

# Sustainable Forest Management Plan

# 2011 ANNUAL PERFORMANCE REPORT

**Radium Defined Forest Area** 

Reporting Period

Jan. 1, 2011 - Dec. 31, 2011

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## **Executive Summary**

This report is the sixth annual report of the Sustainable Forest Management Plan for the Radium defined forest area (DFA) and is for the calendar year of 2011. 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 measures and targets were defined in the SFMP for 2011. Part 2 reports out on the new commitments and improvements adopted to SFMP as of January 1, 2012.

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.

2011 continued to be a financially difficult year for the forest industry. Many factors have impacted Canfor from record low lumber prices, the rise in value of the Canadian dollar to record highs and dramatically decreasing North American housing starts. The Radium sawmill has been indefinitely shut since June 2009.

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

Part 1- Jan1, 2011 -Dec 31, 2011 Annual Report Summary

Classification	Ecological	Economic	Social
Number of Targets Met	24	18	27
Number of Targets Not Met	2	5	0
Number of Targets Pending	4	0	0
Total	30	23	27

#### 1 Introduction

Canfor's Sustainable Forest Management Plan commits to measures 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 sixth 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, 2011 to December 31, 2011, which provides the status of all measures 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 measures and targets were defined in the SFMP for 2011. 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, 2012.

#### 2 PART 1 – JAN 1, 2011 – DEC 31, 2011 ANNUAL REPORT

#### **Radium DFA Criteria & Indicators**

## Criterion Indicator

#### **Ecological Values**

- C1. Biological richness and its associated values are sustained in the defined forest area (DFA)
  - 1-1. Ecologically distinct habitat types are represented in an unmanaged state in the DFA to sustain lesser known species and ecological function
  - 1-2. Negative trends in landscape features that affect forest-dwelling organisms are avoided
  - 1-3. The amount, distribution, and heterogeneity of terrestrial and aquatic habitat type elements and structure important to sustain biological richness are sustained
  - 1-4. Native forest-dwelling species or species guilds are well distributed throughout their range in the DFA
  - 1-5. Government designated protected areas and sites of special biological significance are sustained at the site and sub regional level
  - 1-6. Forest Management activities will conserve the genetic diversity of tree stock
- C 2. The productive capability of forest ecosystems within the Timber Harvesting Land Base (THLB) are sustained
  - 2-1. Biological components of forest soils are sustained
  - 2-2. Productive land-base loss as a result of forestry activities is minimized
  - 2-3. Total growing stock of merchantable and non-merchantable tree species on forest land available for timber production
  - 2-4. No net detrimental loss in productivity as a result of forest related slope instability
  - 2-5. Natural disturbance levels and risk levels are managed for such that resistance to catastrophic change and the ability to recover on the landscape level is sustained
- C 3. Forest ecosystem contributions to global ecological cycles are sustained within the DFA
  - 3-1. The total forest ecosystem biomass and carbon pool is sustained
  - 3-2. The forest products carbon pool is maintained or increased
  - 3-3. The processes that take carbon from the atmosphere and store it in forest ecosystems will be sustained

#### **Economic Values**

- C 4. The flow of economic benefits derived from management unit forests through the forest industry is sustained
  - 4-1. Timber harvesting continues to contribute to economic well-being
  - 4-2. Citizens continue to receive a portion of the benefits
  - 4-3. Governments continue to receive a portion of the benefits
  - 4-4. Opportunities to share a portion of the benefits exist for local First Nations
  - 4-5. Forest management contributes to a diversified local economy
  - 4-6. Levels of forest damaging events or agents are managed such that their economic impact is minimized
- C 5. The flow of marketed non-timber economic benefits from forests is sustained
  - 5-1. Amount and quality of marketed non-timber forest resources is sustained of enhanced over the long-term as a result of forest management activities
- C 6. Forest management contributes to a diversified local economy
  - 6-1. Employment and income sources and their contribution to the local economy continue to be diversified

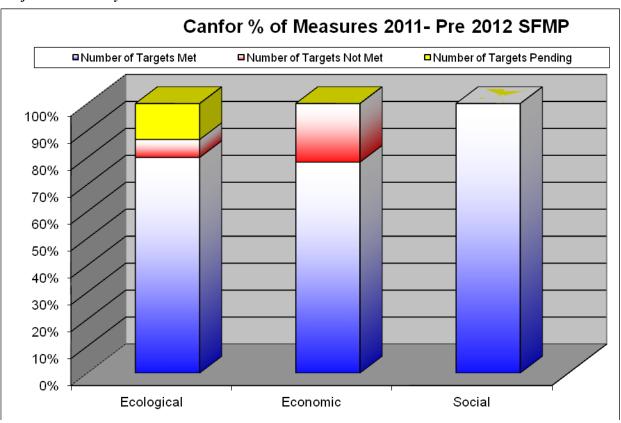
#### **Social Values**

- C 7. Decisions guiding forest management on the management unit are informed by and respond to a wide range of social and cultural values
  - 7-1. Forest management planning adequately reflects the interests and issues raised by the public (tenure holders, residents and interested parties) in the DFA through an effective and meaningful (to all participants) public participation process
  - 7-2. Community understanding and capacity to participate in forest management planning is improved through information exchange between DFA forest resource managers and the public through a varied and collaborative planning approach in order to facilitate capacity building in the community
- C 8. Forest management sustains or enhances the cultural (material and economic), health (physical and spiritual) and capacity benefits that First Nations derive from forest resources
  - 8-1. Aboriginal and treaty rights are respected
  - 8-2. Local management is effective in controlling maintenance of, and access to, resources for First Nations
  - 8-3. The relationship between forest management and First Nations culture is acknowledged as important
  - 8-4. First Nations are provided with detailed, reciprocal knowledge pertaining to forest use as well as forest management plans prior to government approval and implementation
- C 9. Forest management sustains ongoing opportunities for a range of quality-of-life benefits
  - 9-1. Resources and opportunities for recreation (including quality of experience) are maintained or enhanced
  - 9-2. Visual quality of harvested/managed landscape is acceptable to a broad range of residents, stakeholders and visitors
  - 9-3. Forest management conserves unique or significant places and features of social, cultural, spiritual importance (including protected areas) at the landscape and site levels
  - 9-4. Worker and community safety is maintained within acceptable levels
  - 9-5. Water resources will be sustained by maintaining water quality and quantity for domestic and community watersheds that are licensed for human consumption

#### 3 OVERVIEW OF ACHIEVEMENTS

Canfor - For the 2011 reporting year a total of 80 measures were examined. Overall, 69/76 of the measures achieved the targets specified in the SFMP and 4 measures are pending.

Canfor's Measures by Element Area



#### **Summary of SFMP Accomplishments-CANFOR**

SFM Elements	Changed Practice or Increased Knowledge
Ecological	No changed practices. Maintained status quo.
Economic	<ul> <li>Canfor maintains a minimal staff presence in Radium to manage the security of the mill site and manage woodlands obligations such as roads and silviculture.</li> <li>Canfor woodlands was able to sell priority timber stands to other sawmills to manage forest health concerns.</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. Medical Incident Rates (MIR) = 0 over the last 12 months.</li> <li>Maintained a PAG group that successfully completed a major revision to the SFMP in 2011.</li> </ul>

## 4 ECOLOGICAL VALUES

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

#### **Measure 1-1.1 Ecosystem Representation**

The measure reads "Number Size and type of distinct habitat types in both the THLB and NHLB and recommends proportion of area that should be represented in an unmanaged state."

Target	Canfor 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 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	Rare Ecosystem Groups (<2000ha EKCP)										
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 2011 (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	

Uncommor	Uncommon Ecosystem Groups (>2000ha - <10,000ha EKCP)										
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	

Common E	Common Ecosystem Groups (>10,000ha EKCP)										
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	

#### **Measure 1-2.1 Old and Mature Forests**

The measure reads "Percent mature and old seral forest distribution by ecological unit across the DFA."

Target	<b>Canfor Results</b>
100% compliance with the mature and old seral targets defined in the KBHLP	100% Compliant

#### **Measure 1-2.2 Interior Forest Condition**

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

Target	<b>Canfor Results</b>
1(0) Report recommending percent of interior forest by Ecosystem Group across the DFA- March 2010	Pending

Why is this pending? — Limited funds from FIA. Other higher priority projects funded. Other measures in the SFMP do moderate the risk of the values under this measure.

Status of Indicator – There are plans to complete this report within the first 2 years of Radium start-up.

#### Measure 1-2.3 Road Density

The measure reads "Road densities not to exceed the legal requirements for amounts of roads (permanent access structures 7% provincially)"

Target	DFA Results
5% (+/- 2%) of the THLB	Based on the Roads, Trails and Landings Inventory Project (Timberline, 2008), the percent area of THLB converted to non-forest land use through forest management activities is 7.36% and in the future is expected to be 5.3%.

**Why off Target**? –This has been of target since the report. This will be updated with the next Timber Supply Review.

What are we doing about it? – The SFMP re-write has addressed this measure and targets to address the CSAZ809-08 standard.

#### **Measure 1-2.4 Patch Size Distribution**

The measure reads "Percent patch size distribution by natural disturbance type."

Target	DFA Results
Trend towards patch size distribution targets defined in the LU Planning Guide by Natural Disturbance Type over a 5 yr period	Patch size distributions are trending upwards as shown in the Patch Size Distribution Analysis report (Forsite Consultants, 2004) (See FSP supporting document).

#### **Measure 1-3.1 Significant Habitat Features**

The measure reads; "Number, spatial distribution, characteristics and type of significant habitat features in each habitat type as defined below:"

Measure 1-3.1a Dead standing trees on harvested areas in the THLB

Target	Canfor Results
100% of cutblocks will contain retention areas (consisting of high value existing snags or snag recruitment areas) greater that 0.25 ha such that any clear cut area is no more than 500m from a forest edge.	100% Compliant

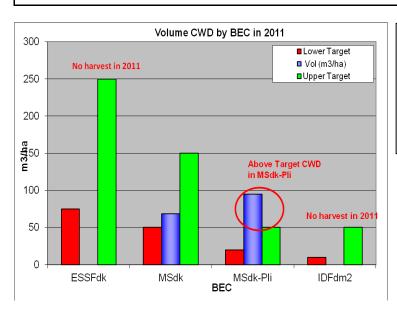
Measure 1-3.1b Stand level retention by Landscape Unit and BEC Variant

Target	Canfor Results
WTPs will be established consistent with Provincial WTP strategies and Biodiversity guidebook targets.  Targets for each LU/BEC combination have been developed. (See SFMP)	100% Compliant

For more information on the results see Invermere Wildlife Tree Retention Analysis Summary Report-Version 1.1- May 23, 2006- Forsite Consultants.

Measure 1-3.1c Coarse Woody Debris (CWD) on harvested areas in the THLB

Target	<b>Canfor Results</b>
CWD Targets by BEC consistent with Tembec and Canfor research (See SFMP)	On Target



Comment? – Only 3 small blocks harvested in 2011. \*Targets are intended to be met on an average basis, not on each individual cutblocks. 5 year trend is within targets. No logging in IDF or ESSF.

Measure 1-3.1d Riparian areas in THLB\*

Target	Canfor Results
	a) 100% compliance
b) Riparian ecosystem types with <2000 ha represented in the East Kootenays will be reserved from harvest.	b) 100% compliance

<sup>\*</sup> Analysis every 5 years - i.e. TSR or major changes to inventory or landbase definition

Measure 1-3.1e Shrub areas across the CFLB\*

Target	DFA Results
Shrub areas greater or equal to baseline levels	Current inventory indicates 34 000 ha (9%) of the DFA's CFLB currently exists in a shrub dominated ecosystem. This is equal to baseline levels.

<sup>\*</sup> Analysis every 5 years - i.e. TSR or major changes to inventory or landbase definition

#### Measure 1-3.1f Deciduous areas across the CFLB

Target	Canfor Results
a) 90% of cutblocks with a deciduous component pre- harvest in the THLB will have a deciduous component post-harvest, including mature and regenerating trees	100% compliance.
b) Track the trend in the NHLB (using updated inventory information)	Current inventory indicates 10 800 ha (4%) of the DFA's CFLB currently exists as deciduous/hardwood species. This is equal to baseline levels.

#### **Background:**

**Canfor:** About 3% of the strata area surveyed in 2011 had deciduous present. Additional deciduous is present outside of these strata.

Total Area of Strata with Deciduous present	64.9
# of Regen Perf Survey ha	1212.4
# of FG Survey Ha	908.5
Total Surveyed	2120.9
% of Area Surveyed with deciduous present in Strata	3.1%

#### Measure 1-4.1 Vertebrate Species-Monitoring Groups

The measure reads; "Number of forest management activities consistent with management strategies for vertebrate species groupings (including Species at Risk and selected focal species)."

Target	Species Group	Canfor Results
0 non-conformances or non-compliance issues with established management strategies for each species groupings	Group 1	N/A
	Group 2	Target met
	Group 3	Target met
	Group 4	Target met
	Group 5	Target met

#### Measure 1-4.2 Monitoring Selected Vertebrate Species

The measure reads; "Select vertebrate species are chosen to monitor effectiveness of forest planning and practice in sustaining species richness."

Target	DFA Results
March 2010	Indicator species have been chosen for the DFA with baseline data.

#### Measure 1-5.1 Parks, reserves, protected areas

The measure reads; "Hectares of forest management activities consistent with the established objectives for parks, reserves, protected areas, biologically significant areas and including areas with specific wildlife management plans.

Target	<b>Canfor Results</b>
0 ha in non-compliance	Target met

#### Measure 1-6.1 Genetic Variability-Conifer Seeds

The measure reads; "The percentage of seeds for coniferous species collected and seedlings planted in accordance with the Tree Seed and Cone Regulation of Chief Forester's Standards for Seed Use."

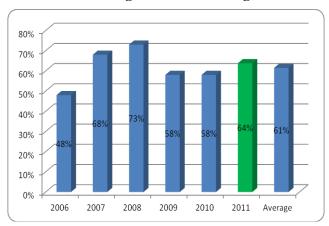
Target	<b>Canfor Results</b>
0 non-compliance or non-conformances with the standards	Target met

#### Measure 1-6.2 Genetic Variability Natural regeneration

The measure reads; "The percentage of natural regeneration."

Target	Canfor Results
Greater than or equal to 8% of area harvested will be restocked by natural regeneration over a 5 year period	Target met – 2011 = 64%
5 year period	6 Yr Average = 61%

#### **Canfor Natural Regeneration Stocking Trend**



#### **Measure 2-1.1 Interim Measure, Site index**

The current measure reads; "Site index by inventory type group for harvested areas."

Target	Canfor Results
Average post harvest site index (at free growing) will not be less than the average pre-harvest site index on harvested blocks	No sites were degraded and post harvest SI remained the same as pre harvest.

#### Measure 2-1.2 Coarse Woody Debris

The measure reads; "Amount of Coarse woody debris remaining on harvested areas."

Target	DFA Results
CWD Targets by BEC consistent with Tembec and Canfor research	See measure 1-3.1c above. On Target.

#### **Measure 2-2.1 Areas converted to non-forest**

The measure reads; "Area of THLB converted to non-forest land use through forest management activities."

Target	DFA Results
Target of 5% (+/-2%) of THLB	See tables for measure 1-2.3 above.

#### **Measure 2-2.2 Roads and Landings**

The measure reads; "The percent of cutblock area having roads/landings constructed due to forest management activities as a measure."

Target	Canfor Results
Legal limit of <7% of cutblock	Target met <7.0%. Actual is 4.65% for blocks harvested in 2011

#### Measure 2-2.3 Long-term Detrimental Soil Disturbance.

The measure reads; "The percent of long term detrimental soil disturbance as a result of forest management activities."

Target	Canfor Results
1) Landscape: Average 4.5% (+/2%) all cutblocks over a 5 year period.	3.75%
2) Stand: For a cutblock, 10% disturbance on high hazard areas and 5% on very high hazard areas as defined in soil conservation guidebook.	High Hazard Areas = 4.05 %
	Very High Hazard Areas = 3.4 %

Landscape: Target-Average 4.5% (+/2%) all cut blocks over 5 years (2006-2011)

Hazard	2006	2007	2008	2009	2010	2011	Average
High Hazard Areas	3.5%	4.6%	5.3%	4.8%	2.6%	3.5%	4.05 %
Very High Hazard Areas	4.3%	4.7%	4.0%	N/A	2.0%	2.0%	3.4%
Total							3.75%

#### **Measure 2-3.1 Regeneration Delay Period**

The measure reads; "Regeneration delay period."

Target	<b>Canfor Results</b>
0 non-compliance or non-conformance with Regeneration Delay period as specified in each Site Plan	Target met.

#### **Measure 2-3.2 Regeneration Standards**

The measure reads; "Compliance with regeneration standards set in FDP/FSP."

Target	<b>Canfor Results</b>
0 non-compliance or non-conformance with the standards	Target met

#### **Measure 2-3.3 Free Growing**

The measure reads; "Compliance with free growing requirements."

Target	<b>Canfor Results</b>
0 non-compliance or non-conformance	Target met

#### **Measure 2-4.1 Landslides**

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

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

#### **Measure 2-5.1 Natural Disturbance Damaging Events**

The measure reads; "The percentage of significant detected natural disturbance damaging events in the THLB which have treatment plans prepared and implemented."

Target	DFA Results
1 strategy exists per damaging event or agent	The Rocky Mountain Forest District has prepared an Invermere TSA Forest Health Strategy, 2011. This plan documents the significant natural disturbance damaging events and strategies for each event.

#### **Measure 3-1.1Carbon Stored in Trees**

The measure reads; "Estimated amount of carbon stored in trees in the DFA's CFLB (converted from TSR m3/ha)"

Target	DFA Results
Baseline (of 39.1-51.3 MT) sustained or increasing trend.	Forecasts show a general decrease trend from in the long-term tree storage of carbon in the CFLB for base case scenario TSR3.

#### Measure 3-1.2 Estimated Carbon in non-tree Vegetation

The measure reads; "Estimated carbon in non-tree vegetation (above ground biomass and roots)."

Target	DFA Results
TBD	Pending - A target for this measure has not been developed at this time.
	has not been developed at this time.

Why is Carbon pending? —There is much beyond our control on how this will be measured. It is desirable to measure this consistently across the province. Holding off on target until this is settled.

**Status of Indicator** – Carbon is at its maximum storage over the TSA as per the Carbon Phase 2 Report. Canfor has standardized these measures across the company as outlined in the revised 2011 SFMP

#### **Measure 3-2.1 Carbon Pool-Forest Products**

The measure reads; "Plan to plan based on report and process being developed by Canadian Forest Service."

Target	DFA Results
TBD	Pending - A target for this measure has not been developed at this time.

#### **Measure 3-3.1 Carbon Sequestration**

The measures reads "Average Carbon Sequestration rate in the ecosystems in the DFA (Mg C/year)."

Target	DFA Results
TBD	Pending - A target for this measure has not been developed at this time.

#### 5 ECONOMIC VALUES

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

#### Measure 4-1.1 Projected timber supply over time is stable

The Measure reads; "Projected timber supply over time is stable."

Target	Results
321,094 m3 (+/- 10%)	The current AAC for the DFA allows 321,094 m3/yr (effective November 1, 2005) of harvest volume and is projected to remain stable or increase during the planning horizon (base case scenario). The base case has been updated to reflect recent change to Ungulate winter range and caribou habitat reserves.  In September 2010, the Chief Forester of BC determined the AAC for the Invermere TSA is unlikely to change and extended the next TSR to a date prior to November 1, 2015.

#### Measure 4-1.2 Actual Harvest Volume

The measure reads; "Actual harvest volume is meeting the timber supply allocation within cut control limits."

Target	Canfor Results
+/- 10% of AAC	2011 Cut Control harvest 0m3 or0% of AAC
over 5 years	5 year cut control period is at 0.5% with cut control period ending Dec 31, 2014.

**Note:** While cutblocks were harvested in 2011 under FLA18979, the volume attributed to these blocks, 10,524 m3, was transferred (via Sec 18) to Tember FLA18978.

#### Measure 4-1.3 Percentage Harvested Area Regenerated to Target Species

The measure reads; "Percentage of harvested area in compliance with regeneration standards set in FSP."

Target	Canfor Results
100% compliant	Target met.

#### Measure 4-2.1 Direct Employment in the Forest Sector

The measure reads; "Employment in each forestry sub-sector locally, regionally and provincially."

Target	Results
Local/Regional – 169 py	Local/Regional- 5.45
Provincial – 239 py (+/- 10%)	Provincial- 7.7

#### Background Info

Local employment statistics used the regional multiplier with the DFA harvest levels. Regional and provincial employment statistics used the TSA harvest levels and the appropriate multiplier from TSR3 reporting (person years per 1000 m3 harvested).

Volume harvested in 2011- 10,524 m3

Local/regional = 0.545 PY's/'000m<sup>3</sup>

Provincial = 0.77 PY's/'000m3 (includes local/regional)

#### Annual harvest and employment, Invermere TSA 2011

	Canfor Result	DFA Total
Harvest	Timber volume (m <sub>3</sub> )	Volume
Allowable Annual Cut (AAC)	221,005	221, 005
Harvested 2011	10,524	10,524

Why off Target? - Radium Indefinite closure reduced actual cut in 2011.

**What are we doing about it?** – Keeping the mill and woodlands "start ready". Purchasing Tembec.

#### Measure 4-2.2 Direct Income in the Forest Sector

The measure reads; "Income generated from each forestry sub-sector, locally, regionally and provincially."

Target	Results
Local/Regional – \$7,424,905 Provincial – \$10,997,557	Local/Regional- \$239, 000
(+/-10%)	Provincial-\$354,000

#### **Background Info**

Local income statistics used the regional multiplier with the DFA harvest levels. Regional and provincial income statistics used the TSA harvest levels and the appropriate multiplier from TSR3 reporting (income generated per 1000 m3 harvested).

Invermere TSA - \$ 23,900/'000 m<sup>3</sup> Provincially - \$35,400/'000 m<sup>3</sup>

Why off Target? – Radium Indefinite closure reduced actual cut in 2011.

**What are we doing about it?** – Keeping the mill and woodlands "start ready". Purchasing Tembec.

#### Measure 4-2.3 Indirect/Induced employment and income

The measure reads; "Indirect/Induced employment and income estimates locally, regionally and provincially."

Target	DFA Results
Indirect/Induced Employment: Local/Regional – 62 py Provincial – 264 py Indirect/Induced Income: Local/Regional – \$1,957,192 Provincial – \$8,481,167 (+/- 10%)	Local/Regional- 2 py, \$63,000  Provincial-8.5 py, \$273,000

Why off Target? – Radium Indefinite closure reduced actual cut in 2011.

What are we doing about it? – Keeping the mill and woodlands "start ready".

#### Background Info

Local statistics used the regional multiplier with the DFA harvest levels. Regional and provincial statistics used the TSA harvest levels and the appropriate multiplier from TSR3 reporting (person years of employment, or income generated per 1000 m3 harvested).

Local/regional =  $0.20 \text{ PY's/}^{\circ}000 \text{m}^{3}$ , Invermere TSA  $- \$ 6,300/^{\circ}000 \text{ m}^{3}$ 

 $Provincial = 0.85\ PY's/'000m^3\ (includes\ local/regional)\ Provincially - \$27,300/'000\ m^3\ \ (includes\ local/regional)$ 

#### Measure 4-2.4 Local contributions of spending

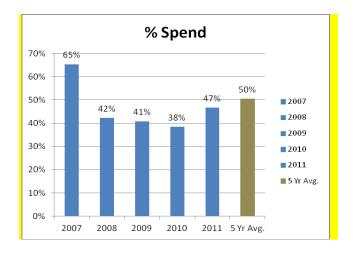
The measure reads; "The percentage of dollars spent locally from the forest sector in proportion to total expenditures."

Target	Canfor Results
Greater than x% (+/-	Target Met
10%)	
Establish baseline over 5	See tables below.
years	

#### Percentage of Dollars Spent Locally 2006-2011

(Note: 2010 and 2011 the operation was indefinitely closed)

Year	Local \$	Total \$	% Spend
2007	\$ 39,955,643.00	\$ 61,073,281.13	65%
2008	\$ 26,707,144.38	\$ 63,243,310.77	42%
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	\$ 2,505,743.20	47%
5 Yr Avg.	\$16,669,283.94	\$33,014,133.89	50%



#### Measure 4-2.5 Local Opportunity to Sell Timber

The measure reads; "Opportunities continue to be available for citizens to sell timber to Canfor."

Target	Canfor Results
50% of milling capacity	Target met

#### Total Net Production Volume in 2011 for Canfor Radium Division

Source	Volume (m3)	Percent of Total Volume
Canfor Managed Quota (including off-grade)	0	N/A
Purchase Volume (Non-quota wood)	0	N/A
Volume Used at Radium Sawmill	0	N/A
Total External Sales	10,524	4.6%

#### **Measure 4-2.6 Civic Vitality - Corporate Donations**

The measure reads; "Amount of corporate donations/sponsors made to the community per year."

Target	Canfor Results
1 Donations Baseline 3 yr average (\$4,180)	<ol> <li>Target met.</li> <li>Donation to the Christmas bureau of Columbia Valley in lieu of sending out corporate holiday cards. This will be Canfor's 12th year where money that would have been spent on the purchase and mailing of corporate Christmas cards will be going to local food banks and Christmas bureaus across all our operations.</li> <li>Donation of Radios and High vis vests for Local Head Banger Trail Run</li> <li>Holiday Trail Event-Radium- in-kind support for parking and security for the event.</li> <li>Personal Employee donations and matching Canfor corporate contributions to Japan Tsunami relief.</li> </ol>

#### Measure 4-3.1 Fees Paid

The measure reads; "Fees paid by industry to municipal, regional and provincial governments."

Target	Canfor Results
0 non-compliance or non-conformances with paying fees on an annual basis	Target met.

#### **Measure 4-4.1 First Nations Economic Opportunities**

The measure reads; "Number of formal opportunities for local First Nations to enter into contracts with Licensees."

Target	Canfor Results
>=1 opportunity on an annual basis	Target Met  Wildlands Ecosystem Resoration Ltd and Kinbasket Dev. Corp. completed brushing contract in 2011

#### **Measure 4-5.1 Timber Supply Certainty**

Target	Results
321,094 m3 (+/- 10%)	Same as 4-1.1. The current AAC for the DFA allows 321,094 m3/yr (effective November 1, 2005) of harvest volume and is projected to remain stable or increase during the planning horizon (base case scenario).

#### Measure 4-5.2 Economic Sustainability

The measure reads; "The percentage return on capital employed (ROCE) at a primary processing facility or business unit."

Target	Canfor Results
set for ROCE for the	Not Achieved. Radium's divisional ROCE percentage was well below the anticipated divisional ROCE for 2006 through to 2011 and was below the corporate average ROCE percentage. Very poor lumber markets in 2006-2011 attributed to poor divisional ROCE.

Why off Target? — Costs are exceeding financial benefit. The cost of fibre particularly impacts the operation. Stumpage fees, cost of logging and cot of purchase wood (about 60% of Radium Sawmill is dependent on high cost purchase wood).

What are we doing about it? — We are looking at various ways of reducing our cost structure and doing more with less. Implementing the "Canfor Operating System" and becoming a Lean customer centric company. Increasing our quota fibre supply by purchasing Tember reduces dependence on purchase wood.

#### **Measure 4-6.1 Damaging Events or Agents**

The measure reads; "Current assessments of damaging events or agents (current status: risk potential) are maintained."

Target	Canfor Results
1 assessment per damaging event or agent	Target met. – North White spruce beetle and MPB flights

#### **Measure 4-6.2 Natural Disturbance Events**

The measure reads; "The percentage of significant detected natural disturbances damaging events threatening the THLB which have treatment plans prepared and implemented."

Target	DFA Results
1 strategy exists per damaging event or agent	Target met - See Measure 2-5.1

#### Measure 5-1.1 Identification of marketed/commercial non-timber forest resources

The Measure reads; "Number of non-conformances with strategies for commercial non-timber forest products identified in DFA."

Target	Canfor Results
0 non-conformances or non-compliance issues with established management strategies for NTFP's	Target met

#### **Measure 6-1.1 Local Employment by Economic Sector**

The measure reads; "Employment supported by each sector of the local economy (actual and percentage of total employment)."

Target	DFA Results
Local Forestry Average Annual Employment– 263 person years and 19% of total employment sectors (+/- 10%)	Local/Regional- 8.5 py  Forestry was 13% in last census. It is reasonable to assume that 2011 was less than 13%
Why off Target? – Radium Indefinite closure reduced actual cut in 2011.	
What are we doing about it? - Keeping the mill and woodlands "start ready". Purchasing Tembec	

#### **Measure 6-1.2 Income Sources of the Local Economy**

The measure reads; "contribution of income sources from each sector of the local economy (actual and percentage of total income)."

Target	DFA Results
Average Local Forestry Annual Incomegreater than \$48 700 and 19% of total income sources (+/- 10%)	Average annual income = \$49,196 [target met]  Forestry was 13% in last census. Expect that 2011 was less than this.

#### 6 SOCIAL VALUES

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

#### Measure 7-1.1 Stakeholder Analysis

The measure reads; "Implementation and annual update of a comprehensive stakeholder analysis of tenure holders, residents and interested parties."

Target	Canfor Results
Annual Updates	Canfor maintains a stakeholder database.

#### Measure 7-1.2 Communication / Participation Plan

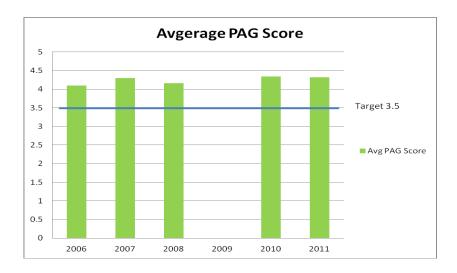
The measure reads, "Development and implementation of a communication / participation plan, with early input from a range of stakeholder representatives."

Target	DFA Results
1 Plan – Date: March 31, 2010	Complete – Will implement once the operation is back up and running.

#### Measure 7-1.3 Effective Public Advisory Group

The measure reads; "The existence of an effective public advisory group indicated by the satisfaction of advisory group members."

Target	DFA Results
Satisfaction Survey – average score > 3.5	PAG Satisfaction Surveys were conducted by the Facilitator in 2006, 2007, 2008, 2010 and 2011 with a combined average score of 4.1, 4.3, 4.16, 4.34, and 4.32 respectively.



#### Measure 7-1.4 Equitable and Inclusive Deliberation Process

The measure reads; "Conduct of an open public process prior to Government approval of operational plans, or any major amendments."

Target	Canfor Results
1	100% Compliant. Canfor completed 1 major FSP amendment.

#### Measure 7-1.5 Satisfaction of Reciprocal Knowledge Exchange

The measure reads; "Documentation of open and transparent reciprocal exchange of social values/opinions, their influence on decisions, and participant satisfaction."

Target	DFA Results
1 Process	Canfor has a process in place to refer operational plans to stakeholders and First Nations through letter mailings, face-to-face meetings and written replies to comments received.

#### **Measure 7-2.1 Public Communications**

The measure reads; "The number and type of communication, extension and planning activities with the public annually about forest management plans (SFMP and operational plans) and operations."

Target	Canfor Results	
Minimum 5	14 Communications sent and received in 2011	

#### **Measure 7-2.2 Demonstration of Reciprocal Knowledge Exchange**

The measure reads; "Demonstration of reciprocal knowledge exchange (i.e. Local community expresses increased knowledge of SFM and technical expert incorporates local knowledge into forest management decisions/plans)."

Target	Results
Minimum of 1 example of reciprocal knowledge exchange on an annual basis (increasing trend)	Four PAG meetings were conducted to revise SFMP to new CSA standard.  Knowledge was shared, reviewed, and feedback from PAG was provided to revise the plan.

#### Measure 8-1.1 Aboriginal and Treaty Rights

The measure reads; "Compliance with legally established Aboriginal and Treaty Rights,"

Target	Canfor Results	
0 non-compliance incidents in the DFA	Currently there are 0 non-compliance issues with current legal requirements. The Ktunaxa Treaty Council is currently in Treaty negotiation.	

#### **Measure 8-1.2 Opportunity to Comment on Plans**

The measure reads; "Affected First Nations are provided the opportunity to comment on forest stewardship plans and the SFM Plan"

Target	Canfor Results
Minimum 1 Opportunity per plan	SFMP- Opportunity to participate and comment on SFMP provided in 2011 through PAG meetings.
	FSP- Opportunity provided to all First Nations to comment on FSP amendments.

#### **Measure 8-2.1 Access to Resources for First Nations**

The measure reads; "The success in implementing and monitoring management practices related to not impeding access to identified resources for First Nations through strategies articulated in Forest Stewardship Plans (FSP) and/or First Nations/Licensee Agreements."

Target	DFA Results
0 non-compliance or non-conformance with	Management practices in Canfor have been 100% compliant with existing
regard to results or strategies outlined in Forest	Forest Stewardship Plans and operational plans with regard to strategies to
Stewardship Plans, First Nations Agreements or	not impede access to identified resources for First Nations. No non-
Contractual Agreements	compliance or non-conformance issues have been identified.

#### Measure 8-2.2 Open and Transparent Reciprocal Exchange of Social Values/Opinions

The measure reads; "Demonstration of open and transparent reciprocal exchange of social value/opinions, their influence on decisions, and participant satisfaction with regards to First Nations."

Target	Canfor Results
1 Process	3 meetings/discussions conducted to exchange information. See table below.

Number and type of communication activities with First Nations in 2011

Type of Communication or Planning Activity-2011	Details	Number
Canfor	<ul> <li>FSP amendment referral letters with all bands and meetings with local bands</li> <li>KNC SFMP input/review meetings</li> <li>Band Meetings to discuss planned harvest activities for 2011 along with FSP amendment review- Shuswap band, Akisqinuk Band, Ktunaxa Nation Council</li> </ul>	3

#### Measure 8-3.1 Consideration and Accommodation of Known First Nations Cultural Issues

The measure reads; "Forest management plans demonstrate consideration and accommodation of identified First Nations cultural issues by protecting or enhancing sensitive areas/features."

Target	Canfor Results
0 non-compliance or non-conformance with forest management plans that include strategies to accommodate culturally sensitive areas	Operations have been 100% compliant with FSP strategies and operational plans. No non-compliance or non-conformance issues have been recorded in 2011.
	AIA's were completed in 2011. All blocks harvested in 2011 are compliant with existing AIA prescriptions.

#### Measure 8-3.2 First Nations interests in Non-Timber Forest Products

The measure reads "Forest management plans demonstrate consideration and accommodation of First Nations' rights and interests in known Non-Timber Forest Products (NTFPs)."

Target	Canfor Results
100% of forest management plans include strategies to accommodate rights and interests in known NTFP	Operations have been 100% compliant with FSP strategies and operational plans. No non-compliance or non-conformance issues have been record in 2011 with known Non Timber Forest Products.

#### Measure 8-4.1 Accessibility of Data Showing Baseline Cultural Uses

The measure reads; "Accessibility of plans, maps, and/or visual simulations showing baseline cultural uses of local forest resources."

Target	Results
100% of areas proposed	Canfor had limited access in 2011 to plans and maps that show baseline cultural uses of local forest resources. Archaeological Overview Mapping has been provided for use by the licensees. Canfor is working with the Ktunaxa Nation Council on a protocol agreement that will address this measure.

#### **Measure 8-4.2 Communication to First Nations**

The measure reads; "Accessibility of current plans, maps, and/or visual simulations prior to government approval that outline logging details such as cutting areas, road construction and include temporal aspects."

Target	Canfor Results
100% of plans and maps are available	All plans have been made accessible to First Nations prior to government approval.  100% compliant. In 2011, Canfor completed 1 Forest Stewardship Plan amendment.

#### **Measure 8-4.3 Meaningful First Nations Participation**

The measure reads; "Degree of meaningful First Nations participation enabled through culturally appropriate opportunities for inclusive participation."

Target	Canfor Results
0 non-compliance or non conformance with legal requirements	All plans have been made accessible to First Nations prior to government approval.
	100% compliant. 0 non-compliance or non conformance issues were recorded.

#### Measure 8-4.4 First Nation's Understand the Resource Plan

The measure reads; "Degree of First Nations comprehension of management plan and monitoring information."

Target	Results
Minimum of 1 example of comprehension of a management plan on an annual basis (increasing trend)	1) Meetings with Ktunaxa Nation Council, Shuswap Band and Akisquink Band have shown a high degree of understanding of Canfor's FSP and SFMP processes and requirements for First Nations involvement. The KNC have prioritized Canfor discussions based on this knowledge and continue to request copies of meeting minutes.

#### **Measure 9-1.1 Inventory of Recreation**

The measure reads; "An inventory of interpretive forest sites, recreation sites, recreation trails and features will be made."

Target	DFA Results
Maintain database as required	A Database is maintained that identifies interpretive forest sites, recreation sites, recreation trails and features as well as their associated management objectives. These features are also spatially identified. Updates were included into spatial database for 2011.

#### Measure 9-1.2 Maintain Current Condition - Recreation Sites/Facilities

The measure reads; "Existing interpretive forest sites, recreation sites and recreation trails and their associated objectives, as identified in Measure 9.1.1, will be maintained to their current condition following forestry activities in the area."

Target	Canfor Results
0 non-compliance or non-conformance with established interpretive forest sites, recreation sites and recreation trails and their associated objectives	0 non-compliance or non-conformance issues have been recorded to the site plans and recreation strategies or standards.

#### **Measure 9-1.3 Recreation Management Strategy**

The measure reads; "Encourage and participate in the development of a strategy to balance primitive, semi-primitive and developed recreation opportunities (and associated quality of experience)."

Target	DFA Results
Encourage & participate in Recreation / Access planning	Currently, there is no process in place for Canfor to participate in the development of a strategy to balance primitive, semi-primitive and developed recreation opportunities. Canfor will discuss this opportunity with the appropriate provincial government in future years.
	Canfor maintains access to over 1,800 km of roads in its operating area. Access barriers are established on 5 roads as shown in its FSP.
	Additionally, recreational trails and features are managed/verified on the Site Plan Checklist as part of the Canfor FMS. Recreational users regularly communicate with Canfor. These information exchanges are recorded in the Creating Opportunities for Public database.

#### Measure 9-2.1 Compliance with Visual Quality Objectives (VQO)

The measure reads; "The percentage that forest management complies with existing Visual Quality Objectives (VQO's) or other visual management approaches established by the BC Ministry of Forests for the area."

Target	Canfor Results
0 Non-conformance or non-compliance	No non-compliance or non-conformance issues have been recorded in 2011 to the site plans and VQO strategies or standards. No harvesting occurred in 2011 in areas with established VQO's.

#### Measure 9-2.2 Visual Stewardship Outside Established VQO Areas

The measure reads; "In areas outside established VQOs but in community viewsheds or major travel corridors to recreation use areas, demonstration of visible stewardship (i.e. explanatory signage, high standards of clean-up along roadsides, landscape design procedures, and modified harvesting procedures)"

Target	Canfor Results
Demonstration of appropriate practices to manage localized visuals. Documentation of mechanism.	No non-compliance or non-conformance issues have been recorded in 2011 to the site plans and VQO strategies or standards. No harvesting occurred in 2011 in areas with localized visuals.

#### **Measure 9-3.1 Management – Unique Sites or Features**

The measure reads; "Existing unique sites, features and protected areas and their associated objectives, will be managed according to their associated management strategies during primary forest activities in the area."

Target	Canfor Results
0 non-conformances or non-compliance	No non-compliance or non-conformance issues have been recorded in 2011 to
with management strategies	the site plans with regard to unique sites or features.

#### Measure 9-4.1 Written Safety Policies – Implemented and Effective

The measure reads; "Worker safety program for employees and contractors implemented periodically reviewed and improved (Canfor)."

Target	Canfor Results
1 safety program in place	Canfor is registered as SAFE certified company with its existing safety program. Certification maintained in 2011.

#### **Measure 9-5.1 Watershed Assessment**

The measure reads; "Hydrological Assessments are completed and regularly updated by a Qualified Registered Professional (QRP) in consumptive use watersheds."

Target	Canfor Results
Operational plans follow the recommendations in the Hydrological Assessment and if indicated, Channel Assessments and/or Drainage Plans are completed by a QRP	No blocks harvested in domestic or community watersheds in 2011.

#### Measure 9-5.2 Consistent with Riparian Management Strategies

The Measure reads; "Percent of primary forest activities consistent with riparian management strategies for reserve and management zones specified in a FSP."

Target	Canfor Results
O Non-conformance or non-compliance with site plan and Forest Stewardship Plan riparian management strategies.	0 non-compliance or non-conformances were recorded in 2011 with regard to site plan commitments and riparian strategies specified in the FSP.

#### **Measure 9-5.3 Stream Crossings**

The measure reads; "Stream crossings are established and maintained according to the requirements for each stream class."

Target	Canfor Results
0 Non-conformance or non-compliance with site plan and FSP riparian management strategies.	0 non-compliance or non-conformances were recorded in 2011 with regard to commitments and riparian strategies as required by the FSP

# 7 PART 2 – JAN 1, 2012 SFMP : CURRENT CONDITION REPORT

Criterion / Element /	/ Indicator					
	Ecological Values			Target Achieved	Background Info	Mapping Product
C1. Biological Divers	sity	Indicator Statement	Target (variance)	(yes) = 1 or (no)= 0		
1.1 Eco	osystem Diversity					
	1.1.1a – Ecosystem Representation of Groups	Percent representation of ecosystem groups across the DFA	-Rare Ecosystems – 0 ha -25% of common ecosystem cluster will be reserved or managed to maintain or restore ecosystem functions -Uncommon ecosystems – Table 15: Canfor Invermere TSA Ecosystem Representation Targets - March 31, 2007	1	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	Percent 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	1	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 mixed wood, conifer) across DFA	Maintain the baseline distribution ( $\pm$ 5%) over a 5-year reporting period.	1	Baseline forest groups 2012 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 seral targets defined in the Kootenay Boundary Higher Level Plan	1	See 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)	1	See 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%	1	See Part 1- Measure 1-3.1b	yes
	1.1.4c – Riparian Management Strategies	Number of non-conformances to riparian management strategies	0 (0)	1	See Part 1- Measure 1-3.1b	yes
1.2 Spe	ecies Diversity					
	1.2.1 & 1.2.2 –Species of Management Concern	Percent of forest management activities consistent with management strategies for Species of Management Concern	100% conformance with management strategies (0)	1	See Part 1- Measure 1-4.1	yes
1.3 Spe	ecies & Genetic Diversity					
	1.2.3a/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	1	See Part 1- Measure 2-3.2	N/A
	1.2.3b/1.3.1b – Natural Regeneration	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)	1	See Part 1- measure 1-6.2	N/A
1.4 Pro	otected Areas & Sites					
	1.4.1 – Protected Areas & Sites of Biological Significance	Percent of forest management activities consistent with management strategies for protected areas and sites of biological significance	100% (0)	1	See 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)	1	See Part 1- measure 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)	1	See Part 1- measure 8-3.1, 8-3.2,8-4.4	n/a

2. Ecosystem Condition	on & Productivity					
2.1 Fores	t Ecosystem Resilience					
	2.1.1 – Regeneration Delay	Regeneration delay for stands established annually	As per FSP (N/A)	1	See Part 1- measure 2-3.1	n/a
2.2 Fores	t Ecosystem Productivity					
	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)	1	n/a	yes
	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)	1	See Part 1- measure 2-4.1	n/a
	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%)	1	See Part 1- measure 4-2.1	n/a
3.Soil & Water						
3.1 Soil C	Quality & Quantity	-				
	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	n/a
	3.1.2 – Coarse Woody Debris Targets	Percent of cutblocks reviewed where post harvest CWD levels are within the targets contained in plans	100% of blocks harvested annually (0)	1	See Part 1- Measure 1-3.1c	n/a
3.2 Water	r Quality & Quantity					
	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
	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)	1	See Part 1- Measure 9-5.2	n/a
. Role of Global Ecol	logical Cycles					
4.1 Carbo	on Uptake and Storage					
	4.1.1 –Retention of Existing Old Forest	Maintain the retention of existing (or replacement of) old forest	See indicator 1.1.3	1	See Part 1- Measure 1-2.1	yes
	4.1.2 – Regeneration Delay	Regeneration delay for stands established annually	As per FSP (N/A)	1	See Part 1- measure 2-3.1	n/a
4.2 Addit	ions and Deletions					
	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)	1	n/a	n/a
5. Economic & Social	Benefits					
5.1 Quan	tity and Quality of Timber & Non-Timber					
	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)	1	See Part 1- measure 4-2.1	n/a
	5.1.1b –Non-Timber Benefits	Conformance with strategies for non-timber benefits identified in plans	No non-conformances for site level plans (0)	1	See Part 1- measure 5-1.1	n/a
5.2 Comr	nunities & Sustainability					
	5.2.1 – Investment In Local Communities	Investment in local communities	>= 50% of dollars spent in local communities; 5-year rolling average (-10%)	1	See Part1-measure 4-2.4	n/a

522 - Environn	ental & Safety Procedures Training	Training in environmental and safety procedures in	100% of company employees and contractors will have			
J.2.2 - Environn	chiai & Saicty Flocedures Training	compliance with company training plans	both environmental and safety training (-5%)	1	See Contractor Preworks	n/a
5.2.3 – Level Of	Direct & Indirect Employment	Level of direct and indirect employment	AAC * employment multiplier - 5-year average (+/-10%) 172 person years (PY)	1	n/a	n/a
5.2.4 –Opportuni Forest Economy	ties for Aboriginals to Participate in	Number of opportunities for Aboriginals to participate in the forest economy	Number of opportunities from baseline assessment; 3- year rolling average. (-10% of baseline)	1	See Part 1-measure 4-4.1	n/a
Economic & Soci	al Values					
ety's Responsibility						
6.1 Aboriginal & Treaty Right	s					
6.1.1 – Aborigina	l Awareness Training	Employees will receive Aboriginal awareness training	100% (-10%)	1	All FMG staff training as per divisional training records.	n/a
6.1.2 – Aborigin: Plans	l Communities Understanding of the	Evidence of best efforts to communicate interests and management plans based on Aboriginal communities having a clear understanding of the plans	100% of management plans (0)	1	See Part 1- measure 8-2.1, 8-2.2	
6.1.3 – Address And Uses	aboriginal Forest Values, Knowledge	Percent of forest operations in conformance with operational plans developed to address Aboriginal forest values, knowledge and uses	100% compliance with operational plans (0)	1	See Part 1- measure 8-3.1, 8-3.2,8-4.4	n/a
6.2 Respect for Aboriginal For	est Values, Knowledge & Uses					
6.2.1 – Identified And Uses	Aboriginal Forest Values, Knowledge	Percent of identified Aboriginal forest values, knowledge and uses considered in forestry planning processes	100% (0)	1	See Part 1- measure 8-3.1, 8-3.2,8-4.4	n/a
6.3 Forest Community Well-B	eing & Resilience					
6.3.1 – Primary A	and By-Products	Primary and by-products that are bought, sold, or traded with other forest dependent businesses in the local area	Report out on # of purchase / sale / trade relationships (n/a)	1	Two log sales occurred in 2011	n/a
6.3.2 & 6.3.3 – 0	ertified Safety Program	Implementation and maintenance of a certified safety program	100% (0)	1	N/A	n/a
6.4 Fair & Effective Decision-	Making					
6.4.1 – PAG Sati	sfaction Survey Implemented	PAG established and maintained according to Terms of Reference (satisfaction survey implemented)	80% satisfaction from surveys (-10%)	1	See part 1- measure 7-1.3	n/a
6.4.2 –Education Information/Trai	al Opportunities for ning	Number of educational opportunities for information/training that are delivered to the PAG	>= 1/meeting (0)	1	See part 1- measure 7-2.2	n/a
6.4.3 – Aborigina Plans	l Communities Understanding of the	Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans	100% of management plans (0)	1	See Part 1- measure 8-2.1, 8-2.2	
6.5 Information for Decision-I	<b>Taking</b>					
6.5.1 –Education	al Opportunity	Number of people who took part in an educational opportunity	25 (-10) annually	1	N/A	n/a
6.5.2 – SFM Mo	itoring Report Public	SFM monitoring report made available to the public	SFM monitoring report available to public annually via		On website	n/a

Total Number of Indicators	42
Total Targets Achieved	41
Total Targets Pending	1
Total Targets Not Achieved	0

#### 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 2011. With this in mind, the 2012 updated plan adopts the new nomenclature of the CSA standard and migrates the old measures and targets over to core indicators and targets. Many of the changes to the plan have addressed the shortfalls in the measures that were identified as off target or pending in 2011. In addition, redundant or duplicated measures were eliminated.

The sawmill closure in 2011 impacted many of the economic measures that depend on the harvest and sawmilling of timber in the region. Canfor has entered into an agreement to purchase Tembec sawmills and forest tenures in late 2011. This will help ensure a stable economic future once the purchase is finalized in the latter half of the first quarter of 2012.

Preparing Forester	"I certify that the work described herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals and that I did personally supervise the Work"
Signature and Seal:	Faner Tometi
Date:	March 15, 2012
	Darren Tamelin, RPF
	Operations Superintendent
	Canadian Forest Products Ltd.
	Forest Management Group