Fort St. John Pilot Project

## Sustainable Forest Management Plan 2009 CSA and Regulatory Annual Report

For the period April 1, 2009 to March 31, 2010

BC Timber Sales Canadian Forest Products Ltd. Cameron River Logging Ltd. Louisiana-Pacific Canada Ltd. Tembec Inc. Dunne-za LP



Final Report November 20, 2010

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#### **EXECUTIVE SUMMARY**

#### Highlights of 2009-2010

- An aggressive program of sanitation and salvage harvesting was implemented during the reporting period to limit the spread of Mountain Pine Beetle within the Fort St. John TSA.
- Harvesting was completed on numerous cutblocks covering a total area of 1,262.9 hectares of green and red attack pine beetle between April 2009 and March of 2010. Licensee participants and BCTS have targeted an approximate additional 1,119 hectares of infested mountain pine beetle timber for harvest during the 2010-2011 season.
- In the face of unprecedented negative economic activity in the forest industry in the last 3 years, the participants achieved consistent positive performance regarding overall conformance to indicator targets - from 59 of 61 indicators (two non conformances) in 2007 Annual Report, 61 of 61 indicators (0 non conformances) in the 2008 Annual Report and 59 of 61 indicators (two non conformances) in 2009 Annual Report.
- For the period of April 1, 2009 to March 31, 2010, the participants achieved the performance indicator objectives on the 22<sup>1</sup> regulatory landscape level strategy indicators (Section 42 of the FSJPPR, or affecting Part 3 Division 5 of the FSJPPR-see page 81).

#### Summary of Participants Consistency with the Landscape Level Strategies

The participants' progress in implementing the landscape level strategies contained in the SFMP, as measured by the degree of achievement of the target or acceptable variance of the regulatory indicators, is detailed in Section 11, and summarized as follows:

<u>Timber Harvesting Strategy</u> - Activities were consistent with the targets or acceptable variances on 100% (5 of 5) of the Fort St. John Pilot Project Regulation (FSJPPR) Section 42 performance indicators, and 100% (11 of 11) of all SFMP indicators (regulatory and CSA indicators) linked to the Timber Harvesting Strategy.

Access Management Strategy - Activities were consistent with the targets or acceptable variances on 100% (2 of 2) of the FSJPPR Section 42 performance indicators, and 100% (3 of 3) of all SFMP indicators (regulatory and CSA indicators) linked to the Access Management Strategy.

Patch Size, Seral Stage and Adjacency Strategy - Activities were consistent with the targets or acceptable variances on 100% (3 of 3) of the FSJPPR Section 42 performance indicators, and 100% (2 of 2) of the Section 35 (6) performance standard indicators linked to the Patch size, Seral Stage and Adjacency Strategy.

<u>Riparian Management Strategy</u> - Activities were consistent with the targets or acceptable variances on 100% (4 of 4) of the FSJPPR Section 42 performance indicators, and 100% (5 of 5) of all SFMP indicators linked to the Riparian Management Strategy

<u>Visual Quality Management Strategy</u> - Activities were consistent with the target or acceptable variance for the Section 42 performance indicator linked to the Visual Quality Strategy.

<sup>&</sup>lt;sup>1</sup> Two indicators, # 2 (Seral Stage) and # 3 (Patchsize) apply to both Forest Health and Patch Size/Seral Stage Landscape Level Strategies

<u>Forest Health Management Strategy</u> - Activities were consistent with the targets or acceptable variances on 100% (4 of 4) of the Section 42 performance indicators, and 100% (5 of 5) of all SFMP indicators linked to the Forest Health Management Strategy.

<u>Range and Forage Management Strategy</u> - Activities were consistent with the targets or acceptable variances on 100% (2 of 2) of the Section 42 performance indicators, and 100% (3 of 3) of all SFMP indicators linked to the Range and Forage Management Strategy.

<u>Reforestation Strategy (conifer)</u> - Activities were consistent with the targets or acceptable variances on 100% (1 of 1) Section 42 performance indicators, and 100% (3 of 3) of all SFMP indicators linked to the Reforestation Strategy.

#### Summary of Changes to the Indicator's or their Status

The following table summarizes non-conformances to indicators, (note that indicators in red text refer to those related to regulatory requirements under the FSJPPR).

Indicator	Non Conformance, Significant Revisions, Progress or Methodology		
54 Dollars Spent Locally	Non-conformance noted. The percentage of dollars spent locally met 3 of 4 targets. However, approximately 80% of all expenditures were made locally.		
55 Value and Total Number of Tendered Contracts	Non-conformance noted. Cost reduction activities deemed necessary to produce an acceptable cost structure to maintain operation of local mills during the global economic recession resulted in the participants not meeting the target for percentage of total contracts tendered.		

Note that no revisions from the 2008 report were made to indicator statements, targets, or monitoring methodology noted in the 2009-10 Annual Report.

A number of changes have been proposed for the indicator statements, targets, or monitoring methodology for implementation in the 2010 –11 reporting year. These revisions are noted in Sustainable Forest Management Plan # 2 (SFMP# 2) submitted to Government for approval.

These changes noted in SFMP# 2 will become effective retroactively to April 1, 2010 upon Governments' approval of SFMP # 2. These revisions will be included in the annual report for the 2010-11 reporting year and are not detailed here.



## TABLE OF CONTENTS

Ex	ecutive	Summary	3
1.	Introd	uction and Overview	9
2.	Descr	ption of the Pilot Project	11
3.	SFM In	ndicators, Objectives and Targets	
	3.1.	FOREST TYPES	12
	3.2.	SERAL STAGES	15
	3.3.	PATCH SIZE	21
	3.4.	SHAPE INDEX	24
	3.5.	SNAGS/CAVITY SITES	
	3.6.	COARSE WOODY DEBRIS VOLUME	29
	3.7.	RIPARIAN RESERVES	30
	3.8.	Shrubs	
	3.9.	WILDLIFE TREE PATCHES	
	3.10.	NOXIOUS WEED CONTENT	
	3.11.	SPECIES AT RISK FOREST MANAGEMENT GUIDELINES (REVISED OCT 30/2005)	
	3.12.	CARIBOU	
	3.13.	CONIFEROUS SEEDS	
	3.14.	ASPEN REGENERATION	38
	3.15.	CLASS A PARKS, ECOLOGICAL RESERVES AND LRMP DESIGNATED	
		PROTECTED AREAS	
	3.16.	UNGULATE WINTER RANGES, WILDLIFE HABITAT AREAS AND MKMA	
	3.17.	REPRESENTATIVE EXAMPLES OF ECOSYSTEMS	
	3.18.	GRAHAM HARVEST TIMING	
	3.19.	GRAHAM MERCH AREA	
	3.20.	GRAHAM CONNECTIVITY	
	3.21.	MKMA HARVEST	
	3.22.	RIVER CORRIDORS	
	3.23.	VISUAL SCREENING ON ROADS	
	3.24.	PERMANENT ACCESS STRUCTURES FOREST HEALTH	
	<mark>3.25</mark> . 3.26.	FOREST HEALTH	
	3.26. 3.27.	SALVAGE	
	3.27. 3.28.	SPECIES COMPOSITION	
	3.20. 3.29.	REFORESTATION ASSESSMENT	
	3.30.	ESTABLISHMENT DELAY	
	3.31.	LONG TERM HARVEST LEVEL	
	3.32.	SITE INDEX	
	3.33.	LANDSLIDES	
	3.34.	PEAK FLOW INDEX.	
	3.35.	WATER QUALITY CONCERN RATING	
	3.36.	PROTECTION OF STREAMBANKS AND RIPARIAN VALUES ON SMALL STREAMS	
	3.37.	SPILLS ENTERING WATERBODIES	
	3.38.	CARBON SEQUESTRATION RATE	
	3.39.	ECOSYSTEM CARBON STORAGE	

	3.40.	COORDINATED DEVELOPMENTS	
	3.41.	RANGE ACTION PLANS	
	3.42.	DAMAGE TO RANGE IMPROVEMENTS	
	3.43.	RECREATION SITES	
	3.44.	VISUAL QUALITY OBJECTIVES.	
	3.45.	RECREATION OPPORTUNITY SPECTRUM	
	3.46.	ACTIONS ADDRESSING GUIDES, TRAPPERS AND OTHER INTERESTS	
	3.47.		
	3.48.	SUMMER AND FALL VOLUMES.	
	3.49.	HARVEST SYSTEMS	
	3.50. 3.51.	COORDINATION	
	3.51.	TIMBER PROFILE	
	3.53.	CUT CONTROL	
	3.54.	DOLLARS SPENT LOCALLY ON EACH WOODLANDS PHASE	
	3.55.	VALUE AND TOTAL NUMBER OF TENDERED CONTRACTS VERSUS TOTAL	00
	0.00.	CONTRACTS	81
	3.56.	CONFORMANCE TO ELEMENTS PERTINENT TO TREATY RIGHTS	
	3.57.	NUMBER OF KNOWN VALUES AND USES ADDRESSED IN OPERATIONAL	
		PLANNING	83
	3.58.	REGULATORY PUBLIC REVIEW AND COMMENT PROCESSES	
	3.59.	TERMS OF REFERENCE (TOR) FOR PUBLIC PARTICIPATION PROCESSES	85
	3.60.	PUBLIC INQUIRIES	86
	3.61.	INFORMATION PRESENTATIONS & FIELD TRIPS	87
4.	Summ	ary of Access Management	89
5.	Summ	arv of Timber Harvesting	89
		ary of Timber Harvesting	
6.	Summ	ary of Basic Forest Management (Reforestation)	89
6. 7.	Summ Increm	ary of Basic Forest Management (Reforestation)	89 90
6. 7. 8.	Summ Increm Summ	ary of Basic Forest Management (Reforestation) Iental Forest Management (Stand Tending) ary of any Variances Given	89 90 90
6. 7.	Summ Increm Summ	ary of Basic Forest Management (Reforestation)	89 90 90
6. 7. 8.	Summ Increm Summ	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED	89 90 90 91
6. 7. 8.	Summ Increm Summ Compl	ary of Basic Forest Management (Reforestation) Iental Forest Management (Stand Tending) ary of any Variances Given iance	89 90 90 91
6. 7. 8.	Summ Increm Summ Compl 9.1.	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED	89 90 90 91 91
6. 7. 8. 9.	Summ Increm Summ Compl 9.1. 9.2.	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT	89 90 91 91 91
6. 7. 8. 9.	Summ Summ Compl 9.1. 9.2. Amend	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT UNDER PART 6 OF THE ACT	90 90 91 91 91 91
6. 7. 8. 9. 10. 11.	Summ Summ Compl 9.1. 9.2. Amend Landso	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT UNDER PART 6 OF THE ACT Iments to FDP's or Forest operations schedule cape Level Strategy implementation	90 90 91 91 91 91 91 93
6. 7. 8. 9. 10. 11. Tin	Summ Increm Summ Compl 9.1. 9.2. Ameno Landso nber Ha	ary of Basic Forest Management (Reforestation)	90 91 91 91 91 91 93 93 94
6. 7. 8. 9. 10. 11. Tin Ro	Summ Increm Summ Compl 9.1. 9.2. Ameno Landso nber Ha ad Acce	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT UNDER PART 6 OF THE ACT Iments to FDP's or Forest operations schedule cape Level Strategy implementation rvesting Strategy	90 91 91 91 91 91 93 93 94 97
6. 7. 8. 9. 10. 11. Tin Ro Pa	Summ Increm Summ Compl 9.1. 9.2. Amend Landso nber Ha ad Acce tch Size	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT UNDER PART 6 OF THE ACT Iments to FDP's or Forest operations schedule cape Level Strategy implementation rvesting Strategy ess Management Strategy b, Seral Stage Distribution And Adjacency.	90 91 91 91 91 91 93 93 94 97 98
6. 7. 8. 9. 10. 11. Tin Ro Pa	Summ Increm Summ Compl 9.1. 9.2. Amend Landson ber Ha ad Acce tch Size	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED CONTRAVENTIONS REPORTED COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT UNDER PART 6 OF THE ACT Iments to FDP's or Forest operations schedule cape Level Strategy implementation rvesting Strategy ess Management Strategy b, Seral Stage Distribution And Adjacency	90 91 91 91 91 91 93 93 93 93 93 94 97 98 99
6. 7. 8. 9. 10. 11. Tin Ro Pa Rip Vis	Summ Increm Summ Compl 9.1. 9.2. Amend Landso hber Ha ad Acce tch Size barian M sual Qua	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT UNDER PART 6 OF THE ACT Iments to FDP's or Forest operations schedule cape Level Strategy implementation rvesting Strategy ess Management Strategy anagement Strategy	90 91 91 91 91 91 93 93 93 93 94 97 98 99 99
6. 7. 8. 9. 10. 11. Tin Ro Pa Rip Vis Fo	Summ Increm Summ Compl 9.1. 9.2. Ameno Landso nber Ha ad Acce the Size parian M sual Qua rest Hea	ary of Basic Forest Management (Reforestation)	
6. 7. 8. 9. 10. 11. Tin Ro Pa <sup>*</sup> Rif Vis Fo Ra	Summ Increm Summ Compl 9.1. 9.2. Amend Landso nber Ha ad Acce tch Size parian M sual Qua rest Hea nge And	ary of Basic Forest Management (Reforestation) ental Forest Management (Stand Tending) ary of any Variances Given iance CONTRAVENTIONS REPORTED COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT UNDER PART 6 OF THE ACT Iments to FDP's or Forest operations schedule cape Level Strategy implementation rvesting Strategy ess Management Strategy anagement Strategy	



## LIST OF TABLES

Table 1: Current and SFMP Baseline statuses, and targets, for Forest Types	.13
Table 2: Boreal Plains Deciduous SFMP baseline and Current Condition Seral Stage, and	4.0
Targets	
Table 3: Boreal Plains Conifer SFMP baseline and Current Condition Seral Stage, and Targe	ets19
Table 4: Boreal Foothills, Northern Boreal Mountains and Omineca SFMP baseline and	00
Current Condition Seral Stage, and Targets	
Table 5: Early patch comparison (2003 to 2010 conditions)	
Table 6: Mature patch comparison (2003 to 2010 conditions)	
Table 7: Shape Index comparison, stands ≤40 yrs old (2003 to 2010 conditions)	
Table 8: Summary of snag/live tree retention post-harvest	
Table 9: Shrub Habitat Current Condition and SFMP# 2 Targets	
Table 10: Harvest Area and Proportion of WTPs by Landscape Unit (2001-2010)	
Table 11: Current and Post FOS Condition for Caribou Management Zones	
Table 12: Harvest Activities in the MKMA	
Table 13: Proportion of Leading Species by NDU Unmanaged	
Table 14: Graham River IRM Plan- Cluster Area and Timing Schedule (Revised Oct 2006)	
Table 15: Current 3-year Average in Permanent Access Structures (PAS)	
Table 16: Area Damaged / Salvaged in Merchantable Timber 2004-2010 (fire damage only) .	.52
Table 17: Area Damaged / Salvaged in Merchantable Timber 2006-2010 (MPB damage only)	53
Table 18: Planting vs. cruise species comparison	.55
Table 19: PFI FOS Condition and Targets	.62
Table 20: Summary of WQCR data collected during 2007 - 2009	.66
Table 21: Proportion of Total Volume Locally Processed	.75
Table 22: Summary of Participants' Road and Bridge Construction Activities	
Table 23: List of Variances	.90
Table 24: Summary of Amendments with No Publication Requirement (Apr1/09-Mar 31/10)	.92
Table 25: Road / Bridge Construction Activity – Forest Licencees 2009-2010	125
Table 26: Annual report on roads constructed in the Fort St. John BCTS field office area	128
Table 27: Road Deactivation Activities –Licencee Participants (2009 – 2010)	131
Table 28: Annual report on roads deactivated in the Fort St John BCTS field office area	137
Table 29: Summary of Completed Timber Harvesting by Participants (April 1, 2009 to March	
31, 2010)	
Table 30: BCTS Establishment Delay Complete (Inventory Label) 2009	143
Table 31: BCTS Establishment Delay Complete (Silviculture Label) 2009	146
Table 32: Mean MSQ by Block-BCTS (2009)	148
Table 33: Mean MSQ by Block-Canfor (2009)	149
Table 34: BCTS Planting Activities (2009)	151
Table 35: Predicted and Target Volumes by Stratum-BCTS 2009	152

Table 36:	Predicted and Target Volumes by Stratum – Canfor 2009	154
Table 37:	Licencee Participant Planting Activities 2009	156
Table 38:	Establishment Delay Report – Inventory Layer – Licencee Participants 2009	159

## LIST OF FIGURES

Figure 1: Project Area Map	9
Figure 2. Six-year results for Snag/Cavity site indicator (2004-2010)	29
Figure 3. Coarse Woody Debris Distribution	30
Figure 4. Five year reporting results of 3-year rolling averages of PAS % (2005-2010	)49
Figure 5: Reforestation assessment merchantable volume prediction	57
Figure 6: Establishment delay summary	59
Figure 7. Results of 3-year rolling averages of all crossings with "high" WQCR (samp 2002-2009).	•
Figure 8: Dollars Spent Locally by Woodlands Phase - 2009	81
Figure 9: Contract Value and Tender Summary	82

## APPENDICES

Appendix 1:	Fort St. John LU's and RMZ's	.104
Appendix 2:	CSA Sustainable Forest Management Matrix	.107
Appendix 3:	Access Management	.124
Appendix 4:	Timber Harvesting	.139
Appendix 5:	Reforestation	.142
Appendix 6:	Compliance	.162



#### 1. INTRODUCTION AND OVERVIEW

This annual report summarizes activities completed between April 1, 2009 and March 31, 2010 on tenures included in the Fort St. John Pilot Project. These tenures include BC Timber Sales, FL A18154 and PA 12 held by Canadian Forest Products Ltd, FL A59959 held by Cameron River Logging Ltd., FL A60972, held by Tembec Inc., FL A60049 and FL A60050 held by Louisiana-Pacific Canada Ltd, and FL A56771 jointly held by Dunne-za Ventures and Canadian Forest Products Ltd.

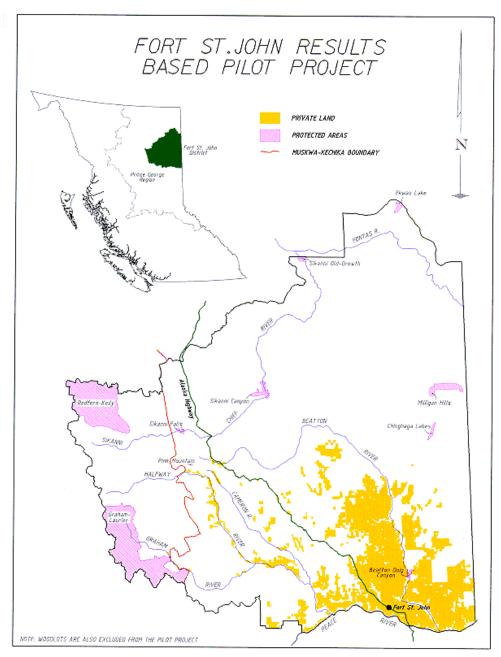


Figure 1: Project Area Map

The Pilot Participants achieved registration under the Canadian Standards Association CAN/CSA Z809-02 Sustainable Forest Management System for the Fort St. John TSA (see Figure 1) forestry operations on October 17, 2003. In partial fulfillment of achieving registration, a public group, the Public Advisory Group (PAG), was formed in 2001 to help identify and select values, objectives, indicators, and targets for sustainable forest management. The original indicators and targets identified by the PAG, along with associated forest management practices to achieve those objectives, were detailed in the Sustainable Forest Management Plan. The participant's registration was renewed on February 6, 2009. The 2009 Annual Report is a summary report on the status of each indicator. The 2009 report does not include any revisions to the indicators, targets, or the way they are measured. These revisions are noted in the revised SFMP# 2. Post approval of SFMP# 2, any future revisions to the indicators, targets, or the way they are measured annual reports.

This report is prepared annually, as required by the CSA standard. In this report, each indicator is reiterated, and a brief status report is provided in Section 3. For additional background information on the indicators and targets, or the implementation and monitoring requirements, the reader should refer to the SFMP.

In addition to CSA requirements, this report includes information required by the FSJPPR (Section 51) on the participants' access management, harvesting, and reforestation activities (Sections 4 to 7), as well as variances (Section 8), compliances (Section 9), self-approved plan amendments (Section 10), and a statement on progress on Landscape Level Strategies (Section 11). The section headings and appendices of this report that address the legal requirements of the FSJPPR are identified in the index, as well as throughout the report, in red text.

The 2009-10 annual report differs from previous reports in that results for several of the indicators are being presented for the first time. Measurement for the indicators listed below is required only on an "SFMP" timeframe. That is, they are analyzed at the time the SFMP is developed (in addition, analyses are conducted to ensure FOS's are consistent with the SFMP) and when the SFMP is replaced. The indicators referenced are:

- 1 Forest Types
- 2 Seral Stages
- 3 Patch Size
- 4 Shape Index
- 8 Shrubs
- 17 Representative Examples of Ecosystems
- 34 Peak Flow Index

Analysis of these indicators, and comparison against the condition present when the SFMP was developed, illustrates both the effect of changing stand dynamics (i.e. forests aging) and the impact of the participants' activities in the DFA. The results will account for the areas amended into the FOS, in response to wildfires and Mountain Pine Beetle, between 2005 and 2009.

Measurement and reporting of progress to the targets for these indicators requires various levels of spatial analysis. In order to obtain as direct a comparison as possible, the participants strove to mirror the baseline data used at the time the SFMP was developed. The forest inventory data, circa 2003, was obtained from the B.C. government data



warehouse (LRDW). Much of the data results, and comparisons with the baseline results presented in the SFMP has given the participants confidence that most of the forest inventory data mirrors that used during the development of the Plan. However there are indications that the inventory dataset is not a 100% match, and may have skewed some of the results slightly. It is possible that a portion of the Vegetation Resource Inventory (VRI) data was used during the development of the SFMP, and not included in the 2003 inventory data used for this Annual Report.

Monitoring procedures as outlined in the SFMP were followed to the best of the participants' abilities. However, full description for all the detailed procedures used in the analyses was not always available due to incomplete documentation and staffing changes. Therefore, the participants had to make some assumptions during analysis that may or may not have been consistent with those done previously. In the participant's estimation, variation resulting from this uncertainty is likely to be quite low, but still possible.

Another source of potential variation likely lays in the private land, lease, and woodlot spatial data used. To complete the analyses for this Annual Report, the participants utilized the most current private land, lease, and woodlot data. The data for these items available to the participants at the time the SFMP was developed was unreliable, and has not been archived. Changes in this data has resulted in a minor reduction in the size of the forested land base managed by the participants.

These issues account for the variation in the forest inventory data presented between the analyses completed when the SFMP was developed and those completed to reflect the current forest condition for this annual report.

#### 2. DESCRIPTION OF THE PILOT PROJECT

In June 1999 the BC government added Part 10.1 to the *Forest Practices Code of BC Act* to enable results-based pilot projects. The intent of the pilot projects is to test ways to improve the regulatory framework for forest practices while maintaining the same or higher levels of environmental standards.

Canadian Forest Products Ltd., Slocan Forest Products Ltd., Louisiana-Pacific Canada Ltd., and the Ministry of Forests Small Business Forest Enterprise Program prepared a detailed pilot project proposal that provided the basis for the *Fort St. John Pilot Project Regulation* (FSJPPR). In 2001, the participants established a public advisory group (PAG) comprised of local people representing a variety of interests. The public advisory group reviewed the draft detailed project proposal and draft regulation, reviewed comments from the general public and provided advice to government on the suitability of the project. Cabinet accepted the proposal and a draft regulation late in 2001. The regulation was approved as effective December 1, 2001.

The *Fort St. John Pilot Project Regulation* requires the establishment of a strategic plan for the pilot project area, known as a Sustainable Forest Management (SFM) Plan. The participants prepared the SFMP with the guidance of a local public advisory group and a scientific/technical advisory committee.

The SFMP was approved by the Regional Manager, Northern Interior Forest Region, Ministry of Forests and the Regional Director, Omineca-Peace Region, Ministry of Water, Land and Air Protection, in April 2004. A revised SFMP was prepared and submitted to Government for approval in July 2010. SFMP# 2 is has undergone thorough review by the PAG, First Nations, the public and scientific technical advisors and Government. SFMP# 2 is currently being reviewed for approval by Government.

#### 3. SFM INDICATORS, OBJECTIVES AND TARGETS

The format of each status report is described below:

#### X.X INDICATOR

Indicator Statement	Target Statement		
A reiteration of the indicator as identified in the landscape level strategy or the SFM matrix.	A specific statement describing a desired future state or condition of an indicator. Targets are succinct, measurable, achievable, realistic, and time bound.		
SFM Objective: A description the SFM objectives that this indicator and target relate to.			
<b>Linkage to FSJPPR:</b> If applicable, a brief statement regarding whether this indicator affects performance requirements of the FSJPPR, or if it will be used to evaluate success of the implementation of the landscape level strategy.			

#### Acceptable Variance:

This provides the acceptable variance from the desired level of the indicator.

#### **CURRENT STATUS AND COMMENTS**

This section provides an update on the status of each indicator and objective. The best information available up to and including March 31, 2009 (except where noted) was used for the preparation of this status report.

#### **REVISIONS**

When required, this section describes suggested revisions to details (e.g., wording, reporting periods) of the indicator and objective. These revisions will be presented to the PAG for their review.

#### 3.1. FOREST TYPES

Indicator Statement	Target Statement				
Percent distribution of forest type (deciduous, deciduous mixedwood, conifer mixedwood, conifer) >20 years old by landscape unit	100% of forest type groups by landscape unit will be within the target range				
SFM Objective:					
The diversity and pattern of communities and ecosystems within a natural range					
Ecosystem functions capable of supporting naturally occurring species exist within the range of natural variability					
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.					

#### Acceptable Variance:

There is no acceptable variance for this indicator.

Targets may need to be reviewed following large natural catastrophic events.

#### CURRENT STATUS AND COMMENTS

This indicator monitors the change in the proportion of forest type groups (> 20 years old), within broad groups based on leading tree species, over time. Stands less than 20 years of age are not included as they typically show significant fluctuations in tree species composition each year due to things such as silviculture practices or rapid natural ingress of species in regenerating stands. Forest type groups are the designation of stand types into one of 4 ecologically significant groups – pure deciduous, deciduous leading mixedwood, conifer leading mixedwood, and pure conifer.

The following table (Table 1) presents both the baseline status from 2003 and the condition as of the end of the reporting period (March 31 2010). All forty-four Forest Type / Landscape Unit combination targets were within the target ranges. There are some minor fluctuations, in both area and relative proportions, between the two points in time used in the measurement of this indicator. These fluctuations are normal and expected. Any areas harvested during the term of SFMP #1 would drop out of the '2010' population, so landscape units which had harvesting activities may exhibit a downward trend in overall area relative to this indicator (the only LU's where harvesting did not occur during the SFMP period are Sikanni, and Milligan). Area additions resulted from projecting the stand ages to the 2010 condition, and reflect the recruitment of stands that were <20 yrs old in 2003.

The participant's activities are consistent with the target for this indicator.

Landscape Unit Forest Type		SFMP baseline (2003)		Current Condition (2010)		Baseline Target Ranges (%)	
<b>O</b> III		Area (ha)	%	Area (ha)	%	Min	Max
	Deciduous	140,289	37%	132,767	36%	30%	45%
Blueberry	Deciduous Mixedwood	32,500	9%	37,064	10%	7%	10%
ыцеренту	Conifer Mixedwood	50,669	13%	47,894	13%	11%	16%
	Conifer	154,320	41%	150,692	41%	33%	49%
Blueberry Tot	al	377,778	100%	368,417	100%		
	Deciduous	646	1%	659	1%	0.50%	2%
Cruina Cirl	Deciduous Mixedwood	706	1%	998	2%	0.50%	2%
Crying Girl	Conifer Mixedwood	1,205	2%	964	2%	1%	3%
	Conifer	58,390	96%	55,577	95%	93%	98%
Crying Girl To	Crying Girl Total		100%	58,198	100%		
	Deciduous	3,061	1%	3,288	1%	0.50%	2%
Graham	Deciduous Mixedwood	1,724	1%	2,210	1%	0.50%	2%
Granam	Conifer Mixedwood	3,866	2%	3,497	2%	1%	3%
	Conifer	205,996	96%	216,003	96%	93%	98%
Graham Total	Graham Total		100%	224,998	100%		
Halfway	Deciduous	14,845	12%	15,150	12%	9%	14%
	Deciduous Mixedwood	5,399	4%	6,618	5%	3%	5%

Table 1: Current and SFMP Baseline statuses, and targets, for Forest Types

	Conifer Mixedwood	8,936	7%	8,414	7%	6%	8%
	Conifer	100,239	78%	99,028	77%	73%	82%
Halfway Tota	al	129,419	100%	129,210	100%		
	Deciduous	64,727	40%	65,000	41%	32%	48%
Kabatab	Deciduous Mixedwood	21,274	13%	22,615	14%	11%	16%
Kahntah	Conifer Mixedwood	25,395	16%	24,252	15%	13%	19%
	Conifer	49,940	31%	48,511	30%	25%	37%
Kahntah Tota	al	161,335	100%	160,378	100%		
	Deciduous	34,392	37%	30,434	35%	30%	44%
Kabaa	Deciduous Mixedwood	8,578	9%	8,013	9%	7%	11%
Kobes	Conifer Mixedwood	13,560	15%	12,369	14%	12%	18%
	Conifer	36,442	39%	35,273	41%	31%	47%
Kobes Total		92,971	100%	86,089	100%		
	Deciduous	58,825	69%	59,202	69%	55%	82%
Lower	Deciduous Mixedwood	5,372	6%	6,174	7%	5%	8%
Beatton	Conifer Mixedwood	7,624	9%	6,839	8%	7%	11%
	Conifer	13,976	16%	13,542	16%	13%	20%
_ower Beatto	on Total	85,797	100%	85,757	100%		
	Deciduous	28,677	26%	29,396	26%	21%	31%
Milligon	Deciduous Mixedwood	22,493	20%	23,393	21%	16%	25%
Milligan	Conifer Mixedwood	25,259	23%	24,368	22%	18%	28%
	Conifer	33,570	31%	36,076	32%	24%	37%
Milligan Tota	l -	109,999	100%	113,233	100%		
	Deciduous	4,608	3%	4,612	3%	2%	4%
Cilconni	Deciduous Mixedwood	2,662	2%	3,232	2%	1.50%	3%
Sikanni	Conifer Mixedwood	4,746	3%	4,183	3%	2%	4%
	Conifer	129,392	92%	130,297	92%	89%	95%
Sikanni Tota	l	141,408	100%	142,324	100%		
	Deciduous	64,676	24%	64,888	25%	19%	29%
Tommy	Deciduous Mixedwood	19,517	7%	19,277	8%	6%	9%
Lakes	Conifer Mixedwood	31,864	12%	27,646	11%	9%	14%
	Conifer	153,325	57%	145,067	56%	46%	68%
Fommy Lake	es Total	269,383	100%	256,878	100%		
	Deciduous	45,003	23%	45,048	23%	18%	28%
<b>T</b>	Deciduous Mixedwood	10,628	5%	11,117	6%	4%	7%
Trutch	Conifer Mixedwood	18,072	9%	17,475	9%	7%	11%
	Conifer	122,373	62%	120,742	62%	50%	75%
Trutch Total		196,076	100%	194,382	100%		
Grand Tota	1	1,839,761	100%	1,819,864	100%		

#### Change Monitoring Inventory (CMI)

Since the inception of the pilot project, 78 Change Monitoring Inventory plots have been established in the Defined Forest Area on harvested or burnt areas. The location of these plots is on a systematic 3km

square grid overlain on the DFA. It is intended to establish plots on predefined points located on the grid, where they fall in managed stands, 15 years after harvest. Over time and subsequent remeasurements, the data from these plots can be used to detect long-term changes in managed stands' species composition. There were no CMI plots established during the reporting period. There was only one plot that could have been established, and was insufficient to structure a contract with. The participants hope that government strategic direction and associated funding will facilitate the continuation of CMI plot establishment on the DFA in future years.

#### **REVISIONS**

There were no revisions applied to this indicator during the term of the SFMP #1. The participants included a 'Forest Types' indicator in SFMP #2, with several revisions applied to reflect the impact of the new Vegetation Resource Inventory for the DFA. Further detail is available in the SFMP# 2 document.

#### 3.2. SERAL STAGES

Indicator Statement	Target Statement			
The minimum proportion (%) of late seral forest by NDU by LU	The minimum proportion (%) of late seral forest by NDU by LU as identified in Tables 2, 3 and 4, will be met within the identified timelines			
SFM Objective:				
The diversity and pattern of communities and ecosystems within a natural range				
A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress				
Ecosystem functions capable of supporting naturally occurring species that exist within the range of natural variability				
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.				

#### Acceptable Variance:

Harvesting can continue in late seral stands if at least 50% of the target is met and the time to reach the full target is not delayed by more than 10 years.

Where large natural disturbances occur within Landscape Units with a Low or Intermediate Forest Management Intensity, the minimum proportion of late seral may decline to the lower limit of the natural range of variation to relieve salvage pressures and allow young natural forests to persist on the landscape.

A variance of up to 50 ha in each NDU/LU combination is acceptable to allow access location or small inclusions within larger blocks.

#### CURRENT STATUS AND COMMENTS

The Seral Stages indicator is in place to ensure that a minimum proportion of late seral stage forest will be present across the DFA through time. It sets limits on harvest planning in later seral stage stands, by Landscape Unit. Analyses were conducted when SFMP #1 and FOS #1 were developed. The results indicated that the amount of area in late seral stands was less than 50% of the target area in the following NDU/LU combinations: Lower Beatton (conifer); Kahntah and Milligan (deciduous).

As per the direction established in SFMP #1, a series of spatially-defined rotating reserves of mature forest was identified for the Lower Beatton and Milligan Landscape Units, prior to any identification of harvesting in late-seral stands. This exercise was completed as part of FOS #1. During the term of FOS #1, an amendment to one of the rotating reserves was required. The following is excerpted from the amendment request (April 18, 2008, FOS Amendment #42):

"Approximately 115 ha of area will be removed from Rotating Reserve #20 through the development of block 25011, required to manage Mountain Pine Beetle infestation. In order to compensate for the necessary reduction in size of rotating reserve #20, a new rotating reserve (#12) will be designated within the Lower Beatton Landscape Unit. Rotating Reserve #12 is 357 ha of largely spruce-leading forest comprised of multiple Vegetation Resource Inventory polygons. The relevant details for the polygons are summarized in the table below. Projected ages and heights represented within the table are for leading species. In order to meet the intent of the Sustainable Forest Management indicator for Seral Stage distribution and to address the impacts that future expansion of Mountain Pine Beetle may have, the rotating reserve was designed to provide a contiguous area of mature conifer leading forest with minimal pine content. Areas of white spruce were chosen over areas of black spruce."

During the term of the SFMP, blocks harvested in the Lower Beatton LU included minimal amounts (5.08 ha) of late seral stage conifer forest type. These areas occurred primarily on the fringes of larger deciduous blocks. No harvesting occurred in late seral stage deciduous forest types in the Kahntah or Milligan Landscape Units.

The following tables (Table 2, Table 3, Table 4) present the results of the most recent seral stage analyses. The 'current condition' values account for the harvesting activities that have been completed during the term of the SFMP #1, as well as the effect of stands aging to the year 2010. No new forecast was completed for this report, but the 'years to meet full target' values were advanced 7 years to account for the time since the original forecasts were done.

#### Boreal Plain - Deciduous

The results indicate that the proportion of late seral deciduous forest increased, or remained steady, in all LU's over the term of the SFMP #1. Late seral deciduous proportion increased in the Milligan LU from 5.7% to 8.1%. The Kahntah LU's position relative to later seral stage deciduous improved from 7.2% to 7.7%. The Kahntah LU remains the only one below the 50% of full target threshold.

#### Boreal Plains - Conifer

The results indicate that the proportion of late seral conifer forest increased, or remained steady, in all LU's over the term of the SFMP #1, except for the Kahntah Upland and Alluvial LU's. Since no harvesting occurred in the Kahntah Alluvial LU/NDU area combination and no recent wildfire data was incorporated into the inventory data, this result was not expected. It is possible that past harvesting within the Kahntah Alluvial area was not accounted for in the original SFMP analysis, as it was completed just before the development of the SFMP. The Tommy Lakes (alluvial) and Lower Beatton (upland) remain below the 50% of full target threshold.

#### Boreal Foothills, Northern Boreal Mountains, Omineca

The results indicate that the proportion of late seral conifer forest increased in all LU's over the term of the SFMP #1. Proportions of late seral stage forest remains above 50% of the full target for each NDU/LU combination in the Boreal Foothills, Northern Boreal Mountains, and Omineca NDU's.

The participants' activities are consistent with the targets for the Seral Stages indicator.

											S	eral Ag	e Group										
				<40	yrs			40-10	0 yrs			101-12	20 yrs				>120 y	rs (late)					
NDU	NDU	Landscape Unit	SFMP ba (200		Curre condition		SFMP baseline Current (2003) Current (2010) (2010)			SFMP ba (200		Curre condition	-	SFMP	baselii	ne (2003)	Current	condit	ion (2010)	>120	Years to	Total Area	
	Subunit		Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Surplus / (Deficit) of full target (ha)	Area (ha)	%	Surplus / (Deficit) of full target (ha)	yrs Target	meet full target	(ha) 2010
		Kahntah	8	30.0%	14	0.4%	2,579	79.1%	2,583	77.3%	276	8.5%	308	8.5%	399	12.2%	(91)	437	13.1%	(64)	15%	23	3,342
	Alluvial	Tommy Lakes	215	3.2%	146	2.2%	4,519	67.3%	4,022	60.4%	564	8.4%	1,075	16.0%	1,419	21.1%	747	1,419	21.3%	753	10%	-	6,662
		Trutch	105	1.8%	106	1.7%	4,177	69.1%	3,714	61.4%	320	5.3%	783	14.1%	1,445	23.9%	538	1,446	23.9%	539	15%	-	6,049
	Alluvial Total		329	2.1%	266		11,275	70.4%	10,319	64.0%	1,160	7.2%	2,166	13.7%	3,263	20.4%		3,302	20.5%				<mark>16,053</mark>
		Blueberry	20,319	11.2%	27,863	14.4%	112,897	62.1%	96,399	49.9%	33,878	18.6%	37,363	10.2%	14,700	8.1%	(3,480)	31,702	16.4%	12,369	10%	-	193,327
Boreal		Halfway	2,329	11.0%	2,341	10.5%	10,545	49.8%	8,660	38.8%	4,158	19.6%	5,442	17.3%	4,149	19.6%	2,031	5,870	26.3%	3,639	10%	-	22,313
Plains		Kahntah	1,430	1.7%	1,270	1.5%	67,182	80.3%	67,870	79.6%	8,971	10.7%	9,490	10.7%	6,043	7.2%	(6,501)	6,592	7.7%	(6,191)	15%	43	85,222
	Upland	Kobes	3,174	7.1%	4,761	10.6%	13,297	29.6%	6,162	13.7%	16,977	37.8%	8,630	26.4%	11,419	25.5%	6,933	25,356	56.5%	20,865	10%	-	44,909
		L. Beatton	5,408	8.3%	8,725	12.5%	44,824	68.5%	38,846	55.5%	8,900	13.6%	12,727	12.3%	6,268	9.6%	(3,542)	9,732	13.9%	(773)	15%	33	70,030
		Milligan	1,039	2.0%	770	1.4%	46,168	89.5%	46,621	87.5%	1,446	2.8%	1553	1.8%	2,921	5.7%	(4,815)	4,337	8.1%	(3,655)	15%	83	53,281
		Tommy Lakes	2,690	3.4%	3,171	3.8%	57,290	73.0%	52,995	64.1%	12,148	15.5%	14,160	14.1%	6,374	8.1%	(1,476)	12,391	15.0%	4,119	10%	-	82,717
		Trutch	161	30.0%	251	0.5%	43,790	88.7%	32,813	65.6%	234	0.5%	11,710	23.5%	5,204	10.5%	(2,205)	5,284	10.6%	(2,225)	15%	33	50,058
	Upland Total		36,550	6.3%	49,152	8.2%	395,992	68.7%	350,366	58.2%	86,713	15.0%	101,075	13.0%	57,077	9.9%		101,264	16.8%				<mark>601,857</mark>
В	oreal Plains	36,879	6.2%	49,418	8.0%	407,268	68.8%	360,685	58.4%	87,873	14.8%	103,308	13.0%	60,340	10.2%		104,566					617,977	



			Seral Age Group																				
				<40	yrs			40-12	0 yrs			121-14	0 yrs				>140 yr	rs (late)					
NDU	NDU	Landscape	SFMP bas (2003		Current o (20		SFMP ba (200		Current c (20		SFMP ba (200		Current co (201		SFMP	baseline	e (2003)	Current	conditio	on (2010)	>140	Years to meet	Total
	Subunit	Unit	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Surplus / (Deficit) of full target (ha)	Area (ha)	%	Surplus / ( <mark>Deficit</mark> ) of full target (ha)	yrs Target	full target	Area (ha) 2010
		Kahntah	747	21.6%	773	22.8%	672	19.4%	646	19.06%	471	13.6%	476	14.0%	1,570	45.4%	(177)	1,495	44.1%	(217)	50.5%	23	3,390
	Alluvial	Tommy Lakes	708	11.0%	820	12.5%	1,880	29.1%	1,870	28.47%	2924	45.2%	2,539	38.7%	953	14.7%	(1,892)	1,339	20.4%	(1,551)	44%	33	6,568
		Trutch	621	11.8%	618	11.8%	1,912	36.2%	1,843	35.27%	2075	39.3%	1319	25.2%	668	12.7%	(1,996)	1,445	27.7%	(1,194)	50.5%	33	5,225
	Alluvial Tot	tal	2076	13.7%	2211		4,463	29.4%	4,359	28.71%	5,470	36.0%	4,334	28.5%	3,190	21.0%		4,279	28.2%				<mark>15,183</mark>
		Blueberry	69,618	23.0%	69,023	22.8%	166,768	55.1%	145,333	48.10%	40,567	13.4%	37,845	12.5%	25,775	8.5%	(25,689)	49,971	16.5%	(1,398)	17%	13	302,172
Derrel		Halfway	14,039	11.7%	16,292	13.1%	46,510	38.6%	40,618	32.64%	25,677	21.3%	23,933	19.2%	34,250	28.4%	13,769	43,606	35.0%	22,450	17%	-	124,449
Boreal Plains		Kahntah	30,278	21.1%	37,429	25.1%	58,401	40.8%	57,079	38.30%	20,647	14.4%	20,993	14.1%	33,980	23.7%	(1,846)	33,529	22.5%	(3,729)	25%	13	149,030
	Upland	Kobes	9,306	13.1%	13,048	18.0%	27,189	38.3%	10,218	14.10%	13,470	19.0%	18,832	26.0%	21,070	29.7%	8,994	30,368	41.9%	18,049	17%	-	72,466
	opiana	L. Beatton	4,017	13.9%	8,891	26.7%	18,240	63.0%	12,934	38.81%	5,754	19.9%	9,747	29.2%	938	3.2%	(6,300)	1,758	5.3%	(6,575)	25%	33	33,330
		Milligan	23,241	21.9%	23,458	22.2%	58,879	55.5%	53,905	51.03%	10,402	9.8%	13590	12.9%	13,531	12.8%	(12,982)	14,674	13.9%	(11,733)	25%	33	105,627
		Tommy Lakes	32,191	10.4%	34,865	11.3%	181,129	58.6%	156,153	50.63%	60,015	19.4%	59,304	19.2%	35,980	11.6%	(16,603)	58,072	18.8%	5,645	17%	-	308,394
		Trutch	6629	3.4%	7897	4.0%	86,550	43.8%	86,312	43.67%	88,817	45.0%	74,398	37.6%	15,472	7.8%	(33,895)	29,045	14.7%	(20,368)	25%	33	197,652
	Upland Tota	l	189,319	14.8%	210,903	16.3%	643,665	50.3%	562,552	43.50%	265,349	20.7%	258,642	20.0%	180,997	14.1%		261,023	20.2%				1,293,120
E	Boreal Plains Total		191,395	14.8%	213,114	16.3%	648,129	50.1%	566,911	43.33%	270,819	20.9%	262,976	20.1%	184,187	14.2%		265,302	20.3%				1,308,303

## Table 3: Boreal Plains Conifer SFMP baseline and Current Condition Seral Stage, and Targets



# Table 4: Boreal Foothills, Northern Boreal Mountains and Omineca SFMP baseline and Current Condition Seral Stage, andTargets

			Seral Age Group																				
				<40	yrs			40-12	20 yrs			121-	140 yrs				>140	yrs					
NDU	NDU Subunit	Landscape Unit	SFN base (200	line	Current (201		SFMP ba (200		Current (201		bas	MP eline 103)	Current (201		SFMP	baselin	ie (2003)	Current			>140 yrs Target	Years to meet full	Total Area (ha) 2010
			Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Surplus / (Deficit)	Area (ha)	%	Surplus / (Deficit)		Target	
		Crying Girl	2,110	4.9%	2,780	6.7%	17,634	40.8%	15,270	36.6%	8,355	19.4%	8,223	19.7%	15,075	34.9%	(2,626)	15,420	37.0%	(1,674)	41.0%	23	41,693
	Mountain	Graham	1,076	1.1%	2,855	2.8%	42,797	43.2%	35703	35.1%	15,608	15.8%	19,299	19.0%	39,523	39.9%	(8,989)	43,815	43.1%	(6,004)	49.0%	23	101,672
		Halfway	26	0.2%	88	0.7%	4,227	35.6%	3,701	31.1%	3,089	26.0%	2,550	21.4%	4,527	38.1%	610	5,571	46.8%	1,641	33.0%	0	11,910
Boreal	Mounta	ain Total	3,212	2.1%	5,723	3.7%	64,658	42.0%	54679	35.2%	27,052	17.6%	30,072	19.4%	59,125	38.4%		64,806	41.7%				155,275
Foothills		Crying Girl	1,762	9.3%	3,702	17.3%	8,804	46.6%	8,325	38.9%	3,396	18.0%	3,434	16.1%	4,947	26.2%	(1,009)	5,926	27.7%	(811)	31.5%	23	21,387
	Valley	Graham	215	1.5%	434	2.9%	8,759	62.5%	6,987	47.2%	2,196	15.7%	3,594	24.3%	2,851	20.3%	(2,757)	3,800	25.6%	(2,126)	40.0%	43	14,815
		Halfway	0	0.0%	16	1.0%	549	35.7%	476	30.3%	505	32.8%	401	25.5%	484	31.5%	130	678	43.2%	317	23.0%	0	1,571
	Valle	y Total	1,978	5.7%	4,152	11.0%	18,112	52.5%	15,788	41.8%	6,098	17.7%	7,429	19.7%	8,282	24.0%		10,404	27.5%				37,773
Boreal Footh	nills Total		5,190	2.8%	9,875	5.1%	82,770	43.9%	70,462	36.5%	33,150	17.6%	37,501	19.4%	67,407	35.8%		75,210	39.0%				193,048
	n Boreal	Graham	1,458	14.4%	1,214	11.8%	4,108	40.5%	3,652	35.5%	1,895	18.7%	2,366	23.0%	2,688	26.5%	(3,401)	3,054	29.7%	(3,118)	60.0%	53	10,286
Mour	ntains	Sikanni	4,118	4.2%	5,465	5.4%	26,447	26.9%	26,438	26.3%	21,460	21.8%	8,883	8.8%	46,431	47.2%	(12,642)	59,601	59.4%	(631)	60.0%	13	100,387
Northern Bo	real Mountain	is Total	5,575	5.1%	6,679	6.0%	30,555	28.1%	30,090	27.2%	23,355	21.5%	11,249	10.2%	49,118	45.2%		62,655	56.6%				110,673
	Mountain	Graham	237	0.3%	4243	4.8%	19,707	22.5%	15,204	17.0%	9,807	11.2%	8,748	9.8%	57,851	66.0%	(2,594)	61,075	68.4%	(521)	69.0%	13	89,270
Omineca	Mounta	ain Total	237	0.3%	4243	4.8%	19,707	22.5%	15204	17.0%	9,807	11.2%	8748	9.8%	57,851	66.0%		61075	68.4%				89,270
•	Valley	Graham	50	0.6%	594	5.3%	4,925	56.7%	4,698	42.2%	1,581	18.2%	2,427	21.8%	2,123	24.5%	(1,349)	3,405	30.6%	(1,045)	40.0%	33	11,124
	Valle	y Total	50	0.6%	594	5.3%	4,925	56.7%	4,698	42.2%	1,581	18.2%	2,427	21.8%	2,123	24.5%		3,405	30.6%				11,124
Omineca To	tal		287	0.3%	4,837	4.8%	24,633	25.6%	19,902	19.8%	11,388	11.8%	11,175	11.1%	1% 59,974 62.3% 64,480 64.2%					100,394			
Grand Tota			11,052	2.8%	21,391		137,957	35.1%	120,454	29.8%	67,893	17.3%	59,925	14.8%	8% 176,500 44.9% 202,345 50.1%						404,115		

#### **REVISIONS**

The participants have included a 'Seral Stages' indicator in SFMP #2. The indicator was revised, and will now be measured on an NDU basis only.



#### 3.3. PATCH SIZE

Indicator Statement	Target Statement									
Percent area by Patch Size Class (0-50, 51-100,	A minimum of 19 of 33 (58%) of the baseline targets for early patches will be achieved during the term of this SFMP									
and >100 ha) by Landscape Unit	A minimum of 10 of 11 (91%) of the baseline targets for mature patches will be achieved during the term of this SFMP									
SFM Objective:										
The diversity and pattern of communities and ecosystem's within a natural range										

Ecosystem functions capable of supporting naturally occurring species that exist within the range of natural variability

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

#### Acceptable Variances:

Natural disturbance events that shift the patch size distribution to such a level that it cannot be accommodated in a short (decade) time frame.

Seral spatial distribution does not permit patch size targets in the short term.

Patch size distributions will need to be recalculated as new forest inventory is completed and targets and thresholds assessed to determine if they are still appropriate.

#### **CURRENT STATUS AND COMMENTS**

This indicator is set up to monitor the patch size distribution, by Landscape Unit, for both 'early' (≤40 yrs) and 'mature' (>120 yrs) forest within the Fort St. John Pilot Project area. The following two tables (Table 5 and Table 6) are used to present the results for each age group. Each table contains the baseline condition present when SFMP#1 was developed as well as the 'current' condition up to the end of the reporting period.

There are essentially three variables impacting the dynamics of this indicator: stands aging (temporal), the location of preexisting patches of similar aged forest (spatial), and the location and timing of harvesting activities (spatial and temporal).

The 'current' condition data reflect the area harvested by the participants during the term of the SFMP, as well as the effect of forest stands aging. As part of the patch size analyses, ages of stands not harvested were projected to 2010. The area of stands harvested during the term of the SFMP is accounted for in the 'early' area (i.e. stand ages reset based on harvesting completion date).

The results of the analyses indicate that 19 of the 33 targets for 'early' patches, and that all 11 of the targets for 'mature' patches were attained. The participants' activities are consistent with the target for this indicator.

#### **REVISIONS**

The participants have included a Patch Size indicator in SFMP #2. The indicator was revised to measure 'early' patches exclusively, on a Natural Disturbance Unit basis.



NDU		Datah Olaas	SFMP bas	eline (2003)		ndition (Mar /10)	Targets	
NDU	LU	Patch Class	Area (ha)	Distribution (%)	Area (ha)	Distribution (%)	(Acceptable Range)	
		0-50	12,804	12%	7,492	7%	5 (5-10)	
	Blueberry (High)	51-100	9,101	8%	8,100	8%	5 (5-10)	
	(3)	100+	86,352	80%	90,099	85%	90 (65-90)	
	Blueberry To	tal	108,257	100%	105,691	100%		
		0-50	2,209	10%	1,509	8%	5 (5-10)	
	Halfway (High)	51-100	3,300	15%	3,446	18%	5 (5-10)	
	(1.1917)	100+	15,903	74%	14,635	75%	90 (65-90)	
	Halfway Tota	I	21,413	100%	19,590	100%		
		0-50	3,194	10%	3,231	8%	5(5-25)	
	Kahntah (moderate)	51-100	2,539	8%	2,651	7%	5 (5-10)	
	(moderate)	100+	26,206	82%	32,943	85%	90 (55-90)	
	Kahntah Tota	I	31,939	100%	38,825	100%		
		0-50	2,544	17%	1,978	11%	5 (5-10)	
	Kobes (high)	51-100	3,243	22%	2,401	14%	5 (5-10)	
		100+	8,893	61%	13,397	75%	90 (65-90)	
Boreal	Kobes Total		14,679	100%	17,776	100%		
Plains	Lower	0-50	5,489	24%	1,933	11%	5 (5-25)	
	Lower Beatton	51-100	2,779		1,989		5 (5-10)	
	(moderate)	100+	14,832	64%	13,784		90 (65-90)	
	Lower Beatto	n Total	23,100	100%	17,706	100%		
		0-50	1,688		1,353	5%	5 (5-25)	
	Milligan	51-100	1,006	4%	1,049	4%	5 (5-10)	
	(moderate)	100+	24,029		22,385		90 (65-90)	
	Milligan Total		26,723	100%	24,787	100%		
	gan ota	0-50	4,570		5,505	18%	5 (5-20)	
	Tommy	51-100	4,470		5,445	18%	5 (5-10)	
	Lakes (high)	100+	29,545		20,039	65%	90 (65-90)	
	Tommy Lake		38,585		30,989	100%	00 (00 00)	
		0-50	851	12%	1,087	13%	5 (5-20)	
	Trutch	51-100	820		1,007	13%	5 (5 20)	
	(moderate)	100+	5,549	77%	6,125	70%	90 (65-90)	
	Trutch Total	1001	7,221	100%	8,689		00 (00 00)	
	Trateri Tota	0-50						
			33,349		24,088			
Boreal Pl	ains Total	51-100	27,258		26,558			
		100+	211,309		213,407	81%		
		All	271,916		264,053			
	Silons: (I)	0-50	121	4%	46		5 (5-15)	
Northern Boreal Mtns	Sikanni (low)	51-100 100+	58	2% 94%	72	2% 96%	5 (5-10)	
	Sikanni Total		2,765		2,769		90 (65-90)	
Menther			2,945	100%	2,887	100%		
Northe	rn Boreal Mti		2,945		2,887	100%		
	Crying Girl	0-50 51-100	627 283	15% 7%	574 272	9% 4%	20 (15-25) 10 (5-15)	
	(moderate)	100+	283 3,176		5,524		70 (55-85)	
Damai	Crying Girl To		4,087	100%	6,370	100%	, 5 (00 00)	
Boreal Foothills		0-50	930	30%	569	20%	20 (15-25)	
	Graham	51-100	930 224	<b>30%</b> 7%	505		10 (5-15)	
	(high)	100+	1,924		1,826		70 (55-85)	
	Graham Tota		3,078	100%	2,900	100%		
		0-50	1,557	22%	1,143			
Boreal Foot	hills Total	51-100	507	7%	777	8%		
		100+	5,100		7,350			
		All	7,165	100%	9,270	100%		

## Table 5: Early patch comparison (2003 to 2010 conditions)



## Table 6: Mature patch comparison (2003 to 2010 conditions)

			SFMP bas	eline (2003)	Current Cor 31/	ndition (Mar. 10)	Target	
NDU	LU	Patch Class	Area (ha)	Distribution (%)	Area (ha)	Distribution (%)	Min % Distribution >100 ha	
		0-50	21,506	24.10%	23,244	18.3%		
	Blueberry	51-100	10,584	11.90%	11,408	9.0%		
	Blueberry Total	100+	57,043		92,414	72.7%	>65%	
	Blacberry Total		89,133		127,066			
	Halfway	0-50	6,730		6,000	6.1%		
	Thanway	51-100 100+	2,452	2.50% 90.80%	3,701	<u>3.8%</u> 90.1%	>65%	
	Halfway Total	100+	90,347 99,528		88,111 97,812		>00%	
		0-50	20,125		20,446	26.7%		
	Kahntah	51-100	9,102		6,407	8.4%		
		100+	43,545		49,610	64.9%	>55%	
	Kahntah Total		72,772		76,463	100.0%		
		0-50	4,785		3,807	4.0%		
	Kobes	51-100	1,957	4.00%	3,476	3.7%		
		100+	41,884	86.10%	87,810	92.3%	>65%	
Boreal	Kobes Total		48,625	100.00%	95,093	100.0%		
Plains		0-50	6,762	35.10%	5,606	24.4%		
	Lower Beatton	51-100	2,260	11.70%	1,809	7.9%		
		100+	10,240	53.20%	15,562	67.7%	>65%	
-	Lower Beatton 7	otal	19,262	100.00%	22,977	100.0%		
		0-50	4,756	17.20%	5,431	14.8%		
	Milligan	51-100	1,994	7.20%	2,277	6.2%		
	Milligan Total	100+	20,831	75.50%	29,072	79.0%	>65%	
	winigan Totai		27,581	100.00%	36,780	100.0%		
	Tamana Labara	0-50	20,607	18.00%	22,304	15.0%		
	Tommy Lakes		7,487		10,035			
	Tommy Lakes T	100+ otal	86,490		116,456		>65%	
	,		114,584		148,795			
	Trutch	0-50	10,364	8.40%	10,537	9.6%		
		51-100 100+	<u>6,179</u> 106,676		7,668 109,332	6.0% <b>85.7%</b>	>65%	
	Trutch Total	100+	123,218		127,537		>05 %	
		0-50	95,635		97,375	13.3%		
	_	51-100	42,013		46,781	6.4%		
Boreal P	lains Total	100+	457,055		588,367	80.3%		
		All	594,703		732,523	100.0%		
		0-50	4,309		4,136	3.2%		
Northern	Sikanni	51-100	2,969	2.60%	3,991	3.1%		
Boreal Mtns		100+	107,250	93.60%	119,739	93.6%	>65%	
	Sikanni Total		114,527	100.00%	127,866	100.0%		
Northe	ern Boreal Mtns	s Total	114,527	100.00%	127,866	100.0%		
	China Cirl	0-50	2,150		1,891	4.8%		
	Crying Girl	51-100	534	2.60%	906	2.3%	FF0/	
Barasi	Crying Girl Tota	100+	18,212		36,908	93.0%	>55%	
Boreal Foothills		0-50	20,896 9,019		<mark>39,705</mark> 5,678			
	Graham	0-50 51-100	<u>9,019</u> 3,315		5,678 4,221	<u> </u>		
		100+	122,428		4,221	<u> </u>	>55%	
	Graham Total		134,762		190,599	100.0%		
		0-50	11,169		7,569			
		51-100	3,849		5,127	2.2%		
Boreal Fo	othills Total	100+	140,640		217,608			
		All	155,658		230,304			



#### 3.4. SHAPE INDEX

Indicator Statement	Target Statement									
	Patches 50 -100 ha: The average Shape Index of young patches in a LU will be at least 2.0									
Average shape index of young patches in a landscape unit	Patches 100 –1000 ha: The average Shape Index of young patches in an LU will be at least 3.0									
	Patches 1000+ ha: The average Shape Index of young patches in an LU will be at least 4.0									
SFM Objective:										
The diversity and pattern of communities and ecosystems within a natural range										
Linkens to FO IDDD. For the summary of Oration 40 of the FO IDDD this is diston statement towned										

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

#### Acceptable Variance:

The average Shape Index maximum variance will be 10% less than the target.

#### **CURRENT STATUS AND COMMENTS**

As noted in the 2003-2004 Annual Report, the monitoring procedure for this indicator was revised from the SFMP so that the status is only reported at the FDP/FOS stages, rather than each Annual Report. The 2004-2005 report summarized the shape index information presented in the 2004 FOS. For the purposes of measuring this indicator, the shape indices of distinct patches of forest ≤40 yrs old, as identified in the 2003 forest inventory, were determined for each Landscape Unit. As in the Patch Size indicator (sec. 3.3), ages of stands not harvested were projected to 2010. Patches falling on Landscape Unit boundaries were accounted for in only the LU where the majority of their area occurs. Planned harvest blocks were not accounted for in the analysis (i.e. only blocks harvested as of March 31, 2010 were included).

Analysis of this indicator shows that 30 of 33 targets were fully achieved and 3 targets, those in the 101-1000 ha patch size class for the Halfway, Graham and Trutch Landscape Units, fell within the acceptable variance range. A discussion of those 3 landscape units is provided below.

**Graham Landscape Unit** – The calculated Shape Index for this LU was 2.85 versus a minimum allowable of 2.7. This Landscape Unit is entirely within the Muskwa Kechika Management Area, and very minimal harvesting occurred within this LU. The only participant blocks harvested within this Landscape Unit were those carried over from previous Forest Development Plans and were not of sufficient size or quantity to affect the overall Shape Index value.

**Trutch Landscape Unit** – The calculated Shape Index for this LU was at the minimum allowable level of 2.70. While the planned harvest identified in FOS #1 easily exceeded Shape Index Targets for this Landscape Unit, factors such as redirecting conifer harvest to address fire salvage in 2006 and mountain pine beetle subsequently, minimized the amount of harvest by the participants within this LU over the term of the SFMP. Therefore, the participants were unable to achieve the full shape index value projected in the Forest Operations Schedule.

**Halfway Landscape Unit** - The calculated Shape Index for this LU was 2.67, which is technically below the minimum acceptable variance of 2.7. However, the target and acceptable variance for this indicator is measured to only one decimal place and therefore the rounding of



the calculated Shape Index value to one decimal place equates to a Shape Index value of 2.7 for this Landscape Unit. It is therefore consistent with the identified acceptable variance in the SFMP. Analysis for the 2004 FOS indicated that this Landscape Unit might not achieve the desired Shape Index Target. An action plan was put in place for subsequent block layout of perimeter boundaries and internal WTP's, which increased the projected SI to 3.13 by 2010, with the assumption that the planned blocks would all be harvested by that date. However the participants redirected their harvesting operations between 2006 to present, to address mountain pine beetle and salvage of timber damaged by wildfire. Subsequently there was minimal harvesting conducted of blocks planned and identified in FOS number one over the term of the SFMP, within this LU.

The participants' activities are consistent with the targets and acceptable variances for the Shape Index indicator.

#### **REVISIONS**

This indicator was not included in SFMP #2.



	50	0-100 (\$	Shape Index ta	arget >= 2.	0)	100	-1000 (	Shape Index to	arget >= 3	.0)	100	00+ (Sh	ape Index targ	jet >= 4.0)					
LU	Area (ha)	n	Perimeter (m)	Shape Index - SFMP (2003)	Shape Index - Current State (2010)	Area (ha)	n	Perimeter (m)	Shape Index - SFMP (2003)	Shape Index - Current State (2010)	Area (ha)	n	Perimeter (m)	Shape Index - SFMP (2003)	Shape Index - Current State (2010)	Total Area (ha)	n	Total Perimeter (m)	Avg Shape Index
Blueberry	8,246	116	873,512	2.51	2.51	36,578	140	3,206,542	3.74	4.00	53,622	13	3,280,488	11.63	11.08	98,446	269	7,360,543	4.0
Crying Girl	272	3	22,239	2.30	2.30	1,527	9	145,986	3.83	3.51	4,018	3	253,538	n/a	6.51	5,817	15	421,763	4.0
Graham	505	8	64,145	3.12	3.12	1,826	7	138,057	4.07	2.85	0	0	0	n/a	n/a	2,331	15	202,202	3.1
Halfway	3,446	45	310,717	2.22	2.22	9,811	37	577,566	3.14	2.70	4,824	2	224,722	6.22	6.45	18,081	84	1,113,005	2.5
Kahntah	2,752	39	314,642	2.75	2.75	10,853	41	837,605	3.77	3.54	22,091	8	1,044,951	8.09	7.01	35,695	88	2,197,198	3.5
Kobes	2,451	36	222,164	2.22	2.22	8,523	37	678,223	3.54	3.41	4,875	4	363,851	n/a	7.35	15,849	77	1,264,238	3.2
Lower Beatton	1,989	29	239,463	2.90	2.90	7,855	33	670,254	3.61	3.71	5,929	3	323,899	7.69	6.85	15,773	65	1,233,616	3.4
Milligan	1,049	15	128,612	2.81	2.81	5,978	15	454,289	4.04	4.28	16,407	2	824,077	13.77	12.83	23,434	32	1,406,978	4.6
Sikanni	72	1	10,967	2.25	2.25	1,208	3	72,136	3.08	3.38	1,562	1	76,460	5.18	5.46	2,842	5	159,563	3.8
Tommy Lakes	5,445	76	641,469	2.97	2.97	13,328	55	1,181,911	3.68	3.89	6,712	4	441,456	10.07	7.60	25,485	135	2,264,835	3.4
Trutch	1,526	23	158,191	2.37	2.37	2,451	8	132,512	2.89	2.67	3,674	2	137,170	4.52	4.51	7,651	33	427,872	2.4
Total	27,753	391	2,986,121	2.58	2.58	99,937	385	8,095,081	3.65	3.68	123,713	42	6,970,610	9.22	8.63	251,403	818	18,051,812	3.6



#### 3.5. SNAGS/CAVITY SITES

Indicator Statement	Target Statement									
Number of snags and/or live trees (>17.5 cm dbh) per ha on prescribed areasRetain annually an average of at least 6 snags and/or live trees (>17.5 cm dbh) per hectare on prescribed areas										
SFM Objective:										
Suitable habitat elements for indicator species to pr	omote species richness									
A natural range of variability in ecosystem function, composition, and structure which allows ecosystems to recover from disturbance and stress										
Linkage to FSJPPR: N/A										

#### Acceptable Variance:

It is expected that implementation success will increase as new operations learn to adjust practices as needed to fully meet this indicator's target.

**2003-2004:** Retain an average of at least 3 snags and/or live trees/ha on prescribed areas.

**2005:** Retain an average of at least 4 snags and/or live trees/ha on prescribed areas.

**2006+:** Retain an average of at least 6 snags and/or live trees/ha on prescribed areas.

#### **CURRENT STATUS AND COMMENTS**

During the reporting period, forty-nine blocks had harvesting completed by the licensee participants and BCTS. Of those blocks, twenty-eight had at least some area prescribed for snags or live tree retention. A review of harvesting results showed that for all of these blocks the general intent of the Site Level Plans (SLP's) snag/live tree prescription had been implemented (Table 8).



Participant	Blocks with Harvesting Completed (#)	Blocks with Prescribed Area (#)	Blocks Conforming (#)
Canfor	31	21	21
BCTS	18	7	7
Total	49	28	28

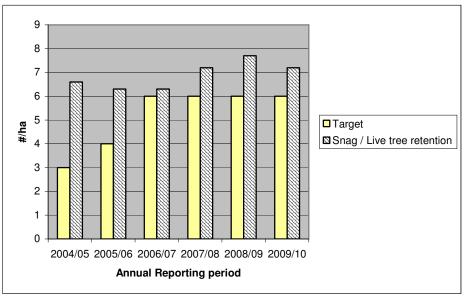
Table 8: Summary of snag/live tree retention post-harvest

The retention level of snags and/or live tree residuals was measured on twenty-seven blocks during the reporting period. The blocks measured have the following attributes:

- a) Harvesting started date after Jan.1, 2003, and
- b) Some or all of the area prescribed for snags and/or live trees retention.

Data for the Canfor blocks included in this report were collected either during silviculture surveys or during harvesting and harvesting inspections. Data from the BCTS blocks were collected during final harvest inspections conducted during the reporting period.

The total prescribed area surveyed was 2,079 ha, with 14,948 snags and/or live tree residuals retained. The actual retention level of snags or live trees in the blocks averaged 7.2 stems/ha. The participants have therefore met the target for this indicator. The following chart (Figure 2) is included to display the participants' performance relative to the targets for this indicator over the last six reporting periods.





#### Figure 2. Six-year results for Snag/Cavity site indicator (2004-2010)

#### **REVISIONS**

SFMP #2 includes a Snags/Cavity Trees indicator similar to the one in SFMP#1. The minimum diameter for snags or residual live trees to count towards measurement of the new indicator is 23 cm, rather than 17.5 cm.

#### 3.6. COARSE WOODY DEBRIS VOLUME

Indicator Statement	Target Statement			
Average Coarse Woody Debris volume/ha on blocks logged in the DFA	Minimum average retention level over the DFA will be 46 m <sup>3</sup> /ha (50% of average pre-harvest volume) on harvested blocks assessed between December 1, 2003 and November 30, 2008			
SFM Objective:				
A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress				

Suitable habitat elements for indicator species

**Linkage to FSJPPR:** For the purposes of 29(2) of the FSJPPR the applicable performance standard is specified by this indicator statement, target statement and acceptable variance.

#### Acceptable Variance: N/A

#### CURRENT STATUS AND COMMENTS

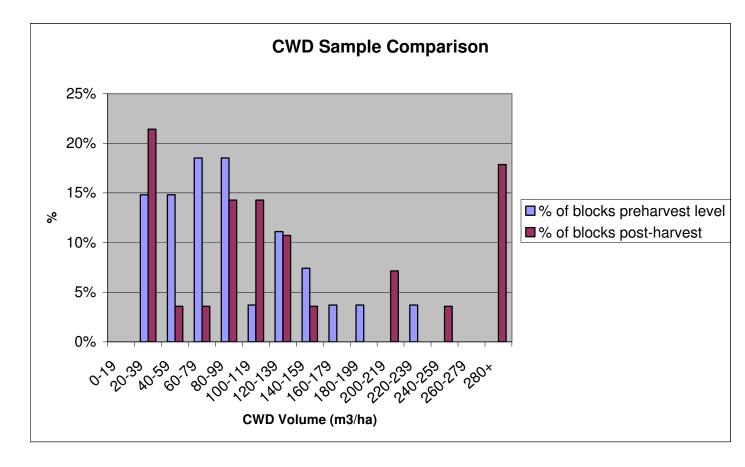
The final results for this indicator were presented in the 2008/09 Annual Report, but are repeated below.

The average residual CWD volume of all data collected through November 30 2008 show an average of 251 m<sup>3</sup>/ha. However, one data point yielded a very high value (3390 m<sup>3</sup>/ha) that skews the average. Without this value included the average residual CWD volume for the 27 plots is 135 m<sup>3</sup>/ha, with a range between 22 and 355 m<sup>3</sup>/ha.

The participants achieved the target for this indicator between December 1 2003 and November 30 2008.

Figure 3. shows the distribution of coarse woody debris volumes along a group of ranges. Data included are those referenced above (post-harvest CWD), and the data presented in the 2004 Sustainable Forest Management Plan (pre-harvest CWD) for comparison purposes. Both data sets show a wide range of variation. It should be noted that no point was sampled twice (i.e. the pre-harvest data and post-harvest data are from different sample points).





#### Figure 3. Coarse Woody Debris Distribution

#### **REVISIONS**

SFMP #2 includes a Coarse Woody Debris Volume indicator. No changes were made to the indicator or target statement relative to that of SFMP #1 except to revise the dates to which the indicator applies (Dec. 1/08 to Nov. 30/16).

#### 3.7. RIPARIAN RESERVES

Indicator Statement	Target Statement			
The number of non-compliances to riparian reserve zone standards	No non-compliances to riparian reserve zone standards			
SFM Objective: Suitable habitat elements for indicator species Maintenance of water quality				
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.				

#### Acceptable Variance:

No variances, unless authorized by the district manager.



#### **CURRENT STATUS AND COMMENTS**

A review of BCTS Compliance issues from April 1, 2009 to March 31, 2010 indicated that BCTS had no non-compliances to riparian reserve zone standards.

A review of licensee participants' compliance issues occurring between April 1, 2009 and March 31, 2010 indicated no non-compliances to riparian reserve zone standards. The participants achieved the target for this indicator.

#### **REVISIONS**

There are no proposed revisions to this indicator or the target.

#### 3.8. SHRUBS

Indicator Statement	Target Statement			
The proportion of shrub habitat (%) by Landscape Unit	Each landscape unit will meet or exceed the baseline target (%) proportion of shrub habitat			
SFM Objective: Suitable habitat elements for indicator species				
Linkage to FSJPPR: N/A				

#### Acceptable Variance:

Acceptable variance is  $\pm$  20% of the baseline target.

#### **CURRENT STATUS AND COMMENTS**

The following table (Table 5) presents the condition of shrub habitat within the DFA as of March 31 2010. The forest inventory base (circa 2003) used to determine the 'current' shrub habitat condition was substantially the same as was used during the development of the SFMP. All of the landscape unit baseline targets were exceeded during the reporting period. There were notable fluctuations within some landscape units (e.g. Blueberry - down 4.6%, Lower Beatton - up 11.2%), but it is interesting to note that the overall shrub habitat percent throughout the DFA varied only by 0.9%.

Fluctuations of shrub habitat values over time within Landscape Units, and across the DFA, are normal and expected. Variations in the proportion of shrub habitat are positively affected by natural disturbance, such as fires, and forest harvesting. It should be noted that the impact of recent forest fires is not reflected in the data below, as the forest inventory base available from government was not updated to account for recent fires. The spatial information for recent fires that is available represents only the outside perimeters of the burned area, and does not represent any unburned area within those perimeters. The other significant positive effect impacting the proportion of shrub habitat is forest harvesting and silviculture activities. For the purposes of this indicator regenerating forests less than 20 years old are considered shrub habitat, as they represent the shrub structural stage.

Negative (downward) impacts on the proportion of shrub habitat within a landscape unit results from forests aging and growing. That is, as young forests grow they eventually pass out of the 'shrub' stage as tree height increases. Although the age at which this occurs varies considerably between tree species, site characteristics, and other variables, the 20-year point was utilized for this indicator. Examples of other negative impacts on the proportion of shrub habitat are conversion of forestland to annual crop agriculture use, and forest succession resulting from the conversion of areas dominated by shrub species to tree species.



		Total Shrub Habitat					
Landscape Unit	Landscape Unit	SFMP Base	eline (2003)	Current Con	Baseline		
	Total Area (ha)	Area (ha)	% shrub of LU	Area (ha)	% shrub of LU	Target (%)	
Blueberry	595,158	117,486	19.7%	89,789	15.1%	15%	
Crying Girl	66,918	4,040	6.0%	4,273	6.4%	5%	
Graham	334,869	56,373	16.8%	78,028	23.3%	16%	
Halfway	195,853	33,980	17.3%	27,677	14.1%	11%	
Kahntah	749,001	214,661	28.7%	223,843	29.9%	25%	
Kobes	143,556	20,694	14.4%	19,234	13.4%	10%	
Lower Beatton	156,195	22,728	14.6%	40,268	25.8%	12%	
Milligan	453,688	178,220	39.3%	220,662	48.6%	34%	
Sikanni	311,908	18,298	5.9%	15,787	5.1%	5%	
Tommy Lakes	705,096	115,965	16.4%	101,912	14.5%	14%	
Trutch	436,283	39,674	9.1%	36,925	8.5%	8%	
Grand Total	4,148,524	822,120	19.8%	858,398	20.7%	N/A	

 Table 9: Shrub Habitat Current Condition and SFMP# 2 Targets

This indicator is monitored at each new SFMP, using updated forest inventory data.

Change Monitoring Inventory (CMI) plots will permit comparisons of shrub composition and abundance over time. The total number of CMI plots established in the Pilot Project area to date is 78.

The participants are consistent with the target for this indicator.

#### **REVISIONS**

The participants included a 'Shrubs' indicator in SFMP #2. During the development of SFMP #2, the new VRI was used to show current status, etc. The proportions of shrubs changed significantly, relative to the old inventory, as a result of the re-inventory of the DFA. Therefore when SFMP #2 was developed, revised targets were established for this indicator using the same process as was followed during the development of SFMP #1 but utilized the new VRI data as a baseline. The targets were set by reviewing the amount of naturally occurring shrub areas by Landscape Unit, as well as forested areas less than 20 years old. LUs with low levels of naturally occurring shrubs generally have lower targets than areas with higher levels of shrubs. The Boreal Plains natural disturbance unit generally has higher levels of shrubs than the other units within the DFA. The targets reflect the same proportionate change as in the 2004 SFMP.

3.9. WILDLIFE TREE PATCHES

**Indicator Statement** 

**Target Statement** 



	Cumulative Wildlife Tree Patch % will meet or exceed the minimum target in each LU <sup>2</sup>			
	Landscape Unit	WTP %		
	Blueberry	6%		
	Halfway	3%		
Aggregate Wildlife Tree Patch percentage in	Kahntah	7%		
blocks harvested under the FSJPPR in each	Kobes	5%		
Landscape Unit	Lower Beatton	8%		
	Milligan	6%		
	Tommy Lakes	3%		
	Trutch	5%		
	Sikanni	4%		
	Graham	4%		
	Crying Girl	6%		
SFM Objectives:				
Suitable habitat elements for indicator species				
A natural range of variability in ecosystem function ecosystems to recover from disturbance and stres		which allows		

**Linkage to FSJPPR:** For the purposes of 29(1) of the FSJPPR the applicable performance standard is specified by this indicator statement, target statement and acceptable variance.

#### Acceptable Variance:

Aggregate WTP percentages will only apply if 200 hectares or more has been harvested under the FSJPR in a landscape unit.

#### **CURRENT STATUS AND COMMENTS**

The following table indicates the amount of harvest area and proportion of Wildlife Tree Patches by each Landscape Unit where the harvest start date is between November 15, 2001 and March 31, 2010.

LU	U Gross Block Area (ha) WTP Area (ha)		WTP %	Target %
Blueberry	21822.5	1754.6	8.0	6
Halfway	1831.7	188.6	10.3	3
Kahntah	1281.0	118.1	9.2	7
Kobes	3500.6	287.7	8.2	5
Lower Beatton	3053.5	311.5	10.2	8
Milligan	30.1	3.1	10.3	6
Tommy Lakes	5867.8	540.3	9.2	3
Trutch	887.2	61.6	6.9	5
Sikanni	0	0	N/A	4
Graham	234.1	31.9	13.6	4
Crying Girl	1718.2	143.2	8.3	6
Grand Total:	40,226.7	3,440.6	8.6	N/A

#### Table 10: Harvest Area and Proportion of WTPs by Landscape Unit (2001-2010)

<sup>&</sup>lt;sup>2</sup> Targets as per 2004-2005 Annual Report revisions



No harvesting has taken place in the Sikanni LU since November 15, 2001. The participants have met the target minimum WTP % for all Landscape Units where logging has occurred.

#### **REVISIONS**

There were no proposed revisions to the indicator or target statements. This indicator was included in SFMP #2.

#### **3.10. NOXIOUS WEED CONTENT**

Indicator Statement	Target Statement			
The % prohibited and primary noxious weeds, and known invasive weed species of concern, in seed mix analysis	Seed mix analysis will have 0% content of prohibited and primary noxious weeds as identified in the most current publication of "Noxious Weeds in the Peace River Regional District", and known invasive weed species of concern			
SFM Objective: Suitable habitat elements for indicator species				

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

#### Acceptable Variance:

The primary objective of seeding is to control erosion to protect water resources, with a secondary objective to discourage the establishment of invasive weeds. In some isolated instances suitable seed mixes having appropriate government approved analysis may not be available in a timely manner. If seeding must urgently be done to control erosion, it may, in rare instances, be necessary to proceed without assurances of the seed source being free of noxious weeds. A maximum of 1 exception annually will be allowable to provide for this eventuality. In the event of an exception, the participant will subsequently inspect the seeded areas to assess weed concerns, and will develop and document appropriate action plans to eliminate prohibited and primary noxious weeds, in consultation with the appropriate government agencies.

#### **CURRENT STATUS AND COMMENTS**

All reclamation seed broadcast by the licensee participants during the reporting period is certified as having 0% content of prohibited and primary noxious weeds, and known invasive weed species of concern, as identified in the Sustainable Forest Management Plan.

For all seeding done by BCTS licensees, seed tags have been retained by BCTS. A review of the seed analysis certificates received support conformance to the indicator target.

The participants are in conformance to the target for this indicator.

#### **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

#### 3.11. Species at Risk Forest Management Guidelines (Revised oct 30/2005)

Indicator Statement	Target Statement
---------------------	------------------



The percent of SLP's prepared annually for effected cutblocks that incorporate 1 or more stand level management guideline.	2005-50% 2006+-100%			
SFM Objective: Maintain habitats for species at risk				
Linkage to FSJPPR: N/A				

#### Acceptable Variance:

An implementation period was required for 2005, since Site Level Plans (SLP's), which may have had all the field work done in a previous field season may not have been approved yet, due to mapping delays, etc.

Operational, logistical, or forest management considerations may on occasion make implementation of the guidelines within a particular cutblock unfeasible. To allow for this potential, a 15% variance below the target will be acceptable.

#### CURRENT STATUS AND COMMENTS

Between April 1, 2009 and March 31, 2010, 13 Site Level Plans (SLP's) were prepared by licensee participants in cutblocks where Stand Level Management Guidelines for species at risk were required. One or more guidelines were applied in all 13 of these plans.

Between April 1, 2009 and March 31, 2010, seven Site Level Plans were prepared by BCTS in cutblocks where Stand Level Management Guidelines for species at risk were required. One or more guidelines were applied in all seven of these plans.

100 % of all Site Level Plans where Stand Level Management Guidelines were required incorporated at least 1 Guideline; therefore the participants achieved the target for this indicator.

#### **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

#### 3.12. CARIBOU

Indicator Statement	Target Statement
Proportion of area (%) of forest greater than the baseline target age by caribou management zone	40% of forests will be greater than the baseline target age by caribou management zone
SFM Objective:	
Suitable habitat elements for indicator species	
Linkage to FSJPPR: N/A	

#### Acceptable Variance:

No acceptable variance.



#### CURRENT STATUS AND COMMENTS

The following table (Table 10), which was included in the 2004 Forest Operations Schedule, illustrates the pre-FOS and projected post-FOS status, and targets for each of the Caribou Management Zones with forest age constraints.

Caribou	Age Group and Targets						Total		
Management	2004 2010		2004		2010		Forested		
Zone	Area	%	Area	%	Area	%	Area	%	Area
Graham	<140 Years Old			Target: 40% >140 Years Old					
Granam	65,989	58.5%	63,743	56.5%	46,862	41.5%	49,108	43.5%	112,851
Kobes	<120 Years Old			Target: 40% >120 Years Old					
Robes	17,036	48.9%	14,909	42.8%	17,829	51.1%	19,955	57.2%	34,864
Hackney	<100 Years Old			Та	rget: 40% >	100 Years (	Dld		
Hackney	55,454	45.5%	46,978	38.6%	66,327	54.5%	74,804	61.4%	121,781

#### Table 11: Current and Post FOS Condition for Caribou Management Zones

The table illustrates that the target has been met in each of the 3 management zones. Note that while several amendments were made to the FOS between 2006 and 2009, in order to add in areas impacted by wildfire and Mountain Pine Beetle, none of the additional area occurred in any of the Caribou Management Zones to which this indicator applies. In addition not all of the blocks included in FOS # 1 in the caribou management areas have been harvested and have been carried over to FOS # 2.

Ungulate Winter Range (UWR) areas and Wildlife Habitat Areas (WHA), and the associated General Wildlife Measures (GWMs) for both, have been developed and implemented. The areas are specific to the northern ecotype caribou occurring in the Graham, Kobes, and Hackney management zones. The orders that enabled the UWR / WHA packages was approved by government May 20, 2008.

The participants have achieved the target for this indicator.

#### **REVISIONS**

There are no proposed revisions to this indicator or the target at this time. The participants are currently working with government to identify UWR and WHA requirements for boreal ecotype caribou. The participants have reviewed the relevance of this indicator, in light of the recently approved UWR and WHA packages, and will not include this indicator in SFMP# 2.



### 3.13. CONIFEROUS SEEDS

Indicator Statement	Target Statement					
The percentage of seeds & vegetative material collected and planted in accordance with the Chief Forester's Standards for Seed Use, November 20, 2004 <sup>3</sup>	100% of all seeds and vegetative material will be collected and planted in accordance with the Chief Forester's Standards for Seed Use, November 20, 2004 <sup>4</sup>					
SFM Objectives: Conserve genetic diversity of tree stock						
Linkage to FSJPPR: N/A						

### Acceptable Variance:

As per the Chief Forester's Standards for Seed Use, no less than 95% of the combined total of the number of seedlings and vegetative material planted during each fiscal year comply with the transfer requirements outlined in Appendix 3 of that standard (Seedlots and Vegetative Lots from Natural Stands).<sup>5</sup>

# **CURRENT STATUS AND COMMENTS**

# <u>BCTS</u>

No cone collections performed between April 1, 2009 and March 31, 2010.

1,051,410 seedlings were planted within the reporting period. All seedlings were planted in accordance with the standard.

# OTHER PARTICIPANTS (Canfor, Tembec, CRL, Dunne-za, Louisiana-Pacific)

No cone collections performed between April 1, 2009 and March 31, 2010.

1,187,910 seedlings were planted within the reporting period. All seedlings were planted in accordance with the standard.

The participants have achieved the target for this indicator.

# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

<sup>&</sup>lt;sup>3</sup> revised in 2005/06 SFMP Annual Report

<sup>&</sup>lt;sup>4</sup> revised in 2005/06 SFMP Annual Report

<sup>&</sup>lt;sup>5</sup> revised in 2005/06 SFMP Annual Report



## 3.14. ASPEN REGENERATION

Indicator Statement	Target Statement					
% Natural Regeneration of aspen	We will use 100% natural regeneration for aspen to ensure the conservation of genetic diversity of tree stock					
SFM Objectives: Conserve genetic diversity of tree stock						
Linkage to FSJPPR: N/A						

### Acceptable Variance:

The acceptable variance is zero unless the District Manager authorizes an exemption; for example operational trials of vegetative propagules or deciduous seedlings.

### **CURRENT STATUS AND COMMENTS**

All Participants have relied on 100% natural regeneration for aspen in the 2009-2010 reporting period. The participants have achieved the target for this indicator.

# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

#### 3.15. CLASS A PARKS, ECOLOGICAL RESERVES AND LRMP DESIGNATED PROTECTED AREAS

Indicator Statement	Target Statement					
Hectares of Forestry Related Harvesting or Road Construction within Class A parks, protected areas, ecological reserves and LRMP designated protected areas	Zero hectares of forestry related harvesting or road construction within Class A parks, protected areas, ecological reserves or LRMP designated protected areas					
<b>SFM Objective:</b> To have representative areas of naturally occurring and important ecosystems, and rare physical environments protected at both the broad and site specific levels across or adjacent to the DFA						
Linkage to FSJPPR: N/A						

#### Acceptable Variance:

No variance, other than government direction requiring the forest industry to move operations into these areas.

#### **CURRENT STATUS AND COMMENTS**

No forestry related harvesting or road construction has occurred in any Class A Parks, Ecological Reserves and LRMP Designated Protected Areas. The participants have achieved the target for this indicator.

Digital boundaries of all known protected areas were used in the development of the Forest Operations Schedule and maps (Section 2.1 of the FOS) to ensure proposed blocks or roads did not fall within any of the protected areas.

#### **REVISIONS**

No revisions are required to this indicator.

## 3.16. UNGULATE WINTER RANGES, WILDLIFE HABITAT AREAS AND MKMA

Indicator Statement	Target Statement						
Proportion of activities consistent with the objectives of the Muskwa-Kechika Management Area (MKMA) and general wildlife measures for Ungulate Winter Ranges (UWR) and Wildlife Habitat Areas (WHA)	All pilot participant activities will be consistent with objectives of MKMA, and general wildlife measures for Ungulate Winter Ranges and Wildlife Habitat Areas						
SFM Objective:							
To have representative areas of naturally occurring and important ecosystems, and rare physical environments protected at both the broad and site specific levels across or adjacent to the DFA							
Linkage to FSJPPR: N/A							

### Acceptable Variance:

No variances unless authorized by the Regional Manager of the MOE.

# **CURRENT STATUS AND COMMENTS**

There are currently 15 approved Wildlife Habitat Area's (WHA's), and 16 Ungulate Winter Range (UWR) areas wholly or partially within the Fort St John TSA. General Wildlife Measures –the legal management regimes that will be required in these areas – have been developed, with input from the participants and other stakeholders. The participants will follow the General Wildlife Measures for each specific area when harvesting is proposed within these areas. For the reporting period, there were no activities conducted within approved WHAs or UWRs.

The WHA's and UWR areas for Caribou in the North and Eastern portions of the Timber Supply Area that were undergoing discussion during the preparation of the previous annual report have not been approved. They may be incorporated into the Canada wide Caribou Recovery Plan that is currently being developed. It may take several years for development of the Caribou Recovery Plan to be complete as research will need to be completed and consensus between the stakeholders may also have to be achieved.

Details regarding the Caribou Recovery Plan will be provided in future annual reports.

The following table summarizes harvest activities within grand parented blocks within the Muskwa-Kechika Management Area (MKMA) up to March 31, 2010.

Licensee	Licence	Timber Mark	Block ID	Gross Area	Merch Area	Harvest Start Date	Harvest Completion Date	System
CANFOR	A18154	EK8335	20007	57.6	52.0	1/19/2005	2/14/2006	CCRES
CANFOR	A18154	EK8335	20008	101.4	88.7	1/19/2005	3/31/2006	CCRES
CANFOR	A18154	EK8335	20060	75.1	68.5	1/5/2005	3/4/2005	CCRES
Total				234.1	209.2			

There are no changes from the 2005-2006 annual report. The total cumulative area logged to date within blocks in the MKMA is 209.2 ha. All harvesting operations within the MKMA have



been consistent with previously approved Forest Development Plans, as well as provisions within the MKMA Act that 'grandparent' previously approved blocks.

Harvesting within the MKMA that is proposed within the Forest Operations Schedule (i.e., to 2010) is currently limited to previously 'grand parented' blocks within the MKMA, and is therefore consistent with the objectives of the MKMA.

There were no activities completed within the MKMA during this reporting period. The participants have achieved the target for this indicator.

# **REVISIONS**

There are no proposed revisions to this indicator or target.

#### 3.17. REPRESENTATIVE EXAMPLES OF ECOSYSTEMS

Indicator Statement	Target Statement						
Proportion of area (%) of forest stands by leading species by NDU in an unmanaged condition	100% of baseline targets for forested stands by leading species by NDU will be met						
SFM Objective: To have representative areas of naturally occurring and important ecosystems, and rare physical environments protected at both the broad and site-specific levels across or adjacent to the DFA							
Linkage to FSJPPR: N/A							

# Acceptable Variance:

No acceptable variance for DFA targets.

10 ha or 10% of area, which ever is greater for Leading Species by NDU that have an uncommon distribution if required for access purposes.

No acceptable variance for Leading Species by NDU that are not identified as uncommon in the SFMP.

# **CURRENT STATUS AND COMMENTS**

A re-analysis of this indicator is required after each Timber Supply Review (TSR) is completed. Each Forest Operations Schedule that is prepared must be consistent with the strategies contained within the approved SFMP. An assessment of the future condition of this indicator, completed to confirm consistency of FOS# 2 with SFMP #2 was completed. The targets specified in SFMP# 1 for proportion of area in forest stands by leading species in an unmanaged condition were carried over to SFMP# 2 without any revision. The assessment of future condition for this indicator is presented below, and indicates that the

The assessment of current and future condition for this indicator is presented below.

Table 13 indicates the future status of forest stands by leading species and NDU for the Non-Timber Harvesting Land Base (NHLB). This reflects the stand types that will exist in an unmanaged state. FOS blocks have been identified within the portion of the land base that is considered as the timber harvesting land base.

Where harvesting is proposed, the SFMP requires an assessment of those NDU species combinations highlighted in yellow in the following table, to ensure that targets are not compromised.



# Table 13: Proportion of Leading Species by NDU Unmanaged

Natural			Total	Unn	nanaged For	ests	FOS
Disturbance Unit	Sub NDU	Leading Species	Forested Area	Non-THLB	%Non- THLB	Baseline Target %	Harvest Area
		AC	23,285	15,346	66%	12%	1,081
		AT	516,129	275,851	53%	12%	53,986
		BL	3,881	3613	93%	12%	108
Boreal Plains		Ep	49,117	42,639	87%	12%	1,265
Doreal Fiams		LT	24,964	24,561	98%	12%	6
		PL	516,091	281,558	55%	12%	31,583
		SX	340,826	163,200	48%	12%	27,776
		SB	998,192	908,821	91%	12%	5730
Boreal Plains Total			2,472,485	1,715,589	69%		121,535
		AC	211	151	72%	80%	0
		AT	2,854	2,242	79%	12%	1
		BL	15	13	87%	0%	0
	Valley	Ep**	2	0	0%	100%	0
		PL	14,008	5,707	41%	12%	377
		SX	17,319	9,253	53%	12%	222
		SB	1,736	1,351	78%	12%	0
	Valley Total		36,145	18,717	52%		600
Boreal Foothills	Mountain	AC	146	107	73%	100%	0
		AT	2,880		87%	12%	0
		BL	25,963		98%	12%	0
							0 0
		Ep PL	30 34,185		<mark>87%</mark> 45%	<u>100%</u> 12%	98
		SX	111,890			12%	90
		SB	918	607	66%	12%	155
	Maxuatain Tat					12%	
	Mountain Tot	ai	176,012		71%		253
Boreal Foothills Tot	ai		212,157	144,528	68%		0
		AC	689	596	87%	70%	Ŭ
		AT	8,400	,	97%	12%	
Northern Boreal Mountains		BL	22,782		100%	12%	
eantae		PL	31,040		62%	12%	
		SX	117,804	98,484	84%	12%	
		SB	6,985		95%	12%	
Northern Boreal Mo	ountains Total		187,700	155,696	83%		0
Omineca		AC	38	37	97%	100%	0
		AT	391	361	92%	50%	0
	Valley	BL*	18	18	100%	100%	0
		PL	4,364	2,857	65%	12%	
		SX	5,978		79%	12%	
		SB	413		91%	12%	
	Valley Total		11,202	8,394	75%		
	Mountain	AC*	2	2	100%	100%	0
		AT	531	487	92%	50%	0
		BL	25,844	25,464	99%	12%	



		PL	9,328	6,658	71%	12%	
		SX	60,366	54,021	89%	12%	
		SB	383	346	90%	100%	0
	Mountain Tot	al	96,454	86,978	90%		
Omineca Total		107,656	95,372	89%			
Grand Total			2,979,998	2,111,185	71%		

\* 100% contained within a Park

\*\* Polygon is a portion of polygon split by the NDU Line between Boreal Foothills Valley and Mountain.

Harvesting proposed in FOS# 2 is represented in the 'FOS Harvest Area' in the above table. The majority of proposed harvesting is to occur in the Boreal Plains NDU. The analysis completed reports on the condition expected as of March 31, 2017 and assumes that all blocks presented in the FOS# 2 will be harvested by that date. The results show that the majority of the baseline targets for retention of a representative sample of forest stands in an unmanaged condition are achieved in the NHLB. Several of the species / NDU combinations do not have sufficient area within the NHLB to meet the target. However in none of the cases was any area harvested under FOS# 1, nor is there any area identified for harvesting under FOS# 2, and therefore a 'managed' designation.

Table 13 indicates that 100% of the baseline targets for retention of a representative sample of forest stands in an unmanaged condition was achieved for all NDUs, including the 'uncommon' associations (highlighted in yellow), either through the identified NHLB area or through avoidance of harvest planning.

The participants' activities are in conformance with the target for this indicator.

# **REVISIONS**

There are no proposed revisions to this indicator.

#### **3.18. GRAHAM HARVEST TIMING**

Target Statement							
Harvesting will not commence prior to the planned harvest start date for any cluster							
SFM Objective:							
Provide opportunities for a feasible mix of timber, recreational activities and non-timber commercial activities							
Management strategies address important values in SMZ areas.							

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

#### Acceptable Variance:

Harvesting of clusters may be delayed at the discretion of the participants, but not advanced, unless the timing advancement is designed to achieve the original goals of coordination of access with other industries, or otherwise to confine the overall disturbance in the drainage (e.g., fire salvage, etc).



Cluster 12 is the exception in which no harvesting will be allowed prior to 2006.

Variances to advance timing of any cluster will be submitted with a rationale, and require the approval of the district manager.

# **CURRENT STATUS AND COMMENTS**

Harvesting in cluster 4, which started in 2004, is not yet completed. No harvesting occurred in any part of the Graham IRM plan area during the period of time covered by this Annual Report. As cluster four's target harvest start date was no earlier than July 2003, as specified in SFMP# 1, the harvest operations are consistent with the target for this indicator.

The Forest Operations Schedule submitted in December 2004, identifies the earliest planned harvest dates for cluster 4, 5, 6a, 6b and 6c within Section 3.1 of the FOS, as well as the associated FOS tables. The timelines presented in the FOS are also consistent with achieving the targeted timelines for this indicator.

# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

## **3.19. GRAHAM MERCH AREA**

Indicator Statement	Target Statement
Cumulative merchantable hectares within blocks harvested within the Graham River IRM area	The cumulative merchantable hectares within blocks will be consistent with the estimated total harvest area, as measured at the end of each time period <sup>6</sup>
SFM Objective:	

Provide opportunities for a feasible mix of timber, recreational activities and non-timber commercial activities

Management strategies address important values in SMZ areas

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

<sup>&</sup>lt;sup>6</sup> Specific target revisions for Table 10 were included in the 2005-2006 Annual Report



# Table 14: Graham River IRM Plan- Cluster Area and Timing Schedule (Revised Oct 2006)

Definition	s:									
Total Area: The total size of a Cluster including inoperable areas										
	ontributing Area: Harvest Area:		The Contributing Area (base area) for FPC Biodiversity calculations Estimated amount of Gross Operable area considered harvestable after IRM factors are taken into account							
Proposed	Schedule:		C	General tim	ing of harves	t sequence c	over the cour	rse of the F	Plan	
Maximun	n Cumulative Me	erch ha			um cumulat to period end		•	previous	periods	s) allowed in
Cluster #	Resource Management Zone	Total Area (ha)	Gross Contrib. Area (ha)	Est. IRM Net Harvest Area (1) (ha)	Est. Proportion of Cluster Proposed for Harvest	Proposec Sche Start	l Harvest dule	Harvest Period	# of Years	Maximum Cumulative Merch ha within blocks to be harvested
1 17 2 3 4	Graham-South Graham-South Graham-South Crying Girl Graham-South	1,946 627 2,208 2,439 3,975	1,922 620 2,085 2,115 <i>3,504</i>	706.0 294.0 312.9 620.5 <mark>976.6</mark>	46.0% 14.2% 25.4%	June 1998 Nov. 1999 July 2000 Nov 2002 July 2003	April 2000 April 2002 April 2003			
Sub-total		11,195	10,246	<mark>2910.0</mark>		1998	2007	Period 1	9	<mark>3638</mark>
6a 6b	Crying Girl Graham-South Graham-South	2,228 2,508 884 726	2,181 <i>2,570</i> 775	748.6 <mark>1078.</mark> 8 257.5 260.0	35.0% 29.0%	April 2007 Nov. 2008 Nov. 2009	Nov. 2009 April 2010			
6c Sub-total	Graham-South	6,346	541 <i>5.665</i>	260.0 2344.9	35.0%	April 2010 2007	2012	Period 2	5	6569
	Crying Girl Crying Girl Crying Girl	1,848 1,904 2,184	1,812 1,638 1,877	577.2 840.0 812.3	44.0%	April 2012 April 2013 April 2013	April 2013 April 2014		0	
Sub-total		5,936	5,327	2229.5	07.078	2012	2017	Period 3	5	9355
	Crying Girl Crying Girl Graham-South	952 966 1,768	840 788 1,717	291.0 317.0 594.0	32.0%	April 2017 Nov. 2017 April 2018	Nov. 2017 April 2018			
Sub-total		3,686	3,345	1202.0		2017	2022	Period 4	5	10858
12 13	Graham-North Crying Girl	3,439 2,493	3,249 2,359	1289.0 745.0		April 2022 April 2024	April 2027			
Sub-total 14 15	Crying Girl Graham-North	5,932 2,643 3,258	5,608 2,583 2,666	2034.0 1034.0 1072.0		2022 April 2027 April 2028	•	Period 5	5	13400
Sub-total		5,901	5,249	2106.0	02.070	2027	2032	Period 6	5	16033
16	Graham-North	2,108	1,917	903.0	42.0%		April 2035			
Sub-total		2,108	1,917	903.0		2032	2035	Period 7	3	17162
18 19	Graham-North Graham-North	1,341 3,121	1,217 2,782	468.0 1022.0		Nov. 2035 Nov. 2037	Nov. 2037 April 2040			
Sub-total		4,462	3,999	1490.0	02.070	2036	2040	Period 8	5	19024.
20	Crying Girl	1,317	1,188	527.0	40.0%	Nov. 2041	April 2045	-		
Sub-total		1,317	1,188	527.0		2042	2045	Period 9	5	19683
Totals (Clu	37	46883	42946	15746.4				Period 1- 9	47.0	19683
D. Total Pl	lan Area	198,140	145,053	15,746	8%					10%

# Acceptable Variance:

The cumulative area may be less than the target, but may not exceed the target by more than 25% at the end of each harvest period.



#### **CURRENT STATUS AND COMMENTS**

April 1, 2007 marked the completion of Harvest Period #1 for this indicator, which covers all logging in the Graham plan area from June of 1998 to April 2007.

This indicator's Period 1 target was 2,910.4 ha, with an allowable maximum allowable area harvested being 3,638 ha (including the allowable variance of 25% additional area). As reported in the previous annual report the area harvested to the end of Harvest Period 1 was 3,515.6 ha, consistent with the acceptable range of area harvested for the first harvest period.

The second harvest period commenced in April of 2007, and runs until April 1, 2012, with a 6,569 hectare cumulative harvest target. No harvesting has occurred in the Graham plan area since April 1, 2007 through October 1, 2010 (time period # 2 to date of preparation of this annual report).

The Participants performance is therefore in conformance with this indicator.

# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

#### **3.20. GRAHAM CONNECTIVITY**

Indicator Statement	Target Statement							
Hectares harvested in cut blocks in the Graham River IRM area, within the permanent alluvial and non-productive/non-commercial components of the connectivity corridors	No harvesting within the permanent alluvial and non-productive/non-commercial components of the connectivity corridors							
SFM Objective:	SFM Objective:							
Ecosystem functions capable of supporting naturally occurring species exist within the range of natural variability								
Management strategies address important values in SMZ areas								
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.								

## Acceptable Variance:

Variances may be allowed on a site-specific basis where government approval is obtained.

# **CURRENT STATUS AND COMMENTS**

No harvesting within the recognized corridors occurred during the time period covered by this report - 2009-2010.

#### **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.



## 3.21. MKMA HARVEST

Indicator Statement	Target Statement						
The number of drainages in the MKMA in which Clustered Harvest Plans are completed and submitted to government	A minimum of 1 drainage plan submitted within 1 year following approval of a landscape unit objective by government						
SFM Objective:							
Provide opportunities for a feasible mix of timber, recreational activities and non-timber commercial activities							
Management strategies address important values in SMZ areas							
Linkage to FSJPPR: For the purposes of Section 42 of the FSJPPR this indictor statement, target							

statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

#### Acceptable Variance:

Timing of submission may be delayed 1 year.

# **CURRENT STATUS AND COMMENTS**

No change from previous annual report. No new clustered harvest plans have been prepared for the MKMA to date.

No new harvesting is proposed in the MKMA, other than that previously approved under grand parenting provisions of the Muskwa-Kechika Management Act and Regulation, for the duration of the FOS.

Initial planning for a drainage harvest plan commenced in 2006, and continued in 2007. An area has been selected for plan completion and Landscape Unit Objectives are currently being developed for the area by the government, with input from the participants. Progress towards the completion of this plan has been made, however the participants must wait for Landscape Unit Objectives to be approved by government before a plan can be submitted and approved. No new clustered harvest plans have been prepared for the MKMA to date.

#### **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

#### **3.22. RIVER CORRIDORS**

Indicator Statement	Target Statement
Percentage of harvested areas that create	No openings exceeding 1 hectare in blocks within
openings greater than 1 hectare within 100 metres	the major river corridors harvested under the
of RRZ's in identified major river corridors	FSJPPR (i.e., after November 15th, 2001)

#### SFM Objective:

Management strategies address important values in SMZ areas

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.



# Acceptable Variance:

Except where required otherwise by a forest health treatment plan, 10% of openings may exceed 1 hectare, but no openings greater than 2 hectares.<sup>7</sup>

# **CURRENT STATUS AND COMMENTS**

As part of the preparation of the Forest Operations Schedule in 2004, a digital coverage was created for those portions of streams identified in the LRMP in the Major River Corridor Resource Management Zone. The coverage assigned a 100-metre buffer to the riparian reserve zone stream classification, which was based on inventory information if known, or defaulted to S1 classifications if unknown. This coverage is displayed on all 1: 50,000 maps where the Major River Corridor RMZ occurs. Any blocks not previously authorized and occurring within a major river corridor were either deleted prior to inclusion in the FOS, or were designated for partial cutting systems (Blocks 20015 and 20016) that will be consistent with the target statement.

During the reporting period, no harvesting occurred within any Major River Corridor. The participants are in conformance with this indicator.

### **REVISIONS**

This indicator has been included in SFMP #2 and as such the participants will continue to implement and report progress to it.

#### 3.23. VISUAL SCREENING ON ROADS

Indicator Statement	Target Statement					
% of new main summer road length developed adjacent to harvested areas within identified major river corridors where visual screening is present	100% of summer accessible road lengths within the designated area will have visual screening from adjacent cutblocks portant values in SMZ areas					
SFM Objective: Management strategies address important values in SMZ areas						
Linkage to FSJPPR: N/A						

# Acceptable Variance:

At least 75% of all new summer road length within the designated area will be visually screened.

# **CURRENT STATUS AND COMMENTS**

No new summer roads were constructed within major river corridors during the 2009-10 reporting period. The participants are in conformance to the requirements of this indicator.

# **REVISIONS**

This indicator has been deleted from SFMP# 2.

<sup>&</sup>lt;sup>7</sup> revised at April 23 2007 Public Advisory Group meeting



#### **3.24. PERMANENT ACCESS STRUCTURES**

Indicator Statement	Target Statement					
Permanent access structures (%) within cutblocks	A maximum of 5% of the total aggregate area in cutblocks by managing participant to be occupied in permanent access structures in which harvesting was completed during that annual reporting period as determined on a 3 year rolling average. This only applies to permanent access structures utilized by the participants. See variance for phase-in period					
SFM Objective:						
Sustain forest lands within our control within the De	fined Forest Area					
A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress						
Linkage to FSJPPR: For the purposes of Section						

target statement and acceptable variance will replace Section 30(1) of the FSJPPPR. For the purposes of Section 42 of the FSJPPR this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

### Acceptable Variance:

Phase in target of 6% for the 3- year period ending March 31, 2004, 5.5% by March 31, 2005 and full implementation of the 5% target by March 31, 2006. No variance necessary following phase in as the percentage is based on a 3-year rolling average.

# **CURRENT STATUS AND COMMENTS**

The current 3-year average area in permanent access structures ending March 31, 2010 is presented in the following Table 15. The target for this period is a maximum of 5% of total area in permanent access structures. All participants' permanent access structure values were consistent with the targets during the reporting period – Canfor 4.5 %, and BCTS 2.5%.

Managing Participant	Annual Reporting Period (Ending Mar. 31st of Year Indicated)	PAS Area (ha)	Total Area (ha)	% PAS of Total Area
Canfor	2008	160.0	3258.6	5.0%
Canfor	2009	115.6	2474.9	4.7%
Canfor	2010	153.6	3788.5	4.1%
Canfo	Canfor Total: <sup>8</sup>		9,522.0	4.5%
BCTS	2008	43.0	1742.5	2.5%
BCTS	2009	23.8	842.0	2.8%
BCTS	2010	23.5	1034.4	2.3%
BCTS	BCTS Total: <sup>9</sup>		3,618.9	2.5 %
Combined Par	ticipants Totals:	519.5	13,140.9	3.9%

#### Table 15: Current 3-year Average in Permanent Access Structures (PAS)

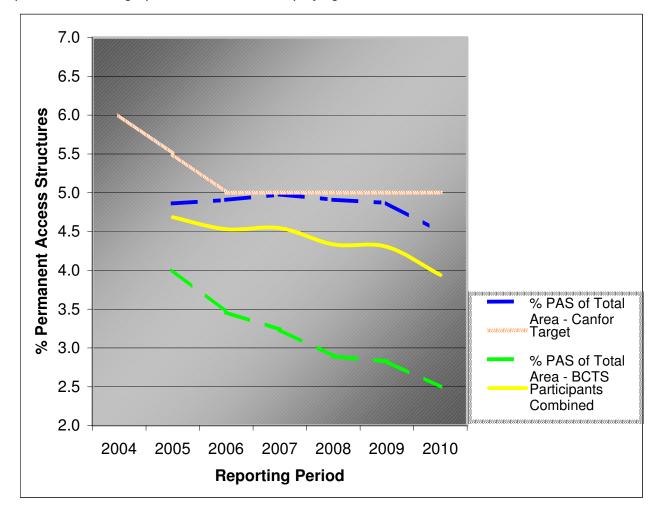
<sup>&</sup>lt;sup>8</sup> based on 10 metre wide road widths

<sup>&</sup>lt;sup>9</sup> based on 6 metre wide road widths



Both managing participants are in conformance with the target for this indicator.

The following graph (Figure 4) shows the participants' performance relative to the Permanent Structure Access indicator over the last five reporting periods. BCTS values have trended consistently downward. Area occupied by Permanent Access Structures on Canfor operations has remained fairly consistent, with this year's values being the lowest reported. Although this indicator is tracked separately for each managing participant, the combined total values are presented in the graph in the interest of displaying a cumulative view.



# Figure 4. Five year reporting results of 3-year rolling averages of PAS % (2005-2010)

# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.



#### **3.25. FOREST HEALTH**

Indicator Statement	Target Statement						
% of sites with significant detected forest health damaging agents which have treatment plans developed for them.	100% of sites infected with Mountain Pine Beetle, and identified within Beetle Management Units with a 'Suppression' classification, will have treatment plans developed for them, and initiated within one year of detection. 100% of sites with significant forest health						
	damaging agents (excluding Mountain Pine Beetle) will have treatment plans developed for them, and initiated within one year of detection						
SFM Objective:							
A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress							
Ecosystem functions capable of supporting naturally	occurring species exist within the DFA						
Maintain or enhance landscape level productivity							
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.							

### Acceptable Variance:

A variance of 1 year is permissible to provide for additional information collection, *treatment plan amendments*, and consultation with forest health specialists.

# **CURRENT STATUS AND COMMENTS**

Mountain Pine Beetle (MPB) populations were initially detected in the Fort St John TSA during the summer of 2006. Following initial detection of the MPB presence an action plan was developed and implemented by the licensees to reduce the impact of the infestation. In 2007 this plan was continued and updated to reduce the population and the long-term impact of the MPB infestation to the AAC of the Fort St John TSA. The action plan was continued in 2008 and 2009.

In September 2007 and 2008 overview flights were completed on the most heavily attacked area of the south half of the TSA to update and document the presence and spread of the MPB attack. (There is only anecdotal evidence regarding the presence of MPB in the northern portion of the TSA). A helicopter equipped with a Global Positioning System (GPS) recorded the coordinates of each suspected MPB site. Due to the extremely widespread MPB presence, the action plan was developed to concentrate treatments on the highest priority areas along the MPB infestation front. A total of 538 sites were identified with treatment plans prepared and implemented within one year of detection.

Ground probing and fall and burn treatments were directed to priority sites along this "leading edge". Ground probing concentrated on the highest priority sites where fall and burn treatments would have the greatest impact on MPB populations. During the 2008 reporting period, a total of 116 fall and burn sites were identified and treated. A total of 8,753 trees were felled and burned to reduce the spread of the Mountain Pine Beetle.



### SUMMARY OF LICENCEE PARTICIPANT MOUNTAIN PINE BEETLE HARVESTING

March 2007	-	40.2 ha logged
April 1, 2007 to March 31, 2008	3 -	624.7 ha logged
April 1, 2008 to March 31, 2009	9 -`	650.8 ha logged
April 1, 2009 to March 31, 2010	) -	801.7 ha logged
April 1, 2010 to March 31, 201	1 - proposed for harvest:	1,118.8 ha
SUMMARY OF BCTS MOUNT	AIN PINE BEETLE HAR	ESTING:

April 1, 2009 to March 31, 2010

Five Timber Sale Licenses were offered (461.2 ha), Five Timber Sale Licenses were sold (461.2 ha), Five Timber Sale Licenses were logged (461.2 ha)

The total MPB area harvested between April 1, 2009 and March 31, 2010 is:

Licensee participants	801.7 ha
B.C.T.S.	461.2 ha
Total	1,262.9 ha.

Areas with high beetle populations and susceptible pine types were selected for harvesting during the summer, fall and winter of 2009-2010 and harvesting of priority blocks continued during the annual reporting period. The MPB population continues to expand in terms of the area of attack, the size of the beetle population and severity of attack.

Harvesting in the current reporting period remains focused on pine leading areas with high MPB populations and susceptible pine timber types in order to reduce the MPB population, and to recover forest and lumber values from MPB attacked stands.

# **BLOWDOWN SUMMARY:**

There were various reports of wind damage to some stands in the Farrell Creek and Kobes Operating areas. A portion of the damaged timber (from private land) was salvaged. There was no estimate of the total volume or area impacted by the wind event.

No other reports of blowdown were received. Small volumes of blowdown do occur along cutblock edges following harvesting. These volumes are generally left in place as they provide wildlife habitat, future Coarse Woody Debris and contribute to biodiversity objectives.

The participants are consistent with the targets for this indicator.

#### **REVISIONS**

There are revisions proposed for the indicator and target, refer to approved SFMP# 2.



#### 3.26. SALVAGE

Indicator Statement	Target Statement The relative proportions of salvage hectares will be highest in the high intensity zones, and lowest in the low intensity zones over an SEMP period				
The relative proportion of salvaged hectares versus total hectares damaged in merchantable stands (as defined in the current TSR) within a management intensity class					
SFM Objective:					
A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress					
Linkage to FSJPPR: N/A					

### Acceptable Variance:

None.

# **CURRENT STATUS AND COMMENTS**

During the summer of 2009 there were14 forest fires identified within the DFA with a combined area of 897.2 ha. These fires occurred in all 3 Management Intensity zones, however none of these fires were of sufficient size or timber value for the Participants to initiate salvage harvesting activities within them. As such salvage harvesting was not completed on any stands damaged by fire during the 2009-2010 reporting period.

Over the term of the Sustainable Forest Management Plan, the participants harvested 701.3 hectares of fire-damaged stands, 91.7% of which were located in areas with High Management Intensity Emphasis.

 Table 16:
 Area Damaged / Salvaged in Merchantable Timber 2004-2010 (fire damage only)

MANAGEMENT INTENSITY EMPHASIS	HIGH		MODERATE		LOW			ALL	
Year	Merch* Timber Damaged (ha)	Merch Timber Salvaged (ha)	Merch* Timber Damaged (ha)	Merch Timber Salvaged (ha)	Merch* Timber Damaged (ha)	Merch Timber Salvaged (ha)	Total Merch* Timber Damaged (ha)	Total Area Salvaged	Total Area Damaged (ha)
2004	0	0	227.3	58.1	0	0	227.3	58.1	708.7
2005	0	0	0	0	0	0	0	0	0
2006	5147.1	643.2	761.5	0	2.5	0	5911.1	643.2	17458.4
2007	3.5	0	0	0	0	0	3.5	0	19.6
2008	14.1	0	5.5	0	0	0	19.5	0	248.94
2009	74.9	0	3.7	0	6.5	0	85.1	0	897.2
SFMP Totals	5239.6	643.2	992.5	58.1	9.9	0	6246.5	701.3	19332.84

\*Based on VRI from LRDW on stands with a total estimated volume of >= 140m<sup>3</sup>/ha



Mountain Pine Beetle entered the DFA in the summer of 2006. Since that time the Participants have focused their conifer harvesting to concentrate primarily on pine leading stands infested with mountain pine beetle. During the 2009-10 reporting period, the participants harvested 1238 hectares of conifer leading stands with mountain pine beetle attack. Below is a summary of harvesting that would meet the 'salvage' threshold for the purposes of this indicator. Due to the nature of the mountain pine beetle infestation in the DFA, the participants were unable to obtain a reliable estimate of the area of heavy infestation. Of the total area of mountain pine beetle stands harvested during the term of this SFMP, 96% occurred in high management intensity zones.

 Table 17: Area Damaged / Salvaged in Merchantable Timber 2006-2010 (MPB damage only)

MANAGEMENT INTENSITY EMPHASIS	HIGH		MODERATE LOW			ALL			
Year	Merch Timber Damaged* (ha)	Merch Timber Salvaged (ha)	Merch Timber Damaged* (ha)	Merch Timber Salvaged (ha)	Merch Timber Damaged* (ha)	Merch Timber Salvaged (ha)	Total Merch Timber Damaged (ha)	Total Area Salvaged	Total Area Damaged (ha)
2006-2007	?	40.4	?	0	?	0	?	0	?
2007-2008	?	516.6	?	133	?	0	?	690	?
2008-2009	?	1192.8	?	0	?	0	?	1192.8	?
2009-2010	?	1238	?	0	?	0	?	1238	?
Totals	?	2987.8	?	133	?	0	?	3120.8	?

\*Unable to obtain reliable estimate

By concentrating salvage operations in the areas of high intensity management class, the participants have demonstrated consistency with the target for this indicator.

# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.



## 3.27. SILVICULTURE SYSTEMS

Indicator Statement	Target Statement					
Percentage of area harvested annually using even aged silvicultural systems	Even aged silvicultural systems will be employed on at least 80% of the total area harvested annually in the DFA					
SFM Objective:						
A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress						
Linkage to FSJPPR: N/A						

### Acceptable Variance:

No acceptable variance.

# **CURRENT STATUS AND COMMENTS**

The following table summarizes the silviculture system (merchantable ha) on blocks harvested between April 1, 2009 and March 31, 2010.

Managing Participant	Even-aged (ha)	Uneven-aged (ha)	Total (ha)
Licensee Participants	3378.0	0	3378.0
BCTS	1034.5	0	1034.5
Total	4412.5	0	4412.5

Even-aged silviculture systems were employed on 100% of the total area harvested by participants within the DFA, which is consistent with the target for this indicator.

# **REVISIONS**

There are no proposed changes to the indicator or the target.

### 3.28. SPECIES COMPOSITION

Indicator Statement	Target Statement						
Relative Change in Plantation Composition versus Harvest Composition for Spruce and Pine	The relative proportion of spruce and pine planted annually will equal the proportions harvested annually (excluding fill planting)						
SFM Objectives:							
The diversity and pattern of communities and ecosystems within a natural range							
A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress							
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.							



# Acceptable Variance:

An annual variance of plus or minus 20% absolute difference between the planted Pine/Spruce percentages and *cruise* Pine/Spruce percentage estimates is allowed to reflect potential annual harvest composition fluctuations.<sup>10</sup>

## CURRENT STATUS AND COMMENTS

The following table summarizes the blocks planted between April 1, 2009 and March 31, 2010 and the corresponding cruise species percentages by licensee:

# Table 18: Planting vs. cruise species comparison

#### 2009 Planting Summary

Division	Data	Total	Percentages
BCTS	Sum of Cruise Spruce (m3)	137268	49.5%
	Sum of Cruise Pine (m3)	140237	50.5%
	Sum of Planted Spruce (trees)	282697	32.8%
	Sum of Planted Pine (trees)	580230	67.2%
Licensee Participants	Sum of Cruise Spruce (m3)	203129	45%
	Sum of Cruise Pine (m3)	251185	55%
	Sum of Planted Spruce (trees)	547980	46%
	Sum of Planted Pine (trees)	639930	54%
Total Sum of Cruise Spruce (m3)		340397	47%
Total Sum of Cruise Pine (m3)		391422	53%
Total Sum of Planted Spruce (trees)		830677	41%
Total Sum of Planted Pine (trees)		1220160	59%

As indicated above the blocks planted in 2009 contained 47% spruce volume in the cruise and were planted with 41% spruce. These blocks contained 53% pine volume in the cruise and were planted with 59% pine. The planted species percentages are within 20% of the cruise species percentages and therefore the participants are within the acceptable variance for this indicator and target.

# **REVISIONS**

There are no proposed revisions to this indicator or the target.

<sup>&</sup>lt;sup>10</sup> revised at the April 23 2007 meeting of the Public Advisory Group



#### **3.29. REFORESTATION ASSESSMENT**

Indicator Statement	Target Statement
Merchantable Volume (m <sup>3</sup> ) for coniferous areas	For coniferous areas, Merchantable Volume will meet or exceed Target Volume (95% of Predicted Maximum Volume) within the reforestation period

#### SFM Objectives:

A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress

Maintenance of the processes for carbon uptake and storage

**Linkage to FSJPPR:** For the purposes of Section 35(5) of the FSJPPR this indicator statement, target statement and acceptable variance will be used in replacement of the portions of affected Section 32 of the FSJPPR through the application of the landscape level strategy for coniferous areas logged after November 15, 2001. This will also apply to coniferous area in cutblocks with commencement dates before November 15, 2001 if the participant currently carries reforestation liability and has submitted a statement to the district manager that the cutblock(s) will be subject to the SFMP under Section 42 of the FSJPPR. Please refer to sec 8.1.3 of this SFMP.

For the purposes of Section 42 of the FSJPPR this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies for coniferous areas.

### Acceptable Variance:

A variance of 5% from the Target Volume will be acceptable. The variance accounts for the complexity of ecosystems and silviculture regimes combined with the long time frames and variety of influences on reforestation outcomes. If the Merchantable Volume falls below the Target Volume and within the variance the results will be reviewed to determine if a specific change in management practice is indicated. This review will consider all Values, Objectives, Indicators and Targets in the SFMP, previous trends and precision of outcomes in silviculture regimes. This review will provide information, which will be considered in developing future regimes and practices, ensuring a model of continuous improvement.

Damage events beyond the control or influence of the participants will also be considered an acceptable variance.

Individual cutblocks will meet a minimum cutblock Mean Stocked Quadrant (MSQ) value of 2.0 Well Growing crop trees for a target stocking of 1200 stems/ha. For a target stocking of 1000 stems /ha and 800 stems/ha the minimum cutblock MSQ value will be 1.7 and 1.3 respectively. If the cutblock has areas of different target stocking the MSQ will be prorated by area.

# CURRENT STATUS AND COMMENTS

# Canfor

A total of 44 blocks were surveyed from the 1994/1995-harvest year. This accounted for a sample size of 1440.1 ha. The field data collected in August/September of 2009 was compiled over the winter using a compiler developed by J.S. Thrower & Associates. The 1440.1 ha were broken down into 18 different stratum based on species composition, site index, stocking class and target stocking standard. For each stratum a target merchantable volume (TMV) was determined based on TASS models. Using the inputs of mean stocked quadrant (MSQ), mean effective age and site index, a predicted merchantable volume (PMV) was then calculated for each stratum. The PMV for the 1994/1995-harvest year was 957,660 m<sup>3</sup> and the TMV was



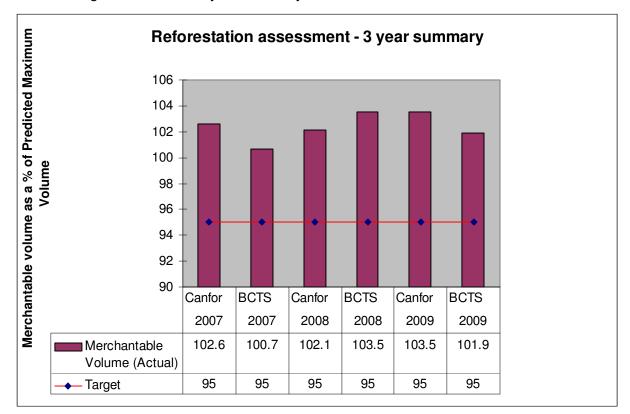
939,351 m<sup>3</sup>. **This put the PMV at 101.9% of the TMV, which means the target was met.** See Table 34, "Predicted and Target Volumes by Stratum – Canfor 2009" in Appendix 5.

Table 31, "Mean MSQ by Block – Canfor (2009)" " in Appendix 5 shows the mean MSQ by block. One block was below the minimum MSQ requirement of 2.0.

Block 39900V MSQ = 0.55. This block is 1.0 hectare and no plots landed in this block. Mean MSQ was estimated. Block is scheduled to be reassessed in 2012.

# **BCTS**

A total of 7 BCTS blocks were surveyed from the 1994/1995-harvest year. This accounted for a sample size of 300.3 ha. The field data collected in September through October was compiled over the winter using a compiler developed by Timberline Natural Resource Group. The 300.3 ha were broken down into 7 different stratums based on species composition, site index, stocking class and target stocking standard. For each stratum a target merchantable volume (TMV) was determined based on TASS models. Using the inputs of mean stocked quadrant (MSQ), mean effective age and site index, a predicted merchantable volume (PMV) was then calculated for each stratum. The PMV for the 1994/1995 harvest year was 181,570m<sup>3</sup>, and the TMV was 175,490m<sup>3</sup>. This put the PMV at 103.5 % of the TMV, which is within the 5% variance.



The following chart shows a 3-year summary for this indicator:

# Figure 5: Reforestation assessment merchantable volume prediction

The participants' activities are consistent with the target for this indicator.



# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

#### **3.30. ESTABLISHMENT DELAY**

Indicator Statement	Target Statement
Establishment Delay (years)	The area weighted average establishment delay for coniferous regeneration will not exceed two years The area weighted average establishment delay for deciduous regeneration will not exceed three
	years
SFM Objectives:	

The diversity and pattern of communities and ecosystems within a natural range

A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress

Maintenance of the processes for carbon uptake and storage

#### Linkage to FSJPPR:

For the purposes of Section 42 of the FSJPPR this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies for coniferous and deciduous areas logged after November 15, 2001.

# Acceptable Variance:

To allow for variations in site preparation requirements, access and delays in harvest the acceptable variance for establishment delay is one half year.

# **CURRENT STATUS AND COMMENTS**

#### **Coniferous Regeneration:**

BCTS coniferous establishment delay was 1.6 years, which is within the acceptable performance range for coniferous establishment timelines for this indicator.

On all other participants' licences, coniferous establishment delay was 1.3 years, which is within the acceptable performance range for coniferous establishment timelines for this indicator.

#### **Deciduous Regeneration**:

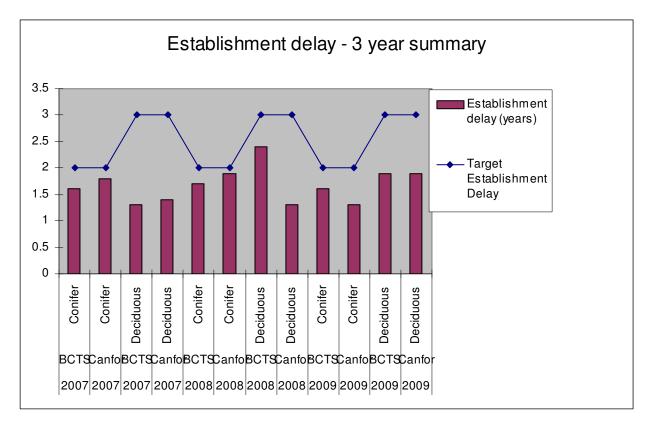
The BCTS deciduous establishment delay was 1.9 years, which is within the acceptable performance range for deciduous establishment timelines for this indicator.

On all other participants' licences, deciduous establishment delay was 1.9 years, which is within the acceptable performance range for coniferous establishment timelines for this indicator.

The following figure shows a 3-year summary for this indicator:



# Fort St. John Pilot Project 2009-2010 SFMP Annual Report - Final Figure 6: Establishment delay summary



# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

# 3.31. LONG TERM HARVEST LEVEL

Indicator Statement	Target Statement
Long-term harvest level (LTHL) as measured in cubic metres per year (m <sup>3</sup> /yr)	We will propose an Allowable Annual Cut (AAC) that sustains the LTHL of the Defined Forest Area (DFA)
SFM Objective:	
Maintain or enhance landscape level productivity	
No decrease in the LTHL in the DFA	
Linkage to FSJPPR: N/A	

# Acceptable Variance:

No acceptable variance.

The participants propose an AAC however, the Chief Forester (Minister of Forests) determines the AAC for the management unit.

# **CURRENT STATUS AND COMMENTS**



The next AAC determination by the provincial Chief Forester was deferred in 2008, and is to occur no later than January 2013. The AAC shall remain at the current levels set in 2003. The participants are in conformance with the target for this indicator.

# **REVISIONS**

There are no proposed revisions to this indicator.

#### 3.32. SITE INDEX

Indicator Statement	Target Statement
Site index	Average post harvest site index will not be less than average pre-harvest site index on blocks harvested under the pilot project regulation
SFM Objective: Maintain or enhance landscape level productivity	
Protect soil resources to sustain productive forests	
Linkage to FSJPPR: N/A	

# Acceptable Variance:

A maximum negative variance of 15% post harvest site index *versus* pre harvest site index is allowed to account for statistical variability.

# CURRENT STATUS AND COMMENTS

There has been no change in the status of this indicator since the development of the SFM plan.

The majority of SPs/SLPs for blocks harvested since Nov. 15, 2001 have been updated to include pre-harvest site index, so that the data will be readily available when well-growing assessments are made to them in the future. All SLP's completed by the participants between April 1, 2009 and March 31, 2010 include site index. All 36 blocks for which licensees developed SLP's during the reporting period have Site Index identified for each Standard Unit.

No well growing assessments were required to be completed during the 2009-10 reporting period. The participants' activities are in conformance with the requirements of this indicator.

# **REVISIONS**

There are no proposed revisions to this indicator or the target.

#### 3.33. LANDSLIDES

Indicator Statement	Target Statement
Number of hectares of landslides resulting from forestry practices	0 hectares of landslides due to forestry activities on blocks harvested and roads constructed commencing December 1, 2001
SFM Objective:	
Protect soil resources to sustain productive forests	
Linkage to FSJPPR: N/A	



# Acceptable Variance:

A one-hectare per year total accumulative variance from the target is considered a manageable variance, which should have no significant measurable impact on the overall productivity of the forest land base.

# **CURRENT STATUS AND COMMENTS**

There were no landslides between April 1,2009 and March 31, 2010 resulting from the participants' activities. The participants have achieved the target for the reporting period.

# **REVISIONS**

This indicator has been deleted from SFMP# 2.

#### **3.34. PEAK FLOW INDEX**

Indicator Statement	Target Statement				
The percent of watersheds achieving baseline targets for the peak flow index and the percent of watershed reviews completed where the baseline target is exceeded	A minimum of 95% of the watersheds will be below the baseline target All watersheds that exceed the baseline target will have a watershed review completed wherever new harvesting is planned				
SFM Objective: Maintenance of water quantity					
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the					

landscape level strategies.

# Acceptable Variance:

A variance to a minimum of 90% of the watersheds will be below the baseline targets will be acceptable.

A zero variance for conducting a watershed review wherever new harvesting is planned in a watershed where the baseline target is exceeded.

# **CURRENT STATUS AND COMMENTS**

The PFI was reassessed during the preparation of the Forest Operations Schedule in 2004, to determine the impacts of the proposed harvesting, and to incorporate new information from Vegetation Resources Inventory (VRI) inventories that were not available for the PFI analysis conducted for the final approved SFMP# 1.

At the time of the 2004 FOS analysis, 98% of the watersheds (103 of 105) were predicted to remain within the target thresholds, upon completion of all harvest activities proposed in FOS#1. The Charlie Lake watershed, which is significantly impacted by agricultural development, and the Martin Creek watershed, which is significantly impacted by natural disturbance events, fell outside the thresholds.

During the 2009 reporting period there was only one instance of harvesting within a watershed that had exceeded PFI threshold values. BC Timber Sales TSL A63402-1, situated in the Charlie Lake watershed, was sold on August 13, 2009, with harvest initiation occurring on February 18, 2010.



A watershed review was conducted on the effected watershed, with the final report dated November 10, 2005. The report indicated that "the amount of forest cover removal attributable to recent and proposed forest harvesting could not have a detectable impact on increased flows, as it only represents a total of 3% of the entire watershed". The report also indicated, "since the commercial forest harvesting within the DFA occurs in the upper most parts of this watershed it has a lesser impact than other developments that occur along the main branch or main tributaries of the Stoddard Creek System".

The watershed review included the following recommendations:

 "Maintain properly functioning riparian buffer along streams within or adjacent to cutblocks. This means that at least 10 trees, with a dbh of at least 15 cm, be maintained along all streams, for every 100 metres of stream length. These trees should be maintained within a 10 metre wide buffer along the edge of the stream."

"Effective erosion control and sediment control practices should be implemented at all stream crossings, no matter what size of the stream."

All recommendations were incorporated into the licensee responsibilities for deactivation.

No other harvesting was initiated in the Charlie Lake or Martin Creek watersheds in 2009.

The following table summarizes the current condition of PFI, including the impact of all forest management activities actually completed under FOS# 1 to March 31, 2010.

Watershed Group	Watershed Name	Class	Size (km2)	Elevation range (m)	H60 Elevation (m)	Baseline Threshold PFI	PFI FOS (2004)	Current Condition (2010)
Fontas	Bedji Creek		230.42	460 - 600	508	50	3.28	3.9
Fontas	Chasm Creek		168.21	539 – 680	599	50	5.74	0.2
Fontas	Dazo Creek		260.27	360 – 494	460	50	4.05	1.6
Fontas	Ekwan Creek	LB	850.5	360 – 481	420	50	4.46	1.4
Fontas	Etthithun River	LB	1161.6	440 - 842	535	50	8.29	5.5
Fontas	FONT Unnamed 1		117.73	361 – 481	461	50	3.11	4.1
Fontas	Fontas River		320.35	536 - 800	660	50	3.89	4.4
Fontas	Fontas River - LB	LB	714.32	440 - 800	580	50	3.7	2.3
Fontas	Kataleen Creek		162.95	380 – 451	413	50	2.95	1.6
Fontas	Teklo Creek		212.81	380 – 474	426	50	1.56	0.8
Fontas	Upper Etthithun River		404.45	620 - 842	680	50	17.25	11.9
Kahntah	Cautley Creek	LB	865.02	518 – 1022	680	62	15.83	5.6
Kahntah	Dahl Creek		412.84	535 – 943	700	50	0.62	1.3
Kahntah	Helicopter Creek		147.32	505 - 742	613	62	3.89	1.3
Kahntah	KAHN Unnamed 4		226.87	640 – 944	720	50	30.22	3.4
Kahntah	KAHN Unnamed 5		126.05	538 – 721	624	62	6.37	1.2

# Table 19: PFI FOS Condition and Targets



	-			•				
Kahntah	Kahntah Creek	LB	1096.59	518 - 944	700	50	9.18	2.1
Kahntah	Upper Cautley Creek		478.27	660 - 1022	740	62	22.64	9.4
Lower Beatton	Aitken Creek		828.45	654-985	815	43	12.7	22.1
Lower Beatton	Charlie Lake		292.66	690-889	773	62	80.89	56.6
Lower Beatton	Doig River		983.34	623-852	731	43	3.81	8.4
Lower Beatton	Osborn River		735.95	623-987	745	43	25.95	19.7
Lower Beatton	Umbach Creek		430.91	611-866	741	43	23.93	21.8
Lower Beatton	Upper Blueberry		857.77	655-1048	820	50	20.27	18.4
Lower Halfway	Aikman Creek		118.74	640 - 1120	815	43	24.12	7.4
Lower Halfway	Blair Creek		230.44	698 – 1142	902	43	16.44	19.2
Lower Halfway	Cameron Creek		495.18	699 – 1203	944	43	12.86	7.5
Lower Halfway	Cameron River - Residual	LB	2029.32	538 - 1205	837	37	19.53	14.7
Lower Halfway	Colt Creek		158.53	719 – 1701	913	43	16.76	7.6
Lower Halfway	Deadhorse Creek		208.99	560 – 959	820	43	25.4	23.2
Lower Halfway	Graham River	LB	2309.94	530 – 2404	1279	43	4.64	3.1
Lower Halfway	Ground Birch Creek		338.39	558 – 1062	735	43	29.79	15
Lower Halfway	Horn Creek		426.61	1079 – 2347	1474	37	0.01	0
Lower Halfway	Kobes Creek		299.88	620 – 1648	828	50	21.17	11.4
Lower Halfway	LHAF Unnamed 1		216.47	699 – 1022	860	43	22.84	13.5
Lower Halfway	Needham Creek		328.94	938 – 2269	1430	43	0.04	0
Lower Halfway	Poutang Creek		179.97	1098 – 2393	1453	43	0	0
Lower Halfway	Townsend Creek		295.8	698 – 1081	880	43	21.35	14.7
Lower Sikanni	Bull Creek		351.34	639 – 981	752	50	0.79	2.6
Lower Sikanni	Conroy Creek	LB	1096.67	417 – 1020	720	50	2.45	4.8
Lower Sikanni	Dechacho Creek		172.51	378 – 762	516	50	8.59	2.5
Lower Sikanni	Gutah Creek	LB	1450.99	380 – 901	645	50	2.53	2.3
Lower Sikanni	Katah Creek		594.82	419 – 915	660	50	0.68	1
Lower Sikanni	Kenai Creek		78.86	400 – 621	1000	50	5.42	3.6
Lower Sikanni	LSIK Unnamed 2		162.43	536 - 858	720	43	8.17	8.7
Lower Sikanni	LSIK Unnamed 4		59.29	519 – 721	641	50	3.57	2.8
Lower Sikanni	Niteal Creek		516.6	359 – 520	475	50	6.8	0.3
Lower Sikanni	Upper Gutah Creek		806.45	559 – 901	728	62	1.27	2.5
Lower Sikanni	West Conroy		248.28	638 – 1020	782	50	1.11	8.6
Milligan	Dede Creek		128.35	680 – 740	720	62	1.84	10.8
Milligan	Flick Creek		203.24	700 – 859	780	62	3.74	3.8
Milligan	Little Beaverdam Creek		334.14	690 – 854	732	62	4.2	2.3
Milligan	MILL Unnamed 3		325.52	780 – 962	880	62	10.81	1.3
Milligan	Milligan Creek		432.38	680 – 941	780	50	5.23	4.5
Milligan	Milligan Creek - LB	LB	1836.56	619 – 941	758	50	5.94	4.5



Villigan	Upper Milligan Creek		382.2	719 – 941	832	50	4.91	2.2
Jpper Beatton	Arrow Creek		507.02	661 – 902	783	50	25.26	1.8
Jpper Beatton	Beatton River		1071.09	777 – 1780	984	43	6.57	6.9
Upper Beatton	Black Creek		666.11	700 – 1022	807	50	7.01	6.8
Jpper Beatton	Grewatsch Creek		269.73	736 – 1103	927	50	7.37	10.1
Upper Beatton	Holman Creek		150.18	719 – 1080	896	50	15.93	13.7
Jpper Beatton	Jedney Creek		128.76	779 – 1101	952	43	5.5	5.7
Jpper Beatton	La Prise Creek		338.99	717 – 1021	860	50	6.54	23.8
Upper Beatton	Martin Creek		120.24	700 – 980	830	50	57.35	24
Jpper Beatton	McMillan Creek		103.34	659 – 770	736	43	4.1	1.4
Upper Beatton	Nig Creek		476.81	680 – 920	782	50	28.62	31.8
Upper Beatton	UBTN Unnamed 9		156.26	677 – 880	757	50	10.19	2.5
Upper Beatton	Upper Beatton Lrg	LB	2345.63	719 - 1782	924	50	8.04	10.3
Jpper Halfway	Blue Grave Creek		158.63	720 – 1722	960	37	15.01	8.1
Upper Halfway	Chowade River	LB	988.88	779 - 2331	1475	43	5.59	7
Jpper Halfway	Cypress Creek	LB	620.07	840 – 2229	1200	37	4.56	3.3
Jpper Halfway	Horseshoe Creek		197.41	739 - 1762	1060	37	4.86	2.9
Jpper Halfway	Two Bit Creek		160.23	980 – 1888	1235	37	0	0.9
Jpper Halfway	UHAF Unnamed 3		127.86	922 – 1862	1221	37	0.47	0
Upper Halfway	UHAF Unnamed 6		211.34	778 – 1981	976	37	14.86	18.4
Jpper Halfway	Upper Chowade		426.75	925 – 2336	1395	37	2.7	5.4
Jpper Halfway	Upper Cypress		334.89	1099 – 2316	1493	37	0	0
Jpper Halfway	Upper Halfway River		629.22	1103 – 2590	1235	37	1.55	0
Jpper Halfway	Upper Halfway River - LB	LB	1096.06	914 – 3057	1241	37	1.36	0.6
Jpper Peace	Coplin Creek		350.04	582-942	773	43	21.9	31
Jpper Peace	Farrel Creek		646.01	447-1686	713	43	10.6	11.8
Jpper Peace	North Cache Creek		187.89	548-909	759	43	18.46	31.6
Jpper Peace	Red Creek		239.85	446-919	753	43	12.65	30.1
Upper Prophet	Besa Creek		515.61	1136 – 2993	1568	43	0.01	0.4
Upper Prophet	Minaker River		170.31	859 – 1742	1060	43	0.12	1.3
Upper Prophet	Minaker River - Residual	LB	555.08	819 – 1820	1070	43	0.25	1.1
Jpper Prophet	Nevis Creek		182.43	1019 – 2102	1422	37	0.01	0
Jpper Prophet	Pocketknife Creek		235.85	860 – 1884	1110	43	0	1
Jpper Prophet	Upper Keily Creek		269.62	1137 – 2920	1683	37	0	0.2
Jpper Prophet	Upper Prophet	LB	1177.85	1020 - 2993	1569	37	0	0.2
Upper Sikanni	Boat Creek		391.83	455 – 1081	719	50	0	0.2
Jpper Sikanni	Buckinghorse River		389.18	840 – 1936	1119	43	0.03	3.9



Upper Sikanni	Buckinghorse River - Residual	LB	1239.18	618 - 1936	1029	43	1.28	3.7
Upper Sikanni	Coal Creek		214.49	637 – 1079	900	43	7.88	5.7
Upper Sikanni	Daniels Creek		223.39	758 – 1263	1041	43	0.99	6.5
Upper Sikanni	Donnie Creek		122.16	520 - 1043	822	50	10.79	11.3
Upper Sikanni	Loranger Creek		132.18	1025 – 2018	1390	43	5.98	0.1
Upper Sikanni	Medana Creek		138.68	702 – 1183	1000	43	1.92	0.5
Upper Sikanni	Middle Fork Creek		207.97	857 – 1269	1060	43	3.97	3.2
Upper Sikanni	Sidenius Creek		460.87	1119 – 2619	1489	43	0.04	1.5
Upper Sikanni	Sikanni Chief		470.52	1119 – 2739	1488	43	0.53	0
Upper Sikanni	Sikanni Chief - Residual	LB	2902	618 – 2739	1143	43	4.08	1.9
Upper Sikanni	Temple Creek		216.19	458 – 901	760	43	3.45	10.6
Upper Sikanni	Trimble Creek		160.27	1082 – 2122	1439	43	0	0.5
Upper Sikanni	Trutch Creek		858.44	491 – 1262	781	43	1.94	9.4

Of note, the analysis of current condition of PFI indicates that all watersheds are below the threshold value for peak flow.

The participants' activities are consistent with the targets for this indicator during the reporting period.

# **REVISIONS**

There are no proposed revisions to this indicator or the target. The participants included the Peak Flow Index indicator in SFMP #2.

#### 3.35. WATER QUALITY CONCERN RATING

Indicator Statement	Target Statement			
The percentage of surveyed stream crossings identified with a high WQCR rating on forestry roads within the DFA for which participants have stewardship (*WQCR – water quality concern rating)	Fewer than 30% of the total number of surveyed stream crossings on roads for which the participants have stewardship, will have "High" WQCR, based on a three year rolling average			
SFM Objective:				
Maintenance of water quality				
Linkage to FSJPPR: N/A				

# Acceptable Variance:

Maximum 'high' WQCR allowable will be 35%, based on a three-year rolling average.

# CURRENT STATUS AND COMMENTS

This target is based on a three-year rolling average. Results of the field surveys conducted in 2007-2009 are presented below (table 16), representing 374 stream crossing assessments in



the DFA. No formal assessments for 2009/10 are reflected in the data below. The participants did not have a dedicated contract for crossing surveys. However the principles for planning, constructing, and deactivating stream crossings with regard to water quality are regularly employed by the participants' field staff and contractors. In addition, a refresher course was presented to key Canfor staff and contractors during the reporting period, in advance of the majority of deactivation activity. Periodic assessments were conducted by contract foremen and staff. Formal surveys are planned for 2010.

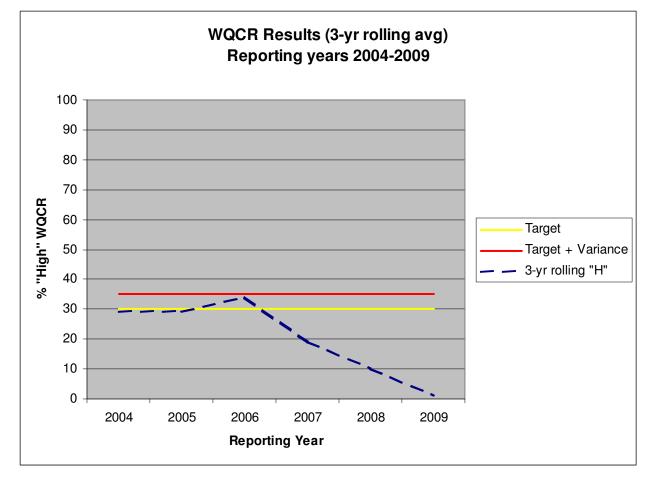
The participants achieved the indicator target for the 2009/10 reporting period.

Status	WQCR 'High' (# crossings)	WQCR 'Medium' (# crossings )	WQCR 'Low' (# crossings)	WQCR 'None' (# crossings)	Total (#)	% crossings rated 'High'
All combined	4	30	183	157	374	1

Table 20: Summary of WQCR data collected during 2007 - 2009

The results for this indicator are now reported as the percentage of <u>all</u> surveyed crossings rated 'high', rather than the previous split target of '*inactive*' and '*active*' roads (change made to indicator March 6 2008). The participants continue to be encouraged by the downward trend of the proportion of road crossings receiving a Water Quality Concern Rating of 'high' (Figure 7)





# Figure 7. Results of 3-year rolling averages of all crossings with "high" WQCR (sample years 2002-2009).

# **REVISIONS**

There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

# 3.36. PROTECTION OF STREAMBANKS AND RIPARIAN VALUES ON SMALL STREAMS

Indicator Statement	Target Statement			
The number of non-conformances to SLP measures to protect stream bank, stream channel stability and riparian vegetation from harvesting and silviculture activities	No non-conformances related to protecting stream bank, stream channel stability and riparian vegetation due to harvesting or silviculture activities			
SFM Objective: Maintenance of water quality				
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.				

# Acceptable Variance:

The maximum allowable variance is one non-conformance per participant annually.



# CURRENT STATUS AND COMMENTS

A review of BCTS incidents related to SLP measures to protect stream bank, stream channel stability and riparian vegetation on small streams due to harvesting or silviculture activities from April 1, 2009 to March 31, 2010 indicated that there were no non-conformances during that period of time.

A review of Canfor incidents related to SLP measures to protect stream bank, stream channel stability and riparian vegetation on small streams due to harvesting or silviculture activities from April 1, 2009 to March 31, 2010 indicated that there were no non-conformances during that period of time.

A variance of one non-conformance per participant is allowed annually. There are no non-conformances; therefore the participants are in conformance with the target for this indicator.

# **REVISIONS**

A minor wording change to this indicator and target is proposed; refer to the approved SFMP# 2.

#### 3.37. SPILLS ENTERING WATERBODIES

Indicator Statement	Target Statement			
Number of reportable spills entering water bodies	Zero spills entering water bodies			
SFM Objective: Maintenance of water quality				
Linkage to FSJPPR: N/A				

#### Acceptable Variance:

None.

#### **CURRENT STATUS AND COMMENTS**

A review of the Issue Tracking Systems (ITS) incidents indicate that licensee participants as well as BCTS had no spills that entered water bodies during the reporting period.

#### **REVISIONS**

A minor wording change to this indicator is proposed; refer to the approved SFMP# 2.

#### 3.38. CARBON SEQUESTRATION RATE

Indicator Statement	Target Statement			
DFA Average Carbon (C) sequestration rate (Mg C/year)	Maintain DFA average C sequestration rates that are consistent with or greater than natural sequestration rates.			
SFM Objective:				
Maintenance of the processes for carbon uptake and storage           Linkage to FSJPPR:         N/A				



# Acceptable Variance:

No decline lower than the natural disturbance sequestration rate as modeled in support of this indicator is acceptable.

# **CURRENT STATUS AND COMMENTS**

There have been no changes in the status of this indicator since the development of the SFM Plan. The strategy to manage sequestration rates is through prompt reforestation (section 3.30) and maintaining acceptable levels of stocking over the landscape on previously harvested and regenerated sites (section 3.29). The participants are in conformance with the requirements of indicators 29 and 30. Next reporting of this indicator will be done in conjunction with the next timber supply analysis.

# **REVISIONS**

There are minor wording revisions proposed for this indicator and target – refer to SFMP# 2.

# 3.39. ECOSYSTEM CARBON STORAGE

Indicator Statement	Target Statement			
Ecosystem Carbon Storage (Mg) in the Fort St. John DFA	Minimum of 95% of Natural Disturbance levels of Ecosystem Carbon Storage.			
SFM Objective:				
Maintenance of the processes for carbon uptake and storage				
Linkage to FSJPPR: N/A				

#### Acceptable Variance:

No acceptable variance.

# **CURRENT STATUS AND COMMENTS**

There have been no changes in the status of this indicator since the development of the SFM Plan. The strategy to manage carbon storage is through prompt reforestation (section 3.30) and maintaining acceptable levels of stocking over the landscape on previously harvested and regenerated sites (section 3.29). The participants are in conformance with the requirements of indicators 29 and 30. Next reporting of this indicator will be done in conjunction with the next timber supply analysis.

# **REVISIONS**

There are minor wording revisions proposed for this indicator and target – refer to SFMP# 2.

#### 3.40. COORDINATED DEVELOPMENTS

Indicator Statement	Target Statement			
Number of coordinated developments	Report annually the number of proposed coordinated developments that are successful versus unsuccessful			
SFM Objective:				
Foster inter-industry cooperation to minimize conversion of forested lands to non-forest conditions				
Linkage to FSJPPR: N/A				



# Acceptable Variance:

The opportunities for coordinated development will fluctuate annually based on the overall activity of the oil and gas industry as well as the proximity of operations to one another. Any amount of coordinated development on the basis of making our plans readily available will be viewed as a positive step in reducing the conversion of forested lands to non-forest conditions. Therefore no variance necessary as the target remains a reporting function primarily of our successes.

# **CURRENT STATUS AND COMMENTS**

Following is a summary of proposed changes to activities related to coordinating development between licensee participants and the oil and gas industry between April 1, 2009 and March 31, 2010.

Licensee participants received 44 referrals of Oil and Gas activities. While many of the referrals already had measures proposed to minimize impacts on forestland, forest licensees did make recommendations on 4 projects proposing changes to minimize impacts. Of the 4 projects where changes were requested, 2 were agreed to during the referral process. It is not known if the 2 outstanding recommendations will be incorporated into industry plans at this time. Only 1 of the recommended changes involved a road location. The recommendation to relocate this proposed road was accepted. While no coordinated road developments were undertaken during this reporting period, a high degree of cooperation between the oil and gas industry regarding shared road use was observed by the participants. In all of the referrals received, planned access to the development had considered information from the Forest Operations Schedule.

Following is a summary of proposed changes to activities related to coordinating development between BCTS and the oil and gas industry between April 1, 2009 and March 31, 2010

BCTS received 12 oil and gas referrals and 4 Integrated Land Management Bureau (ILMB) referrals between April 1<sup>st</sup> 2009 and March 31<sup>st</sup> 2010. Of the 12 oil and gas referrals BCTS proposed changes to 3. It is not known if the 3 proposed changes were implemented. Regarding the 4 ILMB referrals, BCTS requested that no development take place within the BCTS blocks

The participants are in conformance with the target for this indicator.

# **REVISIONS**

There are minor wording revisions proposed for this indicator and target – refer to SFMP# 2.

# 3.41. RANGE ACTION PLANS

Indicator Statement	Target Statement			
Consistency with mutually agreed upon action plans for range	Operations 100% consistent with resultant range action plans			
SFM Objective: Provide opportunities for a feasible mix of timber, recreational activities, and non-timber commercial activities				
Linkage to FSJPPR: N/A				



#### Acceptable Variance:

Variances are permissible only on reaching mutual agreement between the affected range tenure holder and participant.

#### **CURRENT STATUS AND COMMENTS**

There were three mutually agreed specific actions completed by the participants during the reporting period, regarding commitments made by Canfor respecting one range tenure (RAN 073257).

One Timber Range Action Plan (TRAP) was amended and signed between Canfor and a range tenure holder (RAN 073257). During the 2009-2010 reporting period, Timber-Range Action Plans (TRAPs) were initiated for:

RAN 076315 regarding TSL A63433 RAN 074982 regarding TSL A63433 RAN 075020 regarding TSL A85686, A85687 & A85688.

Many of these TRAP's require further discussions with the Range Tenure holder's prior to TRAP development and sign-off.

Participants' operations were 100% consistent with mutually agreed upon action plans due during the reporting period, regarding range tenures.

#### **REVISIONS**

There are no proposed revisions to this indicator or the target. The participants included a 'Range Action Plans' indicator in SFMP #2.

#### **3.42. DAMAGE TO RANGE IMPROVEMENTS**

Indicator Statement	Target Statement			
Number of range improvements damaged by participants' activities	No damage to range improvements by pilot participants' activities			
SFM Objective:				
Provide opportunities for a feasible mix of timber, recreational activities, and non-timber commercial activities				

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

#### Acceptable Variance:

Temporary removal or alteration of a range improvement to enable short-term forestry activities to proceed, however repairs or replacement of improvements must be completed in less than 1 year. The indicator would not apply if the participant can implement alternative mitigation measures to the satisfaction of the range tenure holder.

#### CURRENT STATUS AND COMMENTS



During the 2009/10 reporting period there were two cases of range improvements being damaged by participants' activities.

The first affected range tenure area was RAN 074017. The damage resulted from a fence being breached to allow access for harvest operations of TSL A82098. A gate was installed at the breach point to allow for future access. No further action was required.

The second affected range tenure areas are RAN 076539 and RAN 076309, which share a common boundary that has a fence line along it. The fence was required to be breached in several locations to facilitate road construction and harvesting of block S01277. An action is in place to have gates installed at the road-fence locations prior to March 2011 (COPI reference id# 3660).

There was a report of damage to range improvements received in late March of 2009 that was not reported in the 2008-2009 Annual Report (ITS 08-013-A). The alleged damage was to have occurred during the 2007-2008 reporting period, during the harvesting of A66555. A review of the fence by BC Timber Sales personnel determined that little, if any, damage was caused by the harvest activities. BC Timber Sales met with the Range Officer of the Ministry of Forests and Range to discuss repair options and responsibilities. The Range Officer was to forward all relevant information to the District Manager for review and determination of responsibilities. BC Timber Sales is still awaiting a decision from the Ministry of Forests and Range on this issue.

The participants are consistent with the target for this indicator.

### **REVISIONS**

There are no proposed revisions to this indicator or the target. The participants included a 'Damage to Range Improvements' indicator in SFMP #2.

#### 3.43. RECREATION SITES

Indicator Statement	Target Statement			
The number of recreation sites managed by participants	Participants will provide and maintain a minimum of one recreational site within the DFA			
SFM Objective: Provide opportunities for a feasible mix of timber, recreational activities, and non-timber commercial activities				
Linkage to FSJPPR: N/A				

#### Acceptable Variance:

No less than the target.

# **CURRENT STATUS AND COMMENTS**

Canfor continued operation of the Crying Girl Prairie campsite, utilizing a local contractor to provide firewood, site cleanup, outhouse cleaning, and garbage disposal. The participants are in conformance with the target for this indicator.

#### <u>REVISIONS</u>



There are minor wording revisions proposed for the indicator and target, refer to approved SFMP# 2.

#### **3.44. VISUAL QUALITY OBJECTIVES**

Indicator Statement	Target Statement
Consistency with Visual Quality Objectives (VQO's)	Pilot participants' forest operations will be consistent with the established VQO's

#### SFM Objective:

Provide opportunities for a feasible mix of timber, recreational activities, and non-timber commercial activities

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.

# Acceptable Variance:

Variances to established VQO's, which have a supporting rationale, and are approved by the District Manager, are acceptable.

#### **CURRENT STATUS AND COMMENTS**

Between April 1, 2009 and March 31, 2010 Canfor completed 2 Post-harvest Visual Quality Assessments. The Post-harvest Visual Quality Assessments concluded that the visual quality objective (Modification) had been met.

BCTS completed 1-post harvest visual quality assessments and the visual quality objective had been maintained.

The participants are in conformance with the target for this indicator.

#### **REVISIONS**

There are no proposed revisions to this indicator.

#### **3.45. RECREATION OPPORTUNITY SPECTRUM**

Indicator Statement	Target Statement
Percent of area in primitive and semi-primitive non-motorized classifications of the Recreation Opportunity Spectrum (ROS) for Besa-Halfway- Chowade (B-H-C), Graham North (GN), Graham South (GS), and Crying Girl (CG) Resource Management Zones (RMZ).	Maintain the primitive level ROS percentage at 15% (1996 levels) for the B-H-C RMZ as proposed by the LRMP. Retain a minimum of 50% of area by RMZ as semi-primitive non-motorized ROS class for the Graham North, Graham South and Crying Girl RMZ
SEM Objective:	

# SFM Objective:

Provide opportunities for a feasible mix of timber, recreational activities and non-timber commercial activities

**Linkage to FSJPPR:** For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.



# Acceptable Variance:

The primitive Recreation Opportunity Spectrum (ROS) percentage for the B-H-C may fluctuate over time as roads are constructed and permanently deactivated to retain the percentage at 1996 levels. At any given time the primitive ROS percentage may decrease down to 10% on a temporary basis until such time as the constructed forest roads are permanently deactivated and the primitive classification is restored.

There is no variance necessary for the remaining RMZ's.

## **CURRENT STATUS AND COMMENTS**

The FOS was analyzed to project the potential impact on the ROS targeted percentages, and the results reported in the 2004-2005 Annual Report, with all proposed development being consistent with the SFMP ROS targets. Many of the blocks proposed by FOS# 1 for harvest in the Crying Girl and Graham RMZs have not been harvested and no new activities have been proposed in subsequent amendments to the FOS within the RMZ's to which this indicator apply.

The participants are therefore in conformance with the target for this indicator.

Analysis related to this indicator will be conducted prior to the submission of FOS #2 to government.

#### **REVISIONS**

There are no proposed revisions to this indicator or the target. The participants included a 'Recreation Opportunities Spectrum' indicator in SFMP #2.

#### 3.46. ACTIONS ADDRESSING GUIDES, TRAPPERS AND OTHER INTERESTS

Indicator Statement	Target Statement	
Consistency with mutually agreed upon action plans for guides, trappers and other known non- timber commercial interests	Operations 100% consistent with the resultant action plans	
SFM Objective: Provide opportunities for a feasible mix of timber, recreational activities and non-timber commercial activities		
Linkage to FSJPPR: N/A		

#### Acceptable Variance:

Variances are permissible only on reaching mutual agreement between the affected tenure holders and participant.

# **CURRENT STATUS AND COMMENTS**

Canfor completed five actions, mutually agreed upon with trappers, during the reporting period. All the actions related to more detailed information sharing (regarding either block scheduling, spatial location of blocks, contractors operating on trapline areas, or debris burning). The ITS issue reference identifications are as follows: ITS-FSJ-2009-0109, ITS-FSJ-2009-0104, ITS-FSJ-2009-0114, ITS-FSJ-2009-0115, and ITS-FSJ-2009-0120. There were no mutually agreed upon actions developed with guides during the reporting period, nor were there any outstanding actions relating to trappers or guides to be completed.



The participants' activities are consistent with the indicator and target.

# **REVISIONS**

There are minor wording revisions proposed for this indicator and target – refer to SFMP# 2.

# 3.47. TIMBER PROCESSED IN THE DFA

Indicator Statement	Target Statement
Volume of timber processed in the DFA in proportion to volume harvested in the DFA	The annual equivalent of a minimum of 70% of the DFA's harvest is primary processed in the DFA <sup>11</sup>
SFM Objective: Viable timber processing facilities in the DFA	
Linkage to FSJPPR: N/A	

#### Acceptable Variance:

An acceptable negative variance of 5% (minimum of 65% of the harvest processed in Defined Forest Area (DFA). This target level and variance is necessary to account for timber harvested within the DFA that is not directly harvested by the participants thus having less control as to its final processing destination.

# **CURRENT STATUS AND COMMENTS**

The following table outlines the volume of timber processed in the DFA in proportion to the entire volume of timber harvested in the DFA up to and including March 31, 2010.

# Table 21: Proportion of Total Volume Locally Processed

Total Scaled Volume of Timber Originating Within the DFA	Total Scaled Volume of Timber Delivered to Local Processing Plants	Percentage of Total DFA Volume Processed Locally
596,869m <sup>3</sup> coniferous	820,064m <sup>3</sup> coniferous	137.4%
665,324m <sup>3</sup> deciduous	773,030m <sup>3</sup> deciduous	116.2%
1,262,193 m <sup>3</sup> total	1,593,094 m <sup>3</sup> total	126.2%

Note: The above quoted volumes include woodlot and private wood but does not include oil and gas salvage since there is no way to determine from which Timber Supply Area the salvage wood originated.

The volume of timber processed in the DFA exceeds the volume harvested in the DFA, therefore the participants operations are consistent with the target for this indicator.

# **REVISIONS**

There are no proposed revisions to this indicator or the target.

<sup>&</sup>lt;sup>11</sup> Indicator as revised in Oct 30,2005 submission of 2004-2005 Annual Report



#### 3.48. SUMMER AND FALL VOLUMES

Indicator Statement	Target Statement	
Volume of timber (m <sup>3</sup> ) delivered annually to mills between May 1 <sup>st</sup> and November 30 <sup>th</sup>	2003: Minimum of 100,000 m <sup>3</sup> coniferous delivered to FSJ sawmill	
	2004+: Minimum of 150,000 m <sup>3</sup> coniferous delivered to FSJ sawmill and 185,000 m <sup>3</sup> delivered to the deciduous manufacturing facilities	
SFM Objective: Viable timber processing facilities in the DFA		
Linkage to FSJPPR: N/A		

# Acceptable Variance:

The target volumes assume planned production levels are achieved at the local mills, once they are fully operational. Commencing in 2004, allowable variances for minimum deliveries will be proportional to the number of actual operating weeks, divided by the normal fifty operating weeks of the facilities per year.

# CURRENT STATUS AND COMMENTS

Between May 1st, 2009 and November 30th, 2009, a total of 324,562 m<sup>3</sup> were delivered to the Fort St. John sawmill, and a total of 269,691 m<sup>3</sup> were delivered to the deciduous manufacturing facilities to support continuing operations throughout the summer and fall. The total volumes delivered exceed the minimum volumes required to meet the target.

The participant's activities are consistent with the indicator and target.

# **REVISIONS**

There are minor revisions proposed to this indicator or the target – refer to SFMP# 2.

#### 3.49. HARVEST SYSTEMS

Indicator Statement	Target Statement	
% of coniferous area harvested using conventional ground based harvesting equipment during the term of the SFM Plan.	95% of the coniferous harvested area will utilize conventional ground based harvesting equipment	
SFM Objective: Viable timber processing facilities in the DFA		
Linkage to FSJPPR: N/A		

# Acceptable Variance:

An acceptable variance range will be 85% to 99% of the harvest area utilizing conventional ground based harvesting systems.

# **CURRENT STATUS AND COMMENTS**

The SFMP monitoring procedure indicates that conformance to the target for this indicator will be reported in the next SFMP.



During the 2009 annual reporting period, both BCTS and the licensee participants had 100% of the area in coniferous blocks harvested using ground-based harvesting equipment. This reflects the recent transition to focus harvesting in mountain pine beetle infested stands on relatively flat terrain.

Reporting Period	2004	2005	2006	2007	2008	2009	5 year SFMP Period
% ground based harvest	97.5%	99.0%	100%	100%	100%	100%	99%

Over the course of the 5-year SFMP planning period the participants activities have been consistent with the indicator and target.

# **REVISIONS**

This indicator has been deleted from SFMP# 2.

#### 3.50. COORDINATION

Indicator Statement	Target Statement
Joint FOS	All FOS's will be jointly prepared by active participants
SFM Objective: Viable timber processing facilities in the DFA	
Linkage to FSJPPR: N/A	

# Acceptable Variance:

May exclude participants who may not be required to complete a FOS.

# CURRENT STATUS AND COMMENTS

Participants jointly prepared a Forest Operations Schedule (FOS), which was submitted to the Ministry of Forests in December of 2004 following a public review and comment period. The joint preparation of the FOS effectively reduced preparation and consultation costs, and allowed a comprehensive analysis of the accumulative effects of forestry activities on key landscape level indicators. This analysis was incorporated into the FOS rationale of consistency with the SFMP. Subsequent FOS amendments have been coordinated through the development of a mutual notification protocol.

During the reporting period there were ten minor amendments to the FOS conducted or initiated by the participants. The participants were consistent in following the established amendment procedures, pertaining to ensuring that all participants are aware of, or are involved in, amendments to the FOS.

Work continued on development of a replacement Forest Operations Schedule during the reporting period. The project to identify 6+ years of available fibre in FOS# 2 is being jointly managed by Canfor and BCTS. The participants are consistent with the target for this indicator.

# **REVISIONS**

There are minor wording revisions proposed for this indicator and target – refer to SFMP# 2.



#### **3.51. UTILIZATION**

Indicator Statement	Target Statement	
The percentage of blocks and roads (excluding BCTS Tenures) assessed in which avoidable waste and residue accumulation levels are within the target range	Annually, 100% of blocks and roads (excluding BCTS tenures) will fall within the target avoidable waste and residue accumulation levels. Annually, BCTS will report the % of blocks and roads which fall within the target range of avoidable waste and residue accumulations.	
SFM Objective: No decrease in the Long Term Harvest Level (LTHL) in the DFA		
Linkage to FSJPPR: N/A		

# Acceptable Variance:

Maximum acceptable annual variance is 5% less than the target (excluding BCTS tenures).<sup>12</sup>

# **CURRENT STATUS AND COMMENTS**

Canfor completed waste survey assessments on 13 cut blocks that had a merchantable area of 1197.3ha. The waste survey had no samples that exceeded the avoidable waste target. The waste survey sample contained blocks harvested by 9 different contractors and included both conifer and deciduous leading cut blocks from 7 different operating areas (Inga Lake, South Blueberry, Kobes Creek, Prespatou Creek, Beatton-Doig, Aikman Creek and Wonowon). Results from the surveyed blocks were extrapolated to the entire population of blocks harvested, as per MOFR waste and residue sampling guidelines. Harvesting occurred on a total of 35 blocks between April 1, 2009 and March 31, 2010. The merchantable area of the 35 blocks is 3535.5ha.

The Forest Licence participants met the target for the utilization indicator.

Between April 1, 2009 and March 31, 2010, BC Timber Sales' licensees completed harvesting on 18 blocks. BC Timber Sales personnel measured three blocks, all of which were below the allowable avoidable waste and residue levels

The remaining 15 blocks were to be assessed by the BC Timber Sales licensees as part of the new license requirements. Of the 15 blocks, 13 have been assessed and the findings reported to the Ministry of Forests and Range. 3 blocks were above the allowable avoidable waste and residue levels. The two remaining blocks are to be assessed and reported prior to hazard abatement.

The participants are in conformance with the target for this indicator.

#### **REVISIONS**

This indicator has been deleted from SFMP# 2.

<sup>&</sup>lt;sup>12</sup> Utilization Indicator statement, Target, and Acceptable Variance as revised in the 2005-2006 Annual Report

# **3.52. TIMBER PROFILE**

Indicator Statement	Target Statement	
The proportion (%) of area of height class two pine types to total cutblock area, in blocks harvested	November 15th, 2001 - March 31 <sup>st</sup> , 2006: 8% or more of the total cutblock area of coniferous blocks harvested will be in height class two pine inventory types	
	Subsequent 5 year periods: 8% or more of the total cutblock area of coniferous blocks harvested will be in height class two pine inventory types	
SFM Objective: No decrease in the LTHL in the DFA		
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the		

# Acceptable Variance:

landscape level strategies.

November 15th, 2001 - March 31st, 2006: Not less than 5% of the total cutblock area of coniferous blocks harvested in each time period will be from height class two pine inventory types. April 1, 2006-March 31, 2011: Allowable variance reduced to 0% for this five-year period to provide flexibility to address urgent forest health issues.

# **CURRENT STATUS AND COMMENTS**

The indicator target is based on a 5-year summation of harvesting in height class 2 pine stands. The first period expired concluded in March of 2006, and the second five year period commenced in April of 2007, and will conclude in April of 2011.

An analysis was completed of timber harvesting on pilot project blocks for the assessment period of November 15<sup>th</sup>, 2001 to March 31<sup>st</sup>, 2006. The assessment was reported in the 2006-2007 Annual Report.

No new harvesting occurred during the reporting period in height class two stands, due to the redirection of harvesting to address mountain pine beetle infested areas.

The participants' activities are consistent with the indicator and target.

# **REVISIONS**

To provide flexibility to the participants to focus harvesting on the high priority mountain pine beetle infested areas for the next few years, a proposal to revise the acceptable variance for this indicator was finalized at the March 6, 2008 meeting of the Fort St. John Pilot Project Public Advisory Group.

#### 3.53. CUT CONTROL

Indicator Statement	Target Statement
The percentage of the actual periodic cut control relative to target periodic cut control	Cut control volumes will not exceed 110% of the 5 year periodic cut control volume on each participant's licence
SFM Objective: No decrease in the Long Term Harvest Level (LTHL) in the Defined Forest Area	



(DFA)

Linkage to FSJPPR: N/A

# Acceptable Variance:

None.

# CURRENT STATUS AND COMMENTS

This is year two of a new five-year cut control period for FL A18154. The five-year target cut control volume is 1,974,760 m3. The actual harvested volume for year two was 222,692 m3, or 56% of the target.

Pulpwood Agreement #12 (Canfor): Approximately 63,248 m3 was harvested off of Forestry Licences to Cut under PA 12, well below the maximum allowable annual harvest of 500,000 m3.

The annual coniferous allotment in 2009/10 was 372,059 m3. Between April 1, 2009 and March 31, 2010, BC Timber Sales' offered 159,529 m3 (42.9%) of the annual allocation. All coniferous volume offered for sale in 2009/2010 was sold.

The annual deciduous allotment in 2009/10 was 180,000 m3. Between April 1, 2009 and March 31, 2010, BC Timber Sales' offered 117,202 m3 (65.1%) of the annual allocation. Of the 117,202 m3 offered for sale, 59,676 m3 (33% of annual allocation) sold.

The participants' activities are consistent with the indicator and target.

# **REVISIONS**

There are minor wording revisions proposed to this indicator or the target – refer to SFMP# 2.

#### 3.54. DOLLARS SPENT LOCALLY ON EACH WOODLANDS PHASE

Indicator Statement	Target Statement			
Percentage of dollars spent locally on each woodlands phase in proportion to total expenditures	Woodlands Phases to be monitored: Logging/hauling: minimum of 80% Road construction/maintenance: minimum of 80% Silviculture: minimum of 8% Planning and administration: minimum of 50%			
SFM Objective: Diverse local forest employment opportunities exist in the DFA				
Linkage to FSJPPR: N/A				

# Acceptable Variance:

A 10% variance of the minimum target is required for each identified woodlands phase as the dollars to be spent fluctuate annually, depending on the amount of harvesting completed that year.

# CURRENT STATUS AND COMMENTS



The following table outlines local expenditures by woodlands phase, and performance relative to targets for this reporting period.

Woodlands Phase	Total dollars expended	Total dollars spent locally	Local %	Indicator target
Logging and Hauling	\$38,838611.57	\$32,236,232.47	83%	80%
Reforestation	\$1,615,949.29	\$105,566.49	6.5%	8%
Road construction and Maintenance	\$2,249,261.00	\$1,839,642.44	81.8%	80%
Planning and Administration	\$3,390,554.27	\$2,667,410.49	78.7%	50%
Total	\$46,094,376.18	\$36,848,851.89	79.9%	

# Figure 8: Dollars Spent Locally by Woodlands Phase - 2009

The percentage of dollars spent locally met targets for all phases except reforestation. Approximately 80% of all expenditures were made locally.

It should be noted that BCTS costs for this indicator refer to April 1, 2008-March 31,2009, while other participant's costs are based on calendar year reports due to reporting limitations. This is consistent with previous annual reports for this indicator.

The participants' activities are consistent with 3 of the 4 targets associated with the indicator.

# **REVISIONS:**

No change is required to the target or indicator.

#### 3.55. VALUE AND TOTAL NUMBER OF TENDERED CONTRACTS VERSUS TOTAL CONTRACTS

Indicator Statement	Target Statement			
Value of tendered contracts in proportion to the total value of all awarded contracts on an annual basis	A minimum of 50% of the total value of contracts will be tendered on an annual basis			
SFM Objective: Provide opportunities for a range of interests to access benefits				
Linkage to FSJPPR: N/A				

# Acceptable Variance:

A variance of 10% is required for this indicator as the dollars to be spent fluctuate annually dependent on the amount of harvesting completed.

# CURRENT STATUS AND COMMENTS

The following table outlines the number and value of contracts awarded annually.



Contract Type	# of contracts	Total value of contracts	% Value	Indicator target
Tendered	31	\$6,843,429.89	36.08%	50%
Direct Award	241	\$12,122,660.58	63.92%	n/a
Total number of contracts	272	\$18,966,090.47	100%	

# Figure 9: Contract Value and Tender Summary

The percentage of the value of contracts tendered does not meet the indicator target, and is not within the acceptable variance range for this indicator. The participants are **not** in conformance with this indicator.

During this reporting period, the participants faced extreme pressure to control and to reduce costs in order to continue to operate. In an effort to reduce costs and to maintain work quality, contracts that would normally have been tendered were awarded directly to the past years contractors, with a targeted cost reduction. It was believed that this was the correct course of action to a) reduce costs and b) to maintain the quality of work completed in order to maintain a cost structure that would allow the Fort St John operations to remain open during the global recession. A reduction in the value of work outsourced was also achieved and some work that was contracted in prior years was completed internally, also to control costs. These cost reduction activities were successful in producing an acceptable cost structure, which was instrumental in the decision to maintain operation of the Fort St. John mills during the recession.

Because of the cost reduction activities completed by the participants in response to unprecedented negative local and global economic pressures in the forest industry the participants' did not achieve the target for this indicator in the 2009-10 reporting period.

It should be noted that BCTS costs for this indicator refer to April 1, 2009-March 31, 2010, while other participant's costs are based on the 2009 calendar year reports due to reporting limitations. This is consistent with previous annual reports for this indicator.

# **REVISIONS**

No revisions are required to the indicator or target.

Indicator Statement	Target Statement		
% conformance by participants to SFM elements pertinent to treaty rights (i.e., hunting, fishing and trapping) defined in Treaty 8	Participants will conform 100% to the SFM Indicators and Targets of the SFM Elements pertinent to sustaining hunting, fishing and trapping, as follows:		
	Element 1.1 Ecosystem Diversity (Indicators 2, 3, 4), and Element 1.2 Species Diversity (Habitat Elements) Indicators (5, 6, 7, 8, 9), and		
	Element 3.2 Water Quality and Quantity Indicators (34, 35, 36, 37)		

# 3.56. CONFORMANCE TO ELEMENTS PERTINENT TO TREATY RIGHTS



#### SFM Objective:

Recognition of Treaty 8 rights and respect aboriginal rights in development of plans

Linkage to FSJPPR: N/A

# Acceptable Variance:

Variances provided in the specific indicators will apply.

# **CURRENT STATUS AND COMMENTS**

During the period of April 1, 2009 to March 31, 2010 the participants conformed to 8 of 8 (100%) of the Ecosystem Diversity and Species Diversity indicators, targets and acceptable variances.

The participants conformed to 4 of 4 (100%) of the Water Quality and Quantity indicators, targets and variances during this period.

The participants' activities are consistent with the target for this indicator.

# **REVISIONS**

There are minor wording revisions proposed for this indicator and target - refer to SFMP# 2.

#### 3.57. NUMBER OF KNOWN VALUES AND USES ADDRESSED IN OPERATIONAL PLANNING

Indicator Statement	Target Statement			
% of known traditional site-specific aboriginal values and uses identified during SFMP, FOS, FDP, or PMP referrals addressed in operational plans	100% of known traditional site-specific aboriginal values and uses identified during SFMP, FOS, FDP, or PMP referrals will be addressed in operational plans			
SFM Objective:				
Respect known traditional aboriginal forest values and uses				
Linkage to FSJPPR: N/A				

# Acceptable Variance: None

# **CURRENT STATUS AND COMMENTS**

Between April 1, 2009 and March 31, 2010, opportunity to provide information on site-specific values from First Nations to Canfor & BCTS was available through the formal processes of NIT (notice of intent to treat) communications, and the deciduous *Memorandum of Agreement* Joint Management Advisory Committee (Canfor, LP and the First Nations), as well as other formal or informal communication. Archaeological Impact Assessments (AIAs) are another method used by the participants to gather information on site-specific First Nations' values.

In response to *Notification of Intent to Treat* (NIT) referrals conducted under the PMP's during the reporting period one site-specific comment was brought forward to BCTS. The Halfway River First Nation had a concern with two blocks in the Farrell Creek area where the Band conducts hunting activities. An aerial viewing by helicopter of the blocks was conducted with representatives from the Band. The Band representatives were satisfied that the proposed



treatment would not interfere or negatively impact upon their activities. However during this flight a small previously unidentified mineral lick was discovered. As a result, this area was buffered out from the proposed treatment area and the operating plan was changed prior to treatment.

During *Notification of Intent to Treat* (NIT) discussions lead by Canfor, there were two comments received that related to site-specific concerns. The Halfway River First Nations expressed specific concerns related to blocks 20034 and 307002. Canfor addressed these concerns through commitments for operational mitigation measures (Incident tracking reference = ITS-FSJ-2009-0071).

During the reporting period, BCTS commissioned the completion of five Archaeological Impact Assessments. There were a total of fourteen previously unrecorded archaeological sites found in these assessed blocks. Management of identified archaeological sites was, or will be consistent with the recommendations of the supervising archaeologist.

During the reporting period, licensee participants commissioned five separate Archaeological Impact Assessments. A total of five previously unrecorded archaeological sites were found in three of the blocks assessed. Management of identified archaeological sites was, or will be consistent with the recommendations of the supervising archaeologists.

100% of known traditional site-specific values identified were identified in operational plans. The participants are in conformance with the target for this indicator.

# <u>REVISIONS</u>

There are no proposed revisions to the indicator or the target.

#### 3.58. - REGULATORY PUBLIC REVIEW AND COMMENT PROCESSES

Indicator Statement	Target Statement			
Public Review and Comment Process for the FSJPPR	Obtain PAG acceptance of Public Review and Comment Process Comply with Public Review and Comment Process			
SFM Objective: Satisfactory public participation process				
Linkage to FSJPPR: N/A				

#### Acceptable Variance:

No variances, unless authorized by the Regional Manager.

# CURRENT STATUS AND COMMENTS

During the reporting period there was one case where the participants were required to follow formal Public Review and Comment Process. The participants initiated a public review and



comment period regarding the second Sustainable Forest Management Plan for the Fort St. John Pilot Project area. The public review and comment period ran from February 8 through April 8 2010. The participants followed the procedure set out in the Fort St. John Pilot Project Regulation correctly for the proposed SFMP.

The participants are consistent with the target for the Public Review and Comment requirements set out in the Fort St. John Pilot Project Regulation.

# **REVISIONS**

There are no proposed revisions to this indicator or the target. The participants carried this indicator forward, slightly revised, into SFMP #2.

# 3.59. TERMS OF REFERENCE (TOR) FOR PUBLIC PARTICIPATION PROCESSES

Indicator Statement	Target Statement			
Terms of reference (TOR) for the FSJPPR public participation process	Obtain PAG acceptance of the TOR for public participation process and complete a biennial review of the TOR. <sup>13</sup>			
SFM Objective: Satisfactory public participation process				
Linkage to FSJPPR: N/A				

# Acceptable Variance:

No variances.

# **CURRENT STATUS AND COMMENTS**

- The Public Advisory Group and the Pilot Participants conducted their biennial review of the Terms of Reference during the March 6, 2008 PAG meeting. Each of the sections were discussed as follows:
  - A) No changes proposed.
  - B) No changes proposed.
  - C) Presentations are to be identified to the Chair of the participants at least one week prior to the start of each meeting. Updated list of acceptable meeting locations.
  - D) No changes proposed.
  - E) The participants should distribute the Draft meeting agenda at least 2 weeks prior to next meeting. Also included requirement to conduct PAG surveys.
  - F) No changes proposed.
  - G) Added Energy to list of interests, removed Ministry of Agriculture and Lands from reference to ILMB as an advisor.
  - H) No changes proposed
  - I) No changes proposed
  - J) Proposed changing the next revision date from March 2010 to February 2012.

The next review of the Terms of Reference is scheduled to occur in February 2012.

# **REVISIONS**

<sup>&</sup>lt;sup>13</sup> Target as revised in the 2005-2006 Annual Report



There are minor wording changes proposed for this indicator and the target, refer to approved SFMP# 2.

#### 3.60. PUBLIC INQUIRIES

Indicator Statement	Target Statement			
The percentage of timely responses to Public InquiriesRespond to 100% of public inquiries regarding forestry practices within one month of receipt				
SFM Objective:				
Satisfactory public participation processes				
Relevant information used in decision making process is provided to PAG, FNAG, general public and affected parties				
Linkage to FSJPPR: N/A				

#### Acceptable Variance:

Responses will be provided to all inquiries, provided contact information is provided so that the participants can reach the person making the inquiry. Where the public inquiry is related to an existing consultation process that has a regulatory review and comment period, response timelines may be modified to coincide with the timeframes included in the regulatory review period.

#### CURRENT STATUS AND COMMENTS

Licensee participants received public inquiries five times during the reporting period. The nature of the inquiries, and a general summary of response for each, follows below.

Canfor received a call from a local First Nation's person, on behalf of another, who was concerned about harvesting proposed in the vicinity of a cabin (ITS-FSJ-2009-0075). After meeting with the cabin owner at the site of the cabin, a suitable block boundary location was agreed upon. In addition, Canfor intends to prescribe some variable retention harvesting in portions of the harvest area closest to the cabin.

Canfor received an inquiry from a local First Nation regarding how to facilitate involvement of the First Nation's band members in the silviculture survey activity. Canfor staff worked with the First Nation staff to explore the potential of this idea, including funding sources, logistics, etc. Several actions were taken by both parties to move the idea forward. However by the end of the reporting period there was a lack of interest from the potential labour force, and as such the idea has not yet been implemented. A detailed log of actions taken regarding this inquiry is saved in Canfor's Incident Tracking System (ITS-FSJ-2009-0083).

Canfor received a call from a local First Nation objecting to the layout and planned harvest of a specific cut block. After further discussion, the First Nation representatives indicated the nature of their concern regarding the specific area. Discussions on this topic continued past the reporting period, and have not concluded as of the production of this Annual Report. A detailed log of actions taken regarding this inquiry is saved in Canfor's Incident Tracking System (ITS-FSJ-2009-0090).



During the public review and comment period for SFMP #2, the participants received an inquiry from a concerned member of the public. Canfor staff met with the public member in person, and provided responses to the concerns expressed. A written copy of the responses was delivered at a later date.

Canfor received a set of comments on one occasion relating to the Forest Operations Schedule Amendment # 64, which was advertised and available for public review and comment. Comments and responses to them were included in the final amendment notification submitted to government.

All inquiries received by the participants during the reporting period were responded to within 30 days; therefore the participants are in conformance with this indicator.

# **REVISIONS**

There are no proposed revisions to this indicator or the target.

# 3.61. INFORMATION PRESENTATIONS & FIELD TRIPS<sup>14</sup>

Indicator Statement	Target Statement			
Number of Information Presentations or Field Trips provided for PAG membership	Provide PAG with at least 1 Presentation or field trip annually (between April 1 and March 31) commencing in 2005			
SFM Objective: Relevant information used in decision making process is provided to PAG, general public and affected parties				
Linkage to FSJPPR: N/A				

# Acceptable Variance:

None

# **CURRENT STATUS AND COMMENTS**

During the reporting period, the participants hosted one field trip. The field trip focused on reforestation concepts and featured five local sites. Information presented and discussion topics included understorey conifer retention, vegetation control, and silviculture aspects of mixedwood management (mixedwood ledger, intimate mixtures, discrete mixes, etc.)

There were five information presentations conducted at Public Advisory Group meetings during the reporting period. Topics included Soil Quality and Quantity, Water Quality and Quantity, Fisheries Sensitive Watersheds, Boreal Caribou, and Patch, Seral, and Adjacency concepts.

The participants are consistent with the target for this indicator.

# **REVISIONS**

This indicator will carry forward to SFMP #2, without changes to the indicator or the target.

<sup>&</sup>lt;sup>14</sup> New Indicator in 2005 replaced redundant STAC indicator





# 4. SUMMARY OF ACCESS MANAGEMENT

**Table 22** represents a summary of access construction activities by participant:

Steward	Bridge Construction	New Construction (metres)	Reconstructed or Reactivated (metres)	Surfacing (metres)	Grand Total (metres)
BCTS	0	33,745	21,343	0	55,088
Cameron River	0	291	0	0	291
Canfor Fort St. John	0	42,614	2,565	15,970	61,149
L.P.	0	47,578	0	0	47,578
Grand Total	0	124,228	23,908	15,970	164,106

# Table 22: Summary of Participants' Road and Bridge Construction Activities

BC Timber Sales access management activities for the period April 1, 2009 to March 31, 2010 are detailed **Appendix 3**. Other participants' activities are detailed in **Appendix 3**.

# 5. SUMMARY OF TIMBER HARVESTING

**Appendix 4** contains detailed information on timber harvesting activities. **Table 29** presents a summary of all participants' timber harvesting activities.

# 6. SUMMARY OF BASIC FOREST MANAGEMENT (REFORESTATION)

A summary of the reforestation activities carried out by all participants is included in Tables within **Appendix 5.** BCTS activities are shown in **Table 30** (Establishment Delay Complete-Inventory Label), **Table 31** (Establishment Delay Complete- Silviculture Label), **Table 32** (MSQ data by Block), **Table 33** (Planting Activities), and **Table 35** (Predicted and Target Volumes by Stratum).

All other Participants activities are shown in **Table 38** (Establishment Delay Report-Inventory Layer), **Table 33** (MSQ data by Block), **Table 37** (Planting Activities), and **Table 36** (Predicted and Target Volumes by Stratum).

# **Mixedwood Management**

The commitment for the term of the SFMP regarding intimate mixtures of conifer and deciduous is to manage intimate mixtures on ten percent of the harvested mixedwood land base as operational trials.

# BCTS

Licensees holding BCTS tenures harvested 5966 ha of forested lands over this time period. Of this area, 2708 ha was from stands classified by the percentage of net merchantable volume by species as being either conifer leading or deciduous leading mixtures (CD or DC). This equated to an amount of 270.8 ha of harvested area as a minimum commitment to manage towards intimate mixtures. Currently, BCTS has designated a total of 282.2 ha as intimate mixtures, which is 10.4% of the mixedwood allocation area. This demonstrates achievement of the ten percent target over the term of the SFMP by BCTS.



#### **Licensee Participants**

Licensees' tenures harvested 24,049 ha of forested lands over this time period. Of this area, 4216 ha was from stands classified by the percentage of net merchantable volume by species as being either conifer leading or deciduous leading mixtures (CD or DC). This equated to an amount of 421.6 ha of harvested area as a minimum commitment to manage towards intimate mixtures. Currently participants have designated a total of 338.9ha as intimate mixtures, which is 8.0% of the mixedwood allocation area. This demonstrates that the licensee tenures are currently 2% (or 82.7ha) below the ten percent target over the term of the SFMP. The participants are committed to continue to identify opportunities for mixedwood operational trials over the term of SFMP# 2.

#### Summary

For the term of this SFMP, a total of 9% of mixedwood stands are being managed as operational trials of intimate mixtures in the Fort St John Pilot Project Area.

# 7. INCREMENTAL FOREST MANAGEMENT (STAND TENDING)

There were no stand tending activities carried out between April 1, 2009 and March 31, 2010.

# 8. SUMMARY OF ANY VARIANCES GIVEN

The following is a summary of variances given for licensee participants between April 1, 2009 and March 31, 2010.

Licence	FDP Blk # or Location	Regulatory Requirement	Description of Variance	Date Approved	Approval
A54406	1	Section 32 (4)	Extension of late well growing date	2009-12-21	MOF – District Manager
A52288	1	Section 32 (5)	Stocking standard change	2009-07-03	MOF – District Manager
A51914	2	Section 32 (4)	Extension of late well growing date	2009-04-28	MOF – District Manager
A54408	1	Section 32 (4)	Extension of late well growing date	2009-04-28	MOF – District Manager
All Licensee participa nts	TSA	Section 25 (1)	Variance provided to use the Chief Forester's Standards for seed use	2009-05-08	MOF – District Manager

#### Table 23: List of Variances

A variance was also given Canfor to vary the seed used in reforestation of the following Woodlots (some are within the Fort St John TSA, some are in the Dawson TSA): 1924, 1218, 0297, 0668 and 1467. This is outside of the participants' responsibilities under the FSJPPR.



## 9. COMPLIANCE

#### 9.1. CONTRAVENTIONS REPORTED

Licensee participants reported five contraventions to government agencies (MFR and MOE) between April 1, 2009 and March 31, 2010. One of the contraventions discovered in August 2009, occurred prior to the reporting period (August of 2008) and was and reported to MOE in December of 2009. A summary of the contraventions reported can be found in **Appendix 6**.

BCTS had one contravention, which was reported to government agencies between April 1, 2009 and March 31, 2010.

# 9.2. COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT UNDER PART 6 OF THE ACT

There were no compliance and enforcement penalties imposed on licensee participants by the Government under Part 6 of the Forest Practices Code of B.C. Act between April 1, 2009 and March 31, 2010.

There were three compliance and enforcement measures imposed by the Government under Part 6 of the *Forest Practices Code of B.C. Act* between April 1, 2008 and March 31, 2009 on licensee participants. These measures were in the form of "Compliance Notices". Refer to Appendix 6 for further detail regarding the compliance and enforcement measures imposed by Government on Licensee participants.

There were no compliance and enforcement measures imposed on BCTS by the Government under Part 6 of the Forest Practices Code of B.C. Act between April 1, 2009 and March 31, 2010

# **10. AMENDMENTS TO FDP'S OR FOREST OPERATIONS SCHEDULE**

The following table is a summary of amendments for which notice was not required to be published, that were made from April 1, 2009 to March 31, 2010.



<u>Plan</u>	Licence	Amendment ID	Date	Block / Road	Amendment Description	
FOS	CFP/LP	65	08-June-09	1. 05006	1. Change to proposed road location.	
FOS	PA 12/ A60972	66	21-July-09	1. S02091/02086 2. S02091/02086 3. 02082	<ol> <li>Block divided into two based on distinctive conifer/deciduous timber types.</li> <li>Change to proposed location to avoid crossing an S3 stream.</li> <li>Transfer block from license A18154 to A60972 to manage cut control obligations.</li> </ol>	21-July-09
FOS	A56771/ A18154	67	28-July-09	1. 09075/09025 2. 09075/09025	<ol> <li>Block divided into two based on distinctive conifer/deciduous timber types.</li> <li>Transfer blocks from license A56771 to A18154 to manage cut control obligations.</li> </ol>	28-July-09
FOS	A18154/ A60972	68	28-July-09	04060	Transfer block from license A18154 to A60972 to manage cut control obligations.	28-July-09
FOS	A18154/ A60972	69	15-Sept-09	1. 02018/02081 2. 02086	<ol> <li>Splitting of block into two blocks for management of mountain pine beetle.</li> <li>Transfer block from license A60972 to A18154 to manage cut control obligations.</li> </ol>	15-Sept-09
FOS	CFP	70	17-Sept-09	S26005/S26009	1. Change to proposed road location for better alignment, improved road safety and reduced traffic concentration.	17-Sept-09
FOS	CFP	71	22-Sept-09	Road 02-020-00	Utilization of existing road development recently constructed by oil and gas sector	25-July-08
					Block significantly reduced in size from original FOS area,	

# Table 24: Summary of Amendments with No Publication Requirement (Apr1/09-Mar 31/10)

TSL A85683 block 02030

S43022/43001

FOS

FOS

BCTS

A60050/

A18154

72

73

18-Dec-09

08-Jan-10

18-Dec-09

08-Jan-10

split into 3 separate pieces

considered.

on distinctive

resulting in connecting roads outside of block not originally

Block divided into two based

conifer/deciduous timber types

Fort St. John Pilot Project 2009-2010 SFMP Annual Report - Final



FOS	A18154	74	28-Jan-10	S29016	Identify new Operation road	28-Jan-10	
FOS	PA12/ A60972	75	27-Jan-10	02059	Transfer block from license PA12 to A60972	27-Jan-10	
FOS	A18154/ A60972	76	22-Feb-10	02083	Transfer block from license A18154 to A60972	22-Feb-10	

The following is a summary of major amendments made from April 1, 2009 to March 31, 2010 that did go through the formal public review process.

<u>Plan</u>	Licence	Amendment ID	Date	Block / Road	Amendment Description	MOF Notifed of Change
FOS	All participants	64	18-April-09	Major Amendment – 60 day public review and comment Amendment prepared to deal with forest health issues. To show access roads into blocks S02016 and 05006 and to propose an increase in block area to block S02011 beyond the maximum area allowable without further public review and comment		11-April-09

No other major amendments were processed during the annual reporting period (April 1, 2009 to March 31, 2010).

# **11. LANDSCAPE LEVEL STRATEGY IMPLEMENTATION**

The landscape level strategies (LLS) provide the strategic direction to the participants' plans and operations.

The *Fort St. John Pilot Project Regulation* (FSJPPR) specifies the regulatory content of the SFMP. A sustainable forest management plan at a minimum must include landscape level strategies for all of the following:

- timber harvesting,
- road access management,
- patch size, seral stage distribution and adjacency,
- riparian management,
- visual quality management,
- forest health management, and
- range and forage management.

This SFMP also includes a Landscape Level Reforestation Strategy for coniferous plantations.

The FSJPPR also requires the participants to ensure that each strategy contained in the plan specifies the performance indicators for evaluating whether or not the strategy has been successfully implemented. The participants will regularly review each of these indicators for appropriateness and evaluate performance and progress towards the associated targets. A summary of these reviews and any proposals for change will be reported in the SFMP annual reports. The targets will be managed within the continuous improvement process as described in section 3.4 of the SFMP. Following is a summary of



	Performance Indicators			
Landscape Level Strategy	Affecting Part 3 Division 5 of the FSJPPR (Indicator #) <sup>15</sup>	For Evaluation of LLS - Sec 42 of FSJPPR (Indicator #) <sup>16</sup>	Additional - not for regulatory approval (Indicator #)	
4.1 Timber Harvesting	N/A	18,19, 20, 21, 52	27, 48, 49, 50,51,53	
4.2 Road Access Management	24	24, 45	40	
4.3 Patch Size, Seral Stage Distribution and Adjacency	6, 9	2, 3, 4		
4.4 Riparian Management	N/A	7, 22, 34, 36	23	
4.5 Visual Quality Management	N/A	44		
4.6 Forest Health Management	N/A	1, 2, 3, 25	26	
4.7 Range and Forage Management	N/A	10, 42	41	
4.8 Reforestation	29, 30	28,29,30		

the landscape level strategies and related performance indicators, (as identified in Table 8 of the SFMP) approved by the regional manager (MFR) and regional director (MOE) are:

Following is a summary of the degree to which the participants achieved the indicators linked to each of the landscape level strategies:

# Timber Harvesting Strategy

**Harvesting Strategy #1:** Identify suitable areas for summer and fall harvesting, and maintain deliveries during this time period sufficient to meet processing plant fibre requirements, while meeting environmental objectives.

**Indicator # 48- Summer/Winter volumes (Section 3.48)-** Targets were met for both the coniferous sawmill and the OSB mill during the summer and fall of 2009.

**Harvesting Strategy #2:** Manage the utilization of the timber resource so that waste and residue of merchantable timber occurs within an acceptable range.

**Indicator # 51 Utilization (Section 3.51)**. Based on benchmark levels for coniferous stands considered at the time of writing the SFMP, the targeted ranges were met. As per the approved amendment to this indicator, the calculation of this indicator now excludes B.C. Timber Sales Program tenures.

**Harvesting Strategy #3:** Manage harvesting operations to meet periodic cut control levels on all forest tenures managed by participants, including the B.C. Timber Sale Program.

<sup>&</sup>lt;sup>15</sup> Includes indicators related to both Sec35(5) and Sec35(6)of FSJPPR

<sup>&</sup>lt;sup>16</sup> Indicators 2 (Seral Stage) and 3 (Patch Size) are Performance Indicators for both Strategy 4.3 and 4.6



**Indicator # 53 Cut Control (Section 6.53).** This is year two of a new five-year cut control period for FL A18154. The five-year target cut control volume is 1,974,760 m3. The actual harvested volume for year two was 222,692 m3, or 56% of the target.

Pulpwood Agreement #12 (Canfor): Approximately 63,248 m3 was harvested off of Forestry Licences to Cut under PA 12, well below the maximum allowable annual harvest of 500,000 m3.

The annual coniferous allotment in 2009/10 was 372,059 m3. Between April 1, 2009 and March 31, 2010, BC Timber Sales' offered 159,529 m3 (42.9%) of the annual allocation. All coniferous volume offered for sale in 2009/2010 was sold.

The annual deciduous allotment in 2009/10 was 180,000 m3. Between April 1, 2009 and March 31, 2010, BC Timber Sales' offered 117,202 m3 (65.1%) of the annual allocation. Of the 117,202 m3 offered for sale, 59,676 m3 (33% of annual allocation) sold.

The target for this indicator has been met for this reporting period.

**Indicator # 52 Timber Profile - (Section 3.52):** The first 5-year period expired March 31, 2006. The participants' harvesting for that five-year period was 5.0% in height class two pine stands, which, while below the target of 8%, was equal to the minimum acceptable level of 5.0%. The next calculation of this indicator will occur at the end of the next five-year subsequent period. It was recognized that achievement of this target in the current five-year period April 1, 2007-March 31, 2011, would be negatively impacted by the large-scale salvage harvesting programs currently implemented to address the mountain pine beetle infestation. Accordingly, the variance for this period was revised to 0% at the March 6, 2008 Fort St. John Public Advisory Group meeting to provide flexibility to address the urgent forest health issue. No new harvesting occurred in height class II pine stands during the reporting period in order to concentrate harvest activity on mountain pine beetle infested areas.

**Harvesting Strategy #5:** Even-aged silviculture systems such as clearcuts, or clearcuts with reserves, will be the predominant silviculture systems employed, as these systems most closely parallel the even aged forests that result from natural disturbance events in the TSA. Where other resource values are particularly high, small patch or strip cuts may be proposed to maintain non-timber resource values, while allowing for some timber utilization. Modified shelterwoods will be employed in deciduous logging to protect coniferous understorey on an operational trial basis, consistent with the reforestation strategy.

**Indicator # 27- Silviculture Systems** (3.27)- The participants met the target for this indicator; during the reporting period, even aged silviculture systems were used exclusively.

**Harvesting Strategy #6:** Harvest plans will be designed to maintain conventional groundbased harvesting systems as a consistently high proportion of total harvesting systems, in order to minimize cost fluctuations, and support contractor stability.

**Indicator # 49- Harvest Systems (3.49)-** This indicator is intended to be a cumulative measure over the term of the SFMP. In 2009 the participants harvested 100% of the volume with conventional harvesting systems, and over the term of SFMP# 1 harvested an average of 99% of all volume with ground-based systems. This is in compliance with the indicator target variance.

Harvesting Strategy #7: Participants will coordinate the planning of forestry operations to achieve efficiencies in planning and operational phases of the business, to facilitate analysis of



cumulative impacts in relation to SFMP strategies, and to provide consolidated consultation products to interested parties.

**Indicator # 50- Coordination (Section 3.50):** The participants completed and submitted a coordinated FOS in 2004, and continued to coordinate and collaborate on FOS amendments in 2009, therefore meeting the target for this indicator.

**Harvesting Strategy #8:** Timber harvesting within the Crying Girl LU and the portion of the Graham LU that falls within the Graham River valley will be based on sequential clustered development, and will be consistent with the intent of the harvest schedule outlined in the Graham River IRM Plan.

**Indicator #18 - Graham Harvest Timing (3.18):** No harvesting occurred in 2009 in the Graham. The participants were within the targeted timing of harvest, and therefore range for this indicator.

**Indicator #19 - Graham Merchantable Area Harvested (Section 3.19):** The first reporting period was completed in April 2007. The total area harvested in the first reporting period was 3,516 ha, while the maximum allowable harvest for the period was 3,638 (which had been amended downward from 3.869 ha as a result of transferring block 11058 from cluster 4 to cluster 6, as noted in the 2005-2006 Annual Report). No harvesting occurred in the Graham in 2009. The participants are therefore consistent with the indicator's targeted range.

**Harvesting Strategy #9:** Forest Connectivity Corridors in the Graham River IRM Plan area were identified, which provide substantial connectivity throughout the plan area. Operational plans will respect the long-term primary components of these connectivity corridors. If harvesting activities are proposed in any portion of the permanent corridors, to ensure consistency with the original objectives, government agencies will be consulted, and their agreement attained prior to proceeding.

**Indicator # 20 Graham Connectivity (Section 6.20)-** No new harvesting occurred in the Graham this reporting period. The participants are in conformance to this indicator's target and allowable variance. As well, GIS coverage was used as an overlay during the development of the FOS to ensure consistency of future blocks with this indicator.

**Harvesting Strategy #10:** Grand parented blocks (20015, 20016, 20007, 20008 under FL A18154, and 20060 in FL A59959) and related roads within the Cypress Creek drainage will be harvested prior to any other harvesting occurring in the MKMA. Harvesting in the Graham LU will be consistent with the clustered harvesting sequence prepared in the Graham River IRM Plan. A clustered harvesting plan will be prepared for other drainages in the MKMA, similar to the Graham North clustered harvesting plan, and submitted to government prior to being included in future FOS's as needed.

**Indicator # 21- MKMA Harvest (Section 3.21):** Harvesting and associated road construction was previously completed in three grand parented blocks (20007, 20008, and 20060). No other activity has occurred in the MKMA, so the participants are consistent with the indicators related to this strategy. No harvesting occurred in the MKMA in 2009.

**Summary:** The participants conformed to all five (100%) legal indicators, and 11 of 11 total indicators (100%) used to quantify conformance to the timber harvesting strategies.



#### Road Access Management Strategy

**Objective #1**: Sustain those forestlands within our control within the defined forest area (DFA) by limiting the amount of losses within the Timber Harvesting Land Base (THLB) from permanent access structures within blocks.

**Road Access Management Strategy #1:** Replace the current field performance requirement for the allowable percentage of permanent access structures that can be constructed within a cut block as stated in the current regulation. To propose a new field performance requirement that will not be explicitly linked to each individual cutblock but rather would be an average of the total area occupied by permanent access structures in relation to the total aggregate area harvested of all cutblocks in which harvesting was completed during that annual reporting period. This average would be less than the current allowable level under the current field performance requirement.

**Indicator # 24- Permanent Access Structures (Section 3.24)** –Licensee participants current permanent access structures area is at 4.5%, BCTS is at 2.5%, the participants combined PAS is 3.9%, therefore the participants are consistent with the target for this indicator.

**Objective #2:** Foster inter-industry co-operation in minimizing the conversion of forested lands to non-forest conditions and to coordinate access to minimize negative effects on other resources.

**Road Access Management Strategy #2:** Communicate and provide the opportunity for forest industry access management plans to be shared with the oil and gas sector through the Oil and Gas Commission. This would include providing critical forest industry road construction standards so that the forest industry road specifications can be linked with those of the oil and gas sector. Forest industry access plans encompassing all of the participants' activities will be clearly identified within the forest operations schedule (FOS) that will have been prepared for the defined forest area following the approval of this SFMP. By making this information well known and easily available to the oil and gas sector, coordinated infrastructure developments within common operating areas can be implemented, thus eliminating duplicate entries and thereby reducing the amount of forest land converted to non-forest conditions and minimizing the negative effect on other resources.

**Indicator # 40 Coordinated Developments (Section 3.40)-The participants** proposed changes to 7 of the 56 referrals received from Oil and Gas, to either coordinate development, or otherwise minimize impacts to the timber harvesting land base. The oil and gas company proponents agreed to implement 2 of these proposed changes. It is unknown whether the other 5 changes proposed were accepted or not. Participants noted that in many referrals oil and gas activities were already designed to reduce impacts to the timber harvesting land base.

**Objective #3:** Maintain a component of the remoteness and motorized and non-motorized use factors of the Recreational Opportunity Spectrum (ROS) in the following Resource Management Zones: Besa-Halfway-Chowade, Graham North, Graham South and Crying Girl.

**Road Access Management Strategy #3:** Road access in the Resource Management Zones Besa-Halfway-Chowade, Graham North, Graham South and Crying Girl (Graham, Sikanni and Crying Girl LU's) will be planned to maintain over time the primitive ROS class at 1996 levels, and maintain a component of semi-primitive motorized and non-motorized ROS classes. Following the development of a Forest Operations Schedule which will identify all proposed forest operations for the next several years, a sensitivity analysis will be completed which will



quantify the impact of any proposed development on the updated ROS factors. Short term fluctuations to the ROS factors are expected due to forestry activities, however mitigating access deactivation measures will be implemented that will minimize the impacts on the current ROS factors and ensure that a minimum component of each factor is retained in each RMZ.

**Indicator # 45, Recreation Opportunity Spectrum (Section 3.45):** As no logging occurred in this area in 2008 and 2009, the current status remains consistent with the target range for this indicator. As well, projections of proposed roads and blocks from the FOS indicate that harvest plans will allow future activities through 2010 to be consistent with achieving these targets.

# <u>Summary</u>: The participants conformed to both the (100%) legal indicators, and 3 of 3 (100%) total indicators used to quantify conformance to the access management strategies.

# PATCH SIZE, SERAL STAGE DISTRIBUTION AND ADJACENCY

The general strategy implemented in the SFMP is to approximate the pattern, distribution and structure of natural disturbance events (primarily fire), consistent with information provided by Delong (2002).

#### Seral Stage Distribution strategy

The seral stage distribution strategy is summarized in **Indicator # 2 Seral Stage (Section 3.2)**, where targets and timelines for achieving late seral stages for deciduous leading and coniferous leading stands, by NDU, by LU are presented. Where harvesting is proposed in areas falling below thresholds, there are requirements to spatially identify recruitment areas in Forest Operations Schedule.

In 2004 the participants identified rotating reserves in the FOS for coniferous leading stands in the Lower Beatton LU, and for deciduous stands in the Milligan LU. The seral stage analyses conducted in 2010 to identify the current condition of the indicator identified that the participants' activities were in conformance with the requirements of this indicator.

#### Patch Size

The patch size distribution targets for early and mature patches for the duration of the SFMP are outlined in **Indicator # 3**, **Patch Size (Section 3.3)**. In 2004, projections of patch size using the FOS indicated conformance to the targeted ranges should be achievable. The patch size analysis conducted in 2010 to identify the current condition of the indicator, identified that the participants activities were in conformance with the requirements of this indicator.

#### Structure

Indicators that measure the structure characteristics of natural disturbance patterns are Shape Index, Coarse Woody Debris, and Wildlife Tree Patches.

**Shape index (Indicator #4)** targets are in conformance with the targets and variances. The shape index analysis conducted in 2010 to identify the current condition of the indicator, identified that the participants activities were in conformance with the requirements of this indicator.



**Coarse Woody Debris (Indicator #6)** twenty-nine plots have been measured to date under the FSJPPR, up to the end of the reporting period. Data collected to this date shows the participants are consistent with this indicator.

**Wildlife Tree Patches (Indicator #9)** have cumulative targets by LU for harvesting initiated after November 15, 2001. The participants' activities are currently consistent with the targets for this indicator in all LU's where harvesting has occurred.

## Adjacency

The strategies and indicators that deal with patch size, patch shape and seral stage distribution control both the amount and spatial distribution of the forested land base affected by forest management. The combined functions of managing for both early and mature patch sizes controls where harvesting can occur as well as what is left as intact mature forest over time. The seral stage indicator controls the amounts of the various age groups. The patch size indicators address both the size and shape of patches at the landscape level and over time. The CWD and Wildlife Tree Patch indicators provide structure within or adjacent to harvested areas. These processes manage the structural characteristics and the temporal and spatial distribution of forest patches such that a separate adjacency indicator strategy is not necessary.

# <u>Summary</u>: The participants conformed to the targets for 5 of 5 indicators used to quantify conformance to the patch size, seral stage distribution and adjacency strategy.

# Riparian Management Strategy

**Riparian Management Strategy #1**: Forestry operations adjacent to fish bearing S1, S2 and S3 streams will minimize negative effects on water quality by maintaining regulatory riparian reserve zones that meet or exceed the minimum widths included in Schedule D of the FSJPPR.

**Indicator # 7, Riparian Reserves (Section 3.7)** is an indicator of progress related to this strategy. The participants were in conformance to the target for this indicator during the reporting period.

**Riparian Management Strategy #2:** Assessments of streams that do not have mandatory reserve zones will be conducted by qualified personnel, and site-specific management practices will be incorporated into SLP's to protect stream banks, stream channel stability, and riparian vegetation to protect water quality and other riparian values. Riparian values and fish habitat on small streams will also be protected by adherence to stream crossing procedures developed in conjunction with WLAP, which are included in Appendix 12. Excessive runoff at the watershed level, which can disturb stream channel integrity and adjacent habitats, will be managed by limiting the extent of harvesting within watersheds, as determined through peak flow index analyses.

Two indicators measure progress on this strategy.

**Indicator # 36, Protection of Stream banks and Riparian Values on Small Streams** (Section 3.36). The participants had no issues of non-conformance to SLP riparian management measures; the participants were therefore in conformance with the target for this indicator during the reporting period.



**Indicator # 34, Peak Flow Index (Section 3.34):** The participants are consistent with the target for this indicator, as no new harvesting occurred, nor was any new harvesting planned during this reporting period within either of the two watersheds that were above the baseline target when the peak flow index was assessed during the preparation of the 2004 FOS.

**Riparian Management Strategy #3:** Plans developed for harvesting within the riparian corridors of these major rivers will provide for a high level of forest retention, with new patch openings normally being 1 hectare or less in size within 100 metres of the rivers' RRZ. A variety of silviculture systems can potentially be used to achieve this, including clearcut with reserves and partial cutting systems, employing methods such as strip cuts or patch cuts.

**Indicator #22, River Corridors (Section 3.22):** During the reporting period no harvesting occurred within any major river corridor. The participants' activities are therefore consistent with the target for this indicator.

**Riparian Management Strategy #4:** Road access will be limited to winter access wherever practical within the river corridor areas, to minimize long-term disruption to wildlife. Where summer access is created for roads within 100 metres of riparian reserves, visual screening techniques will be used where topography and wind firmness permit, to minimize disturbance to wildlife.

**Indicator #23 Visual Screening on Roads (Section 3.23):** No new summer roads were developed in these areas, consequently the participants were consistent with the target for this indicator during the reporting period.

Summary: The participants conformed to the target or acceptable variance for 4 of the 4 (100%) legal indicators, and 5 of 5 total indicators used to quantify conformance to the riparian management strategy.

# Visual Quality Management Strategy

**Visual Quality Strategy #1:** All forest operations carried out in scenic areas covered by an established visual quality objective (VQO) will be consistent with the objective, and in scenic areas without established VQO's all forest operations will be designed using appropriate visual design techniques to minimize visual impacts.

**Indicator # 44, Visual Quality Objectives, (Section 3.44)** measures whether activities were consistent with VQO's during the reporting period, and is used to quantify conformance to the visual quality management strategy. The participants completed 3 assessments during the reporting period, which concluded the VQO's were achieved. The participants are therefore in conformance with the target for this indicator and with the strategy.

# Forest Health Management Strategy

**Forest Health Strategy #1:** To minimize the potential of catastrophic forest health events, the participants will apply the principles of Integrated Forest Health Management in the planning and implementation of forestry activities.



Indicators, strategies and implementation details for maintaining ecological processes are included in indicators dealing with Forest Types (Indicator #1, Section 3.1), Seral Stage (Indicator #2, Section 3.2), and Patch Size (Indicator #3, Section 3.3). The participants are in conformance with the target for each of these indicators.

**Forest Health Strategy #2:** The participants will identify potential forest health issues, and prioritize those, which may have a significant impact on forest resources. The participants will detect and monitor significant forest health agents in a timely manner, and where potential impacts are significant, implement cost effective treatment controls where practical.

**Indicators # 25 (Forest Health) and #26 (Salvage)** measure the monitoring and actions arising for the detection of forest health issues, and development and implementation of treatment plans.

**Forest Health Indicator (Section 3.25),** the participants' activities were consistent with the targets for this indicator. During the reporting period the participants identified and harvested 1,62.9 ha of mountain pine beetle infested timber. Each of these sites had treatment plans developed and implementation commenced within 1 year of detection.

**Indicator # 26, Salvage (Section 3.26),** measures relative salvage efforts based on management intensity over an extended period of time. The cumulative assessment of this indicator reveals the participants ongoing salvage efforts for fire and mountain pine beetle have been concentrated in the high intensity LU's, with no salvage to date occurring in the low intensity LU's, consistent with the indicators purpose.

Summary: The participants' activities conformed to the target or acceptable variance for 4 of 4 (100%) legal indicators, and 5 of 5 (100%) total indicators used to quantify conformance to the forest health strategy.

# Range And Forage Management Strategy

**Range and Forage Management Strategy #1:** The participants and range interests will define and prioritize forage and timber harvesting overlap management issues in order to develop and implement effective mutually agreed action plans to address key areas of concern. This will be accomplished by developing productive on going communication between the participants and range tenure holders, and range related associations.

**Indicator #41, Range Action Plans (Section 3.41)** is the indicator which shows progress on this strategy. There were 5 mutually agreed specific actions completed, 1 Timber Range Action Plan (TRAP) was amended and 3 TRAPs were initiated completed by the participants during the reporting period. Participants' operations were 100% consistent with the mutually agreed upon action plans for range during the reporting period.

**Range and Forage Management Strategy # 2:** The participants will ensure damage to range improvements as a result of participants' activities are repaired to the satisfaction of the range tenure holder in a timely manner.

**Indicator # 42, Damage to Range Improvements (Section 3.42)** identifies targets, which indicates success in implementing this strategy. In this reporting period the participants damaged one range improvement on a single range tenure in order to allow short-term access



for harvesting equipment. A gate was installed at the breach point to allow for future access. Consequently the participants are consistent with the indicator's target.

**Range and Forage Management Strategy # 3:** The participants will implement measures during grass seeding activities that minimize the risk of inadvertently introducing noxious weeds, which would be counterproductive to range interests.

**Indicator # 10, Noxious Weed Content (Section 3.10)** measures the success of this strategy. All reclamation seed broadcast by the licensee participants and BCTS licensees during the reporting period is certified as having 0% content of prohibited and primary noxious weeds, and known invasive weed species of concern, as identified in the Sustainable Forest Management Plan. The participants were consistent with the targeted range for this indicator.

Summary: The participants conformed to the target or acceptable variance for 2 of 2 legal indicators, and 3 of 3 total indicators used to quantify conformance to the range and forage management strategy.

#### Reforestation Strategy

The Reforestation strategy has the following key features to:

- Set standards for reforestation to provide restocking of harvested coniferous areas.
- Provide a landscape level assessment of reforestation success for *coniferous leading stands*, based on a comparative measure of future volume.
- Ensure that Professional Foresters will have professional accountability at the cut block level to vary regimes and provide for other values as they progress to a landscape level target for volume.
- Allow continuous improvement by providing feedback on landscape level reforestation success. Silviculture regimes and/or corrective action can be considered across the landscape and implemented in a cost effective manner that considers all values being managed.

Traditionally, reforestation success has not been measured at a landscape level. This strategy extends beyond previous practices and provides an additional measure to assure adequate management and conservation.

This strategy applies to all area harvested after November 15, 2001, under the FSJPPR. Participants may elect to include areas harvested under prescription between 1987 and November 15, 2001. A statement of election to include areas must be made in writing to the District Manager.

Participants in the Pilot Project will be responsible for implementing the strategy and applying corrective actions within their harvest area. Corrective actions to meet targets can be applied to another participant's area only by mutual agreement.

# The following 3 indicators measure performance to the overall reforestation strategy of the participants:

**Indicator # 28, Species Composition (Section 3.28),** measures the progress participants make in retaining relative consistent species composition between pre and post harvest operations on the landscape. In this reporting period the participants are within the acceptable variance range for this indicator.



**Indicator # 29, Reforestation Assessment (Section 3.29),** provides a landscape level assessment of reforestation success for *coniferous leading stands*, based on a comparative measure of future volume. Overall, all of the participants are within the acceptable volume target range for the group of blocks in the 1994/1995 harvest year.

**Indicator # 30-Establishment Delay (Section 3.30)** provides a broad view of the average amount of time being taken to confirm establishment of a new forest on harvested areas. In this reporting period the participants are within the acceptable variance range of the target.

<u>Summary</u>: The participants conformed to 3 of the 3 legal indicator targets (100%) that measure progress on the reforestation strategy.



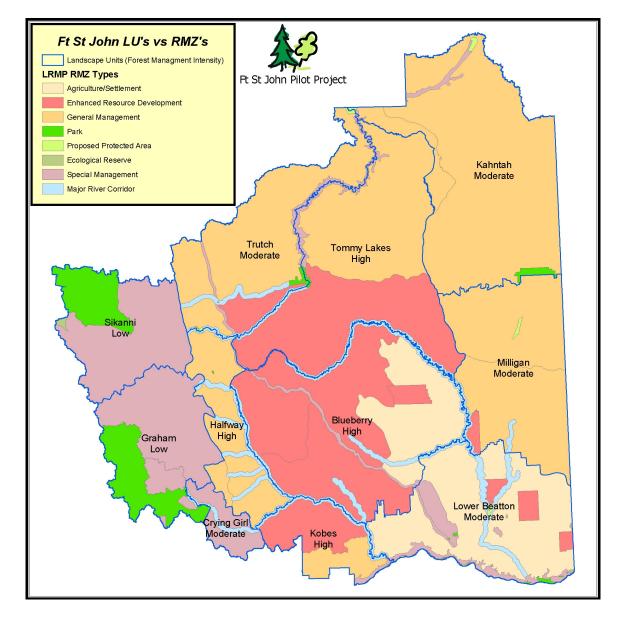
Appendix 1: Fort St. John LU's and RMZ's



## Fort St. John Landscape Units (LU's) and Resource Management Zones (RMZ's)

Landscape Units (LU) are based on updated Biogeoclimatic Ecosystem Classification (BEC) mapping, ecosection boundaries, Natural Disturbance Units (NDU's) and important administrative boundaries such as the revised district boundaries and the strategic land use boundaries of the Muskwa-Kechika Management Area. In the absence of an administrative boundary, resource features such as main stem rivers (midpoint) or height of land were used wherever possible to provide logical natural boundaries for each LU. These boundaries often encompass multiple watersheds in mountainous terrain, and reflect similar BEC units, ecosections and Natural Disturbance Units.

The current LU boundaries are consistent with strategic boundaries and their respective objectives at the LRMP Resource Management Zone (RMZ) level, and allow the administrative areas to be managed without overlapping LU boundaries and fragmenting objectives during implementation.







Appendix 2: CSA Sustainable Forest Management Matrix



# 29.0 CSA Matrix<sup>17</sup> (Effective April 1, 2008 - changes from previous Matrix highlighted)

6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective		Indicator	Target
with the public participation process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses 6.1-6.6, as well as any other values associated with DFA.	characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.	statement describing a	measures or describes		Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time-limited, and quantified, if possible.
CCFM Criterion 1 – Conservation of Conserve biological diversity by mai		and diversity of living org	anism	s and the complexes	of which they are part
Element 1.1 Ecosystem Diversity Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally occur on the DFA.	Ecosystem Diversity	The diversity and pattern of communities and ecosystems within a natural range.		Percent distribution of forest type (deciduous, deciduous mixedwood, conifer mixedwood, conifer) >20 years old by landscape unit	100% of forest type groups by landscape unit will be within the target range
			2	The minimum proportion (%) of late seral forest by NDU by LU	The minimum proportion (%) of late seral forest by NDU by LU as identified in tables 10, 11, 12 will be met within the identified timelines
			3	Percent area by Patch Size Class (0-50, 51-100, and	A minimum of 19 of 33 (58%) of the baseline targets for early patches will be achieved during the term of this SFM Plan. A minimum of 10 of 11 (91%) of the baseline targets for mature patches will be achieved during the term of this SFM Plan
			4	patches in a landscape unit	Patches 50 -100 ha: The average Shape Index of young patches in a LU will be at least 2.0. Patches 100 -1000: The average Shape Index of young patches in an LU will be at least 3.0. Patches 1000+: The average Shape Index of young patches in an LU will be at least 4.0.
Element 1.2 Species Diversity Conserve species diversity by ensuring that habitats for the native species found on the DFA are maintained through time.	Species Richness	Suitable habitat elements for indicator species	5		Retain annually an average of at least 6 snags and/or live trees (>17.5 cm dbh) per hectare on prescribed areas

<sup>&</sup>lt;sup>17</sup> matrix number reflects the PAG meeting at which it was approved.



6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective		Indicator	Target
The organization, in conformance with the public participation process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses	characteristic, component or quality considered by	Objective - a broad statement describing a desired future state or condition for a value.	meas	ate or condition of a	Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
			6	Average Coarse Woody Debris volume/ha on blocks logged in the DFA	Minimum target average retention level over the DFA will be 46 m <sup>3</sup> /ha (50% of average pre-harvest volume) on harvested blocks assessed for the period between December 1, 2003 and November 30, 2008
			7	The number of non-compliances to riparian reserve zone standards	No non-compliances to riparian reserve zone standards
			8	The proportion of shrub habitat (%) by Landscape Unit	Each landscape unit will meet or exceed the baseline target (%) proportion of shrub habitat
			9	Unit	Cumulative Wildlife Tree Patch % will meet or exceed the minimum target in each LU (Blueberry 6%, Halfway 3%, Kahntah 7%, Kobes 5%, Lower Beatton 8%, Milligan 6%, Tommy Lakes 3%, Trutch 5%, Sikanni 4%, Graham 4%, Crying Girl 6%)
			10	The % prohibited and primary noxious weeds, and known invasive weed species of concern, in seed mix analvsis	Seed mix analysis will have 0% content of prohibited and primary noxious weeds as identified in the most current publication of "Noxious Weeds in the Peace River Regional District", and known invasive weed species of concern
		Maintain habitats for species at risk	11	The percent of SLP's prepared annually for effected cutblocks	2005-50% 2006+-100%



Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses	Value Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.	Objective Objective - a broad statement describing a desired future state or condition for a value.	meas		Target Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
			12	Proportion of area (%) of forest greater than the baseline target age by caribou management zone	40% of forests will be greater than the baseline target age by caribou management zone
Element 1.3 Genetic Diversity Conserve genetic diversity by maintaining the variation of genes within species.	Genetic Diversity	Conserve genetic diversity of tree stock	13	The percentage of seeds & vegetative material collected and planted in accordance with the Chief Forester's Standards for Seed Use, November 20, 2004	100% of seeds and vegetative material will be collected and planted in accordance with the Chief Forester's Standards for Seed Use (Nov. 20, 2004).
			14	% natural regeneration of aspen	We will use 100% natural regeneration for aspen to ensure the conservation of genetic diversity of tree stock
Element 1.4 Protected Areas and Sites of Special Biological Significance Respect protected areas identified through government processes. Identify sites of special biological significance within the DFA and implement management strategies appropriate to their long term maintenance.	Protected Areas and Conservation Emphasis areas, for example Special Management Zones, Ecological Reserves, etc.	To have representative areas of naturally occurring and important ecosystems and rare physical environments protected at both the broad and site-specific levels across or adjacent to the DFA	15	Hectares of forestry related harvesting or road construction within Class A parks, ecological reserves and LRMP designated protected areas	Zero hectares of forestry related harvesting or road construction within Class A parks, ecological reserves or LRMP designated protected areas



6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective		Indicator	Target
with the public participation process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses	Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.	statement describing a	meas	ate or condition of a	Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
			16	(MKMA), and general wildlife measures for Ungulate Winter Ranges (UWR) and Wildlife Habitat Areas (WHA)	All pilot participant activities will be consistent with the objectives of the MKMA, and general wildlife measures for the Ungulate Winter Ranges and Wildlife Habitat Areas
			17	Proportion of area (%) of forest stands by leading species by NDU in an unmanaged condition	100% of baseline targets for forested stands by leading species by NDU will be met
		Management strategies address important values in SMZ areas	18	Relative timing of commencement of operational harvesting within clusters in the Graham IRM Plan area	Harvesting will not commence prior to the planned harvest start date for any cluster
			19	Cumulative merchantable hectares within blocks harvested within the Graham IRM area	The cumulative merchantable hectares within blocks will be consistent with the estimated total harvest area, as measured at the end of each time period



process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses	Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.	desired future state or	meas		Target Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
			20	Hectares harvested in cutblocks in the Graham IRM area, within the permanent alluvial and non- productive/non- commercial components of the connectivity corridors	No harvesting within the permanent alluvial and non- productive/non-commercial components of the connectivity corridors
			21	The number of drainages in the MKMA in which	A minimum of one drainage plan submitted no later than 1 year following approval of a landscape unit objective by government
			22	The percentage of harvested areas that create openings greater than 1 hectare within100 metres of RRZ's in identified major river corridors	No openings exceeding 1 hectare in blocks within the major river corridors harvested under the FSJPPR (i.e. after November 15, 2001)



6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective		Indicator	Target
process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM	characteristic, component or quality considered by		the state or condition of a value.		Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
CCFM Criterion 2 – Maintenance ar	nd Enhancement of Forest I	Ecosystem Condition and	23	major river corridors where visual screening is present	100% of summer accessible road lengths within the designated area will have visual screening from adjacent cutblocks
Conserve forest ecosystem condition	on and productivity by maint	aining the health, vitality			duction.
Element 2.1 Forest Ecosystem Resilience Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions.	Ecosystem Resilience	A natural range of variability in ecosystem function, composition and structure with allows ecosystems to recover from disturbance and stress	2	See indicator #2	
			24	Permanent access structures (%) within cutblocks	A maximum of 5% of the total aggregate area in cutblocks by managing participant to be occupied in permanent access structures in which harvesting was completed during that annual reporting period as determined on a 3 year rolling average. This only applies to permanent access structures utilized by the participants.
			25	Permanent access structures (%) within cutblocks % of sites with significant detected forest health damaging agents which have treatment plans developed for them	managing participant to be occupied in permanent access structures in which harvesting was completed during that annual reporting period as determined on a 3 year rolling average. This only applies to permanent access structures utilized by the
			25	Permanent access structures (%) within cutblocks % of sites with significant detected forest health damaging agents which have treatment plans	managing participant to be occupied in permanent access structures in which harvesting was completed during that annual reporting period as determined on a 3 year rolling average. This only applies to permanent access structures utilized by the participants. 1. 100% of sites with significant forest health damaging agents (excluding mountain pine beetle) will have treatment plans developed for them, and initiated within 1 year of detection. 2. 100% of sites with mountain pine beetle damage, and identified within Beetle Management Units with a 'Suppression' classification, will have treatment plans developed for them, and



6.0 The SFM Performance					
Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective		Indicator	Target
The organization, in conformance with the public participation process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses	Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.	statement describing a desired future state or	measi	ate or condition of a	Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time-limited, and quantified, if possible.
			26	in merchantable	The relative proportions of salvage hectares will be highest in the high intensity zones, and lowest in the low intensity zones over an SFM Plan period (December 1, 2003 - March 31, 2008)
			27	Percentage of area harvested annually	Even aged silvicultural systems will be employed on at least 80% of the total area harvested annually in the DFA
			28	Relative Change in Plantation Composition versus Harvest Composition for Spruce and Pine	The relative proportion of spruce and pine planted annually will equal the proportions harvested annually (excluding fill planting)
			29	Merchantable Volume (m <sup>3</sup> ) for coniferous areas	For coniferous areas, Merchantable Volume will meet or exceed Target Volume (95% of Predicted Maximum Volume) within the reforestation period
			30	Establishment Delay (years)	The area weighted average establishment delay for coniferous regeneration will not exceed two years. The area weighted average establishment delay for deciduous regeneration will not exceed three years



6.0 The SFM Performance					
Requirements: CCFM Criteria	Value	Objective		Indicator	Target
and CSA SFM Elements	Value	Objective		maloutor	Turget
The organization, in conformance with the public participation process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses	characteristic, component or quality considered by	statement describing a desired future state or			Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time-limited, and quantified, if possible.
Element 2.2 Forest Ecosystem Productivity Conserve ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species.	Ecosystem Productivity	Ecosystem functions capable of supporting naturally occurring species exist within the range of natural variability	1	See indicator #1	
, , , , , , , , , , , , , , , , , , , ,			2	See indicator #2	
			20	See indicator #20	
			3	See indicator #30	
			25	See indicator #25	
	Productive Capacity for	Maintain or enhance landscape level productivity	31	Long-term harvest level (LTHL) as measured in cubic metres per year (m <sup>3</sup> /yr)	We will propose an Allowable Annual Cut (AAC) that sustains the LTHL of the Defined Forest Area (DFA)
			32	Site index	Average post harvest site index will not be less than average pre- harvest site index on blocks harvested under the pilot project regulation
			25	See indicator #25	
	CCI	-M Criterion 3 – Conserv	vation	of Soil and Wat <u>er Re</u>	sources
	Conserve soil and wa	ater resources by mainta	uining t		ality in forest ecosystems.
Element 3.1 Soil Quality and				See indicator #32	
Quantity Conserve soil resources by maintaining soil quality and quantity.	Soil Productivity	Protect soil resources to sustain productive forests	32		
			33	Number of hectares of landslides resulting from forestry practices	Zero hectares of landslides due to forestry activities on blocks harvested and roads constructed commencing December 1, 2001



6.0 The SFM Performance Requirements: CCFM Criteria	Value	Objective		Indicator	Target
and CSA SFM Elements	value	Objective		mulcator	Target
The organization, in conformance with the public participation process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM	characteristic, component or quality considered by	statement describing a	meas	ate or condition of a	Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
Element 3.2 Water Quality and Quantity Conserve water resources by maintaining water quality and quantity.	Water Quantity	Maintenance of water quantity	34	The percent of watersheds achieving baseline targets for the peak flow index and the percent of watershed reviews completed where the baseline target is exceeded	A minimum of 95% of the watersheds will be below the baseline target. All watersheds that exceed the baseline target will have a watershed review completed wherever new harvesting is planned
	Water Quality	Maintenance of water quality	35	The percentage of surveyed stream crossings identified with a high WQCR rating on forestry roads within the DFA for which participants have stewardship (*WQCR – water quality concern rating)	Fewer than 30% of the total number of surveyed stream crossings on roads for which the participants have stewardship will have 'High' WQCR, based on a three year rolling average
			7	See indicator #7	
			36	The number of non-conformances to SLP measures to protect stream bank, stream channel stability and riparian vegetation from harvesting and silviculture activities	No non-conformances related to protecting stream bank, stream channel stability and riparian vegetation due to harvesting or silviculture activities



6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective		Indicator	Target
process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM	characteristic, component or quality considered by	Objective - a broad statement describing a desired future state or condition for a value.	measures or describes		Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
			37 Number of reportable spills entering water bodies		Zero reportable spills entering water bodies
	CCFM Criter	rion 4 – Forest Ecosyste	m Con	tributions to Global E	cological Cycles
	Maintain forest conditions	and management activiti	es tha		alth of global ecological cycles.
Element 4.1 Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems.	Carbon Uptake and Storage	Maintenance of the processes for carbon uptake and storage	38	DFA Average Carbon (C) sequestration rate (Mg C/year)	Maintain DFA average C sequestration rates that are consistent with or greater than natural sequestration rates.
			39	Ecosystem Carbon Storage (Mg) in the Fort St. John DFA	Minimum of 95% of Natural Disturbance levels of Ecosystem Carbon Storage.
			29	See indicator #29	
			30	See indicator #30	
Element 4.2 Forest Land Conversion Protect forestlands from deforestation or conversion to non- forests.	Forest Land Base	Sustain forest lands within our control within the DFA	24	See indicator #24	
		Foster inter-industry cooperation to minimize conversion of forested lands to non- forest conditions		Number of coordinated developments	Report annually the number of proposed coordinated developments that are successful versus unsuccessful
				e Benefits to Society	
	Sustain flows of forest ber		ire ger	nerations by providing	g multiple goods and services.
Element 5.1 Timber and Non- Timber Benefits Manage the forest to produce an acceptable and feasible mix of both timber and non-timber benefits.	Multi-use Benefits	Provide opportunities for a feasible mix of timber, recreational activities, and non- timber commercial activities	41	Consistency with mutually agreed upon action plans for range	Operations 100% consistent with resultant range action plans



6.0 The SFM Performance					
Requirements: CCFM Criteria	Value	Objective		Indicator	Target
and CSA SFM Elements	Tuluo	objective		maloutor	i al got
	Value - a DFA	Objective - a broad	Indica	tor - a variable that	Target - a specific statement describing a desired future state or
	characteristic, component		measu	ures or describes	condition of an indicator. Targets should be clearly defined, time-
process requirements set out in	or quality considered by	desired future state or	the sta	ate or condition of a	limited, and quantified, if possible.
Section 5, will identify DFA-specific		condition for a value.	value.		
	important in relation to a				
	CSA SFM Element or				
	other locally identified element.				
6.1-6.6, as well as any other values associated with DFA.	element.				
values associated with DFA.				Number of range	
				improvements	
			42	damaged by	No damage to range improvements by pilot participants' activities
				participants'	no damage to range improvements by prior participants douvries
				activities	
				The number of	
			43	recreation sites	Participants will provide and maintain a minimum of one
			43	managed by	recreational site within the DFA
				participants	
				Consistency with	Pilot participants' forest operations will be consistent with the
			44	Visual Quality	established VQO's
				Objectives (VQO's) Percent of area in	
				primitive and semi-	
				primitive non-	
				motorized	
				classifications of	
				the Recreation	Maintain the primitive level ROS percentage at 15% (1996 levels)
				Opportunity	for the B-H-C RMZ as proposed by the LRMP.
				Spectrum (ROS)	Retain a minimum of 50% of area by RMZ as semi-primitive non-
			45	for Besa-Halfway-	motorized ROS class for the Graham North, Graham South and
				Chowade (B-H-C),	Crying Girl RMZ
				Graham North	
				(GN), Graham South (GS), and	
				Crying Girl (CG)	
				Resource	
				Management	
				Zones (RMZ)	
				See indicator #18	
			-	See indicator #19	
			21	See indicator #21	



Value	Objective		Indicator	Target
Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.	Objective - a broad statement describing a desired future state or condition for a value.	measi the sta	ures or describes ate or condition of a	Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
		46	mutually agreed upon action plans for guides, trappers and other known non-timber commercial	Operations 100% consistent with the resultant action plans
		47	Volume of timber processed in the DFA in proportion to volume harvested in the DFA	The annual equivalent of a minimum of 70% of the DFA's harvest is primary processed in the DFA
Sustainable and Viable Communities	Viable timber processing facilities in the DFA	48	Volume (m <sup>3</sup> ) of timber delivered annually to mills between May 1 and November 30	2003: Minimum of 100,000 m <sup>3</sup> coniferous to FSJ sawmill. 2004+: Minimum of 150,000 m <sup>3</sup> coniferous to FSJ sawmill and 185,000 m <sup>3</sup> delivered to the deciduous manufacturing facilities
		49	harvesting equipment during the term of the SFM Plan.	95% of the coniferous harvested area will utilize conventional ground based harvesting equipment All FOS's will be jointly prepared by active participants
	Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.	Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.       Objective - a broad statement describing a desired future state or condition for a value.         Sustainable and Viable communities       Viable timber processing facilities in	Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.       Objective - a broad statement describing a desired future state or condition for a value.       Indica measu the state condition for a value.         46       46         Sustainable and Viable Communities       Viable timber processing facilities in the DFA       48	Value - a DFA characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identifiedObjective - a broad statement describing a desired future state or condition for a value.Indicator - a variable that measures or describes the state or condition of a value.46Consistency with mutually agreed upon action plans for guides, trappers and other known non-timber communitiesConsistency with mutually agreed upon action plans for guides, trappers and other known non-timber commercial interestsSustainable and Viable CommunitiesViable timber processing facilities in the DFAVolume (m³) of timber delivered annually to mills between May 1 and November 30Sustainable and Viable CommunitiesViable timber processing facilities in the DFA48Volume (m³) of timber delivered annually to mills between May 1 and November 30



6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective		Indicator	Target
with the public participation process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses	characteristic, component	statement describing a desired future state or	the state or condition of a value.		Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
				The percentage of blocks and roads (excluding BCTS) assessed in which avoidable waste and residue accumulation levels are within the target range	Annually, 100% of blocks and roads (excluding BCTS tenures) will fall within the target avoidable waste and residue accumulation levels. Annually, BCTS will report the % of blocks and roads which fall within the target range of avoidable waste and residue accumulation levels, and the actual amount of waste/ha on those that exceed the target range.
		No decrease in the LTHL in the DFA	52	of area of height class two pine types to total cutblock area, in blocks harvested	November 15, 2001 - March 31, 2006: 8% or more of the total cutblock area of coniferous blocks harvested will be in height class two pine inventory types Subsequent 5 year periods: 8% or more of the total cutblock area of coniferous blocks harvested between will be in height class two pine inventory types
			32	See indicator #32	
			53	The percentage of the actual periodic cut control relative to target periodic cut control	Harvest volumes will not exceed 110% of the 5 year periodic cut control volume on each participant's licence
	in the Use and Management of the	Diverse local forest employment opportunities exist in the DFA	54	Percentage of dollars spent locally on each woodlands phase in proportion to total expenditures	Logging/hauling: 80%, road construction and maintenance: 80%, silviculture: 8%, planning and administration: 50%
Element 5.3 Fair Distribution of Benefits and Costs Promote the fair distribution of timber and non-timber benefits and costs.	Fair Distribution of	Provide opportunities for a range of interests to access benefits	55	Value of tendered contracts in proportion to the total value of all awarded contracts on an annual basis	A minimum of 50% of the total value of contracts will be tendered on an annual basis



6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective		Indicator	Target
Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses 6.1-6.6, as well as any other values associated with DFA.	characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM Element or other locally identified element.	Objective - a broad statement describing a desired future state or condition for a value.	meası the sta value.	ate or condition of a	Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
	nsibility for sustainable fore	st management requires			ective forest management decisions are made.
Element 6.1 Aboriginal and Treaty Rights Recognize and respect Aboriginal and treaty rights.	Aboriginal and Treaty Rights	Recognition of Treaty 8 rights and respect aboriginal rights in development of plans		participants to SFM elements pertinent to treaty rights (i.e.,	Participants will conform 100% to the SFM Indicators and Targets of the SFM Elements pertinent to sustaining hunting, fishing and trapping, as follows: Element 1.1 Ecosystem Diversity (Indicators 2, 3, 4), and Element 1.2 Species Diversity (Habitat Elements) Indicators (5, 6, 7, 8, 9), and Element 3.2 Water Quality and Quantity Indicators (34, 35, 36, 37)
Element 6.2 Respect for Aboriginal Forest Values, Knowledge and Uses Respect traditional Aboriginal forest values and uses identified through the Aboriginal input process.		Respect known traditional Aboriginal forest values, and uses		% of known traditional site- specific aboriginal values and uses identified during SFMP, FOS, FDP, or PMP referrals addressed in operational plans	100% of known traditional site-specific aboriginal values and uses identified during SFMP, FOS, FDP, or PMP referrals will be addressed in operational plans
Element 6.3 Public Participation Demonstrate that the public participation process is designed and functioning to the satisfaction of the participants.		Satisfactory public participation processes	58	Public Review and Comment Process for the FSJPPR	Obtain PAG acceptance of Public Review and Comment Process; comply with Public Review and Comment Process
				Terms of reference (TOR) for the FSJPPR public participation process	Obtain PAG acceptance of TOR for public participation process and complete a bi-annual review of TOR
			60	The percentage of timely responses to public inquiries	Respond to 100% of public inquiries regarding our forestry practices within one month of receipt



6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements	Value	Objective	Indicator		Target
process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses	characteristic, component or quality considered by	statement describing a measures or describes c		ures or describes ate or condition of a	Target - a specific statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time- limited, and quantified, if possible.
Element 6.4 Information for Decision-Making Provide relevant information to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems.	Information for Decision-	Relevant info used in decision making process is provided to PAG, FNAG, general public and affected parties	60	See indicator #60	
			61	Number of Information Presentations or Field Trips provided for PAG membership	Provide PAG with at least 1 Presentation or field trip annually (between April 1 and March 31) commencing in 2005



Appendix 3: Access Management

Steward Name	Road Name	Start (metres)	End (metres)	Length (m)	Completion Date	Season	Area	Method
Canfor FSJ	01-016-00	0	392	392	3/16/2010	Winter	Inga Lake	New Construct
Canfor FSJ	01-018-01	1356	1677	321	3/13/2010	Winter	Inga Lake	New Construct
Canfor FSJ	02-004-01	780	1998	1218	3/30/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-004-03	0	692	692	3/30/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-018-00	0	384	384	1/5/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-018-04	0	539	539	1/10/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-018-05	0	481	481	1/5/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-018-06	0	256	256	1/5/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-019-00	0	475	475	2/15/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-019-01	0	368	368	2/15/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-019-02	0	295	295	2/15/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-019-03	0	579	579	2/15/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-020-00	1667	3985	2318	12/20/2009	Winter	R10807 Section A	Reactivation
Canfor FSJ	02-020-00	3986	7253	3267	1/8/2010	Winter	R10807 Section A	New Construct
Canfor FSJ	02-020-01	0	319	319	1/8/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-020-02	0	551	551	1/8/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-020-03	0	273	273	1/8/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-020-04	0	843	843	1/8/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-036-00	0	259	259	2/12/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-036-01	0	505	505	2/12/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-038-00	0	306	306	2/15/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-081-01	0	366	366	12/15/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-081-01	366	794	428	2/15/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-081-03	0	548	548	12/15/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-081-03	548	1037	489	2/15/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-082-00	0	1452	1452	12/1/2009	Summer	South Blueberry	Surfacing
Canfor FSJ	02-082-01	0	306	306	12/1/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-082-03	0	553	553	12/9/2009	Summer	South Blueberry	Surfacing
Canfor FSJ	02-082-04	0	469	469	12/1/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-082-06	0	453	453	12/1/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-082-07	0	134	134	12/1/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-082-08	0	340	340	11/23/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-082-09	0	343	343	12/1/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-082-10	0	389	389	12/1/2009	Summer	South Blueberry	New Construct
Canfor FSJ	02-082-12	0	247	247	11/23/2009	Winter	South Blueberry	Reactivation
Canfor FSJ	02-085-00	1146	2990	1844	1/22/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-085-00	0	1146	1146	3/15/2010	Summer	South Blueberry	Surfacing
Canfor FSJ	02-085-01	0	379	379	1/28/2010	Winter	South Blueberry	New Construct
Canfor FSJ	04-035-00	921	1651	730	9/3/2009	Summer	Wonowon	New Construct
Canfor FSJ	04-035-00	0	921	921	9/3/2009	Summer	Wonowon	Surfacing
Canfor FSJ	04-035-01	250	573	323	9/3/2009	Winter	Wonowon	New Construct
Canfor FSJ	04-035-01	0	250	250	10/22/2009	Winter	Wonowon	Surfacing
Canfor FSJ	04-054-03	260	511	251	2/15/2010	Winter	Wonowon	New Construct
Canfor FSJ	04-056-00	0	327	327	10/22/2009	Summer	Wonowon	Surfacing
Canfor FSJ	04-056-01	0	820	820	11/10/2009	Summer	Wonowon	Surfacing
Canfor FSJ	04-056-02	0	224	224	10/22/2009	Winter	Wonowon	New Construct
Canfor FSJ	04-056-03	0	218	218	10/22/2009	Winter	Wonowon	New Construct
Canfor FSJ	04-056-04	0	846	846	11/10/2009	Summer	Wonowon	Surfacing
Canfor FSJ	04-056-05	0	274	274	10/22/2009	Summer	Wonowon	Surfacing
Canfor FSJ	04-056-06	0	1264	1264	9/3/2009	Summer	Wonowon	Surfacing
Canfor FSJ	04-056-07	0	465	465	10/22/2009	Summer	Wonowon	Surfacing
Canfor FSJ	04-058-00	0	429	429		Summer	Wonowon	Surfacing

## Table 25: Road / Bridge Construction Activity - Forest Licensees 2009-2010



#### Fort St. John Pilot Project 2009-2010 SFMP Annual Report – Final

Steward Name	Road Name	Start (metres)	End (metres)	Length (m)	Completion Date	Season	Area	Method
Canfor FSJ	04-059-00	0	5240	5240	8/1/2009	Summer	Wonowon	Surfacing
Canfor FSJ	04-059-01	0	103	103	11/20/2009	Winter	Wonowon	New Construct
Canfor FSJ	04-059-02	0	583	583	1/8/2010	Summer	Wonowon	Surfacing
Canfor FSJ	04-059-03	0	205	205	1/8/2010	Summer	Wonowon	Surfacing
Canfor FSJ	04-059-04	0	1195	1195	1/8/2010	Summer	Wonowon	Surfacing
Canfor FSJ	04-060-02	0	175	175	1/1/2010	Summer	Wonowon	New Construct
Canfor FSJ	04-061-02	0	867	867	10/22/2009	Summer	Wonowon	New Construct
Canfor FSJ	05-004-00	0	693	693	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-004-01	0	347	347	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-004-02	0	738	738	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-004-03	0	949	949	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-004-04	0	411	411	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-004-05	0	580	580	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-004-06	0	287	287	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-020-03	0	355	355	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-020-04	0	428	428	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-020-05	0	249	249	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-020-06	0	376	376	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	05-020-07	0	265	265	12/31/2009	Summer	Aikman Creek	New Construct
Canfor FSJ	09-025-00	0	986	986	11/6/2009	Summer	Kobes Creek	New Construct
Canfor FSJ	09-025-01	0	391	391	11/3/2009	Summer	Kobes Creek	New Construct
Canfor FSJ	09-025-02	0	216	216	11/2/2009	Winter	Kobes Creek	New Construct
Canfor FSJ	S02-061-09	515	1630	1115	12/11/2009	Winter	South Blueberry	New Construct
Canfor FSJ	S02-061-12	0	486	486	12/9/2009	Winter	South Blueberry	New Construct
Canfor FSJ	S02-061-13	0	423	423	12/9/2009	Winter	South Blueberry	New Construct
Canfor FSJ	S02-061-15	0	246	246	12/11/2009	Winter	South Blueberry	New Construct
Canfor FSJ	S02-069-00	2067	2810	743	1/30/2010	Summer	South Blueberry	New Construct
Canfor FSJ	S02-089-00	0	898	898	1/25/2010	Winter	South Blueberry	New Construct
Canfor FSJ	S02-089-01	0	644	644	1/25/2010	Winter	South Blueberry	
Canfor FSJ	S02-089-02	0	662	662	1/25/2010	Winter	South Blueberry	New Construct
Canfor FSJ	\$03-005-00	0	3120	3120	12/1/2009	Winter	North Blueberry	New Construct
Canfor FSJ	S26-005-03	0	147	147	1/18/2010	Winter	Beatton-Doig River	New Construct
Canfor FSJ	S26-005-04	0	985	985	1/18/2010	Winter	Beatton-Doig River	New Construct
Canfor FSJ	S26-005-06	0	944	944	1/18/2010	Winter	Beatton-Doig River	New Construct
Canfor FSJ	S26-009-00	0	1827	1827	12/10/2009	Winter	Beatton-Doig River	New Construct
Canfor FSJ	S26-009-01	0	480	480	12/7/2009	Winter	Beatton-Doig River	
Canfor FSJ	S26-009-03	0	308	308	12/10/2009	Winter	Beatton-Doig River	New Construct
Canfor FSJ	S29-018-00	0	365	365	2/20/2010	Winter	Prespatou Creek	New Construct
Canfor FSJ	S29-019-00	0	892	892	2/10/2010	Winter	Prespatou Creek	New Construct
Cameron River	09-007-00	2334	2625	291	1/1/2010	Winter	Kobes Creek	New Construct
Canfor/LP	01-020-00	782	2887	2105	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	09-014-00	0	2199	2199	12/5/2009	Winter	off 212-1900 road	New Construct
Canfor/LP	09-014-01	0	551	551	12/5/2009	Winter	Kobes Creek	New Construct
Canfor/LP	09-014-02	0	591	591	12/5/2009	Winter	Kobes Creek	New Construct
Canfor/LP	09-027-00	0	3131	3131	1/30/2010	Winter	Kobes Creek	New Construct
Canfor/LP	09-027-01	0	675	675	1/30/2010	Winter	Kobes Creek	New Construct
Canfor/LP	S01-277-01	3160	4424	1264	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-01	0	3160	3160	2/15/2010	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-02	0	352	352	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-03	0	656	656	2/15/2010	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-04	0	179	179	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-05	0	1014	1014	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-06	0	349	349	11/15/2009	Winter	Inga Lake	New Construct

Steward Name	Road Name	Start (metres)	End (metres)	Length (m)	Completion Date	Season	Area	Method
Canfor/LP	S01-277-07	0	1214	1214	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-08	0	2143	2143	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-09	0	1525	1525	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	S01-277-10	0	228	228	9/1/2009	Winter	Inga Lake	New Construct
Canfor/LP	S02-061-18	0	407	407	12/20/2009	Winter	South Blueberry	New Construct
Canfor/LP	S02-061-19	0	74	74	12/20/2009	Winter	South Blueberry	New Construct
Canfor/LP	S02-071-00	0	1814	1814	10/15/2009	Summer	South Blueberry	New Construct
Canfor/LP	S02-071-01	0	722	722	10/30/2009	Summer	South Blueberry	New Construct
Canfor/LP	S02-071-02	0	202	202	10/30/2009	Summer	South Blueberry	New Construct
Canfor/LP	S02-071-03	0	126	126	10/30/2009	Summer	South Blueberry	New Construct
Canfor/LP	S02-071-04	0	251	251	10/30/2009	Summer	South Blueberry	New Construct
Canfor/LP	S02-071-05	0	393	393	10/30/2009	Summer	South Blueberry	New Construct
Canfor/LP	S04-033-00	5900	11314	5414	11/28/2009	Summer	Wonowon	New Construct
Canfor/LP	S04-033-01	0	2061	2061	2/17/2010	Summer	Wonowon	New Construct
Canfor/LP	S04-033-02	0	469	469	3/1/2010	Summer	Wonowon	New Construct
Canfor/LP	S04-033-03	0	2310	2310	2/2/2010	Summer	Wonowon	New Construct
Canfor/LP	S04-033-13	0	818	818	12/11/2009	Summer	Wonowon	New Construct
Canfor/LP	S04-033-14	0	643	643	12/11/2009	Summer	Wonowon	New Construct
Canfor/LP	S04-033-15	0	1281	1281	10/12/2009	Summer	Wonowon	New Construct
Canfor/LP	S04-033-16	0	1126	1126	9/1/2009	Summer	Wonowon	New Construct
Canfor/LP	S04-033-17	0	494	494	3/1/2010	Summer	Wonowon	New Construct
Canfor/LP	S04-033-19	0	1116	1116	12/1/2009	Summer	Wonowon	New Construct
Canfor/LP	S04-033-27	0	2653	2653	2/10/2010	Summer	Wonowon	New Construct
Canfor/LP	S09-067-00	0	2866	2866	2/20/2010	Winter	Kobes Creek	New Construct
Canfor/LP	S09-067-01	0	372	372	2/1/2010	Winter	Kobes Creek	New Construct
Canfor/LP	S09-067-02	0	630	630	2/20/2010	Winter	Kobes Creek	New Construct
Canfor FSJ	01-016-00	0	392	392	3/16/2010	Winter	Inga Lake	New Construct
Canfor FSJ	01-018-01	1356	1677	321	3/13/2010	Winter	Inga Lake	New Construct
Canfor FSJ	02-004-01	780	1998	1218	3/30/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-004-03	0	692	692	3/30/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-018-00	0	384	384	1/5/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-018-04	0	539	539	1/10/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-018-05	0	481	481	1/5/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-018-06	0	256	256	1/5/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-019-00	0	475	475	2/15/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-019-00	0	368	368	2/15/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-019-01	0	295	295	2/15/2010	Summer	South Blueberry	New Construct
Canfor FSJ	02-019-02	0	579	579	2/15/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-019-03	1667	3985	2318	12/20/2009	Winter	R10807 Section A	Reactivation
Canfor FSJ	02-020-00	3986	7253	3267	1/8/2010	Winter	R10807 Section A	New Construct
							South Blueberry	
Canfor FSJ	02-020-01	0	319 551	319	1/8/2010	Winter		New Construct
Canfor FSJ	02-020-02	0		551	1/8/2010	Winter	South Blueberry	New Construct
Canfor FSJ	02-020-03	0	273 843	273	1/8/2010	Winter	South Blueberry South Blueberry	New Construct
Canfor FSJ	02-020-04	0	843	843	1/8/2010	Winter	South Blueberry	New Construct
Total				109018				



### **Table 26**: Annual report on roads constructed in the Fort St. John BCTS field office area.

Steward Name	Road Name	0	End (m)	Length (m)	Completion Date	Season	Area	Method
BCTS	133-800	0	860	860	15-01-10	Winter	Inga Lake	Reactivate
BCTS	20-400	0	1776	1776	15-01-10	Winter	Inga Lake	Reactivate
BCTS	A63402-001-00	0	525	525	30-01-10	Winter	Inga Lake	New Construct
BCTS	A63402-001-01	0	340	340	30-01-10	Winter	Inga Lake	New Construct
BCTS	A63402-01027-00	0	908	908	30-01-10	Winter	Inga Lake	New Construct
BCTS	A63412-001-00	1779	2830	1051	30-01-10	Winter	Inga Lake	Reactivate
BCTS	A66547-001-01	0	1543	1543	4/1/2010	Winter	South Blueberry	New Construct
BCTS	A66550-001-00	0	2943	2943	5/12/2009	Winter	Wonowon	New Construct
BCTS	A66554-001-02	0	2492	2492	30-01-10	Winter	South Blueberry	New Construct
BCTS	A80055-01069-01	0	297	297	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01070-00	0	350	350	15-01-10	Winter	Inga Lake	Reactivate
BCTS	A80055-01071-00	0	315	315	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01072-00	0	1996	1996	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01072-01	0	264	264	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01072-02	0	674	674	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01072-03	0	354	354	15-01-10	Winter	Inga Lake	New Construct
BCTS	A82096-18008-00	0	3765	3765	5/12/2009	Winter	Nig Creek	Maintaing
BCTS	A82096-18008-01	0	2504	2504	5/12/2009	Winter	Nig Creek	New Construct
BCTS	A82098-01042-00	0	4631	4631	9/1/2010	Winter	Inga Lake	New Construct
BCTS	A82098-01042-01	0	383	383	9/1/2010	Winter	Inga Lake	New Construct
BCTS	A82098-01042-02	0	579	579	9/1/2010	Winter	Inga Lake	New Construct
BCTS	A82098-01042-03	0	451	451	9/1/2010	Winter	Inga Lake	New Construct
BCTS	A82098-01042-04	0	320	320	9/1/2010	Winter	Inga Lake	New Construct
BCTS	A82098-01045-01	0	2616	2616	9/1/2010	Winter	Inga Lake	New Construct
BCTS	A82098-01045-02	0	450	450	9/1/2010	Winter	Inga Lake	New Construct
BCTS	A82098-01046-01	0	581	581	9/1/2010	Winter	Inga Lake	New Construct
BCTS	A82099-01078-00	0	3370	3370	2/2/2010	Winter	Inga Lake	New Construct
BCTS	A82099-01078-01	0	1683	1683	1/2/2010	Winter	Inga Lake	New Construct
BCTS	A84642-04045-01	0	1885	1885	30-12-09	Winter	Wonowon	New Construct
BCTS	A84642-04045-02	0	363	363	5/12/2009	Winter	Wonowon	New Construct
BCTS	A84642-04045-03	0	948	948	5/12/2009	Winter	Wonowon	New Construct
BCTS	A84642-04050-00A	0	840	840	5/12/2009	Winter	Wonowon	New Construct
BCTS	A84642-04050-01	0	285	285	5/12/2009	Winter	Wonowon	New Construct
BCTS	A84642-04050-02	0	961	961	5/12/2009	Winter	Wonowon	New Construct
BCTS	A84642-04050-03	0	325	325	5/12/2009	Winter	Wonowon	New Construct
BCTS	A84642-04050-04	0	169	169	5/12/2009	Winter	Wonowon	New Construct
BCTS	A85683-02029-01	0	609	609	1/3/2010	Winter	South Blueberry	New Construct
BCTS	A85683-02029-02	0	511	511	1/3/2010	Winter	South Blueberry	New Construct
BCTS	A85683-02030-01	0	1351	1351	1/3/2010	Winter	South Blueberry	Reconstruct
BCTS	A85799-02084-00	0	2500	2500	1/3/2010	Winter	South Blueberry	Reactivate
BCTS	133-800	0	860	860	15-01-10	Winter	Inga Lake	Reactivate
BCTS	20-400	0	1776	1776	15-01-10	Winter	Inga Lake	Reactivate

## April 1<sup>st</sup> 2009 to March 31<sup>st</sup> 2010

Steward Name	Road Name	Start (m)	End (m)	Length (m)	Completion Date	Season	Area	Method
BCTS	A63402-001-01	0	340	340	30-01-10	Winter	Inga Lake	New Construct
BCTS	A63402-01027-00	0	908	908	30-01-10	Winter	Inga Lake	New Construct
BCTS	A63412-001-00	1779	2830	1051	30-01-10	Winter	Inga Lake	Reactivate
BCTS	A66547-001-01	0	1543	1543	4/1/2010	Winter	South Blueberry	New Construct
BCTS	A66550-001-00	0	2943	2943	5/12/2009	Winter	Wonowon	New Construct
BCTS	A66554-001-02	0	2492	2492	30-01-10	Winter	South Blueberry	New Construct
BCTS	A80055-01069-01	0	297	297	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01070-00	0	350	350	15-01-10	Winter	Inga Lake	Reactivate
BCTS	A80055-01071-00	0	315	315	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01072-00	0	1996	1996	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01072-01	0	264	264	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01072-02	0	674	674	15-01-10	Winter	Inga Lake	New Construct
BCTS	A80055-01072-03	0	354	354	15-01-10	Winter	Inga Lake	New Construct
BCTS	A82096-18008-00	0	3765	3765	5/12/2009	Winter	Nig Creek	Maintaing
BCTS	A82096-18008-01	0	2504	2504	5/12/2009	Winter	Nig Creek	New Construct
BCTS	A82098-01042-00	0	4631	4631	9/1/2010	Winter	Inga Lake	New Construct
Total:				55088				



Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type	Level of Road Deactivation Completed
Canfor FSJ	02-018-00	0	384	384	2/1/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	02-018-04	0	539	539	2/1/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	02-018-05	0	481	481	2/1/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	02-018-06	0	256	256	2/1/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	02-019-00	0	475	475	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	02-019-01	0	368	368	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	02-019-02	0	295	295	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	02-019-03	0	579	579	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
							R10807 Section		
Canfor FSJ	02-020-00	1667	2331	664	3/15/10	Cross Ditches	A	Quad/ATV	Permanent
Canfor FSJ	02-036-00	0	259	259	3/15/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	02-036-01	0	505	505	3/15/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	02-038-00	0	306	306	3/15/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	02-081-01	0	794	794	3/1/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	02-081-03	0	1037	1037	3/1/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	02-085-01	0	379	379	3/15/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	09-025-00	0	416	416	3/15/10	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor FSJ	09-025-01	0	391	391	3/15/10	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor FSJ	S02-061-00	0	1986	1986	4/3/09	Ditching	South Blueberry	2WD	Permanent
Canfor FSJ	S02-061-01	0	789	789	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-014	0	2560	2560	4/1/09	Ditching	South Blueberry	4WD	Maintained- Inactive
Canfor FSJ	S02-061-015	0	562	562	4/5/09	Cross Ditches	South Blueberry	4WD	Temporary
Canfor FSJ	S02-061-02	0	283	283	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-04	0	1924	1924	4/3/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-05	0	204	204	4/3/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-06	0	1057	1057	4/3/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-08	0	810	810	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-09	0	515	515	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-09	515	1630	1115	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	S02-061-11	0	736	736	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-12	0	486	486	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	S02-061-13	0	423	423	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary

**Table 27:** Road Deactivation Activities – Licensee Participants (2009 – 2010)





Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type	Level of Road Deactivation Completed
Canfor FSJ	S02-061-14	0	328	328	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-15	0	246	246	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	S02-061-17	0	308	308	4/1/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-069-00	2067	2810	743	3/25/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S25011-05	0	404	404	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-011-01	0	302	302	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-011-02	0	218	218	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-011-03	0	628	628	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-011-04	0	1043	1043	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-068-01	0	281	281	4/1/09	Cross Ditches	Alces Creek	Quad/ATV	Permanent
Canfor FSJ	S25-068-02	0	677	677	4/1/09	Cross Ditches	Alces Creek	Quad/ATV	Permanent
Canfor FSJ	S26-005-03	0	147	147	2/28/10	Cross Ditches	Beatton-Doig River	Quad/ATV	Permanent
Canfor FSJ	S26-005-04	0	985	985	2/28/10	Cross Ditches	Beatton-Doig River	Quad/ATV	Permanent
Canfor FSJ	S26-005-06	0	944	944	2/28/10	Cross Ditches	Beatton-Doig River	Quad/ATV	Permanent
Canfor FSJ	S26-009-00	0	1827	1827	2/28/10	Cross Ditches	Beatton-Doig River	Quad/ATV	Permanent
Canfor FSJ	S26-009-01	0	480	480	2/28/10	Cross Ditches		Quad/ATV	Permanent
Canfor FSJ	S26-009-03	0	308	308	2/28/10	Cross Ditches	Beatton-Doig River	Quad/ATV	Permanent
Canfor FSJ	S29-018-00 Road	0	365	365	3/30/10	Cross Ditabas	Prespatou Creek		Permanent
Canfor FSJ	02-020-01	0	319	319	3/15/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-020-01	0	551	551	3/15/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-020-02	0	273	273	3/15/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-020-03	0	843	843	3/15/10	Cross Ditches	,	Quad/ATV	Permanent
Canfor FSJ	02-020-04	0	216	216	3/15/10	Cross Ditches		Quad/ATV Quad/ATV	Temporary
Canfor FSJ	S29-019-00	0	892	892	3/30/10		Prespatou Creek		Permanent
Cameron River	02-061-00	0	428	428	4/4/09	Cross Ditches		Quad/ATV Quad/ATV	Temporary
Canfor/LP	01-020-00	0	2886	2886	3/31/10	Cross Ditches	Inga Lake	Quad/ATV Quad/ATV	Temporary
Gam01/LI	01-020-00	0	2000	2000	5/51/10		off 212-1900		remporary
Canfor/LP	09-014-00	0	2199	2199	3/20/10	Cross Ditches		Quad/ATV	Temporary
Canfor/LP	09-014-01	0	551	551	3/20/10	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor/LP	09-014-02	0	591	591	3/20/10	Cross Ditches	Kobes Creek	Quad/ATV	Permanent

Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type	Level of Road Deactivation Completed
Canfor/LP	09-027-00	0	3131	3131	3/18/10	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
Canfor/LP	09-027-01	0	675	675	3/18/10	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
Canfor/LP	S01-277-01	0	4424	4424	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-02	0	352	352	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-03	0	656	656	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-04	0	179	179	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-06	0	349	349	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-07	0	1214	1214	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-09	0	1525	1525	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-10	0	228	228	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S02-061-18	0	407	407	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor/LP	S02-061-19	0	74	74	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor/LP	S02-071-00	0	1814	1814	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor/LP	S02-071-01	0	722	722	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor/LP	S02-071-02	0	202	202	3/29/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor/LP	S02-071-03	0	126	126	3/29/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor/LP	S02-071-05	0	393	393	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor/LP	S04-033-03	0	2310	2310	3/30/10	Cross Ditches	Wonowon	Quad/ATV	Temporary
Canfor/LP	S04-033-13	0	818	818	3/30/10	Cross Ditches	Wonowon	Quad/ATV	Permanent
Canfor/LP	S04-033-14	0	643	643	3/30/10	Cross Ditches	Wonowon	Quad/ATV	Permanent
Canfor/LP	S04-033-19	0	1108	1108	4/3/09	Cross Ditches	Wonowon	Quad/ATV	Permanent
Canfor/LP	S04-033-20	0	381	381	4/3/09	Cross Ditches	Wonowon	Quad/ATV	Permanent
Canfor/LP	S04-033-22	0	2442	2442	4/3/09	Cross Ditches	Wonowon	Quad/ATV	Permanent
Canfor/LP	S04-033-23	0	1824	1824	4/3/09	Cross Ditches	Wonowon	Quad/ATV	Permanent
Canfor/LP	S04-033-25	0	188	188	4/3/09	Cross Ditches	Wonowon	Quad/ATV	Permanent
Canfor/LP	S01-277-08	0	2143	2143	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S02-089-00	0	898	898	3/15/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor/LP	S02-089-02	0	662	662	3/15/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Julia Kowalsky	02-020-00	0	1667	1667	3/15/10	Cross Ditches	R10807 Section A	Quad/ATV	Permanent
Canfor FSJ	02-018-00	0	384	384	2/1/10	Cross Ditches	South Blueberry		Temporary
Canfor FSJ	02-018-04	0	539	539	2/1/10	Cross Ditches	South Blueberry		Temporary
Canfor FSJ	02-018-05	0	481	481	2/1/10	Cross Ditches	South Blueberry		Temporary
Canfor FSJ	02-018-06	0	256	256	2/1/10	Cross Ditches	South Blueberry		Temporary
Canfor FSJ	02-019-00	0	475	475	3/30/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-019-01	0	368	368	3/30/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-019-02	0	295	295	3/30/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-019-03	0	579	579	3/30/10		South Blueberry		Permanent



Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type	Level of Road Deactivation Completed
							R10807 Section		
Canfor FSJ	02-020-00	1667	2331	664	3/15/10	Cross Ditches	A	Quad/ATV	Permanent
Canfor FSJ	02-036-00	0	259	259	3/15/10	Cross Ditches		Quad/ATV	Permanent
Canfor FSJ	02-036-01	0	505	505	3/15/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-038-00	0	306	306	3/15/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	02-081-01	0	794	794	3/1/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	02-081-03	0	1037	1037	3/1/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	02-085-01	0	379	379	3/15/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	09-025-00	0	416	416	3/15/10	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor FSJ	09-025-01	0	391	391	3/15/10	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor FSJ	S02-061-00	0	1986	1986	4/3/09	Ditching	South Blueberry	2WD	Permanent
Canfor FSJ	S02-061-01	0	789	789	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-014	0	2560	2560	4/1/09	Ditching	South Blueberry	4WD	Maintained- Inactive
Canfor FSJ	S02-061-015	0	562	562	4/5/09	Cross Ditches	South Blueberry	4WD	Temporary
Canfor FSJ	S02-061-02	0	283	283	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-04	0	1924	1924	4/3/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-05	0	204	204	4/3/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-06	0	1057	1057	4/3/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-08	0	810	810	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-09	0	515	515	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-09	515	1630	1115	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	S02-061-11	0	736	736	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-12	0	486	486	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	S02-061-13	0	423	423	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-14	0	328	328	4/2/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-061-15	0	246	246	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor FSJ	S02-061-17	0	308	308	4/1/09	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S02-069-00	2067	2810	743	3/25/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor FSJ	S25011-05	0	404	404	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-011-01	0	302	302	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-011-02	0	218	218	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-011-03	0	628	628	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-011-04	0	1043	1043	4/2/09	Cross Ditches	Alces River	Quad/ATV	Permanent
Canfor FSJ	S25-068-01	0	281	281	4/1/09	Cross Ditches	Alces Creek	Quad/ATV	Permanent
Canfor FSJ	S25-068-02	0	677	677	4/1/09	Cross Ditches	Alces Creek	Quad/ATV	Permanent

Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type	Level of Road Deactivation Completed
	_						Beatton-Doig		_
Canfor FSJ	S26-005-03	0	147	147	2/28/10	Cross Ditches	River	Quad/ATV	Permanent
	000 005 04	0	005	005	0/00/40		Beatton-Doig		Democrat
Canfor FSJ	S26-005-04	0	985	985	2/28/10	Cross Ditches	River	Quad/ATV	Permanent
Canfor FSJ	S26-005-06	0	944	944	2/28/10	Cross Ditches	Beatton-Doig River	Quad/ATV	Permanent
		_	-	_			Beatton-Doig		
Canfor FSJ	S26-009-00	0	1827	1827	2/28/10	Cross Ditches	River	Quad/ATV	Permanent
							Beatton-Doig		
Canfor FSJ	S26-009-01	0	480	480	2/28/10	Cross Ditches	River	Quad/ATV	Permanent
							Beatton-Doig		
Canfor FSJ	S26-009-03	0	308	308	2/28/10	Cross Ditches	River	Quad/ATV	Permanent
0 ( 50)	S29-018-00				0/00/40	0 0 1			<b>.</b> .
Canfor FSJ	Road	0	365	365	3/30/10		Prespatou Creek		Permanent
Canfor FSJ	02-020-01	0	319	319	3/15/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-020-02	0	551	551	3/15/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-020-03	0	273	273	3/15/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	02-020-04	0	843	843	3/15/10	Cross Ditches	South Blueberry		Permanent
Canfor FSJ	09-025-02	0	216	216	3/15/10	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor FSJ	S29-019-00	0	892	892	3/30/10		Prespatou Creek		Permanent
Cameron River	02-061-00	0	428	428	4/4/09	Cross Ditches		Quad/ATV	Temporary
Canfor/LP	01-020-00	0	2886	2886	3/31/10	Cross Ditches	Inga Lake	Quad/ATV	Temporary
		_					off 212-1900		_
Canfor/LP	09-014-00	0	2199	2199	3/20/10	Cross Ditches	road	Quad/ATV	Temporary
Canfor/LP	09-014-01	0	551	551	3/20/10	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor/LP	09-014-02	0	591	591	3/20/10	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
Canfor/LP	09-027-00	0	3131	3131	3/18/10	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
Canfor/LP	09-027-01	0	675	675	3/18/10	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
Canfor/LP	S01-277-01	0	4424	4424	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-02	0	352	352	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-03	0	656	656	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-04	0	179	179	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-06	0	349	349	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-07	0	1214	1214	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-09	0	1525	1525	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S01-277-10	0	228	228	3/15/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor/LP	S02-061-18	0	407	407	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor/LP	S02-061-19	0	74	74	1/10/10	Cross Ditches	South Blueberry	Quad/ATV	Temporary



S	iteward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type	Level of Road Deactivation Completed
Ca	anfor/LP	S02-071-00	0	1814	1814	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Ca	anfor/LP	S02-071-01	0	722	722	3/30/10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
			Total kms:		74130					

#### **Table 28:** Annual report on roads deactivated in the Fort St John BCTS field office area.

Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type	Level
BCTS	A63402-001-01	0	340	340	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A63412-001-00	1779	2830	1051	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A66547-001-01	0	1543	1543	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A66550-001-00	0	2943	2943	31-03-10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
BCTS	A66554-001-00	0	292	292	31-03-10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
BCTS	A66554-001-01	0	1613	1613	31-03-10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
BCTS	A66554-001-02	0	2492	2492	31-03-10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
BCTS	A80055-01069-01	0	297	297	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01070-00	0	350	350	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01071-00	0	315	315	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01072-00	0	1996	1996	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01072-01	0	264	264	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01072-02	0	674	674	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01072-03	0	354	354	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A82096-18008-00	0	3765	3765	6/3/10	Grading	Inga Lake	4WD	Maintained-Inactive
BCTS	A82096-18008-01	0	2504	2504	31-03-10	Cross Ditches	Inga Lake	4WD	Temporary
BCTS	A82098-01042-01	0	383	383	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A82098-01042-03	0	451	451	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A82098-01042-04	0	320	320	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A82098-01045-01	0	2616	2616	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A82098-01045-02	0	450	450	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A82098-01046-01	0	581	581	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Temporary
BCTS	A82099-01078-00	0	1560	1560	5/3/10	Deactivate	Inga Lake	4WD	Permanent
BCTS	A82099-01078-00	1570	3370	1800	5/3/10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A82099-01078-01	0	1683	1683	5/3/10	Deactivate	Inga Lake	Quad/ATV	Permanent
BCTS	A84642-04045-01	0	1885	1885	31-03-10	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A84642-04045-02	0	363	363	31-03-10	Cross Ditches	Wonowon	Quad/ATV	Permanent

April 1<sup>st</sup> 2009 to March 31<sup>st</sup> 2010





BCTS	A84642-04045-03	0	948	948	31-03-10	Deactivate	Wonowon	Quad/ATV	Permanent
BCTS	A84642-04050-00A	0	840	840	31-03-10	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A84642-04050-01	0	285	285	31-03-10	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A84642-04050-02	0	961	961	31-03-10	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A84642-04050-03	0	325	325	31-03-10	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A84642-04050-04	0	169	169	31-03-10	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A63402-001-01	0	340	340	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A63412-001-00	1779	2830	1051	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A66547-001-01	0	1543	1543	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A66550-001-00	0	2943	2943	31-03-10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
BCTS	A66554-001-00	0	292	292	31-03-10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
BCTS	A66554-001-01	0	1613	1613	31-03-10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
BCTS	A66554-001-02	0	2492	2492	31-03-10	Cross Ditches	South Blueberry	Quad/ATV	Permanent
BCTS	A80055-01069-01	0	297	297	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01070-00	0	350	350	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01071-00	0	315	315	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01072-00	0	1996	1996	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
BCTS	A80055-01072-01	0	264	264	31-03-10	Cross Ditches	Inga Lake	Quad/ATV	Permanent
<u>Total</u> :			36413						

Appendix 4: Timber Harvesting



Participant	Gross Area (ha)	Merch Area (ha)
BCTS	1078.9	1034.5
Dunne-za/Canfor	0	0
Cameron R	145.7	116.2
Tembec	268.9	250.4
Canfor (conifer)	475.8	435.1
Canfor (decid)	913.2	848.0
LP	2058.0	1839.4
Total	4970.5	4523.60

### **Table 29:** Summary of Completed Timber Harvesting by Participants (April 1, 2009 to March 31, 2010)



Appendix 5: Reforestation

Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1	Sp 1 %	Sp. 2	Sp 2 %
11-Feb-05	94A.053-047	A61985		1	Regen Delay (Stocking)(Walkthrough)	20-Aug-09	A-1	34.3	I	At	80	Ac	20
		A61985		1	Regen Delay (Stocking)(Walkthrough)	20-Aug-09	A-2	13.4	I	At	90	Ac	10
26-Mar-06	94A.031-027	A63391		1	Regen Delay (Stocking)(Walkthrough)	06-Aug-09	А	49.6	I	At	90	Ac	10
07-Jan-07	94A.031-028	A63392		1	Regen Delay (Stocking)(Walkthrough)	13-Aug-09	A1	69.1	I	At	90	Ac	10
		A63392		1	Regen Delay (Stocking)(Walkthrough)	13-Aug-09	A2	16.2	I	Ac	70	Ac	30
		A63392		1	Regen Delay (Stocking)(Walkthrough)	13-Aug-09	B1	51.8	I	At	70	Ac	30
05-Dec-06	94A.021-031	A63393		1	Regen Delay (Stocking)(Walkthrough)	14-Aug-09	А	22.4		At	80	Ac	20
		A63393		1	Regen Delay (Stocking)(Walkthrough)	14-Aug-09	В	39.1		At	90	Ac	10
30-Dec-05	94A.054-059	A63405		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	А	35.5		At	70	Sw	30
		A63405		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	В	15.4		At	60	Ep	40
		A63405		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	С	15.8		Ep	50	Sw	50
31-Jan-05	94A.061-032	A63410		1	Regen Delay (Stocking)(Walkthrough)	02-Jun-09	1	73.9		At	60	Sw	40
		A63410		1	Regen Delay (Stocking)(Walkthrough)	02-Jun-09	2	110.7		At	100		
03-Feb-05	94A.065-010	A63417		1	Regen Delay (Stocking)(Walkthrough)	27-Jul-09	А	29.9	I	At		Sw	
		A63417		1	Regen Delay (Stocking)(Walkthrough)	27-Jul-09	В	19.4		At	90	Ep	10
14-Feb-06	94B.089-029	A63435		1	Regen Delay (Stocking)(Walkthrough)	25-Jul-09	Α	42.0		At	100		
28-Nov-05	94B.090-011	A63439		1	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	А	25.8		At	80	Ac	20
		A63439		1	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	В	1.0	I	At	60	Sx	40
		A63439		1	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	С	19.7		At	90	Ac	10
13-Dec-05	94B.090-012	A63440		1	Regen Delay (Stocking)(Walkthrough)	30-Jul-09	1	16.6		At	100		
31-Dec-05	94G.018-004	A63450		1	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A1	13.8	I	At	80	Pli	20
		A63450		1	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A2	8.9	I	Sw	50	Pli	50
		A63450		1	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A3	10.4	I	Sw	50	Pli	50-
15-Dec-04	94H.003-010	A63456		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	А	59.4	I	Pli	50	Sx	50
		A63456		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	В	10.6	I	Sx	100		
		A63456		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	В	10.6		Sx	100		
20-Jan-05	94A.055-035	A64846		1	Regen Delay (Stocking)(Walkthrough)	31-Jul-09	А	17.8	I	At	90	Sw	10

 Table 30:
 BCTS Establishment Delay Complete (Inventory Label) 2009



	A64846	1	Regen Delay (Stocking)(Walkthrough)	31-Jul-09	В	45.1	I	At-	100	
01-Dec-0594B.079-012	A66538	1	Regen Delay (Stocking)(Walkthrough)	16-Jul-09	Α	24.9	Ι	At	100	
	A66538	1	Regen Delay (Stocking)(Walkthrough)	16-Jul-09	В	37.0	I	At	90 At	10
01-Dec-0594B.079-013	A66538	2	Regen Delay (Stocking)(Walkthrough)	15-Jul-09	А	35.3	I	At	100	
	A66538	2	Regen Delay (Stocking)(Walkthrough)	15-Jul-09	В	7.3	I	At	90 Pli	10
01-Dec-0594B.079-014	A66538	3	Regen Delay (Stocking)(Walkthrough)	14-Jul-09	Α	61.9	Ι	At	100	
	A66538	3	Regen Delay (Stocking)(Walkthrough)	14-Jul-09	В	30.4	I	At	90 Sx	10
01-Dec-0594B.080-021	A66538	4	Regen Delay (Stocking)(Walkthrough)	25-Jul-09	А	29.3	I	At	100	
13-Nov-0694B.070-010	A66545	1	Regen Delay (Stocking)(Walkthrough)	11-Jul-09	А	39.3	I	At	100	
	A66545	1	Regen Delay (Stocking)(Walkthrough)	11-Jul-09	В	9.9	I	At	90 Sw	10
13-Nov-0694B.070-011	A66545	2	Regen Delay (Stocking)(Walkthrough)	10-Jul-09	А	21.0	I	At	100	
	A66545	2	Regen Delay (Stocking)(Walkthrough)	10-Jul-09	В	18.70	I	At	90 Sw	10
01-Mar-0794A.051-007	A66555	2	Regen Delay (Stocking)(Walkthrough)	16-Aug-09	A1	76.9	Ι	At	100	
	A66555	2	Regen Delay (Stocking)(Walkthrough)	30-Jul-09	B1	30.8	I	At	80 Ac	20
29-Jan-0794A.051-008	A66557	1	Regen Delay (Stocking)(Walkthrough)	06-Jul-09	А	123.0	I	At	90 Ac	10
	A66557	1	Regen Delay (Stocking)(Walkthrough)	06-Jul-09	В	5.9	I	At	90 Sw	10
31-Dec-0594A.093-012	A70094	1	Regen Delay (Stocking)(Walkthrough)	11-Aug-09	A1	65.3	I	At	90 Sw	10
	A70094	1	Regen Delay (Stocking)(Walkthrough)	11-Aug-09	A2	8.5	I	Sw	50 At	50
11-Mar-0794A.091-022	A76785	03074	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A1	12.6	I	Pli	50 At	50
	A76785	03074	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A2	8.4	I	At	90 Sw	10
	A76785	03074	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	В	6.7	I	Pli	70 At	30
12-Nov-0894A.063-067	A76788	01033	Regen Delay (Stocking)(Walkthrough)	30-Jul-09	A1	14.3	I	Pli	100	
	A76788	01033	Regen Delay (Stocking)(Walkthrough)	30-Jul-09	B1	1.9	I	Pli	100	
25-Nov-0894A.063-068	A76788	01034	Regen Delay (Stocking)(Walkthrough)	06-Aug-09	A1	48.8	I	Pli	100	
25-Nov-0894A.064-039	A76788	01037	Regen Delay (Stocking)(Walkthrough)	07-Aug-09	A1	33.2	I	Sx	80 At	20
17-Nov-0894A.064-034	A76789	01032	Regen Delay (Stocking)(Walkthrough)	07-Aug-09	A1	4.3	I	Sx	100	
15-Dec-0794H.053-001	A76792	41004	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	A1	22.7	I	Sx	70 At	30
	A76792	41004	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	B1	5.2	Ι	Sx	70 At	30
	A76792	41004	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	C1	2.8	I	Sx	70 At	30
21-Nov-0794H.023-022	A80049	38001	Regen Delay (Stocking)(Walkthrough)	27-Jul-09	A1	23.0		Sx	70 At	30

24-Nov-0894A.073-043	A83961	02050	Regen Delay (Stocking)(Walkthrough)	07-Aug-09	A1	112.2		Pli	90	At	10
	A83961	02050	Regen Delay (Stocking)(Walkthrough)	07-Aug-09	B1	6.2	I	Pli-	90	At	10
15-Dec-0894A.073-044	A83962	02051	Regen Delay (Stocking)(Walkthrough)	06-Aug-09	A1	66.2	I	Pli	90	At	10



# Table 31: BCTS Establishment Delay Complete (Silviculture Label) 2009

Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1	Sp 1 %	Sp. 2	Sp 2 %
	94A.053-047	A61985	I CHIII		Regen Delay (Stocking)(Walkthrough)	20-Aug-09	A-1	34.3	-	At	92	Ac	8
		A61985		1	Regen Delay (Stocking)(Walkthrough)	20-Aug-09		13.4		At	93	Ac	7
26-Mar-06	94A.031-027	A63391		1	Regen Delay (Stocking)(Walkthrough)	06-Aug-09	A	49.6		At	87	Ac	13
	94A.031-028	A63392		1	Regen Delay (Stocking)(Walkthrough)	13-Aug-09		69.1	S	At	97	Ac	3
		A63392		1	Regen Delay (Stocking)(Walkthrough)	13-Aug-09		16.2	S	Ac	65		
		A63392		1	Regen Delay (Stocking)(Walkthrough)	13-Aug-09		51.8		Sw	100		
05-Dec-06	94A.021-031	A63393		1	Regen Delay (Stocking)(Walkthrough)	14-Aug-09		22.4	S	Sw	100		
		A63393		1	Regen Delay (Stocking)(Walkthrough)	14-Aug-09		39.1	S	At	90	Ac	10
30-Dec-05	94A.054-059	A63405		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	А	35.5	S	Sw	87	Pli	13
		A63405		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	В	15.4	S	Pli	56	Sw	44
		A63405		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	С	15.8	S	Sw	100		
31-Jan-05	94A.061-032	A63410		1	Regen Delay (Stocking)(Walkthrough)	02-Jun-09	1	73.9	S	Sx	100		
		A63410		1	Regen Delay (Stocking)(Walkthrough)	02-Jun-09	2	110.7	S	At	100		
03-Feb-05	94A.065-010	A63417		1	Regen Delay (Stocking)(Walkthrough)	27-Jul-09	Α	29.9	S	Sw	100		
		A63417		1	Regen Delay (Stocking)(Walkthrough)	27-Jul-09	В	19.4	S	At	89	Ep	11
14-Feb-06	94B.089-029	A63435		1	Regen Delay (Stocking)(Walkthrough)	25-Jul-09	Α	42.0	S	At	98	Ac	2
28-Nov-05	94B.090-011	A63439		1	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	Α	25.8	S	Sw	100		
		A63439		1	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	В	1.0	S	Sw	100		
		A63439		1	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	С	19.7	S	At	97	Ac	3
13-Dec-05	94B.090-012	A63440		1	Regen Delay (Stocking)(Walkthrough)	30-Jul-09	1	16.6	S	At	100		
31-Dec-05	94G.018-004	A63450		1	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A1	13.8	S	Sw	57	Pli	43
		A63450		1	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A2	8.9	S	Sw	52	Pli	48
		A63450		1	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A3	10.4	S	Sw	64	Pli	36
15-Dec-04	94H.003-010	A63456		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	А	59.4	S	Pli	50	Sx	50
		A63456		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	В	10.6	S	Sx	100		
15-Dec-04	ŀ	A63456		1	Regen Delay (Stocking)(Walkthrough)	29-Jul-09	А	59.4	S	Pli	50	Sx	50

20-Jan-0594A.055-035	A64846	1	Regen Delay (Stocking)(Walkthrough)	31-Jul-09	A 17.	3 S	Sw	100		
	A64846		Regen Delay (Stocking)(Walkthrough)	31-Jul-09	B 45.	-	At	99	Ac	1
01-Dec-0594B.079-012	A66538	1	Regen Delay (Stocking)(Walkthrough)	16-Jul-09	A 25.		At	100		
	A66538	1	Regen Delay (Stocking)(Walkthrough)	16-Jul-09	B 37.	) S	Sw	82	Pli <sup>-</sup>	18
01-Dec-0594B.079-013	A66538	2	Regen Delay (Stocking)(Walkthrough)	15-Jul-09	A 35.	3 S	At	100		
	A66538	2	Regen Delay (Stocking)(Walkthrough)	15-Jul-09	B 7.3	3 S	Pli	93 3	Sw	7
01-Dec-0594B.079-014	A66538	3	Regen Delay (Stocking)(Walkthrough)	14-Jul-09	A 61.	) S	At	100		
	A66538	3	Regen Delay (Stocking)(Walkthrough)	14-Jul-09	B 30.4	4 S	Sw	94	Pli	6
01-Dec-0594B.080-021	A66538	4	Regen Delay (Stocking)(Walkthrough)	25-Jul-09	A 29.3	3 S	At	100		
13-Nov-0694B.070-010	A66545	1	Regen Delay (Stocking)(Walkthrough)	11-Jul-09	A 39.	3 S	At	100		
	A66545	1	Regen Delay (Stocking)(Walkthrough)	11-Jul-09	B 9.9	3 S	Sw	100		
13-Nov-0694B.070-011	A66545	2	Regen Delay (Stocking)(Walkthrough)	10-Jul-09	A 21.	) S	At	100		
	A66545	2	Regen Delay (Stocking)(Walkthrough)	10-Jul-09	B 18.	7 S	Sw	100		
01-Mar-0794A.051-007	A66555	2	Regen Delay (Stocking)(Walkthrough)	16-Aug-09	A1 76.	S	At	99	Ac	1
	A66555	2	Regen Delay (Stocking)(Walkthrough)	30-Jul-09	B1 30.	3 S	Sw	100		
29-Jan-0794A.051-008	A66557	1	Regen Delay (Stocking)(Walkthrough)	06-Jul-09	A 123.	) S	At	100		
	A66557	1	Regen Delay (Stocking)(Walkthrough)	06-Jul-09	B 5.	) S	Sw	87	BI <sup>-</sup>	13
31-Dec-0594A.093-012	A70094	1	Regen Delay (Stocking)(Walkthrough)	11-Aug-09	A1 65.	3 S	Sw	95	Pli	5
	A70094	1	Regen Delay (Stocking)(Walkthrough)	11-Aug-09	A2 8.	5 S	Sw	90	Sb '	10
11-Mar-0794A.091-022	A76785	03074	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A1 12.	6 S	Sw	84	Pli <sup>-</sup>	16
	A76785	03074	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	A2 8.4	4 S	Sw	99	Pli	1
	A76785	03074	Regen Delay (Stocking)(Walkthrough)	04-Aug-09	B 6.	7 S	Pli	100		
12-Nov-0894A.063-067	A76788	01033	Regen Delay (Stocking)(Walkthrough)	30-Jul-09	A1 14.3	3 S	Pli	100		
	A76788	01033	Regen Delay (Stocking)(Walkthrough)	30-Jul-09	B1 1.9	) S	Pli	100		
25-Nov-0894A.063-068	A76788	01034	Regen Delay (Stocking)(Walkthrough)	06-Aug-09	A1 48.	3 S	Pli	100		
25-Nov-0894A.064-039	A76788	01037	Regen Delay (Stocking)(Walkthrough)	07-Aug-09	A1 33.	2 S	Sx	100		
17-Nov-0894A.064-034	A76789	01032	Regen Delay (Stocking)(Walkthrough)	07-Aug-09	A1 4.3	3 S	Sx	100		
15-Dec-0794H.053-001	A76792	41004	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	A1 22.	7 S	Sx	100		
	A76792	41004	Regen Delay (Stocking)(Walkthrough)	17-Jul-09	B1 5.3	2 S	Sx	100		
	A76792		Regen Delay (Stocking)(Walkthrough)		C1 2.8	-	Sx	100		
21-Nov-0794H.023-022	A80049		Regen Delay (Stocking)(Walkthrough)		A1 23.	-	Sx	100		
24-Nov-0894A.073-043	A83961				A1 112.		Pli	100		





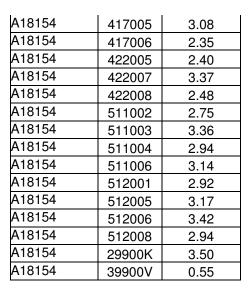
A83961 02050 Regen Delay (Stocking)(Walkthrough) 07-Aug-0		6.2	S	Pli	100	
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## Table 32: Mean MSQ by Block-BCTS (2009)

Licence	Block	Opening Number	Block MSQ Average
A31996	1	94A.079-002	3.21
A36002	1	94G.016-001	2.68
A36005	1	94H.002-023	3.84
A45128	1	94A.063-025	3.26
A45130	1	94A.063-033	3.33
A45134	1	94H.002-021	3.63
A49504	1	94A.063-031	3.36

License	Block	Block-Level Mean MSQ
A18154	119004	3.93
A18154	119005	3.93
A18154	137001	3.57
A18154	137002	3.72
A18154	137003	3.86
A18154	137004	3.63
A18154	137005	3.64
A18154	137006	3.63
A18154	137007	3.69
A18154	137009	3.76
A18154	206003	3.67
A18154	208006	3.64
A18154	211007	3.39
A18154	214004	3.27
A18154	324001	3.31
A18154	324002	3.00
A18154	324003	3.59
A18154	324004	3.27
A18154	324005	3.31
A18154	324007	3.77
A18154	325002	3.62
A18154	406001	2.50
A18154	406002	2.88
A18154	406004	2.50
A18154	406005	3.00
A18154	406006	2.75
A18154	417001	3.67
A18154	417002	2.33
A18154	417003	2.38

# Table 33: Mean MSQ by Block-Canfor (2009)



Harvest Start Date	Opening	License	Permit	Block ID	Activity	Activity Date	Area	Seedlot	# Trees
01-Nov-98	94A03100 18	A52770		1	Planting (Container)	27-Jul-09	12.4	31308	19970
02-Jan-05	94H03300 4	A60209		1	Fill Plant	23-Jul-09	5.8	52043	6000
		A60209		1	Fill Plant	23-Jul-09	59.0	52043	29010
15-Nov-06	94A05400 55	A63403		1	Fill Plant	30-Jul-09	2.0	31308	1269
		A63403		1	Fill Plant	30-Jul-09	6.0	52043	5349
		A63403		1	Fill Plant	30-Jul-09	32.0	52043	14940
07-Feb-07	94A05400 61	A63404		1	Fill Plant	29-Jul-09	16.7	52043	13500
		A63404		1	Fill Plant	29-Jul-09	50.9	31308	21240
07-Feb-05	94A06100 29	A63412		1	Fill Plant	30-Jul-09	11.3	31308	8050
11-Nov-05	94A08300 33	A63424		1	Fill Plant	06-Aug-09	5.7	31308	2900
30-Nov-07	94A08400 18	A63425		29005	Planting (Container) burn piles	05-Aug-09	1.6	02116	1560
30-Nov-07	94A08400 19	A63425		29004	Planting (Container)	14-Aug-09	2.6	48541	1410
15-Dec-04	94H00300 10	A63456		1	Planting (Container)	29-Jul-09	36.8	31308	46050
01-Feb-06	94H03200 36	A63459		3	Fill Plant	21-Jul-09	27.1	52043	10260
15-Dec-04	94H03300 5	A63459		2	Fill Plant	21-Jul-09	28.1	52043	12960
01-Mar-07	94A05100 7	A66555		2	Planting (Container)	30-Jul-09	30.8	31308	44730
12-Jan-07	94A09100 23	A76785		03053	Planting (Container)	30-Jul-09	11.5	02116	16860
25-Nov-08	94A06300 68	A76788		01034	Planting (Container)	06-Aug-09	10.6	02116	10930
12-Nov-08	94A06300 67	A76788		01033	Planting (Container)	30-Jul-09	16.5	48541	23760
05-Dec-08	94A06300 69	A76788		01035	Planting (Container)	12-Aug-09	16.8	52041	12412
05-Dec-08	94A06300 69	A76788		01035	Planting (Container)	12-Aug-09	17.0	31308	14925
05-Dec-08	94A06300 69	A76788		01035	Planting (Container)	12-Aug-09	30.4	02116	49695
25-Nov-08	94A06400 39	A76788		01037	Planting (Container)	07-Aug-09	34.0	02116	42095
25-Nov-08	94A06300 68	A76788		01034	Planting (Container)	06-Aug-09	38.2	48541	55905
17-Nov-08	94A06400 34	A76789		01032	Planting (Container)	07-Aug-09	4.3	31308	7135
24-Nov-08	94A06400 36	A76789		01039	Planting (Container)	01-Aug-09	13.0	31308	12330
24-Nov-08	94A06400 36	A76789		01039	Planting (Container)	01-Aug-09	16.0	52041	12585
26-Jan-09	94A06400 37	A76789		01040	Planting (Container)	31-Jul-09	23.0	02116	35610
24-Nov-08	94A06400 36	A76789		01039	Planting (Container)	01-Aug-09	24.3	48541	40570

 Table 34:
 BCTS Planting Activities (2009)



00 000 00		7.04100	Total	2020		· · ·	945.6	02110	1,049,875
	94A07300 45	A84189			Planting (Container)	11-Aug-09		02116	16345
15-Dec-08	94A07300 44	A83962			Planting (Container)	06-Aug-09	61.1	48541	79487
15-Dec-08	94A07300 44	A83962	0	2051	Planting (Container)	06-Aug-09	21.4	48541	27642
15-Dec-08	94A07300 44	A83962	0	2051	Planting (Container)	06-Aug-09	6.7	48541	8066
24-Nov-08	94A07300 43	A83961	0	2050	Planting (Container)	07-Aug-09	74.9	48541	106930
24-Nov-08	94A07300 43	A83961	0	2050	Planting (Container)	07-Aug-09	45.0	02116	63365
30-Nov-07	94A09300 14	A80054	2	9012	Fill Plant (Container)	29-Jul-09	16.2	60455	4490
15-Nov-07	94A09300 15	A80053	2	9025	Planting (Container)	29-Jul-09	11.9	31308	14360
20-Dec-07	94A09400 33	A80052	2	9010	Planting (Container)	22-Jul-09	23.2	31308	33220
14-Oct-07	94A08400 21	A80051	2	9027	Planting (Container)	23-Jul-09	6.4	31308	9540
30-Nov-07	94A08400 17	A80050	2	9001	Planting (Container) burn piles	06-Aug-09	1.1	31308	700
21-Nov-07	94H02300 22	A80049	3	8001	Planting (Container)	27-Jul-09	15.8	52041	21600
21-Nov-07	94H02300 22	A80049	3	8001	Planting (Container)	27-Jul-09	5.3	52043	11120
21-Nov-07	94H02300 22	A80049	3	8001	Planting (Container)	27-Jul-09	1.8	31308	4820
15-Dec-07	94H05300 1	A76792	4	1004	Planting (Container)	17-Jul-09	30.7	31308	52560
26-Jan-09	94A06400 37	A76789	0	1040	Planting (Container)	31-Jul-09	28.0	52041	21620

 Table 35:
 Predicted and Target Volumes by Stratum-BCTS 2009

Block Strata Summary	Stratum	Net Area (ha)	Mean SI	Mean EA	Mean MSQ	Mean TSS	PMV/ha	Tot PMV	Target MSQ	Target EA	TMV/ha	Total TMV	PMV % of Target
A49504(A)	PI/WG/21-23/1200-1400	10.2	21.1	13	3.4	1200	531.4	5420	3.7	14	520.3	5307	102.1
A45130(B), A45134(B),													
A36005(A), A45128(A)	PISx/WG/19-21/1200-1400	93	20.7	15.2	3.7	1200	558.5	51922	3.7	14	527	48994	106
A45134(A), A36005(B)	PISx/WG/21-23/1200-1400	52	22.6	16.6	3.6	1200	662.3	34422	3.7	14	621.3	32292	106.6
A31996(B)	Sx/WG/19-21/1000-1200	46.4	19.9	16.4	2.8	1000	512	23770	3.5	14	511.6	23755	100.1
A36002(A)	Sx/WG/19-21/1200-1400	41.9	19.8	15.8	2.5	1200	479.3	20084	3.7	14	511.9	21449	93.6

A31996(A)	Sx/WG/21-23/1200-1400	24.6	24.8	14.8	3.6	1200	812.9	20006	3.7	14	771.5	18987	105.4
A45130(A)	Sx/WG/23-25/1200-1400	32.2	24.7	17	3.3	1200	804.8	25946	3.7	14	766.3	24706	105
	Total	300.3	21.6	15.8	3.3	1169	604.6	181570	3.7	14	584.4	175490	103.5



# Table 36: Predicted and Target Volumes by Stratum – Canfor 2009

#### 2009 Canfor Predicted and Target Volumes by Stratum

Block Strata Summary	Stratum	NetArea(ha)	MeanSI	MeanEA	MeanMSQ	MeanTSS	PMV/ha	TotPMV	TargMSQ	TargEA	TMV/ha To
119004-А, D, 208006-В	Pl/WG/21-23/1200-1400	76.5		11.3		1200		41089	U C	14	
119005-A, 137004-A	Pl/WG/23-25/1200-1400	42.4	22.6	11.6	3.6	1200	607.4	25754	3.7	14	589.3
	PlSx/NSR/21-23/1200-										
324001-D	1400	3	16.9	11.4	0.7	1200		289	3.7	14	337.4
422008-C	PlSx/SR/19-21/1200-1400	15.4	23.3	16.7		1200	306.5	4721	3.7	14	651.3
206003-A	PlSx/WG/15-17/1200-1400	44.1	16.1	13.2	3.6		314.7	13879	3.7	14	301.6
324003-С, 422007-А	PlSx/WG/17-19/1200-1400	23.6	20.3	15.6		1200	528.6	12476	3.7	14	504
119005-В, 137003-В, 512008-А,Н	PlSx/WG/19-21/1200-1400	74.5	18.2	13	3.7	1200	420.6	31331	3.7	14	402.8
119004-C, 137003-A, 137004-B, 137005- B, 324003-A, 324004-C,D, 325002-B,D	PlSx/WG/21-23/1200-1400	137.4	21.1	13.1	3.8	1200	572.6	78681	3.7	14	546.7
137001-A, 208006-C, 324005-A	PISx/WG/23-25/1200-1400							12218	3.7	14	
, , ,	P15X/W0/25-25/1200-1400	54	17.2	9.5	5.8	1200	559.4	12218	5.7	14	552.7
39900V-A, 406001-A,B,C, 406006-B,C, 417002-A, 422005-A, 422008-D, 511006- E, 512008-G, I	Sx/SR/19-21/1200-1400	26.8	13.9	8.9	1.5	1180	128.3	3439	3.7	14	202
324005-B, 324007-A, B,								,			
417001-A,B,C, 422008-B, 511006-C	Sx/WG/17-19/1200-1400	53.5	12.1	9.8	3.2	1194	108.7	5817	3.7	14	110.7
406002-A, 406004-A, 406005-A,B, 406006-A, 417005-A, 422005-B, 511002- A,B, 511003-A, 511004-A,B, 511006-B, 512006-A,512008-C, F	Sx/WG/19-21/1200-1400	174.9	24.4	16.2	3.1	1197	766.9	134126	3.7	14	752.7
324002-В	Sx/WG/21-23/1000-1200	11	22.6	14.4	3.5	1000	685.9	7545	3.5	14	650.5
206003-B, 211007-A, 214004-B,C, 29900J-A, 324005-C, 325002-C, 422007- B, 512005-A	Sx/WG/21-23/1200-1400	143.7	23.4	15.7	3.4	1200	734.9	105610	3.7	14	702.6
511006-A,D	Sx/WG/23-25/1000-1200	25.3	23.7	17.6	3.3	1000	753.3	19059	3.5	14	705.2
137001-B, 137005-A, 137006-A,B, 137007-A,C, 208006-A, 214004-A, 324004-A, 406002-B, 417006-A, 422008-	S-1000/22 25/1200 1400	200.0	25	15.0	2.1	1200	900 5	224791	2.7	1.4	795 (
А, 511003-В	Sx/WG/23-25/1200-1400	280.8	25	15.8	3.1	1200	800.5	224781	3.7	14	785.6

#### Fort St. John Pilot Project 2009-2010 SFMP Annual Report - Final

137001-C, 137002-A,B, 137007-B, 137009-A,C, 324002-A, 324004-B, E, 324007-C, 325002-A, 422005-C, 512001-		224.1		15 0	2.2	1200	0.00.2	104501	2.7	14	046.0	
А, 512008-В	Sx/WG/25-27/1200-1400	224.1	26.2	15.3	3.2	1200	868.3	194581	3.7	14	846.2	2 1
119004-B, E, 137009-B, 324003-B,												
417003-A	Sx/WG/27-29/1200-1400	49.1	26.5	15	3	1094	860.8	42263	3.6	14	857.5	5
	Total	1440.1	22.7	14.4	3.3	1190	665	957660	3.7	14	652.3	3 9

\*\* Two strata listed have relatively low mean SI values (Sx/SR/19-21/1200-1400 and Sx/WG/17-19/1200-1400). This is attributed to low numbers of height sample trees in these strata.



Table 37:	Licensee	Participant	Planting	Activities 2009	

Harvest Start Date	Licence	Permit	Block ID	Planting Activity	Planting Date	Planted Area (ha)	Seedlot	# of Trees
12/21/2007	A18154	710	01013	Planting - Burn Piles	06/20/2009	1.0	31310	690
01/14/2008	A18154	714	01014	Planting - Establishment	06/20/2009	9.0	31310	16005
01/07/2008	A60049	704	01022	Planting - Burn Piles	07/20/2009	0.0	48555	1830
01/21/2008	A18154	706	01050	Planting - Establishment	06/20/2009	6.0	48555	9140
01/31/2008	A18154	709	01051	Planting - Burn Piles	06/20/2009	0.0	31310	300
12/15/2007	A18154	711	01052	Planting - Burn Piles	06/20/2009	2.0	31310	1965
12/21/2007	A18154	705	01054	Planting - Establishment	06/20/2009	2.0	47967	2880
12/21/2007	A18154	705	01054	Planting - Establishment	07/20/2009	11.0	48555	11025
12/21/2007	A18154	705	01054	Planting - Establishment	06/20/2009	13.0	48555	15520
12/21/2007	A18154	710	01055	Planting - Burn Piles	06/20/2009	2.0	31310	2580
01/14/2008	A18154	710	01056	Planting - Burn Piles	06/20/2009	0.0	31310	300
12/14/2007	A18154	705	01058	Planting - Burn Piles	06/20/2009	0.0	31310	150
12/11/2007	A18154	705	01059	Planting - Burn Piles	06/20/2009	0.0	31310	450
12/19/2007	A18154	705	01060	Planting - Burn Piles	06/20/2009	0.0	31310	150
12/19/2007	A18154	716	01061	Planting - Burn Piles	06/20/2009	0.0	31310	210
12/14/2007	A18154	705	01062	Planting - Burn Piles	06/20/2009	0.0	31310	165
02/25/2008	A18154	716	01063	Planting - Burn Piles	06/20/2009	0.0	31310	4785
12/06/2007	A18154	713	01064	Planting - Burn Piles	06/20/2009	0.0	31310	300
12/12/2007	A18154	708	01065	Planting - Burn Piles	06/20/2009	0.0	31310	450
12/14/2007	A18154	712	01066	Planting - Establishment	06/20/2009	15.0	47967	23400
12/12/2007	A18154	712	01067	Planting - Establishment	06/20/2009	8.0	31310	11220
12/12/2007	A18154	713	01068	Planting - Burn Piles	06/20/2009	0.0	31310	1650
12/30/2008	A60972	724	01073	Planting - Establishment	06/20/2009	3.0	31310	5400
12/30/2008	A60972	724	01073	Planting - Establishment	06/20/2009	5.0	44273	8130
01/18/2009	A60972	724	01075	Planting - Establishment	07/20/2009	9.0	48555	2790
01/18/2009	A60972	724	01075	Planting - Establishment	07/20/2009	9.0	31310	10020
01/15/2009	A60972	723	01076	Planting - Establishment	07/20/2009	5.0	48555	1260
01/15/2009	A60972	723	01076	Planting - Establishment	07/20/2009	5.0	31310	6300
01/12/2009	A60972	723	01077	Planting - Establishment	07/20/2009	5.0	48555	2475
01/12/2009	A60972	723	01077	Planting - Establishment	07/20/2009	5.0	60455	4095

12/20/2008	A59959	902	01079	Planting - Establishment	06/20/2009	17.0	47967	14640
12/20/2008	A59959	902	01079	Planting - Establishment	06/20/2009	17.0	31310	9170
12/15/2008	A59959	902	01080	Planting - Establishment	06/20/2009	8.0	48555	11300
12/15/2008	A59959	902	01080	Planting - Establishment	06/20/2009	3.0	31310	4500
12/15/2008	A59959	902	01081	Planting - Establishment	07/20/2009	7.0	30779	8160
12/09/2008	A59959	902	01085	Planting - Establishment	07/20/2009	7.0	30779	10170
08/21/2007	PAG12	APR-82371	02015	Planting - Burn Piles	06/20/2009	1.0	31310	3660
10/02/2008	A59959	902	02022	Planting - Establishment	07/20/2009	77.0	48555	102855
10/02/2008	A59959	902	02022	Planting - Establishment	06/20/2009	8.0	31310	11050
11/25/2008	PAG12	APR-84979	02064	Planting - Establishment	06/20/2009	9.0	31310	16380
01/31/2008	A60972	717	02073	Planting - Establishment	06/20/2009	10.0	31310	15570
01/31/2008	A60972	717	02074	Planting - Establishment	06/20/2009	47.0	31310	44175
01/31/2008	A60972	717	02074	Planting - Establishment	06/20/2009	47.0	31310	180
01/31/2008	A60972	717	02074	Planting - Establishment	06/20/2009	47.0	48555	27400
01/06/2003	A18154	156	03013	Planting - Fill Plant	06/20/2009	3.0	44273	2250
01/16/2007	A56771	703	03071	Planting - Burn Piles	07/20/2009	1.0	30779	1020
12/18/2006	A56771	703	03073	Planting - Burn Piles	07/20/2009	1.0	48555	960
01/08/2007	A56771	703	03075	Planting - Burn Piles	07/20/2009	1.0	30779	180
10/06/2006	A60049	193	04051	Planting - Burn Piles	07/20/2009	1.0	48555	465
01/28/2009	A59959	903	04054	Planting - Establishment	07/20/2009	43.0	30779	60480
01/28/2009	A59959	903	04054	Planting - Establishment	07/20/2009	0.0	48555	435
01/02/2003	A18154	639	07008	Planting - Fill Plant	06/20/2009	5.0	31310	3210
01/10/2002	A18154	630	07011	Planting - Fill Plant	06/20/2009	1.0	31310	600
02/10/2002	A18154	632	08007	Planting - Fill Plant	06/20/2009	4.0	31310	2300
01/07/2003	A18154	645	08023	Planting - Fill Plant	07/20/2009	1.0	31310	1170
02/04/2004	A18154	656	08043	Planting - Fill Plant	06/20/2009	1.0	31310	870
06/22/2005	A18154	222	09003	Planting - Establishment	07/18/2009	93.0	48555	112630
09/10/2008	A18154	223	09004	Planting - Establishment	07/18/2009	123.0	48555	148875
11/20/2008	A59959	248	09038	Planting - Establishment	07/18/2009	28.0	48555	37715
04/01/2008	PAG12	APR-83805	27001	Planting - Establishment	07/20/2009	4.0	31310	5070
04/01/2008	PAG12	APR-83805	27001	Planting - Establishment	07/20/2009	0.0	60455	630
04/01/2008	PAG12	APR-83805	27001	Planting - Establishment	07/20/2009	0.0	31310	690
01/24/2008	PAG12	APR-83805	27003	Planting - Burn Piles	07/20/2009	1.0	48555	1350
11/21/2007	A59959	751	27006	Planting - Burn Piles	07/20/2009	0.0	48555	60
11/21/2007	A59959	751	27007	Planting - Burn Piles	07/20/2009	0.0	48555	30

## Fort St. John Pilot Project 2009-2010 SFMP Annual Report – Final



11/21/2007	A59959	751	27008	Planting - Burn Piles	07/20/2009	0.0	48555	150
12/05/2007	A59959	751	27010	Planting - Burn Piles	07/20/2009	0.0	48555	195
12/05/2007	A59959	751	27011	Planting - Burn Piles	07/20/2009	0.0	48555	195
11/26/2007	A59959	751	27012	Planting - Burn Piles	07/20/2009	0.0	48555	105
02/11/2004	A60972	642	36027	Planting - Fill Plant	06/20/2009	9.0	31310	8040
12/01/1995	A18154	610	610006	Re-Planting - Sec. 108	06/20/2009	4.0	44273	4185
03/01/1996	A18154	610	610010	Re-Planting - Sec. 108	06/20/2009	27.0	44273	35385
03/14/2008	PAG12	APR-83869	S02028	Planting - Burn Piles	06/20/2009	1.0	31310	750
07/26/2007	PAG12	APR-81872	S02030	Planting - Establishment	06/20/2009	11.0	31310	17380
12/01/2008	A60049	243	S09016	Planting - Establishment	07/18/2009	3.0	48555	4665
12/01/2008	A60049	243	S09016	Planting - Establishment	07/18/2009	3.0	60455	5040
12/01/2008	A60049	243	S09016	Planting - Establishment	07/18/2009	3.0	31310	5985
02/02/2007	A60049	239	S09068	Planting - Establishment	07/18/2009	0.0	60455	540
02/02/2007	A60049	239	S09068	Planting - Establishment	07/18/2009	12.0	31310	18585
09/20/2007	A60049	241	S09081	Planting - Establishment	07/18/2009	13.0	48555	25575
09/20/2007	A60049	241	S09081	Planting - Establishment	07/18/2009	33.0	60455	49500
06/26/2007	A60049	240	S09115	Planting - Establishment	07/18/2009	3.0	60455	5085
06/26/2007	A60049	240	S09115	Planting - Establishment	07/18/2009	18.0	31310	30555
01/06/2009	PAG12	APR-83380	S18016	Planting - Establishment	07/20/2009	48.0	31310	75270
11/17/2006	PAG12	APR-81151	S26014	Planting - Establishment	07/20/2009	57.0	31310	94890
					Totals	972.0		1187910

Harvest							Stratum	Stratum	Inventory	Species	Species	Species	Species
	Licensee	Licence	СР	Block #	Block ID	Regen Met Date	Name	Area	Layer	1	%	2	%
24/07/2006	LP	A60049	196	S01113	S01113	07/07/2009	A1	297.60	I	At	100		
20/09/2007	LP	A60049	241	S09081	S09081	16/09/2009	1A	42.79		At	100		
20/12/2008		A59959	902		01079	20/06/2009	2	10.20		Pli	62	Sw	38
01/12/2008	LP	A60049	243	S09016	S09016	18/07/2009	A1	9.20		Pli	61	Sx	39
14/12/2007	CANFOR	A18154	712		01066	20/06/2009	1	15.29		Pli	100		
27/11/2006	LP	A60050	272	05003	05003	04/08/2009	A1	151.51		At	95	Act	5
24/01/2008	CANFOR	PAG12	APR-83805	27003	27003	17/08/2009	Α	30.00		At	100		
10/01/2008	CANFOR	PAG12	APR-82835	02065	02065	03/08/2009	A1	33.50		At	100		
13/07/2006	LP	A60049	230	S44036	S44036	20/08/2009	A1	303.40	I	At	99	Act	1
06/12/2006	LP	A60049	232	S45017	S45017	06/08/2009	A1	11.70		At	99	Ер	1
27/02/2007	LP	A60049	179	S01030	S01030	15/07/2009	A1	43.58		At	100		
08/01/2007	LP	A60049	136	S01009	S01009	15/07/2009	A1	44.37		At	100		
02/10/2008		A59959	902	02022	02022	21/06/2009	A19	7.78		Sx	100		
02/10/2008		A59959	902	02022	02022	21/07/2009	A29	44.82		Pli	100		
01/11/2005	LP	A60050	227	S05012	S05012	18/08/2009	C1	21.82		At	100		
14/12/2006	LP	A60049	232	S09078	S09078	10/08/2009	A1	9.57		At	100		
23/01/2008	LP	A60049	431	S26016	S26016	17/08/2009	Α	40.42		At	100		
09/07/2007	LP	A60050	702	05001	05001	06/08/2009	B1	48.52		At	100		
09/07/2007	LP	A60050	702	05001	05001	06/08/2009	A1	52.03		At	100		
22/06/2005	CANFOR	A18154	222	09003	09003	18/07/2009	B-1	31.01		Pli	100		
17/11/2006	CANFOR	PAG12	APR-81151	S26014	S26014	22/07/2009	В	17.93		At	100		
15/12/2008		A59959	902		01080	20/06/2009	1	11.17	-	Pli	58	Sx	42
12/01/2009	TEMBEC	A60972	723	01077	01077	20/07/2009	2	4.90	-	Sx	70	Pli	30
24/07/2006	LP	A60049	195	04049	04049	21/07/2009	A1	201.32		At	100		
12/02/2007	LP	A60050	188	05005	05005	14/08/2009	A1	118.92	I	At	98	Act	2
03/10/2006	LP	A60049	192	04031	04031	09/07/2009	A1	4.20	I	At	98	Act	2
21/02/2007	LP	A60050	273	S43003	S43003	07/07/2009	A1	26.28	I	At	100		
02/04/2007	LP	A60050	367	S10035	S10035	20/08/2009	A1	105.87	I	At	100		
28/11/2006	LP	A60049	233	S45019	S45019	05/08/2009	A1	8.45	I	Act	82	At	18
08/01/2007	LP	A60049	136	S01009	S01009	15/07/2009	B1	15.82		At	82	Act	18
10/09/2008	CANFOR	A18154	223	9004	09004	18/07/2009	3	75.20	I	Pli	100		

 Table 38:
 Establishment Delay Report – Inventory Layer – Licensee Participants 2009



## Fort St. John Pilot Project 2009-2010 SFMP Annual Report – Final

14/01/2008	CANFOR	A18154	714	01014	01014	20/06/2009	D	3.32	Ι	Sx	51	Pli	49
09/11/2005	LP	A60050	213	S43002	S43002	07/07/2009	A1	147.52	I	At	100		
22/06/2005	CANFOR	A18154	222	09003	09003	18/07/2009	A-1	34.97	I	Pli	100		
01/08/2007	CANFOR	PAG12	APR-81872	S02031	S02031	13/08/2009	A1	34.58	I	At	100		
17/11/2006	CANFOR	PAG12	APR-81151	S26014	S26014	20/07/2009	D	14.48	I	Sx	100		
15/12/2008		A59959	902		01081	20/07/2009	1	6.50	I	Pli	100		
09/02/2007	CANFOR	PAG12	APR-81927	S03036	S03036	10/08/2009	A1	29.77	I	At	98	Ep	2
19/02/2007	LP	A60050	199	S01272	S01272	28/07/2009	A1	45.78	I	At	100		
06/01/2009	CANFOR	PAG12	APR-83380	S18016	S18016	20/07/2009	B1	35.81	I	Sx	100		
10/09/2008	CANFOR	A18154	223	9004	09004	18/07/2009	4	2.60	I	Pli	100		
20/11/2008	CRL	A59959	248	09038	09038	18/07/2009	1	1.52	I	Pli	100		
20/11/2008	CRL	A59959	248	09038	09038	18/07/2009	5	25.97	I	Pli	100		
14/01/2008	CANFOR	A18154	714	01014	01014	20/06/2009	С	10.43	I	Sx	95	Pli	5
01/11/2005	LP	A60050	227	S05012	S05012	18/08/2009	B1	89.56	Ι	At	100		
23/01/2008	LP	A60049	431	S26016	S26016	17/08/2009	С	3.22	Ι	At	100		
22/06/2005	CANFOR	A18154	222	09003	09003	18/07/2009	C-1	28.81	Ι	Pli	100		
21/02/2006	LP	A60050	225	S43001	S43001	07/07/2009	A1	86.10	Ι	At	93	Act	7
26/07/2007	CANFOR	PAG12	APR-81872	S02030	S02030	20/06/2009	5B	6.95	Ι	Sx	100		
14/01/2008	CANFOR	A18154	714	01014	01014	20/06/2009	Е	3.99	I	Sx	75	Pli	25
28/01/2009		A59959	903	04054	04054	20/07/2009	1A	37.34	I	Pli	100		
02/10/2008		A59959	902	02022	02022	21/07/2009	B9	31.85	I	Pli	100		
01/11/2005	LP	A60050	227	S05012	S05012	18/08/2009	A1	11.77	I	At	94	Act	6
20/09/2007	LP	A60049	241	S09081	S09081	16/09/2009	3C	1.81	I	At	100		
21/12/2007	CANFOR	A18154	705	01054	01054	20/07/2009	1	25.95	I	Pli	100		
17/11/2006	CANFOR	PAG12	APR-81151	S26014	S26014	20/07/2009	С	12.79	I	Sx	100		
09/12/2008		A59959	902	01085	01085	20/07/2009	1	7.03	I	Pli	100		
31/01/2008	CANFOR	A60972	717	02073	02073	20/06/2009	1	18.13	I	Pli	62	Sx	38
05/01/2006	LP	A60049	125	S04009	S04009	09/07/2009	A1	24.22		At	98	Ac	2
27/02/2007	LP	A60049	179	S01030	S01030	15/07/2009	B1	11.32		At	97	Act	3
30/12/2008	TEMBEC	A60972	724	01073	01073	20/06/2009	A1	3.41		Sx	100		
07/11/2007	LP	A60049	234	S09036	S09036	21/08/2009	A1	56.10	Ι	At	93	Ep	4
23/01/2008	LP	A60049	431	S26016	S26016	17/08/2009	В	45.89	Ι	At	100		
09/07/2007	CANFOR	PAG12	APR-82835	S02053	S02053	10/08/2009	A1	118.00	1	At	100		
15/01/2009	TEMBEC	A60972	723	01076	01076	20/07/2009	2	5.11	1	Sx	76	Pli	24

31/01/2008 CANFOR	A60972	717	02074	02074	20/06/2009	3	46.20	Ι	Sx	62	Pli	38
17/11/2006 CANFOR	PAG12	APR-81151	S26014	S26014	22/07/2009	А	214.98	I	At	100		
26/01/2006 LP	A60049	185	S01004	S01004	04/08/2009	A1	97.04	Ι	At	100		
06/12/2006LP	A60049	300	S04032	S04032	02/07/2009	A1	309.56		At	100		
19/02/2007 LP	A60049	232	S09104	S09104	10/08/2009	A1	86.60		At	99	Ep	1
10/09/2008 CANFOR	A18154	223	9004	09004	18/07/2009	2	11.96		Pli	100		
11/12/2007LP	A60050	275	S45043	S45043	27/08/2009	А	179.60		At	100		
06/02/2007 CANFOR	A56771	703	03046	03046	03/08/2009	В	15.00		At	100		
18/01/2009 TEMBEC	A60972	724	01075	01075	20/07/2009	2	8.60		Sx	84	Pli	16
21/12/2005LP	A60050	186	02009	02009	24/08/2009	A1	21.16	Ι	At	100		
12/10/2007 CANFOR	PAG12	APR-82371	02017	02017	23/07/2009	А	22.26		At	100		
15/11/2005LP	A60049	124	S04028	S04028	27/07/2009	A1	36.80		At	98	Ac	2
16/09/2006LP	A60049	192	04030	04030	09/07/2009	A1	38.44		At	100		
01/12/2005LP	A60050	224	S45078	S45078	10/07/2009	A1	186.94		At	100		
25/11/2008 CANFOR	PAG12	APR-84979	02064	02064	20/06/2009	6B	6.28		Sx	100		
10/09/2008 CANFOR	A18154	223	9004	09004	18/07/2009	5	32.50		Pli	100		
28/01/2009	A59959	903	04054	04054	20/07/2009	С	4.81		Pli	100		
20/12/2008	A59959	902		01079	20/06/2009	1	5.80		Pli	62	Sx	38
12/12/2007 CANFOR	A18154	712		01067	20/06/2009	1	7.69	I	Sx	100		
21/08/2007 CANFOR	PAG12	APR-82371	02015	02015	29/07/2009	А	99.84		At	100		
01/12/2005LP	A60050	224	S45078	S45078	07/10/2009	B1	11.50		At	69	Act	31
26/07/2007 CANFOR	PAG12	APR-81872	S02030	S02030	19/08/2009	A1	21.08	Ι	At	100		
14/01/2008 CANFOR	A18154	714	01014	01014	20/06/2009	A2	36.15		Sx	69	Pli	31



Appendix 6: Compliance

# Contraventions Reported to Agencies - April 1, 2009- March 31, 2010

Incident ID	Occurrence Date	Tenure	Location	Date Reported	Agency	Status	Issue Description
ITS-FSJ- 2009-099	Aug 1, 2008	A18154 Bks 06006, 23010, 06001, 04020, 139001 24036	Blair Creek, Cameron River, Wonowon, Jedney	Dec 9, 2009	MOE	Closed	<ul> <li>Herbicide overspray from August 2008 that was discovered during a brushing program block review audit completed in August 2009. These non-compliances were reported to the MOE on December 9 2009. No penalties were issued by MOE, however a notice of non-compliance letter was issued by MOE on Feb 11, 2010. Block 06006 had 0.5 ha treated that was not included in the treatment plan.</li> <li>Block 23010 had 0.3 ha of pesticide free zone areas treated along upper reaches of 3 non-classified drainages.</li> <li>Block 06001 had 2.3 ha of area treated that was not included in the treatment plan.</li> <li>Block 04020 had 0.7 ha of area treated that was not included in the treatment plan.</li> <li>Block 139001 had a minor area along the NW boundary that was treated that was not included in the treatment plan.</li> <li>The pipeline right of way in Block 24036 was treated, this area was not included in the treatment plan.</li> </ul>
ITS-FSJ- 2009- 0110	Nov 19, 2009	A60049 Bk 09014	Km 28 Kobes Creek	Nov 20, 2009	MFR	Closed	Dozer operator clearing road access to block 09014 left the proposed road location and cleared brush for approximately 150 feet outside of the proposed road location. This trespass incident was reported to MFR on Nov 20, 2009. On Nov 26, 2009 Canfor and MFR compliance and enforcement staff visited the trespass site. Upon review of the site, MFR indicated that no further compliance action would be taken by the MFR regarding the trespass and issued a compliance notice ("Alleged Non Compliance Summary"). No penalties were issued by MFR.



ITS- FSJ2009- 0111	Nov 16, 2009	A18154 Bk 05020	Km 12 Kobes Compressor Road	Nov 20, 2009	MFR	Closed	During harvesting of block 05020, a skidder traveled approximately 80 metres outside of the block on a seismic line. The trespass occurred on frozen ground This trespass incident was reported to MFR on Nov 20, 2009. On Nov 26, 2009 Canfor and MFR compliance and enforcement staff visited the trespass site. Upon review of the site, MFR indicated that no further compliance action would be taken by the MFR regarding the trespass. On Nov 26, 2009 the MFR issued a compliance notice ("Alleged Non Compliance Summary"). On July 7, 2007 Canfor and MFR staff walked the trespass area (seismic line) under snow free conditions. The MFR issued a "General Inspection Report" and compliance notice ("Alleged Non Compliance Summary") and indicated that snow free inspection revealed that no detrimental disturbance occurred as a result of the trespass and that no further action was necessary for the issue. No penalties were issued by MFR.
ITS-FSJ- 2010- 0118	Jan 6, 2010	A18154 Bk 04056	Wonowon	Jan 7, 2010	MFR	Closed	Contractor assigned to burn debris piles in Block 04054 wandered into adjacent block 04056 (harvested by a different contractor) and burnt approximately 400 m of debris piles. These debris piles were to be burnt by the contractor who harvested block 04056. Although this non-conformance to Canfor's Forest Management System is not categorized as a non-compliance, it was reported to the MFR on Jan 7, 2010. The MFR agreed that this incident was not a compliance issue and identified that no compliance and enforcement action was required.
ITS-FSJ- 2010- 0126	Mar 10, 2010	A18154 Bk 01018	Inga Lake	Mar 11, 2010	MFR	Closed	Feller buncher cutting right of way into block 01018 along the 01-018-00 road turned off of the 01-018-00 road and began cutting the 01-023-00 road right of way. Approximately 795 m (approx. 1.2 ha) of right of way was cut in trespass. The trespass incident was reported to the MFR on March 11, 2010. Canfor and MFR staff inspected the site of the trespass on March 16, 2010. The MFR issued a compliance notice ("Alleged Non Compliance Summary") and commented that "this

							compliance notice serves notice to the client that future occurrences of this nature may lead to increased enforcement actions". No other actions were taken by the MFR. No penalties were issued by MFR.
ITS-FSJ- 2009- 001-A	06/15/2007	BCTS A63393 Blk.01 RD 45- 63393- 01	Beryl Prairie	06/05/2009	MOE	Closed	Temporary crossing was built so site prep equipment could cross S4 stream and crossing was left in place for tree planting contractor. Crossing was not built as per the Stream Crossing Matrix and crossing was not removed after work was completed. BCTS removed crossing, no damage to stream or stream banks occurred due to leaving crossing in place for 2 years. MOE was notified and to date no enforcement action has been taken.