporting Period

Jan. 1, 2014 - Dec. 31, 2014

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# **Executive Summary**

This report is the ninth annual report of the Sustainable Forest Management Plan for the Radium defined forest area (DFA) and is for the calendar year of 2014. Part 1 of this report summarizes the progress and performance made by Canfor to achieve the results committed to under the Radium DFA Sustainable Forest Management Plan (SFMP) as the indicators and targets were defined in the SFMP for 2014. Part 2 reports out on the new commitments and improvements adopted to SFMP as of January 1, 2014.

Canadian Forest Products Ltd- Radium (Canfor) was the sole participant and signatories to the SFM plan. Currently, Canfor is certified by third party verification to the ISO 14001 standard and the CSA Z809 SFM standard.

2014 saw significant financial improvements for the forest industry and outlooks in the near term remain optimistic although there are signs of markets not rebounding as strongly as anticipated. Forestry operations were at full strength beginning the year to capture the Annual Allowable Cut within the last year of the 5 year cut control period before it ends December 31, 2014. Woodlands and mill staffing numbers returned to historic levels and economic benefits exceeded average annual levels. To better align all operations within the Kootenay region, forestry operations in both the Radium CSA and Kootenay FSC DFA adhered to one, internal management standard which is intended to meet or exceed both certification standards. A project to amalgamate the requirements of both the CSA and FSC standards in one SFMP was initiated in 2014 with significant input from the Public Advisory Group (PAG). Several World Café style meetings were held by the PAG to focus on the group's most important indicators and provide effective review and input from the group. A finalized SFMP is expected in early 2015. The annual report indicator tables provide information where indicators are changing or altered as a result of this project with a description of the new, proposed indicator. As a result of this project, some indicators will not be reported in this annual report and information on the proposed new indicator and current state will be provided.

Each value area has a suite of associated indicators and targets. The following table summarizes the Canfor's overall achievements of meeting the assigned targets.

Part 1- Jan1, 2014 -Dec 31, 2014 Annual Report Summary

Classification	Ecological	Economic	Social
Number of Targets Met	20	6	11
Number of Targets Not Met	0	0	0
Number of Targets Pending		0	
Total	25	6	11

# 1 Introduction

Canfor's Sustainable Forest Management Plan commits to indicators and targets that address a number of established indicators of sustainable forest management. The following documents the current status of meeting those targets for Canfor.

This document is the ninth annual report of the Sustainable Forest Management Plan (SFMP) of the Radium, British Columbia Defined Forest Area (DFA). This annual report is an integral part of continual improvement of the 2006 SFMP and is a part of the assessment confirming Canfor implementation of the CSA Z809 SFM standard. The reporting period is January 1, 2014 to December 31, 2014, which provides the status of all indicators locally developed through the Sustainable Forest Management Planning process.

Part 1 of this report summarizes the performance made by Canfor to achieve the results committed to under the SFMP as the indicators and targets were defined in the SFMP for 2014. A significant re-write of the SFMP occurred in 2011 to address the new CSA Z809-08 standard and Canfor's core indicators. Part 2 reports out on the new commitments and improvements adopted to SFMP as of January 1, 2014.

# 2 PART 1 – Jan 1, 2014 – Dec 31, 2014 Annual Report

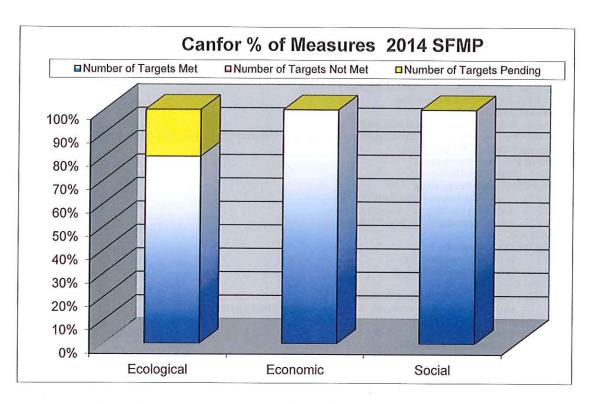
# Table 1: Radium DFA Criteria, Element & Indicators

Table 1. Radium D171 Cheria, Element & Indicators
Ecological Values
C1. Biological Diversity
1.1 Ecosystem Diversity
1.1.1a – Ecosystem Representation of Groups
1.1.1b – Interior Forest by Ecosystem Group
1.1.1c – Patch Size Distribution by Natural Disturbance Type
1.1.2 – Distribution of forest type >20 years old
1.1.3 – Late Seral or Age Class
1.1.4.a – Dispersed Retention
1.1.4b – Stand Structure Retention
1.1.4c – Riparian Management Strategies
1.2 Species Diversity 1.2.1 & 1.2.2 – Species of Management Concern
1.3 Species & Genetic Diversity
1.2.3a/1.3.1a – Regeneration – Seed & Vegetative Material
1.2.3b/1.3.1b – Natural Regeneration
1.4 Protected Areas & Sites 1.4.1 – Protected Areas & Sites of Biological Significance
1.4.2a & b – Identification & Addressing Aboriginal And Other Cultural Forest Values, Knowledge And Uses
C2. Ecosystem Condition & Productivity
2.1 Forest Ecosystem Resilience
2.1.1 – Regeneration Delay
2.1.1 – Regeneration Delay  2.2 Forest Ecosystem Productivity
2.2.1a – Conversion To Non-Forest Land Use
2.2.1b – Landslides resulting from forestry practices
2.2.2 – Volume Harvested Vs. Allocated Harvest
C3.Soil & Water
3.1 Soil Quality & Quantity
3.1.1 – Soil Disturbance Objectives
3.1.2 – Coarse Woody Debris Targets
3.2 Water Quality & Quantity
3.2.1a – Peak Flow Targets – Sensitive Watersheds
3.2.1b—High Hazard Drainage Structures — Mitigation Strategies Implemented
C4. Role of Global Ecological Cycles
4.1 Carbon Uptake and Storage
4.1.1 –Retention of Existing Old Forest
4.1.2 – Regeneration Delay
4.2 Additions and Deletions
4.2.1 – Conversion To Non-Forest Land Use
Economic & Social Values
C5. Economic & Social Benefits
5.1 Quantity and Quality of Timber & Non-Timber
5.1.1a - Volume Harvested Vs. Allocated Harvest
5.1.1b -Non-Timber Benefits
5.2 Communities & Sustainability
5.2.1 – Investment In Local Communities
5.2.2 - Environmental & Safety Procedures Training
5.2.3 – Level Of Direct & Indirect Employment
5.2.4 - Opportunities for Aboriginals to Participate in Forest Economy
C6. Society's Responsibility
6.1 Aboriginal & Treaty Rights
6.1.1 – Aboriginal Awareness Training
6.1.2 – Aboriginal Communities Understanding of the Plans
6.1.3 – Address Aboriginal Forest Values, Knowledge And Uses
6.2 Respect for Aboriginal Forest Values, Knowledge & Uses
6.2.1 – Identified Aboriginal Forest Values, Knowledge And Uses
6.3 Forest Community Well-Being & Resilience
6.3.1 – Primary And By-Products
6.3.2 & 6.3.3 – Certified Safety Program
6.4 Fair & Effective Decision-Making
6.4.1 – PAG Satisfaction Survey Implemented
6.4.2 – Educational Opportunities for Information/Training
6.4.3 – Aboriginal Communities Understanding of the Plans
6.5 Information for Decision-Making

# 3 OVERVIEW OF ACHIEVEMENTS

Canfor - For the 2014 reporting year a total of 46 indicators were examined. Overall, 37/42 of the indicators achieved the targets specified in the SFMP and 5 indicators are pending.

Canfor's Indicators by Element Area



# **Summary of SFMP Accomplishments-CANFOR**

SFM Elements	Changed Practice or Increased Knowledge
Ecological	<ul> <li>Forestry operations continue within the DFA to capture undercut volumes in last year of cut control.         Changes to prescriptions and layout continue to meet requirements of FSC BC standard. Most notably increases to riparian reserve requirements and green tree retention. The HCVF Effectiveness monitoring report for 2014 identified that green tree retention was met in all of the blocks examined in the Radium DFA. Opportunities for improvements were noted with respect to identifying and ribboning out wet areas within blocks, and riparian management areas adjacenet to riparian reserves.     </li> </ul>
Economic	<ul> <li>With major Radium mill upgrades completed and harvest rates set to capture full 5 year cut control, direct and indirect employment are at their highest in past 5 year period.</li> <li>Total dollars spent locally within the DFA with goods and services purchased, forest contractors and consultants rose to 96% of total spend within the DFA.</li> <li>Donations and scholarships within the DFA increased from last year's levels.</li> <li>There has been a significant increase in Aboriginal participation in the forest economy.</li> </ul>
Social	<ul> <li>Maintained certification as a SAFE company with the implementation of a comprehensive health and safety program in sawmill and woodlands operations.</li> <li>Maintained a PAG group that has ideintified their priority indicators and completed review of proposed indicators of amalgamated SFMP for the Kootenay Region.</li> <li>Significant efforts were made to increase Aboriginals understanding of proposed forest development plans.</li> </ul>

## 4 ECOLOGICAL VALUES

The following provides specifics of each ecological indicator, target and results for Canfor. Where appropriate, additional data and recommendations for improvement have been provided.

## **Indicator 1.1.1a Ecosystem Representation**

The indicator reads "Percent representation of ecosystem groups across the DFA."

Target	DFA Results
0 ha of rare ecosystems clusters (<2000ha) will be harvested.	Targets achieved- No harvesting within rare clusters
For uncommon ecosystem clusters (>2000 ha and <10,000 ha), the amount reserved (or managed to maintain or restore ecosystem function) depends on the area of ecosystem group (See below)	Targets achieved - No harvesting within uncommon clusters
25% of common ecosystem clusters (>10 000ha) will be reserved or managed to maintain or restore ecosystem function	Targets achieved- maintained > 25% of common clusters.

# Canfor Invermere TSA Ecosystem Representation Targets - March 31, 2007

Rare Ecosy	stem Gro	ups (<2000)	na EKCP)			N. S. K.	D WALL			
Ecosystem Group	EKCP Area (ha)	EKCP Target Res %	EKCP Target (ha)	EKCP NHLB	EKCP THLB Target (ha)	Canfor Area (ha)	Canfor THLB Area	Canfor Resp (%)	Canfor Log Target (ha)	Canfor Harvest 2014 (ha)
2	949	100%	949	232	717	856	35	12.1%	0	0
14	1,645	100%	1,645	480	1,165	0	0	0.0%	0	0
16	368	100%	368	130	237	1031	20	27.6%	0	0
24	1,750	100%	1,750	1,324	426	655	88	24.5%	0	0

Ecosystem Group	[A] EKCP Area (ha)	EKCP Target Res %	EKCP Target (ha)	EKCP NHLB	[D] EKCP THLB Target (ha)	[B] Canfor Area (ha)	Canfor THLB Area	[C] Canfor Responsibility [B] / [A] (%)	[E] Canfor Res Target (ha) = [C]'(D)	Canfor EG in Natural Condition THLB (ha)
8	4,402	89.9%	3,957	732	3,225	0	0	0.0%	0	0
10	6,702	50.5%	3,385	2,664	721	3,214	1,721	47.9%	345.8	1,327
17	6,526	53.3%	3,476	3,740	0	305	45	4.7%	0	41
18	8,891	31.5%	2,801	4,777	0	1,285	344	14.4%	0	216
19	4,462	89.1%	3,978	4,065	0	2,209	16	49.5%	0	14
29	2,444	99.7%	2,436	1,508	928	370	122	15.1%	55.6	122

Ecosystem Group	EKCP Area (ha)	EKCP Target Res %	EKCP Target (ha)	EKCP NHLB	EKCP THLB Target (ha)	Canfor Area (ha)	Canfor THLB Area	Canfor Responsibility (%)	Canfor Res Target (ha)	Canfor EG in Natural Condition THLB (ha)
1	73,765	25%	18,441	10,885	7,557	18,757	2,485	25.4%	1,921	2,222
12	10,851	27.1%	2,940	3,330	0	9,920	770	16.7%	0	665
3	237,685	25%	59,421	55,357	4,065	36,533	10,911	15.4%	626	8,862
6	92,710	25%	23,178	29,989	0	22,612	10,721	24.4%	0	8,357
7	315,806	25%	78,952	103,435	0	71,273	37,692	22.6%	0	28,513

The results for this measurable are based on data from cutblocks harvested (Harvest Complete) between 1 January 2014 and 31 December 2014. The GIS overlay analysis indicated that no blocks contained rare or uncommon ecosystems within the net block area.

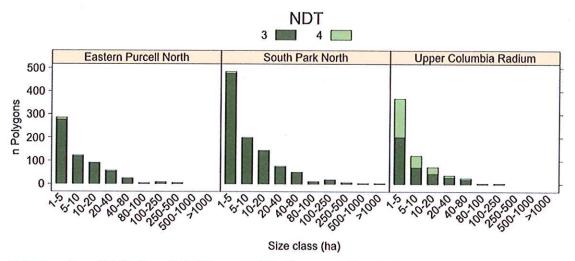
# **Indicator 1.1.1b Interior Forest by Ecosystem Group**

The indicator reads "Recommended percent of interior forest by Ecosystem Group across the DFA."

Target	DFA Results
1(0) Report recommending percent of interior forest by Ecosystem Group across the DFA- March 2010	To be replaced in new SFM

Why is this pending? – This indicator will be replaced in the new amalgamated SFMP. It will be replaced with an indicator for Interior Habitat for Old and Mature.

The draft new indicator is the "Size class distribution of Old Growth and Mature Management Areas, by NDT and ecosection" and the target is "the median is maintained orincreased through time". The current state analysis results are below.



2014 size class distribution of OGMAs and MMAs for ecosections in the Radium licence

## **Indicator 1.1.1c Patch Size Distribution by NDT**

The indicator reads "Percent patch size distribution by natural disturbance type." This indicator will be modified slightly in the new amalgamated SFMP, so that it reads: Patch size distribution by Natural Disturbance Type (NDT), within Ecosections. Ecosections are groupings of landscape units, so the change was essentially to increase the spatial scale at which the indicator was calculated. It also increased the temporal scale over which trends were determined, given that patch size over large areas, like ecosections, changes less rapidly than patch size over smaller areas, like landscape units.

Target	DFA Results
Trend towards patch size distribution targets as defined in the Biodiversity Guidebook, by Natural Disturbance Type (NDT) within Ecosections, over the mid-term (20-50 yrs).	First result by Ecosection so no trends through time available.

	Ecosection		Size cl	ass (ha)				
#	Name	Variance from target <sup>1</sup>						
	-17	< 40 ha	40-250 ha	250- 1000 ha	1000+ ha			
6	Southern Park Ranges - North	High	Within	Low	Low			
10	Upper Columbia Valley	Within	Within	Low	Within			
13	Eastern Purcell Mountains - North	V. High	Within	V. Low	V. Low			

 $<sup>^{\</sup>text{I}}$  V. low: ≥10% below target, Low: <10% below target, within: within target, High: <20% above target,  $^{\text{I}}$  V. high: ≥20% above target. The different cut-offs between low and high were because of the unequal possibility of going below the target versus going above the target.

Results are similar among ecosections in that there tend to be too many patches in the < 40ha size class, adequate numbers of patches in the moderate size class (40-250 ha) and too few in the large size classes. Through time, as patches are joined through harvesting of leave patches between older cutblocks, larger patches will be created.

# Indicator 1.1.2 - Distribution of forest type > 20 years old

The indicator reads "Percent distribution of forest type (deciduous, deciduous mixed wood, conifer mixed wood, conifer) across DFA."

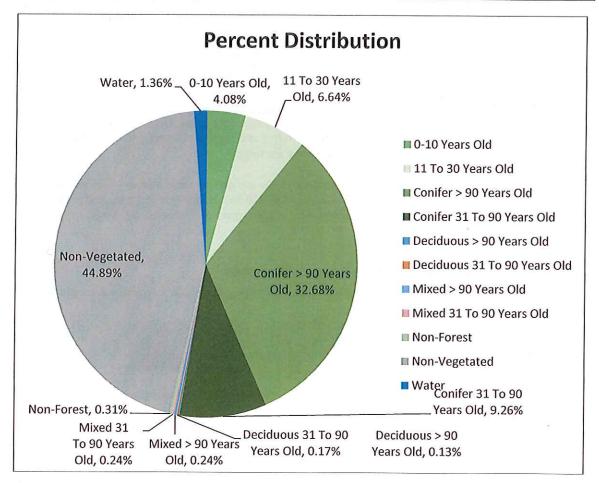
Target	DFA Results
Maintain the baseline distribution (+ 5%) over a 5-year reporting period.	Target achieved

This indicator is reported every 5 years. The last analysis was competed in 2011 and targets achieved.

Based on current state information for 2015 and using the newly proposed indictor where forest types are assessed using a threshold age of 30 years old, the distribution is as follows:

		BE	C Zone (h	a)			
Broad Forest Group	ESSF	ICH	IDF	IMA	MS	Percent Distribution	Grand Total (ha)
0-10 Years Old	5307	1478	1312	0	7326	4.08%	15,423
11 To 30 Years Old	4269	3558	4405		12875	6.64%	25,106
Conifer > 90 Years Old	65204	13830	13423		31166	32.68%	123,623
Conifer 31 To 90 Years Old	11697	4943	4305		14103	9.26%	35,049
Deciduous > 90 Years Old		35	388		61	0.13%	484
Deciduous 31 To 90 Years Old	34	208	237		154	0.17%	632
Mixed > 90 Years Old	61	254	232		373	0.24%	920
Mixed 31 To 90 Years Old	61	254	232		373	0.24%	920
Non-Forest	470	15	245		433	0.31%	1,164

Non-Vegetated	83982	2338	11814	65264	6423	44.89%	169,822
Water	605	502	3086	46	922	1.36%	5,160
Total	171691	27416	39678	65310	74208	100.0%	378302



# Indicator 1.1.3 - Seral Stage or Age Class

The indicator reads "Percent late seral distribution by ecological unit across the DFA."

Target			DFA Results
100% compliance with the mature and old seral targets defined in the Kootenay Boundary Higher Level Plan			100 % Compliance

For 2015, the measureable under the new amalgamated SFMP is being changed to 'Area of old, mature and early seral stands, by ecosystem (BEC subzone) grouping, for current and future time periods relative to the Range of Natural Variability'. The new target will be 'To be compatible with (either within or moving towards) the Range of Natural Variability.'

## Indicator 1.1.4a - Dispersed Retention

The indicator reads "Percent of blocks meeting dispersed retention levels as prescribed in the operational plan."

Target	DFA Results
100% (0)	Target met

Blocks are meeting dispersed retention levels based on GIS analysis and silviculture survey results. No non-compliances indentified.

#### Indicator 1.1.4b - Stand Structure Retention

The indicator reads "Percent of stand structure retained across the DFA in harvested areas."

Target	DFA Results
Landscape level target – 7%	Target met. Current level is 11.7%

The total percent stand structure retention in the DFA is 11.7%. This is summed across all landscape units and all BEC variants in the Radium licence, based on 25,612 ha's of WTP, Riparian Reserves and OGMAs out of 218,639 ha of CFLB. This is summed across all landscape units and all BEC variants in the Radium licence.

#### Indicator 1.1.4c - Riparian Management Strategies

The indicator reads "Number of non-conformances to riparian management strategies."

Target	DFA Results
0 (0)	Target met but Opportunities for Improvement identified in 2013 and 2014 HCVF Effectiveness Monitoring Reports

No non-conformances with riparian management strategies were identified in 2014. The 2014 HCVF Effectiveness monitoring project sampled 3 blocks within the Radium license and noted layout procedures and Machine Free Zones (MFZ) were followed and protected riparian values. The Site Plan map and text in another block were confusing with respect to riparian values. These results were reported back to the appropriate staff for continual improvement. In 2013, 23 blocks within the Radium licence were sampled. General observations included where better RRZ/RMZ design was needed to retain and windfirm spruce trees in riparian habitat in fisheries sensitive watersheds. The RMZ in particular was identified as a management zone needing more consideration. Placing MFZ around NCDs was also identified as an area of improvement. These things were communicated to Field Operations and layout consultants at annual training sessions.

## Indicator 1.2.1 & 1.2.2 - Species of Management Concern

The indicator reads "Percent of forest management activities consistent with management strategies for Species of Management Concern."

Target	DFA Results
100% conformance with management strategies (0)	Target met

Results based on IT reports for the 2014 year. This indicator is being modified in the 2015 ammalgamated SFMP. The new indicator 1.2.1 will read 'Forest management activities conform to operational plans that include the appropriate management strategies from the SWP for blocks containing habitat for species of management concern'. The new indicator for 1.2.2 will read 'Suitable habitat is provided for key Species of Management Concern'.

#### Indicator 1.2.3a & 1.3.1a - Regeneration - Seed & Vegetative Material

The indicator reads "Regeneration will be consistent with provincial regulations and standards for seed and vegetative material use."

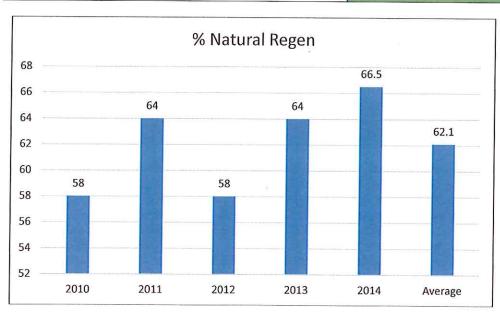
Target	DFA Results
Annually, 100% conformance with the standards	Target met

Seed use report indicate compliance with provincial regulations as 0.24% of seedlings planted on A18979 were outside their transfer limit. A total of 1,731,252 seedlings wre planted in Radium in 2014 of which 4,178 were outside their transfer limit.

# Indicator 1.2.3b & 1.3.1b - Natural Regeneration

The indicator reads "Percent of natural regeneration."

Target	DFA Results
Greater than or equal to 50% of area harvested will be restocked by natural regeneration over a 5 year period (rolling average)	Target met. In 2014, the result was 66.5 % while the 5 year average is 62.1%



# Indicator 1.4.1 - Protected Areas and Sites of Biological Significance

The indicator reads "Percent of forest management activities consistent with management strategies for protected areas and sites of biological significance."

Target	DFA Results
100% (0)	Target met

NB – although not a protected area or a site of biological significance, the harvesting of RRZ along Frances Cr. Constitutes an encroachment of reserve area.

This indicator is being redefined to two indicators for the next year in the 2015 amalgamated SFMP. 1.4.1a will be Protected Areas, and 1.4.1b, Sites of Biological Significance.

The new measureable for 1.4.1a will be 'Percent of area in protected reserves, by BEC variant and management unit, within the DFA', with targets ranging from 12-24%, depending on BEC variant.

The new measureable for 1.4.1b will be 'Percentage of blocks (with cutting permits approved in calendar year) following SWPs for Sites of Biological Significance (SBS) when block has SBS identified' with a target of 100%.

## Indicator 1.4.2a - Identified Aboriginal & Other Cultural Forest Values, Knowledge & Uses

The indicator reads "Percent of identified Aboriginal and other cultural forest values, knowledge and uses considered in forestry planning processes."

Target	DFA Results
100% (0)	Target met

Proposed forest development areas were information shared with the Ktunaxa Nation, Shuswap Indian Band, Adams Lake Indian Band (ALIB) and Neskonlith Indian Band February 2014, july 2014, December 2014 and fire salvage areas were information shared in September 2014. A respone from the Ktunaxa Lands and Resource Agency asked Canfor to confirm the Ktunaxa Nation's archaeological guidelines were followed in fire salvage areas which was confirmed. Archaelogical field reconnaissance was completed on 7 identified potential polygonsin Radium DFA (GRA0046, FRA0010, FRA0014, STE0054, STE0058, STE0060 and FEN0018) All field surveys were negative except for FEN0018 and the identified area was included in the Site Plan as Machine Free Zones. All site plans contain a section which considers First Nation's values and cultural heritage. Management practices in Canfor have been 100% compliant with existing Forest Stewardship Plans and operational plans with regard to strategies to not impede access to identified resources for First Nations. No non-compliance or non-conformance issues have been identified.

# Indicator 1.4.2b – Aboriginal & Other Cultural Forest Values, Knowledge & Uses – Grant Frank O report

The indicator reads "Percent of forest operations in conformance with operational plans developed to address Aboriginal and other cultural forest values, knowledge and uses."

Target	DFA Results
100% compliance with operational plans (0)	Target met

In 2014, 21 blocks which were harvested had archaeological assessments completed as there were moderate to high potential archaeology polygons identified. Qualified registered professionals completed field assessments which yielded 4 positive finds for archaeological values and the inclusion of strategies to protect potential archaeological values on 7 blocks. The location of these sites remains confidential.

No non-compliance or non-conformance issues have been identified with operational plans developed to address Aboriginal values, knowledge or uses.

#### Indicator 2.1.1 – Regeneration Delay

The indicator reads "Regeneration delay for stands established annually."

Target	DFA Results
As per FSP (N/A)	Target met. Average regen delay for DFA is 2.6 years.

Operations have been 100% compliant with FSP strategies and operational plans. No non-compliance or non-conformance issues have been recorded in 2014. The average regen delay for 2014 is 2.6 years which is a reduction from 2013's 4.2 years...

#### Pending - Indicator 2.2.1a - Conversion to Non-Forest Land Use

The indicator reads "Percent of gross forested landbase in the DFA converted to non-forest land use through forest management activities."

Target	DFA Results
Less than 3% of gross forested landbase (GFL)1	Indicator pending new SFMP revision

Why is this pending? – This indicator will be replaced in the new amalgamated SFMP. The target will be updated.

The draft new indicator is the "Percent of Operable Land base converted to permanent access structures through forest management activities." and the target is "5% or less per LU (+2%)". The current state analysis results for LU's within the Radium DFA are below. Only 1 LU currently exceeds the 5% target, although it is currently within the acceptable variance. 11 LU's are approaching the 5% target.

#### **Current Condition**

% PAS	> 5	4.1 - 5	3.1- 4	2.1-3	<2
LU	125	116, 118, 123 ,125, 126, 129, 130, 133,	115, 120, 121, 122, 124, 127, 128, 132	113, 114, 117, 119	

#### Indicator 2.2.1b - Landslides

The indicator reads "Number of hectares of landslides resulting from forestry practices."

Target	DFA Results
0 ha in THLB (for slides >0.5 ha in size)	Target met

There were no landslides observed or reported in ITS within the DFA resulting from forestry practices.

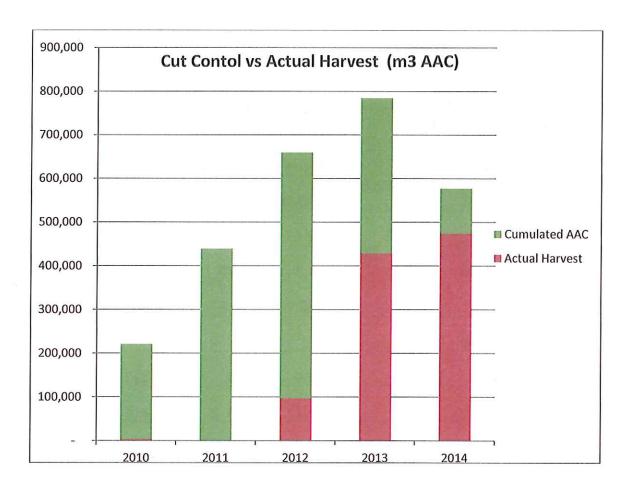
# Indicator 2.2.2 - Volume Harvested Vs. Allocated

The indicator reads "Percent of volume harvested compared to allocated harvest level."

Target	DFA Results
100% over the cut control period as defined by Timber supply forecast harvest flow (According to the Cut Control Regulation and Policy) (Variance +10%)	

In 2014, the harvested volume from within the DFA was approx. 473,000 m3. (NB – at the time of writing this report, final cut control letters were not issued by FLNRO therefore this volume estimate will be revised) The 5 year Cut Control period ended in 2014. A total of 1,005,869 m3 were harvested within the cut control period which is leaves means a total of 91.0 % of cut control was achieved.

<sup>&</sup>lt;sup>1</sup> GFL = THLB + NTHLB + NP Nat + adjacent protected areas



#### Indicator 3.1.1 - Soil Disturbance

The indicator reads "Percent of harvested blocks meeting soil disturbance objectives identified in plans."

Target	DFA Results
100% of blocks meet soil disturbance objectives (0)	Target met. No non- conformances reported.
1) Landscape: Average 4.5% (+/2%) all cutblocks over a 5 year period.	3.75% based on 5 year average
2) Stand: For a cutblock, 10% disturbance on high hazard areas and 5% on very high hazard areas as defined in soil conservation guidebook.	Target met with no non- compliance reported.

Note: Soil disturbance levels noted by ocular estimates during and/or post-harvest. No compliance issues observed. For future implementation, random surveys will be completed from a sample of harvested blocks in conjunction with ocular estimates. Revised survey methodology in process of updating.

#### Indicator 3.1.2 - Coarse Woody Debris

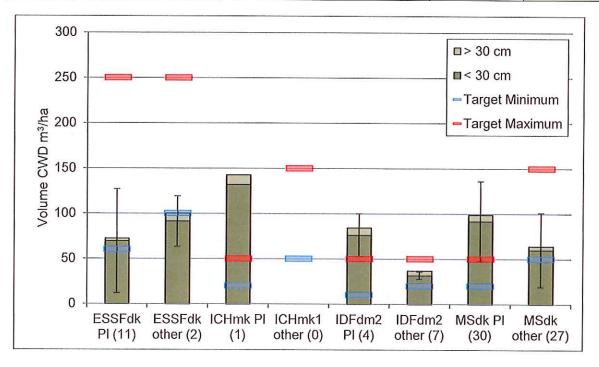
The indicator reads "Percent of cutblocks reviewed where post harvest CWD levels are within the targets contained in plans."

Target	DFA Results
100% of blocks harvested annually (0)	Target met

Coarse woody debris surveys conducted in conjunction with waste and residue survey results for 2014 are shown below. One result was below the target however only 2 blocks were sampled.

2014 Post harvest CWD volumes and targets for Radium Licence (A18979) by BEC and leading stand type

BEC	Leading	n	Mean m³/ha CWD			Target
	stand type   block	blocks	<30cm	>30cm	Total± SD	met?
ESSFdk	PI	11	69.4	2.9	72.3±57.6	WITHIN
	Other	2	91.3	8.75	100.6±28.0	BELOW
ICHmk	PI	1	132.1	10.7	142.8	ABOVE
	Other	0	-	-		-
IDFdm2	PI	4	76.4	8.0	84.3±23.7	ABOVE
	Other	7	31.7	5.4	37.2±4.1	WITHIN
MSdk	PI	30	91.8	4.3	96.1±44.1	ABOVE
	Other	27	60.0	7.0	67.0±41.0	WITHIN



2014 Post harvest CWD volumes and targets for Radium Licence (A18979) by

# BEC and leading stand type (number in brackets indicates number of blocks)

#### Indicator 3.2.1a - Peak Flow of Sensitive Watersheds

The indicator reads "Sensitive watersheds that are above Peak Flow targets will have further assessment."

Target	DFA Results
100% (-10%)	Target met

The current range for PFSI in Pinnacle/Luxor Sub-basines range from 1.8 – 17.7 %. Based on proposed harvesting they are predicted to range from 4.9% - 17.7 % by 2018. The current range for PFSI in Forester Sub-basines range from 0.2-4.6 %. Based on proposed harvesting they are predicted to range from 0.2 - 4.7 % by 2018.

# Indicator 3.2.1b - High Hazard Drainage Structures

The indicator reads "Percent of high hazard drainage structures in sensitive watersheds with identified water quality concerns that have mitigation strategies implemented as per the plan."

Target	DFA Results
100% (0)	Target met

Drainage structures were built in both Forester and Luxor/Pinnalce watersheds. Two small bridges were installed in place of proposed culverts in the Forster Watershed in summer 2014. The 2 bridges were installed in place of proposed culverts given the time of year of road construction and proximity to the Forester Water Intake. The bridges were installed on R07183 Sec. 118 and 119 to access EY7319 block FOR0004. Bridges were also installed in the Pinnacle Creek Watershed last fall to Access EY7315 LUX0001, LUX0012 and Luxor Creek EY7337 Block Lux0014. Road construction and other bridge and culvert will be installed in the Pinnacle drainage summer 2015 to access EY7315 LUX0004. Mitigation strategies are outlined in the bridge design plans.

In the Palliser drainage, 6 new bridge structures were installed including those required to replace bridges and culverts damaged in the 2013 flood event. A fisheries biologist provided design and installation recommendations which were all followed. Some recommendations included installation of longer bridges to stay outside the high water mark, installation of bridges rather than culverts, timing of installation and use, and removal of some structures after activities were completed.

#### Indicator 4.1.1 - Retention of Old Forests

The indicator reads "Maintain the retention of existing (or replacement of) old forest."

Target	DFA Results
See indicator 1.1.3	Results Pending

Results Pending.

For 2015, the measureable is being changed to 1.1.3b 'Amounts of old and mature stands by landscape unit and BEC variant'. The new target will be 'full compliance with the mature and old targets as defined in the Kootenay Boundary Higher Level Plan and spatial identification of stands to meet these targets (+0.3% of the target)'.

#### Indicator 4.1.2 – Regeneration Delay

The indicator reads "Regeneration delay for stands established annually."

Target	DFA Results
As per FSP (N/A)	Target met. Average regen delay for DFA is 2.6 years.
See indicator 2.1.1	

# Pending = Indicator 4.2.1 - Conversion to Non-Forest Land Use - Need additional info from Ian on changes

The indicator reads "Percent of gross forested landbase in the DFA converted to non-forest land use through forest management activities."

Target	DFA Results
Less than 3% of gross forested landbase (GFL) <sup>2</sup>	Indicator pending new SFMP revision
See indicator 2.2.1a	

Why is this pending? – This indicator will be replaced in the new amalgamated SFMP. The target will be updated.

The draft new indicator is the "Percent of Operable Land base converted to permanent access structures through forest management activities." and the target is "5% or less per LU (+2%)". The current state analysis results for LU's within the Radium DFA are below. Only 1 LU currently exceeds the 5% target, although it is currently within the acceptable variance. 11 LU's are approaching the 5% target.

#### **Current Condition**

% PAS	> 5	4.1 - 5	3.1- 4	2.1-3	<2
LU	125	116, 118, 123 ,125, 126, 129, 130, 133,	115, 120, 121, 122, 124, 127, 128, 132	113, 114, 117, 119	

## 5 ECONOMIC VALUES

The Radium Sustainable Forest Management Plan included 20 indicators to evaluate economical criteria. The following provides specifics of each indicator, target and results for Canfor.

# Indicator 5.1.1a - Volume Harvested Vs. Allocated

The indicator reads "Percent of volume harvested compared to allocated harvest level."

Target	DFA Results
100% over the cut control period as defined by Timber supply forecast harvest flow (According to the Cut Control Regulation and Policy) (Variance +10%) See indicator 2.2.2	2014 Cut Control harvest approx. 473,000 m3 or 214% of AAC  5 year cut control period ended Dec 31, 2014and an estimated 1,005,869 m3 were harvested which is 91.0% of 5 year cut control period.

<sup>&</sup>lt;sup>2</sup> GFL = THLB + NTHLB + NP Nat + adjacent protected areas

**Note:** A total of approximately 473,000 m3 were harvested from the DFA from the Radium licenses A18979. Harvest levels increased through 2014 to achieve the AAC for the 5 year cut control period which ended December 31, 2014. (NB: These figures are estimates based on billed volumes as cut control letters are pending.)

#### Indicator 5.1.1b - Non-Timber Benefits

The indicator reads "Conformance with strategies for non-timber benefits identified in plans."

Target	DFA Results
No non-conformances for site level plans (0)	Operations have been 100% compliant with FSP strategies and operational plans. No non-compliance or non-conformance issues have been recorded in 2014 with known Non Timber Forest Products.

#### Indicator 5.2.1 - Investment in Local Communities

The indicator reads "Investment in local communities."

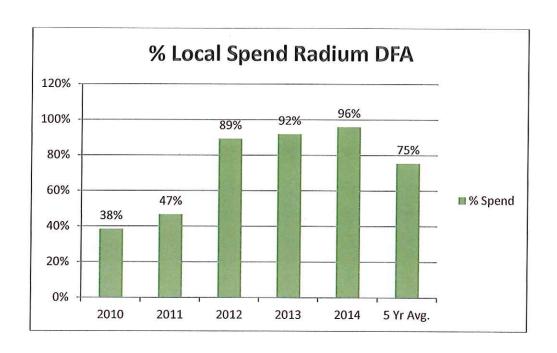
Target	DFA Results
>= 50% of dollars spent in local communities; 5-year rolling average (-10%)	Target met.

The 5 year rolling average is 75% and the 2014 percentage is 96%. Lower percentages in the earlier part of this period are attributable to the mill curtailment period when little activity was taking place in the DFA. With full operations in 2014 given a focus on capturing the full AAC in the cut control period, the results greatly improved compared to other recent years. NB — the amount spent was based on totals for the region and prorated based on AAC's.

Additionally, 19 corporate donations were made within the region totalling over \$18,000 of which 5 were specific to the Radium DFA. These donations included 2 scholarhsips, 2 donations to minor sports and one to a forestry education camp.

# Percentage of Dollars Spent Locally in Radium DFA 2009-2014 Spend in Radium DFA

Year	% Local \$		Total \$	% Spend
2009	\$	14,073,949.65	\$ 34,497,215.04	41%
2010	\$	1,440,754.91	\$ 3,751,119.30	38%
2011	\$	1,168,927.77	\$2,505,743.47	47%
2012	\$	4,263,927.54	\$4,778,833.47	89%
2013	\$	24,569,129.10	\$26,770,993.82	92%
2014	\$	42,592,587.88	\$44,404,019.54	96%
5 Yr Avg.	\$	88,109,276.84	\$ 116,707,924.63	75%



# Indicator 5.2.2 - Environmental & Safety Training

The indicator reads "Training in environmental and safety procedures in compliance with company training plans."

Target				DFA Results
100% of company employee	s and contractors will have both	environmental and safety tra	ining (-5%)	Target met

Based on training records in Ecplise module, staff have completed mandatory training requirements. Generally, training is completed and updated in spring training sessions.

# Indicator 5.2.3 - Direct & Indirect Employment

The indicator reads "Level of direct and indirect employment."

Target	DFA Results
AAC * employment multiplier - 5-year average (+/-10%)	Target met

The target was not met in 2012 but with resumption of forestry operations, the target was met in both 2013 and 2014. It is expected this trend will continue however the 5 year average may decrease next year due to a reduction in harvesting on the Radium license as the under cut was captured in the latter 2 years of the cut control and normalized operations resume. The target achieved was 90.3%.

	Employme	ent 2010-2014			
FL A18979 Volume har	vested				
Year	2010	2011	2012	2013	2014
AAC m <sup>3</sup>	221,005	221,005	221,005	221,005	221,005
Cumulative AAC m <sup>3</sup>	221,005	442,010	663,015	884,020	1,105,025

Annual harvest m <sup>3</sup>	3,246	0	96,356	428,222	473,677
% of AAC	1.47%	0.00%	43.60%	193.76%	214.33%
Cumulative	3,246	3,246	99,602	527,824	1,001,501
% of cumulative AAC	1.47%	0.73%	15.02%	59.71%	90.63%
Average per year over five years					200,300
Direct + indirect employment per 1000 m <sup>3</sup>					0.745
Person Year Target					165
Person Year Calculated					149

# Indicator 5.2.4 - Aboriginals Participate in Forest Economy

The indicator reads "Number of opportunities for Aboriginals to participate in the forest economy."

Target	DFA Results
Number of opportunities from baseline assessment; 3-year rolling average. (-10% of baseline)	Target met

Opportunities included payments to, and contracts with, Tipi Mtn Eco-Cultural Services, Nupqu Development Corp, the Ktunaxa Nation, KDC Sand and Grave, Shuswap Woodlands Cor, St-Eugene Mission Resort, a local artisan and Dominion Excavating. A total of 13 Aboriginal vendors and suppliers provided goods and services to Canfor in the region. Estimated total revenue to First Nations in the DFA (prorated based on AAC's with remaining Kootenay DFA) was over \$2,433,69 up from 2013 levels of \$1,164,000. The joint management and advisory committee tasked with implementing aspects of the Engagement and Benefits Agreement met four times in 2014.

#### 6 SOCIAL VALUES

The Radium Sustainable Forest Management Plan included several indicators to evaluate social criteria. The following provides specifics of each indicator, target and results for Canfor.

#### Indicator 6.1.1 – Aboriginal Awareness Training

The indicator reads "Employees will receive Aboriginal awareness training."

Target	DFA Results
100% (-10%)	Target met

100% of all employees who require Aboriginal Awareness training have completed the training modules in Eclipse. Mandatory training is for planning and silviculture staff who work in the DFA.

#### Indicator 6.1.2 - Aboriginal Understanding of Plans

The indicator reads "Evidence of best efforts to communicate interests and management plans based on Aboriginal communities having a clear understanding of the plans."

Target	DFA Results
100% of management plans (0)	Target met

Efforts to communicate various plans include many formats such as emails, phone calls and face-to-face meetings. Face-toface meetings allow a two way dialogue and allow the Nation and Bands the opportunity to ask in-depth questions and clarify other aspects of forest management and plans to better understand them. Proposed forest development areas were information shared with the Ktunaxa Nation, Shuswap Indian Band, Adams Lake Indian Band (ALIB) and Neskonlith Indian Band February 2014, july 2014, December 2014 and fire salvage areas were information shared in September 2014. Follow up calls and meetings specific to these information sharing submissions provide the opportunity for further discussions and clarification.

An FSP amendment was referred to all bands and the Nation in May 2014. Face-to-face meetings to explain the FSP amendment in advance of the referral occurred with the Tobacco Plains Indian Band (TPIB), A qam Band (SMIB) and Shuswap Indian Band (SIB) in April, 2014. A presentation on the FSP amendment was made to the Chief and Council of the Akisqnuk Band (AIB) in April 2014 in which questions were asked and answered and a modification to the amendment resulted from AIB input.

With the KLRA, a face-to-face mtg was held in April 2014 to discuss an FSP amendment and provide information on the TSR process. A respone from the Ktunaxa Lands and Resource Agnecy (KLRA) on an information sharing submission asked us to confirm the Ktunaxa nation's archaeological guidelines were followed in fire salvage areas which was confirmed. Additionally, meetings were held in June and November to discuss monitoring for the Culturally Important High Conservation Value Forests (CCVF's). Meetings were held with the new KLRA manager in December'14 and January '15 to discuss information sharing processes and provide a better undersxtanding of general local forestry activities and principles.

Face-to-face meeting with the TPIB in February and April included review and discussions on general forest development plans, management of their license and proposed development within the Flathead and Wigwam areas which are of high importance to the band. Further face-to-face meetings included discussions on their traplines in May and Decmber. Another meeting to discuss and clarify proposed development in the Wigwam took place in October and as a result, plans were put on hold by Canfor.

Face-to-face meetings with SMIB in February included topics on proposed forest development plans and their forest licenses. Canfor and SMIB signed an MoU in May which outlined their respective interests and commitments to work cooperatively and develop capacity for the band.

Meetings with Lower Kootenay Indian band (LKIB) have included referrals on FSP amendments and general forest development plans. The LKIB raised a concern regarding proposed harvest within an area with White Pine which is culturally important to the band. Revisions to the plans are on-going to address and resolve their concerns.

Face-to-face meeting with the Shuswap Indian Band (SIB) included review and dicussion on proposed forest development plans in April and July. The April meeting included a review of the proposed FSP amendment which amended the FSP to include SIB's forest license. A meeting with the newly elected Chief occurred in December to explain general forest activities, current agreements with the band and proposed forest development plans. A follow up meeting occurred in January 2015.

Face-to face meetings were held with the Neskonlith Indian Band (NIB) in July and December and similar meetings were scheduled with Adams Lake Indian band. The July meeting with Adams Lake (ALIB) had to be cancelled while the December meeting took plae. In each meeting, the information sharing process and plans were discussed and both bands indicated the process and information format met their requirements for review and comment purposes.

## Indicator 6.1.3 – Address Aboriginal Forest Values, Knowledge and Uses

The indicator reads "Percent of forest operations in conformance with operational plans developed to address Aboriginal forest values, knowledge and uses."

Target	DFA Results
100% compliance with operational plans (0)	Target met

In 2014, 21 blocks which were harvested had archaeological assessments completed as there were moderate to high potential archaeology polygons identified. Qualified registered professionals completed field assessments which yielded 4 positive finds for archaeological values and the inclusion of strategies to protect potential archaeological

values on 7 blocks. The location of these sites remains confidential.

No non-compliance or non-conformance issues have been identified with operational plans developed to address Aboriginal values, knowledge or uses.

# Indicator 6.2.1 - Identified Aboriginal Forest Values, Knowledge & Uses

The indicator reads "Percent of identified Aboriginal forest values, knowledge and uses considered in forestry planning processes."

Target	DFA Results
100% (0)	Target met

Proposed forest development areas were information shared with the Ktunaxa Nation, Shuswap Indian Band, Adams Lake Indian Band (ALIB) and Neskonlith Indian Band February 2014, july 2014, December 2014 and fire salvage areas were information shared in September 2014. A respone from the Ktunaxa Lands and Resource Agency asked Canfor to confirm the Ktunaxa Nation's archaeological guidelines were followed in fire salvage areas which was confirmed. Archaelogical field reconnaissance was completed on 7 identified potential polygonsin Radium DFA (GRA0046, FRA0010, FRA0014, STE0054, STE0058, STE0060 and FEN0018) All field surveys were negative except for FEN0018 and the identified area was included in the Site Plan as Machine Free Zones.

All site plans contain a section which considers First Nation's values and cultural heritage. Management practices in Canfor have been 100% compliant with existing Forest Stewardship Plans and operational plans with regard to strategies to not impede access to identified resources for First Nations. No non-compliance or non-conformance issues have been identified.

#### Indicator 6.3.1 - Primary and By-Products

The indicator reads "Primary and by-products that are bought, sold, or traded with other forest dependent businesses in the local area."

Target	DFA Results
Report out on # of purchase / sale / trade relationships (n/a)	Target met

During the reporting period, there were 30 purchase clients, 23 sales clients and trade/purchase agreements in place with Louisiana-Pacific, Woodex and the Paper Excellence's pulp mill at Skookumchuk.

#### Indicator 6.3.2 & 6.3.3 – Certified Safety Program

The indicator reads "Implementation and maintenance of a certified safety program."

Target	DFA Results
100% (0)	Target met

Canfor has achieved and maintains Safe BC certification

#### Indicator 6.4.1 - PAG Satisfaction

The indicator reads "PAG established and maintained according to Terms of Reference (satisfaction survey implemented)."

Target	DFA Results
80% satisfaction from surveys (-10%)	Target met

There were 5 PAG meetings in 2014. Two followed a usual format while 3 were held in a World Café style. The satisfaction surveys were conducted for the two meetings while all meeting time was dedicated to the café style meetings to make most effective use of discussions on new SFM plan indicator development. The average PAG satisfaction score was 4.3. Some opportunities for improvement were identified from survey results and intitiatives to

improve overall satisfaction will be implemented in 2015.

# Indicator 6.4.2 - Educational Opportunities - Information/Training

The indicator reads "Number of educational opportunities for information/training that are delivered to the PAG."

Target	DFA Results
>= 1/meeting (0)	Target met

Presentations to the PAG included topics such as; Pile burning, the silviculture strategy, the biodiversity strategy and a tour of the re-fitted Radium mill. Additionally, several meetings included a world café style of discussions on the proposed new SFM plan indicators including areas such as riparian management, patch size distribution, landslides and investment in local communities.

#### Indicator 6.4.3 – Aboriginal Communities Understand Plans

The indicator reads "Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans."

Target	DFA Results
100% of management plans (0)	Target met

Efforts to communicate various plans include many formats such as emails, phone calls and face-to-face meetings. Face-toface meetings allow a two way dialogue and allow the Nation and Bands the opportunity to ask in-depth questions and clarify other aspects of forest management and plans to better understand them. Proposed forest development areas were information shared with the Ktunaxa Nation, Shuswap Indian Band, Adams Lake Indian Band (ALIB) and Neskonlith Indian Band February 2014, july 2014, December 2014 and fire salvage areas were information shared in September 2014. Follow up calls and meetings specific to these information sharing submissions provide the opportunity for further discussions and clarification.

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#### Indicator 6.5.1 – Educational Opportunity

The indicator reads "Number of people who took part in an educational opportunity."

Target	DFA Results
25 (-10) annually	Target met.

Educational and information sharing opportunities include a field tour of approx.. 20 people led by the Forest Scientist during Wings Over the Rockies event to discuss sustainablke forest management, a tour of the Radium mill for 12 members of the Radium Canfor Citizen Advisory Committee, a tour of the Radium mill with over 40 contractors to educate them on the milling process and mill upgrades, field tours with stakeholders, mailout notifications and general public advertisements on proposed forest development activities. In addition, the Forest Scientist gave a presentation at a public conference in Waterton National Park on Sustainable Forest Management in Canfor's Operating Area, together with John Bergenske of WildSight.

#### Indicator 6.5.2 – SFM Monitoring Report

The indicator reads "SFM monitoring report made available to the public."

Target	DFA Results
SFM monitoring report available to public annually via web (N/A)	Target met

7 PART 2-JAN 1, 2014 SFMP: CURRENT CONDITION REPORT

C1. Biological Diversity						
1. Riological Diversity	Ecological Values			Target Achieved	Background Info	Mapping Product
A TOTAL PROPERTY OF THE PARTY O	9	Indicator Statement	Target (variance)	(yes) = 1 or (no)= 0		
1.1 Ecosyste	1.1 Ecosystem Diversity			P. March College and Land		
	1.1.1a — Ecoayatem Representation of Groups	Percent representation of ecosystem groups across the DFA	-Rare Ecosystems - O ha -23% of common ecosystem cluster will be reserved or managed to minimin or restore ecosystem functions -Uncommon ecosystems - Table 15; Canfor Invernere TSA Ecosystem Representation Targets - March 31, 2007	=	See Part 1-Measure 1-1.1	yes
	1.1.1b - Interior Forest by Ecosystem Group	Recommended percent of interior forest by Ecosystem Group across the DFA	1 Report (0)	Pending	N/A	N/A
	1.1.1c - Patch Size Distribution by Natural Disturbance Type		Trend towards patch size distribution targets defined in the LU Planning Guide by Natural Disturbance Type over a 5 year period	Pending	See Part 1- Measure 1-2,4	yes
	1.1.2 - Distribution of forest type >20 years old	Percent distribution of forest type (deciduous, deciduous mixed wood, conifer across DFA	Maintain the baseline distribution ( $\pm$ 5%) over a 5-year reporting period,	-	Baseline forest groups 2014 chart- see current condition SFMP 1,1.2	yes
	1.1.3 - Late Seral Distribution	Percent late seral distribution by ecological unit across the DFA	100% compliance with the mature and old serul targets defined in the Kootenay Boundary Higher Level Plan	=	Sec Part 1- Measure 1-2.1	yes
	1.1.4.a - Dispersed Retention	Percent of blocks meeting dispersed retention levels as prescribed in the operational plan.	100% (0)	₽	Sec Part 1- Measure 1-3.1	N/A
	1.1.4b - Stand Structure Retention	Percent of stand structure retained across the DFA in harvested areas	Landscape level target – 7%	Į.	See Part 1- Measure 1-3.1b	yes
	1.1.4c - Riparian Management Strategies	Number of non-conformances to riparian management strategies	(0) 0.	7	See Part 1- Measure 1-3.1b	yos
1.2 Species Diversity	Diversity					
	12.1 & 12.2 -Species of Management Concern	Percent of forest management activities consistent with management strategies for Species of Management Concern	100% conformance with management strategies (0)	₹	See Part 1- Measure 1-4.1	yes
1.3 Species	1.3 Species & Genetic Diversity					
	1.2.3n/1.3.1a - Regeneration - Seed & Vegetative Material	Regeneration will be consistent with provincial regulations and standards for seed and vegetative material use	Annually, 100% conformance with the standards	-	See Part 1- Measure 2-3.2	N/A
	1.2.3b/1.3.1b - Natural Regenention	Percent of natural regeneration	Greater than or equal to 50% of area harvested will be restocked by natural regeneration over a 5 year period (rolling average)	-	Sec Part 1- measure 1-6.2	N/A
1.4 Protect	1.4 Protected Arens & Sites					
	1.4.1 — Protected Arens & Sites of Biological Significance	Percent of forest management activities consistent with management strategies for protected areas and sites of biological significance	100% (0)	-	Sec Part 1- measure 1-5.1	N/A
	1.4.2a - Identification & Addressing Aboriginal And Other Cultural Forest Values, Knowledge And Uses	Percent of identified Aboriginal and other cultural forest values, knowledge and uses considered in forestry planning processes	100% (0)	-	See Part 1- mensure 8-2.1, 8-2.2	N/A
	1.4.2b Aboriginal & Other Cultural Forest Values, Knowledge & Uses	Percent of forest operations in conformance with operational plans developed to address Aboriginal and other cultural forest values, knowledge and uses	100% compliance with operational plans (0)	-	See Part 1- measure 8-3.1, 8-3.2,8-4.4	e/u

As per FSP (N/A)  Less than 3% of gross forested inriduae (GPL)  Dan in THLB (for stides >0.5 ha in size)  O ha in THLB (for stides >0.5 ha in size)  100% over the cut coulted period as edited by Timber apply forcest invest flow (According to the Cut Control Regulation and Policy) Variance +10%  100% of blocks meet soil disturbance objectives (0)  100% of blocks invested annually (0)  100% of blocks invested annually (0)  See indicator 1.1.3  As per FSP (N/A)  Less than 3% of gross forested landbase (GEL)  As per FSP (N/A)  Less than 3% of gross forested landbase (GEL)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)  No non-conformates for site level plants (0)  Regulation and Policy)	C2. Ecosyst	C2. Ecosystem Condition & Productivity			The state of the s		
2.1.1 - Forgretten Drop   2.1.2 - Volume to the control of the c		2.1 Forest Ecosystem Resilience					
Table   Convention To Non-Found Land Use   Authorized Enables (1972)   Products		2,1.1 - Regeneration Delay	Regeneration delay for stands established annually	As per FSP (N/A)	-	See Part 1- measure 2-3.1	n/a
2.2.1 = - Conversion To None-Secuel Land Use   2.2.2 = - Landsidizer tearlings from foreign practices and management startings and management startings from foreign practices and for		2.2 Forest Ecosystem Productivity					
2.1.1 b - Landshider recoiting from theretry precise of Number (courty percises and the court of the court		2.2.1a - Conversion To Non-Forest Land Use	Percent of gross forested landbase in the DFA converted to non-forest land use through forest management activities	Less than 3% of gross forested landbase (GFL)	Pending	n/a	yes
Star 2.2. "Volume farvered Vs. Alosated Flavest   Name of Campo Part		2.2.1b - Landslides resulting from forestry practices	Number of hectares of landslides resulting from forestry practices	0 ha in THLB (for slides >0.5 ha in size)		See Part 1- measure 2-4.1	e/u
Soli Quality & Quantity  3.1.1.—Soli Disturbance Objective  As 1.1.—Soli Disturbance Objective  As 1.1		2.2.2. – Volume Harvested Vs. Allocated Harvest	Percent of volume harvested compared to allocated harvest level	100% over the cut control period as defined by Timber supply forecast harvest flow (According to the Cut Control Regulation and Policy) Variance +10%)	-	See Part 1- mensure 4-2.1	e/u
High granting Chycine Chycline Chycline and Chycline in Entired blocks meeting and disturbance Chycline Chyclin	C3.Soil &	Water					
Percent of the new collectives desiring to a part in the surgest of definitions of blocks in next soil disturbance objectives (9)  Percent of the surgest occupied in plans  The surgest of the surgest occupied in plans  The surgest of the surgest occupied in plans  The surgest occupied in plans  The surgest occupied in plans  The surgest occupied in the surgest occupied in plans  The surgest occupied in the surgest occupied in plans  The surgest occupied in the surgest occupied in plans  The surgest occupied in the surgest occupied in plans  The surgest occupied in the surgest		3.1 Soll Quality & Quantity					
nuntity  Trans. Blow Target  OVD, Jovet are within the impete contained in plans  Trans. Blow Target  Numerical Structures – Milegade  Numerical Structures – Milegad		3.1.1 – Soil Disturbance Objectives	Percent of harvested blocks meeting soil disturbance objectives identified in plans	100% of blocks meet soil disturbance objectives (0)	1	See Part 1- measure 2-2.3	e/u
Penk Plow Targets – Sensitive Widersided Sensitive witershoed that are above Penk Flow targets   100% 6.10%    Figh Flow Targets – Sensitive Widersided Sensitive witershoed that are above Penk Flow targets   100% 6.10%    Formation of Percent of high hazard drainings structures in sensitive will have miliginion strategies implemented as per the plan were above the plan were believed with identified with identified with identified with identified with identified with identified and recent of the plan were fined by Transfer & Non-Florest Land Use    Formation of Existing Old Forest   Maintain the retention of existing for replacement of a per fine plan sensitive with identified with identified and the plan were fined by Transfer & Non-Florest Land Use    Formation of Existing Old Forest   Maintain the retention of existing for replacement of the plan sensitive with identified in plan sensitive with the plan		3.1.2 - Conrse Woody Debris Turgets	Percent of cutblocks reviewed where post harvest CWD levels are within the targets contained in plans	100% of blocks harvested annually (0)	-	See Part 1- Measure 1-3.1c	n/a
Peak Flow Targets – Sometive Waterabode   Wall have further accessment and have beak Flow targets   100% (c)		3.2 Water Quality & Quantity					
Storage   Percent of the parameter quilty concerns that have milguiton strategies implemented as per de plan		3,2,1a - Peak Flow Targets - Sensitive Watersheds	Sensitive watersheds that are above Peak Flow targets will have further assessment.	100% (-10%)	1	See Part 1- Measure 9-5.3	yes
Storage		3.2.1b – High Hazard Drainage Structures – Mitigation Strategies Implemented	Percent of high hazard drainage structures in sensitive watersheds with identified water quality concerns that have mitigation strategies implemented as per the plan	100% (0)		Sec Part 1- Measure 9-5.2	e/u
-Regeneration of Existing Old Forest -Regeneration of Existing Old Forest -Regeneration of Existing Core Family -Regeneration of Existing Old Forest -Regeneration Oblidy -Regeneration Converted to non-forest land use through forest -Convertion To Non-Forest Land Use - Percent of goes forested landbase in the DFA - Percent of goes forested landbase in the DFA - Convertion To Non-Forest Land Use - Percent of goes forested landbase in the DFA - Convertion To Non-Forest Land Use - Percent of goes forested landbase in the DFA - Convertion To Non-Forest Land Use - Percent of you than the rested to non-forest land use through forest - Convertion To Non-Forest Land Use - Percent of you than the rested of the plant of the Converted landbase (GFL) - Pending - Percent of you than the rested of the plant of the Converted landbase (GFL) - Pending - Percent of you than the rested of the plant of you than the plant of the Converted landbase (GFL) - Pending - Pending - Percent of you than the rested of the plant of you than the plant of the Converted landbase (GFL) - Pending	C4, Role o.	if Global Ecological Cycles					
Regeneration of Excisting Old Forest   Maintain the retention of existing (or replacement of)   See indicator 1.1.3   Pending    -Regeneration Delay   Regeneration delay for stands established annually   As per FSP (WA)    -Regeneration Delay   Regeneration delay for stands established annually   As per FSP (WA)    -Regeneration Delay   Regeneration delay for stands established annually    -Regeneration To Non-Forest Land Use   Percent of gross forested landbase in the DFA    -Recent of gross forested landbase in the DFA   Less than 3% of gross forested landbase (GFL)   Pending    -Recent of gross forested landbase in the DFA   Less than 3% of gross forested landbase (GFL)    -Recent of gross forested landbase in the DFA   Less than 3% of gross forested landbase (GFL)   Pending    -Recent of volume harvested Vs. Allocated Harvest    -Recent of volume harvested Vs. Allocated Harvest    -Recent of volume harvested Vs. Allocated Harvest    -Requirement in Local Communities   Investment in local communities   Inv		4.1 Carbon Uptake and Storage					
Te-Regeneration Delay  Regeneration delay (for stands established annually Deletions		4.1.1 -Retention of Existing Old Forest	Maintain the retention of existing (or replacement of) old forest	Sec indicator 1.1.3	Pending	See Part 1- Measure 1-2.1	sak
Deletions Conversion To Non-Forest Land Use converted to non-drest land use through forest mannigement activities for non-timber benefits		4.1.2 - Regeneration Delay	Regeneration delay for stands established annually	As per FSP (N/A)		See Part 1- measure 2-3.1	n/a
Conversion To Non-Forest Land Use		4.2 Additions and Deletions	· ·				
Duality of Timber & Non-Timber    Percent of volume harvesited compured to allocated   100% over 5 years as defined by Timber supply   100% over 5 years   100% over 5 years   100% over 5 years   100% over 5 years   100% ov		4.2.1 - Conversion To Non-Forest Land Use	Percent of gross forested landbase in the DFA converted to non-forest land use through forest management activities	Less than 3% of gross forested landbase (GFL)	Pending	n/n	e/u
Percent of volume harvested compared to allocated harvest flow (According to the Cat Courted harvest level plans (O) Conformance with strategies for non-timber benefits  Conformance with strategies for non-timber benefits  Conformance in local communities  Investment in local communities  >= 50% of dollars spent in local communities; 5-year rolling severage (-10%)  100% of company amployees and contractes will have	C5. Econo	mic & Social Benefits					
Percent of volume harvested compared to allocated   100% over 5 years as defined by Timber supply   Interest to a foreast harvest flow (According to the Cut Control   Interest flow in strategies for non-timber benefits   No non-conformances for site level plans (0)   Interest flow in local communities   No non-conformances for site level plans (0)   Interest flow in local communities   No non-conformances for site level plans (0)   Interest flow in local communities   No non-conformances for site level plans (0)   Interest flow in local communities   No non-conformances for site level plans (0)   Interest flow in local communities   No non-conformances for site level plans (0)   Interest flow in local communities   Interest flow in local c		5.1 Quantity and Quality of Timber & Non-Timber					
Senetits   Conformance with strategies for non-timber benefits   No non-conformances for site level plans (0)   1		5.1.1a - Volume Harvested Vs. Allocated Harvest	Percent of volume harvested compared to allocated harvest level	100% over 5 years as defined by Timber supply forecast harvest flow (According to the Cut Control Regulation and Policy)	- <del></del>	See Part 1- mensure 4-2.1	e/u
Local Communities Investment in local communities >= 50% of dollars spent in local communities; 5-year rolling average (-10%)  1.6. Safety Procedures Training in carrironmental and anticty procedures in 1.00% of company employees and contractors will have		5.1.1b -Non-Timber Benefits	Conformance with strategies for non-timber benefits identified in plans	No non-conformances for site level plans (0)	=	See Part 1- measure 5-1.1	e/u
Investment in local communities   >= 50% of dollars spent in local communities; 5-year		5.2 Communities & Sustainability					
Training in cavironmental and safety procedures in 100% of company employees and contractors will have		5.2.1 – Investment In Local Communities	Investment in local communities	>= 50% of dollars spent in local communities; 5-year rolling average (-10%)		See Part1-measure 4-2.4	e/u
both environmental and salety training (-5%)		5.2.2 - Environmental & Safety Procedures Training	Training in environmental and safety procedures in compliance with company training plans	100% of company employees and contractors will have both environmental and safety training (-5%)	18	See Contractor Preworks	e/u

5 0

Total Number of Indicators
Total Targets Achieved
Total Targets Pending
Total Targets Not Achieved

e/u	n/a				e/u		n/a		e/u		e/u	n/a		e/u	n/a			n/a	n/a	
n/n	See Part 1-measure 4-4,1				All FMG staff training as per divisional training records.	See Part 1- measure 8-2.1, 8-2.2	See Part 1- mensure 8-3.1, 8-3.2,8-4,4		See Part 1- mensure 8-3.1, 8-3.2,8-4.4		Two log sales occurred in 2011	N/A		See part 1- measure 7-1.3	See part 1- measure 7-2.2	See Part 1- mensure 8-2.1, 8-2.2		N/N	On website	
	-				-	4	1		-		-	1		-	1	1		1	-	
AAC * employment multiplier - 5-year average (+/-10%) 172 person years (PY)	Number of opportunities from baseline assessment; 3- year rolling average. (-10% of baseline)				100% (-10%)	100% of management plans (0)	100% compliance with operational plans (0)		100% (0)		Report out on # of purchase / sale / trade relationships $(nh)$	100% (0)		80% satisfaction from surveys (-10%)	>= 1/mecting (0)	100% of management plans (0)		25 (-10) annually	SFM monitoring report available to public annually via web. (Nonc)	
lirect employment	Number of opportunities for Aboriginals to participate in the forest economy				1	Evidence of best efforts to communicate interests and management plans based on Aboriginal communities having a clear understanding of the plans	Percent of forest operations in conformance with operational plans developed to address Aboriginal forest values, knowledge and uses		Percent of identified Aboriginal forest values, knowledge and uses considered in forestry planning processes			Implementation and maintenance of a certified safety program		Jo su	Number of educational opportunities for information/training that are delivered to the PAG	Bvidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans		Number of people who took part in an educational opportunity	SFM monitoring report made available to the public	
-	5.2.4 – Opportunities for Aboriginals to Participate in Forest Economy	Economic & Social Values	sibility	6.1 Aboriginal & Trenty Rights		6.1.2 – Aboriginal Communities Understanding of the Plans	6.1.3 – Address Aboriginal Forest Values, Knowledge And Uses	6.2 Respect for Aboriginal Forest Values, Knowledge & Uses	6.2.1 – Identified Aboriginal Forest Values, Knowledge And Uses	6.3 Forest Community Well-Being & Resilience	6.3.1 – Primnry And By-Products	6.3.2 & 6.3.3 - Certified Safety Program	6.4 Fair & Effective Decision-Making	6.4.1 – PAG Satisfaction Survey Implemented	6.4.2 –Educational Opportunities for Information/Training	64.3 – Aboriginal Communities Understanding of the Plans	6.5 Information for Decision-Making		6.5.2 - SFM Monitoring Report Public	
	-		C6. Society's Responsibility	6.1 Abor				6.2 Resp		6.3 Fores			6.4 Fair				6.5 Infor			

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## 8 SUMMARY OF ACTIONS AND RECOMMENDATIONS

The initial development and subsequent changes to the SFM Plan have been achieved through the ongoing input and support of the Radium SFM Public Advisory Group (PAG) throughout 2014. Several PAG meetings focused on a review of indicators that the PAG rated as highest importance to them for review. Some of meetings were facilitated using a World Style Café format to provide indepth review and feedback. The SFM revision is on-going and once completed, will include public participation.

The sawmill closure in 2011 impacted many of the economic measures that depend on the harvest and sawmilling of timber in the region. Many of the economic indicators greatly improved due to the purchase of Tembec assets and operations focusing on capturing the full AAC within the current cut control period. There was a high increase in local procurement and dollars spent on contractors and consultants. For the ecological indicators, three indeicators are pending the new SFM plan. One indicator related to Interior Forest Ecosystems will be replaced with targets for Old and Mature Habitat for the Interior. The other two pending indicators are 2.2.1 a and 4.2.1 both related to conversion to non-forest land use. New targets are under development in the new SFM. There was one potential non-compliance noted for indiactor 1.1.4 c Riparian Management Strategies. It was due to a a portion of a block's riparian management area being accidentally harvested. The incident was selfreported to Ministry of Forests Lans and Natural Resource Operations Compliance and Enforcement staff. No determination has been received following the investigation at the time of writing this report. Canfor staff worked with Ministry of Environment staff to develop and implement mitigative measures. The remaining ecological, social and economic indicator targets have been met. Work continues on amalgamating the region's two SFM plans. Additional work is underway to ensure monitoring is robust and effective.

