Fort St. John Pilot Project

Sustainable Forest Management Plan 2012 CSA and Regulatory Annual Report

For the period April 1, 2012 to March 31, 2013

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



Final Report October 29, 2013

Fort St. John Pilot Project

Sustainable Forest Management Plan 2012 CSA and Regulatory Annual Report

For the period April 1, 2012 to March 31, 2013

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

Submitted on behalf of the participants by:

U. Regimbal

Darrell Regimbald RPF Planning Coordinator Canfor

Prepared by:

Andrew Tyrrell, RPF, Planning Forester, Canfor Jennifer McCracken, RPF, Planning Forester, Canfor Stephanie Smith RPF, Planning Forester, BC Timber Sales Walter Fister, RPF, Area Forester, BC Timber Sales Darral Alexander RFT, Operations Technician, BC Timber Sales Betty Baker, Business Officer, BC Timber Sales Dawn Griffin, RPF, Silviculture Coordinator, Canfor Kim Verbruggen, GIS Coordinator, Canfor Matt Donovan, RPF, Silviculture Forester, Canfor Debbie Ewanchuk, Woodlands Accountant, Canfor Norma Pyle, RPF, Forestry Supervisor, Canfor Larry McFadden, RPF, Practices Forester, BCTS Evan Hauk, RPF Operations Supervisor, Canfor Jon Gibbons, RPF, Permitting Coordinator, Canfor Wes Neumeier, RPF Harvesting Superintendent



"I certify that have reviewed this document and, while I did not personally supervise the work described, I have determined that this work has been done to the standards expected of a member of the Association of British Columbia Forest Professionals."

EXECUTIVE SUMMARY

Highlights of 2012-2013

- 2012-13 was the second year of operation under SFMP# 2.
- 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.
- In the face of unprecedented negative economic conditions prevalent in the forest industry over the last 6 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, 59 of 61 indicators (two non conformances) in 2009 Annual Report, 61 of 62 (one non conformance) in the 2010 Annual Report, 62 of 65 (3 non conformances) in the 2011 Annual Report and 63 of 66 indicators in the 2012 Annual Report.
- For the period of April 1, 2012 to March 31, 2013, the participants achieved the performance indicator objectives on 26 of the 28¹ regulatory landscape level strategy indicators (Section 42 of the FSJPPR, or affecting Part 3 Division 5 of the FSJPPR-see Section 11).

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% (7 of 7) of the Fort St. John Pilot Project Regulation (FSJPPR) Section 42 performance indicators, and 100% (3 of 3) of non regulatory SFMP indicators (CSA indicators) linked to the Timber Harvesting Strategy.

<u>Access Management Strategy</u> - Activities were consistent with the targets or acceptable variances on 100% (2 of 2) of the FSJPPR Section 42 performance indicators, and 100% (1 of 1) of the Section 35 (6) performance standard indicators and 100% (1 of 1) of non regulatory SFMP indicators (CSA indicators) linked to the Access Management Strategy.

<u>Patch Size, Seral Stage and Adjacency 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% (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% (2 of 2) of the Section 35 (6) performance standard indicators linked to the Riparian Management Strategy.

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

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

Quality Strategy on 10 of 13 blocks. Required assessments on 3 blocks were not completed, therefore at the time of writing this report consistency or inconsistency with the target has not been verified.

<u>Forest Health Management Strategy</u> - Activities were consistent with the targets or acceptable variances on 100% (5 of 5) of the Section 42 performance indicators and 100% (1 of 1) non regulatory 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% (1 of 1) non regulatory 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 75% (3 of 4) Section 42 performance indicators, on 100% (2 of 2) Section 35 (6) performance standard indicators and 100% (1 of 1) non regulatory SFMP indicators linked to the Reforestation Strategy.

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

Summary of Changes to the Indicator's or their Status

The following table summarizes non-conformances to indicators in 2012, (note that indicators in red text refer to those related to regulatory requirements under the FSJPPR) and revisions made to the SFMP for the 2012 reporting year. Also noted are revisions made to the SFMP for the 2012 reporting year.

Indicator		Non Conformance			
30	Establishment Delay	Indicator target not achieved in 2012.			
44 Visual Quality ObjectivesIndicator target not achieved in 2012.					
63 Worker Training Indicator target not achieved in 2012.					
Indicator		Significant Revisions,			
54	Dollars Spent Locally on Each Woodlands Phase	Indicator Target revised effective April 1, 2012			
55	Direct and Indirect Employment	Indicator and Target revised effective April 1, 2012			
66	Deletions to Forest Area	New indicator for 2012, effective April 1, 2012			

For the 2012-13 reporting year indicator # 66 was added to the SFMP to address the core indicator requirements of the CSA Z809-08 standard. The Targets and Indicators for Indicators 54 and 55 were revised for the 2012-13 reporting year. For the purposes of the *Fort St.John Pilot Project Regulation*, these indicators are considered as non legal plan content, and therefore did not require public review and comment.

These revisions were discussed with the PAG and incorporated in SFMP# 2 in the spring of 2012. These indicator revisions became effective April 1, 2012.



TABLE OF CONTENTS

Ex	ecutive	Summary	3
1.	Introd	uction and Overview	10
2.	Descr	iption of the Pilot Project	12
3.	SFM li	ndicators, Objectives and Targets	13
	3.1.	FOREST TYPES	13
	3.2.	SERAL STAGES	16
	3.3.	PATCH SIZE	
	3.4.	SOIL DISTURBANCE	
	3.5.	SNAGS/CAVITY SITES	
	3.6.	COARSE WOODY DEBRIS VOLUME	
	3.7.	RIPARIAN RESERVES	
	3.8.	SHRUBS	
	3.9.	WILDLIFE TREE PATCHES	
	3.10.	NOXIOUS WEED CONTENT AND INVASIVE PLANT CONTENT	
	3.11.	SPECIES AT RISK STAND LEVEL MANAGEMENT GUIDELINES	
	3.12.	FOREST WORKERS' SAFETY	
	3.13.	SEED USE	
	3.14.	ASPEN REGENERATION	
	3.15.	CLASS A PARKS, ECOLOGICAL RESERVES AND LRMP DESIGNATED PROTECTED AREAS	37
	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 HARVESTED	
	3.20.	GRAHAM CONNECTIVITY	
	3.21.	MKMA Harvest	
	3.22.	River Corridors	46
	3.23.	TOTAL NUMBER OF CONTRACTS AWARDED TO FIRST NATIONS	47
	3.24.	PERMANENT ACCESS STRUCTURES	47
	3.25.	FOREST HEALTH	49
	3.26.	SALVAGE	51
	3.27.	SILVICULTURE SYSTEMS	52
	3.28.	SPECIES COMPOSITION	
	3.29.	REFORESTATION ASSESSMENT	54
	3.30.	ESTABLISHMENT DELAY	
	3.31.	LONG TERM HARVEST LEVEL	58
	3.32.	SITE INDEX	
	3.33.	FIRST NATIONS CONSULTATION & INFORMATION SHARING	
	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	69

	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. TIMBER PROCESSED IN THE DFA	
	3.48. SUMMER AND FALL VOLUMES	
	3.49. FOREST HEALTH FOS PLANNING	
	3.50. COORDINATION3.51. TIMBER PROFILE-DECIDUOUS	
	3.52. TIMBER PROFILE-DECIDUOUS	
	3.53. CUT CONTROL	
	3.54. DOLLARS SPENT LOCALLY ON EACH WOODLANDS PHASE	
	3.55. DIRECT AND INDIRECT EMPLOYMENT	
	3.56. MAINTENANCE OF WILDLIFE AND FISHERIES HABITAT VALUES	
	3.57. NUMBER OF KNOWN VALUES AND USES ADDRESSED IN OPERATIONAL	
	PLANNING	87
	3.58. REGULATORY PUBLIC REVIEW AND COMMENT PROCESSES	
	3.59. TERMS OF REFERENCE (TOR) FOR PUBLIC PARTICIPATION PROCESSES	89
	3.60. PUBLIC INQUIRIES	
	3.61. EDUCATIONAL OUTREACH	
	3.62. BRUSHING PROGRAM AERIAL HERBICIDE USE	
	3.63 WORKER TRAINING	
	6.64 PAG SATISFACTION SURVEYS	
	6.65 AVAILABILITY OF INFORMATION ON ISSUES OF CONCERN	
_	6.66 DELETIONS TO FOREST AREA	
	Summary of Access Management	
5.	Summary of Timber Harvesting	98
6.	Summary of Basic Forest Management (Reforestation)	98
7.	Incremental Forest Management (Stand Tending)	99
8.	Summary of any Variances Given	99
9.	Compliance	
	9.57. Contraventions Reported	100
	9.57. CONTRAVENTIONS REPORTED	100
	UNDER PART 6 OF THE ACT	100
	Amendments to FDP's or Forest operations schedule	
11.	Landscape Level Strategy implementation	103
Tin	nber Harvesting Strategy	104
Ro	ad Access Management Strategy	107
Pat	tch Size, Seral Stage Distribution And Adjacency Strategy	108
Rip	parian Management Strategy	109
Vis	sual Quality Management Strategy	



Range And Forage Management Strategy	111
Reforestation Strategy	112
Soil Management Strategy	113

LIST OF TABLES

Table 1: Forest Types: 2010 status, SFMP targets, and projected 2016 Status	.14
Table 2: Boreal Plains conifer Seral Stage 2010 status and projected 2016 status	.18
Table 3: Boreal Plains deciduous Seral Stage 2010 status and projected 2016 status	.19
Table 4: Boreal Foothills, Northern Boreal Mountains and Omineca Seral Stage 2010 status a projected 2016 status	
Table 5: Natural Disturbance Unit Early Patch Distribution Targets	21
Table 6: Early Patch Size Class 2010 Status & Post FOS#2 Condition	.22
Table 7: Shrub Habitat Projected 2016 Condition and SFMP# 2 Targets	.29
Table 8: Harvest Area and Proportion of WTPs by Landscape Unit (2001-2013)	.31
Table 9: Harvest Activities in the MKMA	.38
Table 10: Proportion of Leading Species by NDU Unmanaged (from FOS#2)	.40
Table 11: Graham River IRM Plan- Cluster Area and Timing Schedule (Revised Oct 2006)	.43
Table 12: Current 3-year Average in Permanent Access Structures (PAS)	.48
Table 13: Area Damaged / Salvaged in Merchantable Timber 2012-2013	
Table 14: Planting vs. cruise species comparison	.53
Table 15 Summary of information sessions related to IVMPs or SFMP, to which First Nations were invited (2012-2013).	5
Table 16: PFI FOS#2 Condition and Targets	.62
Table 17: Summary of WQCR data collected during 2012	.65
Table 18: Projection of Changes to ROS Class from 1996 to 2016	.75
Table 19: Proportion of Total Volume Locally Processed	.77
Table 20: Supply Block F Deciduous Leading Stand Area	.80
Table 21: Licensee Conifer License AAC	.83
Table 22: Licensee Deciduous License AAC	
Table 23: BCTS Volume Allotment	
Table 24 Dollars Spent Locally by Woodlands Phase - 2012	.85
Table 25: Fort St. John TSA employment and employment coefficients	.86
Table 28: Road Area Constructed by Managing Participants since 2004 SFMP # 1	.97
Table 29: Road Area Constructed by Managing Participants since 2011 SFMP # 2	.97
Table 30: Summary of Participants' Road and Bridge Construction Activities	.98
Table 31: List of Variances	.99
Table 32:Summary of Amendments with No Publication Requirement (Apr1/12-Mar 31/13)1	.01

Table 33: Landscape Level Strategies and Related Performance Indicators104
Table 34: Road / Bridge Construction Activity – Forest Licensees 2012-2013148
Table 35: Annual report on roads constructed in the Fort St. John BCTS field office area 156
Table 37: Annual report on roads deactivated in the Fort St John BCTS field office area168
Table 38: Summary of Completed Timber Harvesting by Participants (April 1, 2012 to March 31, 2013)172
Table 39: BCTS Establishment Delay Complete (Inventory Label) 2012
Table 40: BCTS Establishment Delay Complete (Silviculture Label) 2012174
Table 41: Mean MSQ by Block-BCTS (2012)
Table 43: BCTS Planting Activities (2012) 180
Table 44: Predicted and Target Volumes by Stratum-BCTS 2012181
Table 45: Predicted and Target Volumes by Stratum – Canfor 2012
Table 46: Licensee Participant Planting Activities 2012
Table 47: Establishment Delay Report – Inventory Layer – Licensee Participants 2012192
Table 48: BCTS establishment delay calculation for reporting period of April 1, 2012 to March 31, 2013
Table 49: Licensee Participants establishment delay calculation for reporting period of April 1,2012 to March 31, 2013199

LIST OF FIGURES

Figure 1: Project Area Map	10
Figure 2. Nine year results for Snag/Cavity site indicator (2004-2013)	25
Figure 3: Example of 'stub' tree – block 117/005. Cavity in aspen stub colonized by Northern	1
Flickers. Note live residual aspen in background, 15 years after block harvesting	26
Figure 4: Example of a coarse woody debris measurement transect (Block 01056)	28
Figure 5: Typical habitat favoured by Connecticut Warbler (Oporornis agilis) in the Peace Ri	iver
region	34
Figure 6. Graham River operating area clustered harvest pattern, cluster 2.	44
Figure 7: Nine year reporting results of 3-year rolling averages of PAS % (2005-2013)	49
Figure 8: Reforestation assessment merchantable volume prediction	56
Figure 9: Establishment delay summary	58
Figure 10: Example of a crossing with a 'High' Water Quality Concern Rating	66
Figure 11: Example of a crossing with a 'Low' Water Quality Concern Rating	66
Figure 12: 'Stick teepee' discovered in S25018	88
Figure 13: Fort St. John LU's and RMZ's	117

APPENDICES



~
9
7
'1
'3
)7

1. INTRODUCTION AND OVERVIEW

This annual report summarizes activities completed between April 1, 2012 and March 31, 2013 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 held by Louisiana-Pacific Canada Ltd, FL A85946 held by Peace Valley OSB and FL A56771 jointly held by Dunne-za Ventures and Canadian Forest Products Ltd.

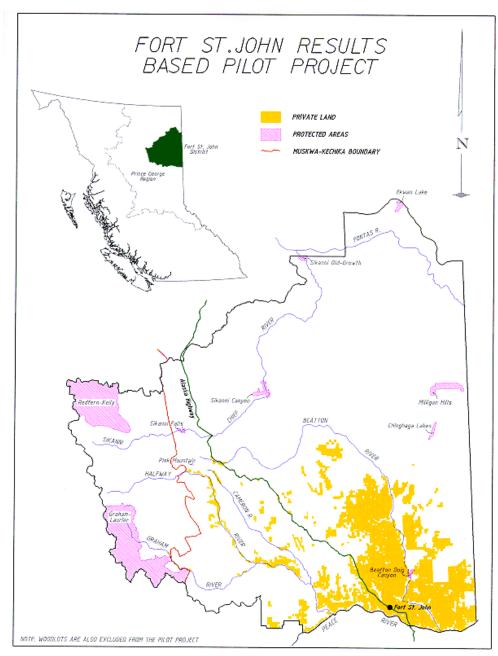


Figure 1: Project Area Map



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# 1 (SFMP# 1) and revised in SFMP# 2. The participant's registration was renewed on February 6, 2009. The 2012 Annual Report is a summary report on the status of each indicator. The 2012 report includes revisions to the indicators, targets, or the way they are measured, as noted in amendment # 1 to SFMP# 2. Future revisions, if any, to the indicators, targets, or the way they are measured will be captured in subsequent annual reports.

This report is prepared annually, as required by the CSA standard and the *FSJPPR*. 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 2012-13 annual report differs from the 2009 report in that results for several of the indicators will not be presented again until SFMP# 2 is replaced. 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
- 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 2010 and 2016.

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 the 2009 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 these 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 the 2009 and this the 2012 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 was approved by Government on November 1, 2010.

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.					
Linkage to FSJPPR: 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, 2012 (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.

Status of Indicators in 2012

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	All forest type groups by landscape unit will meet or exceed the minimum area percentage in Table 9. ²					
SFM Objective: Maintain 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						
Linkage to <i>FSJPPR</i> : For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Forest Health Landscape Level Strategy.						

² Refers to Table 9 in the Fort St. John Pilot Project Sustainable Forest Management Plan #2

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) is excerpted from the Forest Operations Schedule #2, and presents the baseline status as of 2010, the SFMP targets by Forest Type and Landscape Unit, and the condition projected to 2016. All forty-four Forest Type / Landscape Unit combination targets were projected to be above the target minimums, and therefore consistent with the SFMP.

The participants' activities are consistent with the target for this indicator. The analysis for this indicator will be conducted again when significant amendments to the Forest Operations Schedule are proposed (eg. Significant addition of proposed block area).

Landscape Unit	Forest Type	2010 Current Status		2010 Target Minimum Area	2010 Target Minimum Area	Target2016MinimumStatus	
		Area (ha)*	% of L.U.	Percentage	(ha)	Percentage	(ha)
	Deciduous	126,729	34.6%	28%	102,495	31.6%	111,631
Blueberry	Deciduous Mixedwood	48,777	13.3%	11%	40,266	13.2%	46,590
Blueberry	Conifer Mixedwood	37,973	10.4%	8%	29,284	12.3%	43,463
	Conifer	152,573	41.7%	33%	120,797	43%	151,990
Blueberry Total		366,052	100%				
	Deciduous	556	1.0%	1%	546	1.2%	658
Crying Girl	Deciduous Mixedwood	928	1.7%	1%	546	1.8%	998
	Conifer Mixedwood	915	1.7%	1%	546	1.7%	957
	Conifer	52,206	95.6%	76%	41,499	95.4%	54,161
Crying Girl Total		54,604	100%				
	Deciduous	2,764	1.4%	1%	1,963	1.5%	3,475
Graham	Deciduous Mixedwood	2,142	1.1%	1%	1,963	1.1%	2,391
Granam	Conifer Mixedwood	3,540	1.8%	1%	1,963	1.7%	3,908
	Conifer	187,878	95.7%	77%	151,170	95.7%	215,791
Graham Total		196,325	100%				
	Deciduous	13,730	11.6%	9%	10,676	10.8%	13,364
Halfway	Deciduous Mixedwood	7,765	6.5%	4%	4,745	6.7%	8,291
Tanway	Conifer Mixedwood	5,782	4.9%	3%	3,559	5.5%	6,743
	Conifer	91,345	77.0%	62%	73,546	77.0%	94,951
Halfway Total		118,622	100%				

Table 1: Forest Types: 2010 status, SFMP targets, and projected 2016 Status

Fort St. John Pilot Project 2012-2013 SFMP Annual Report – Final

Landscape Unit	Forest Type	2010 Current Status		2010 Target Minimum Area	2010 Target Minimum Area	2016 Status	
		Area (ha)*	% of L.U.	Percentage	(ha)	Percentage	(ha)
	Deciduous	63,979	37.8%	30%	50,826	35.6%	63,502
Kahntah	Deciduous Mixedwood	21,232	12.5%	10%	16,942	12.0%	21,404
Nannan	Conifer Mixedwood	22,217	13.1%	10%	16,942	12.8%	22,830
	Conifer	61,990	36.6%	29%	49,132	39.5%	70,485
Kahntah Total		169,419	100%				
	Deciduous	31,736	34.7%	28%	25,575	29.0%	23,723
Kobes	Deciduous Mixedwood	10,107	11.1%	9%	8,221	10.3%	8,429
Robes	Conifer Mixedwood	9,334	10.2%	8%	7,307	11.9%	9,701
	Conifer	40,164	44.0%	35%	31,969	48.9%	39,978
Kobes Total		91,341	100%				
	Deciduous	69,470	70.6%	56%	55,128	70.0%	69,762
Lower Beatton	Deciduous Mixedwood	8,575	8.7%	7%	6,891	8.6%	8560
Lower Deallon	Conifer Mixedwood	6,494	6.6%	5%	4,922	7.0%	6,981
	Conifer	13,904	14.1%	11%	10,829	14.3%	14,287
Lower Beatton Total		98,442	100%				
	Deciduous	38,499	29.5%	24%	31,282	27.3%	39,885
Millimore	Deciduous Mixedwood	8,739	6.7%	5%	6,517	6.2%	9,022
Milligan	Conifer Mixedwood	9,223	7.1%	6%	7,821	6.6%	9,606
	Conifer	73,882	56.7%	45%	58,654	59.9%	87,419
Milligan Total		130,343	100%	N/A			-, -
<u> </u>	Deciduous	2,422	2.2%	1%	1,118	2.6%	3,839
	Deciduous Mixedwood	2,144	1.9%	1%	2,144	2.2%	3,285
Sikanni	Conifer Mixedwood	3,104	2.8%	1%	1,118	2.4%	3,638
	Conifer	104,128	93.1%	75%	83,848	92.8%	138,208
Sikanni Total		111,797	100%	N/A			,
	Deciduous	62.243	22.9%	18%	48,974	21.6%	56,536
	Deciduous Mixedwood	30,505	11.2%	9%	24,487	10.2%	26,728
Tommy Lakes	Conifer Mixedwood	26,783	9.8%	8%	21,766	9.8%	25,549
	Conifer	152,546	56.1%	45%	122,435	58.4%	152,546
Tommy Lakes Total		272,078	100%	N/A	,		
	Deciduous	43,229	21.3%	17%	34,422	20.5%	43,153
T (1)	Deciduous Deciduous Mixedwood	22,193	11.0%	9%	18,223	10.6%	22,336
Trutch	Conifer Mixedwood	16,552	8.2%	7%	14,174	8.1%	16,983
	Conifer	120,509	59.5%	48%	97,192	60.9%	128,331
Trutch Total		202,483	100%	N/A			,
	Deciduous	455,357	25.1%	N/A	362,301		
All L.U.'s	Deciduous Mixedwood	163,107	9.0%	N/A	126,805		
	Conifer Mixedwood	141,917	7.8%	N/A	108,690		
	Conifer	1,051,125	58.0%	N/A	833,293		
Total All		1,811,506	00.073	N/A	000,200		

Change Monitoring Inventory (CMI)

Starting in 2003, the Participants have contracted the establishment of Change Monitoring Inventory plots in the Defined Forest Area on harvested or burnt areas. The location of these plots is on a systematic 3km square grid overlaid on the DFA. It is intended to establish plots on predefined points located on the grid, where they fall in <u>managed</u> stands, 15 years after harvest. Over time and subsequent re-measurements, the data from these plots can be used to detect long-term changes in managed stands' species composition. There were 14 CMI plots established during the reporting period, 91 to date. Due to logistical difficulties, no CMI work will be done in the DFA in 2013. CMI work will resume in 2014, and will include establishment of new plots as well as re-measurement effort of plots established at least 10 years ago.

REVISIONS

There are no revisions planned for this indicator.

3.2. SERAL STAGES

Indicator Statement	Target Statement							
The minimum proportion (%) of late seral stage forest by NDU	The minimum proportion (%) of late seral forest by NDU as identified in Table 11 ³ will be met.							
SFM Objective:								
Maintain the diversity and pattern of communities and ecosystems within a natural range Ecosystem functions capable of supporting naturally occurring species that exist within the range of natural variability Maintain 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 S								
statement, target and acceptable variance w	statement, target and acceptable variance will be one of the indicators used to determine if							
forest practices are consistent with the Patch Size, Seral Stage and Adjacency and Forest								
Health Management Landscape Level Strategies.								

Acceptable Variance:

A 1% variance below the target is permissible provided projections indicate the target can be met within 20 years (eg. Boreal Foothills minimum allowable would be 22%).

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 Natural Disturbance Unit (note, in SFMP#1 the limits pertained to Landscape Units). A landscape-level analysis (based on NDUs) was conducted when FOS #2 was developed. The projection through 2016, which considered all the newly proposed FOS blocks, indicates that the amount of area in late seral stands through 2016 will be above the minimum targets set for all NDUs in the DFA. Therefore the participants are consistent with the target for this indicator.

The following tables (Table 2, Table 3, Table 4) are excerpted from the FOS#2, and present the results of the most recent seral stage analyses. The 'current condition' values account for the harvesting activities that started prior to 2010. For further detail regarding seral stages target development and application, please

³ Refers to Table 11 in the Fort St. John Pilot Project Sustainable Forest Management Plan #2

refer to the Fort St. John Pilot Project Sustainable Forest Management Plan #2 (section 6.2) and the Fort St. John Pilot Project Forest Operations Schedule #2. (section 3.3).

The analysis for this indicator will be conducted again when significant amendments to the Forest Operations Schedule are proposed (eg. Significant addition of proposed block area).

	Table 2: Boreal Plains conifer Seral Stage 2010 status and projected 2016 status																		
		< 40	years		4	40 – 100 years			101	101 – 140 years				> 140	years				
Landscape Unit	201	10	201	6	201	0	20 ⁻	16	2010	201	16	2010-	Curren	t State		2016		(a) Target	Total Area (ha)
	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	Area (ha)	%	Area (ha)	%	Surplus/ (Deficit)	Area (ha)	%	Surplus/ (Deficit)		
Blueberry	29,203	12.9%	54,237	23.7%	90,826.00	40.0%	89,033	38.9%	66,680	50,541	22.1%	40,509	17.8%		35,024	15.3%			228,835
Crying Girl	935	1.6%	3,161	5.5%	10,691.00	18.8%	4,029	7.1%	22,554	26,342	46.2%	22,759	39.9%		23,475	41.2%			57,007
Halfway	4,580	4.2%	14,140	12.8%	24,614.00	22.7%	16,973	15.3%	35,069	35,786	32.3%	44,325	40.8%		43,885	39.6%			110,784
Kahntah	2,171	2.6%	4,907	5.7%	35,005.00	41.4%	34,343	40.1%	21,941	21,365	24.9%	25,434	30.1%		25,113	29.3%			85,728
Kobes	4,830	9.0%	10,950	19.8%	10,036.00	18.6%	6,564	11.9%	26,139	21,837	39.5%	12,842	23.8%		15,976	28.9%			55,327
Lower Beatton	1,872	8.9%	2,172	10.4%	8,249.00	39.3%	6,771	32.3%	9,337	9,182	43.8%	1,521	7.3%		2,859	13.6%			20,984
Milligan	5,146	4.9%	3,567	3.4%	73,280.00	70.1%	72,934	69.8%	15,098	11,165	10.7%	10,964	10.5%		16,823	16.1%			104,489
Tommy Lakes	8,873	4.5%	30,846	15.5%	68,500.00	34.8%	57,083	28.6%	71,543	67,096	33.7%	48,051	24.4%		44,306	22.2%			199,331
Trutch	1,938	1.3%	3,927	2.7%	60,506.00	41.4%	51,632	35.3%	46,435	50,625	34.6%	37,179	25.5%		40,174	27.4%			146,358
Boreal Plains NDU Total	59,548	6.0%	127,907	12.7%	381,707	38.2%	339,362	33.6%	314,796	293,939	29.1%	243,584	24.4%	83,642	247,635	24.5%	86,220	16%	1,008,843

2010 - uses all FOS blocks with harvest start date < Jan 1, 2010

2016 - uses FOS blocks with harvest start date >Jan 1, 2010



Stand Age		< 40 yea	ars			40 – 1	00 years				>	100 years				
	2010)	2016		201	0	20	16	2010- C	urrent			2016			
Landscape Unit	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Surplus/ (Deficit)	Area (ha)	%	Surplus/ (Deficit)	Target	Total Area (ha)
Blueberry	20,954	10.7%	50,725	25.7 %	107,722	55.0%	89,228	45.2%	67,341	34.4%		57,619	29.2%			197,572
Crying Girl	181	11.2%	104	6.3%	944	58.5%	763	46.5%	490	30.3%		773	47.1%			1,640
Halfway	1,523	6.6%	3,038	13.2 %	10,552	46.0%	8,704	37.8%	10,840	47.3%		11,259	49.0%			23,001
Kahntah	1,312	1.6%	2,134	2.6%	64,596	77.7%	64,316	77.4%	17,203	20.7%		16,666	20.1%			83,116
Kobes	2,309	5.2%	14,149	31.6 %	16,003	36.0%	9,131	20.4%	26,179	58.8%		21,449	48.0%			44,729
Lower Beatton	7,973	10.0%	9,588	12.0 %	55,860	70.0%	52,589	65.9%	15,946	20.0%		17,625	22.1%			79,802
Milligan	3,433	7.4%	2,313	5.0%	38,015	81.7%	38,497	82.7%	5,081	10.9%		5,720	12.3%			46,530
Tommy Lakes	4,605	4.9%	15,625	16.5 %	55,025	58.4%	45,427	48.1%	34,633	36.7%		33,377	35.3%			94,429
Trutch	445	0.7%	1,359	2.1%	43,158	65.7%	34,618	52.7%	22,095	33.6%		29,752	45.3%			65,729
Boreal Plains NDU Total	42,735	6.7%	99,035	15.6 %	391,875	61.8%	343,273	53.9%	199,808	31.5%	98,301	194,240	30.5%	92,392	16%	636,548

Table 3: Boreal Plains deciduous Seral Stage 2010 status and projected 2016 status

2010 - uses FOS blocks with harvest start date < Jan 1, 2010

2016 - uses FOS blocks with harvest start date >Jan 1,2010



Table 4: Boreal Foothills, Northern Boreal Mountains and Omineca Seral Stage 2010 status and projected 2016 status

Stand Age			< 40 yea	ars			40 – 100) years			101 – 14	40 years				> 140	years			
		201	10	20	16	201	D	201	16	20	10	20	16	201	0- Current S	State		2016		Target
NDU Sub- Unit	Landscape Unit	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Surplus/ (Deficit)	Area (ha)	%	Surplus/ (Deficit)	Target
	Crying Girl	2308	5.6%	3385	8.2%	8058	19.4%	2948	7.1%	14764	35.6%	17776	42.8%	16377	39.5%		17418	41.9%		
Boreal Foothills	Graham	3248	3.2%	3509	3.5%	19907	19.8%	9475	9.4%	33676	33.5%	43257	43.0%	43709	43.5%		44300	44.1%		
Mountains	Halfway	53	0.4%	59	0.5%	2178	18.4%	1140	9.6%	3942	33.3%	4342	36.7%	5659	47.8%		6294	53.2%		
	Kobes	19	47.5%	19	47.5%	4	10.0%	4	10.0%	10	25.0%	10	25.0%	7	17.5%		7	17.5%		
	NDU Total	5628	3.7%	6972	4.5%	30147	19.6%	13567	8.8%	52392	34.0%	65385	42.5%	65752	42.7%	13,160	68019	44.2%	17,218	33%
	Crying Girl	1687	8.5%	2766	14.0%	3511	17.8%	1807	9.1%	7692	39.0%	8459	42.7%	6843	34.7%		6784	34.2%		
Boreal	Graham	25	0.2%	141	1.1%	3207	25.1%	1726	13.5%	5833	45.7%	6830	53.5%	3690	28.9%		4059	31.8%		
Foothills	Halfway	20	0.5%	13	0.8%	3207	20.9%	204	13.1%	508	32.7%	391	25.1%	713	45.9%		4059 950	61.0%		
Valley	Kobes	44	18.7%	40	16.9%	10	4.1%	15	6.3%	141	59.8%	89	37.6%	41	17.4%		93	39.2%		
	NDU Total	1764	5.1%	2960	8.6%	7053	20.6%	3752	10.9%	14174	41.4%	15769	45.9%	11287	32.9%	2,365	11886	34.6%	3,982	23%
Northern	Graham	241	1.9%	85	0.7%	1575	12.4%	1641	12.9%	4378	34.4%	4144	32.6%	6533	51.3%		6855	53.9%		
Boreal Mountains	Sikanni	13252	11.3%	13203	11.3%	13897	11.9%	12171	10.4%	28930	24.8%	30590	26.2%	60798	52.0%		60910	52.1%		
	NDU Total	13493	10.4%	13288	10.3%	15472	11.9%	13812	10.7%	33308	25.7%	34734	26.8%	67331	52.0%	38,973	67765	52.3%	19,813	37%
Omineca	Crying Girl	0	0.0%	0	0.0%	0	0.0%	0	0.0%	37	82.8%	37	82.8%	8	17.2%		8	17.2%		
Mountains	Graham	3620	4.1%	3620	4.1%	8695	9.8%	3284	3.7%	14468	16.3%	19287	21.8%	61878	69.8%		62469	70.5%		
	NDU Total	3620	4.1%	3620	4.1%	8695	9.8%	3284	3.7%	14505	16.4%	19287	21.8%	61886	69.8%	10,949	62469	70.4%	11.028	58%
																-/			,	
Omineca	Crying Girl	0	0.0%	0	0.0%	60	45.5%	32	24.2%	57	43.2%	68	51.5%	15	11.3%		32	24.2%		
Valley	Graham	61	0.6%	61	0.6%	2964	29.3%	1218	12.0%	3862	38.1%	5150	50.8%	3241	32.0%		3699	36.5%		
Omineca Total	NDU Total	61	0.6%	61	0.6%	3024	29.5%	1250	12.2%	3919	38.2%	5218	50.9%	3256	31.7%	1,673	3731	36.4%	2,089	16%

2010 - uses all FOS blocks with harvest start date <Jan 1, 2010

2016 - uses FOS blocks with harvest start date >Jan 1, 2010

<u>**REVISIONS**</u> There are no revisions planned for this indicator.



Fort St. John Pilot Project 2012-2013 SFMP Annual Report - Final

3.3. PATCH SIZE

Indicator Statement	Target Statement
	A minimum of 9 of 18 of the baseline targets for early patches will be achieved during the term of this SFMP (Table 16) ⁴

SFM Objective:

Maintain the diversity and pattern of communities and ecosystems 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 indicator statement, target and acceptable variance will be one of the indicators used to determine if forest practices are consistent with the Patch Size, Seral Stage and Adjacency Strategy.

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 for 'early' (\leq 40 yrs) forest within the Fort St. John Pilot Project area, on a Natural Disturbance Unit basis (note, in SFMP#1 the limits pertained to Landscape Units). The targets are presented in the following table (5).

Natural Disturbance		y (<40 yrs) Patch Size Target (%) (acceptable range)							
Unit	100+ ha	51-100 ha	<50 ha						
Boreal Plains Uplands (BPU)	90 (65- 90)	5 (5-15)	5 (5-15)						
Boreal Foothills Valley (BV)	70 (55- 85)	10 (5-15)	20 (15-25)						
Boreal Foothills Mountain (BM)	70 (55- 85)	10 (5-15)	20 (15-25)						

Table 5: Natural Disturbance Unit Early Patch Distribution Targets

⁴ Refers to Table 16 in the Fort St. John Pilot Project Sustainable Forest Management Plan #2

Northern Boreal Mountains (NBM)	90 (65- 90)	5 (5-15)	5 (5-15)
Omineca Mountains (OM)	70 (55- 85)	10 (5-15)	20 (15-25)
Omineca Valley (OV)	90 (65- 90)	5 (5-15)	5 (5-15)

A landscape-level analysis (based on NDUs) was conducted when FOS #2 was developed. Stand ages were projected through 2016, and all the newly proposed FOS blocks were assumed to be harvested by 2016. The results of the analyses are presented in the following table 6.

		2010 E	arly (≤ 4	0 years) Patch S	Size Dist	ribution		
	Large(> 100 ha)		Med. (50	-100 ha)	Small (-	< 50 ha)	Total All Patches		
Natural Disturbance Unit (NDU)	%	ha	%	ha	%	ha	%	ha	
Boreal Plain Upland (BPU)	72.5%	137865	14.4%	27460	13.1%	24922	100.0%	190247	
Boreal Foothills Valley (BV)	84.3%	2276	2.4%	66	13.3%	359	100.0%	2701	
Boreal Foothills Mountain (BM)	77.4%	3443	9.7%	431	12.9%	575	100.0%	4449	
Northern Boreal Mountains (NBM)	1.2%	4	54.3%	178	44.5%	146	100.0%	328	
Omineca Mountains (NBM)	0.0%	0	6.2%	4	93.8%	61	100.0%	65	
Omineca Valley (OV)	0.0%	0	65.7%	92	34.3%	48	100.0%	140	
Total DFA (All NDU's)	72.5%	143588	14.3%	28231	13.2%	26111	100.0%	197930	
<mark>Yellow</mark> = Below Targe <mark>Blue</mark> = No harvesting planned				ove Targe	0				
	201	16 Project	ted Early	/ (≤ 40 y	ears) Pa	tch Size	Distribut	tion*	
	Large (> 100 ha)	Med. (50	-100 ha)	Small («	< 50 ha)	Total All	Patches	
Natural Disturbance Unit (NDU)	%	ha	%	ha	%	ha	%	ha	
Boreal Plain Upland (BPU)	83.5%	188,527	9.5%	21,523	7.0%	15,702	100.0%	225,752	
Boreal Foothills Valley (BV)	81.2%	1891	2.8%	65	16.0%	372	100.0%	2328	
Boreal Foothills Mountain (BM)	72.5%	2220	14.8%	454	12.7%	388	100.0%	3062	



Fort St. John Pilot Project 2012-2013 SFMP Annual Report - Final

Northern Boreal Mountains (NBM)	0.0%	0	0%	0	0%	0	100.0%	0		
Omineca Mountains (OM)	0.0%	0	100%	4	0%	0	100.0%	4		
Omineca Valley (OV)	0.0%	0	100%	92	0%	0	100.0%	92		
Total DFA (All NDU's)	76.4%	76.4% 154158 12.4% 24980 11.2% 22685 100.0% 201823								
* Assumes current FOS blocks logged and maturation of some stands to 40+ years										

The analysis of the post-FOS #2 condition (all blocks in FOS# 2 harvested by January 1, 2017), indicates that 8 of 18 or 44% of early patches will meet the target ranges. However it must be noted that the harvesting planned in FOS# 2 is situated almost exclusively within the Boreal Plains Upland and Boreal Foothills Valley NDUs. A very minor amount of harvesting is proposed for the Boreal Foothills Mountain NDU, and the majority of young patch disturbance in this NDU is attributable to wildfire.

In FOS# 2 harvesting is proposed only in one of the of the ten NDU patch size combinations where the desired patch size distribution is not achieved by 2016. In nine of these NDU patch size combinations where the target distribution is not achieved it is likely that natural disturbance may alter the actual distribution achieved in 2017.

Of the three NDUs where harvesting is proposed, the patch targets are achieved in 8 of 9, or 89%, of the relevant patch size NDU combinations. In the 1 NDU patch size combination where harvesting does not achieve the desired patch size distribution, it must be noted that a slight improvement over the baseline condition (2010 condition) is achieved. This demonstrates a trend to moving toward achieving the desired patch size distribution over the course of implementation of FOS# 2.

The foregoing indicates that the participants are consistent with the patch size indicator. The analysis for this indicator will be conducted again when significant amendments to the Forest Operations Schedule are proposed (eg. Significant addition of proposed block area).

REVISIONS

There are no revisions proposed to this indicator.



3.4. SOIL DISTURBANCE⁵

Indicator Statement	Target Statement							
Number of blocks with non-conformances to soil disturbance limits reported annually by Managing Participant Zero blocks will have non-conformances to soil disturbance limits.								
SFM Objective:								
Protect soil resources to maintain productive forests.								
Linkage to FSJPPR: For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target and acceptable variance will be one of the indicators used to determine if forest practices are consistent with the Soil Management Strategy.								

Acceptable Variance:

None

CURRENT STATUS AND COMMENTS

There were no incidents of detrimental soil disturbance reported by the Licensee participants during the 2012-2013 reporting period.

BCTS had no incidents of detrimental soil disturbance reported during the 2012-2013 reporting period.

The participants' activities are consistent with the target and acceptable variance for the soil disturbance indicator.

REVISIONS

No revisions anticipated at this time.

3.5. SNAGS/CAVITY SITES

Indicator Statement	Target Statement							
Number of snags and/or live trees (>23 cm dbh) per ha on prescribed areas	Retain annually an average of at least 6 snags and/or live trees (>23 cm dbh) per hectare on prescribed areas							
SFM Objective:								
Suitable habitat elements for indicator species								
Maintain a natural range of variability in ecosys	stem function, composition, and structure which							
allows ecosystems to recover from disturbance and stress								
Linkage to FSJPPR: N/A								

Acceptable Variance:

Prescribed areas within blocks on which the SLP's were completed prior to April 1st 2010 will have a target of 6 snags and/or live trees greater than 17.5 cm dbh, consistent with the SFMP in effect at that time.

⁵ New indicator in 2010 SFMP. Previous SFMP #1 indicator 6.4 was Shape Index, which has been deleted.



CURRENT STATUS AND COMMENTS

During the reporting period, 108 blocks had harvesting completed by the licensee participants and BCTS. Of those blocks, 37 had at least some area prescribed for snags or live tree retention.

The retention level of snags and/or live tree residuals was measured on 30 blocks during the reporting period. The data below also includes four blocks completed in the past reporting period but not included in past reports for this indicator. 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 blocks included in this report were collected during the harvesting phase and as part of final harvest inspections conducted during the reporting period.

The total prescribed area surveyed was 2,508 ha, with 16,644 snags and/or live tree residuals retained. The actual retention level of snags or live trees in the blocks averaged 6.6 stems/ha. The participants have 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 nine reporting periods.

Figure 3 shows an example of a 'stub' tree created during harvesting operations, and residual live aspen. 'Stubs' are often created to act as surrogates for snags in managed stands to provide future vertical forest structure while managing forest worker safety, and make up the majority of vertical habitat elements tracked for this indicator

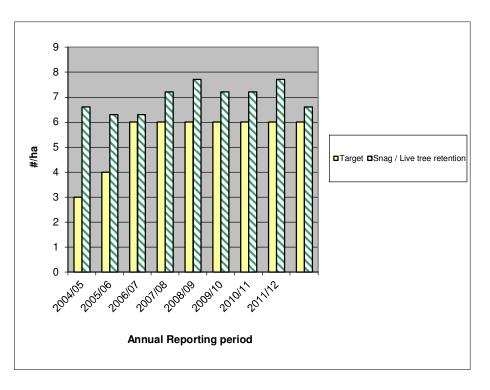


Figure 2. Nine year results for Snag/Cavity site indicator (2004-2013)





Figure 3: Example of 'stub' tree – block 117/005. Cavity in aspen stub colonized by Northern Flickers. Note live residual aspen in background, 15 years after block harvesting.

REVISIONS

There are no revisions planned for this indicator.



Fort St. John Pilot Project 2012-2013 SFMP Annual Report - Final

3.6. COARSE WOODY DEBRIS VOLUME

Indicator Statement	Target Statement
Average retention level of Coarse Woody Debris volume/ (m ³ /ha) on blocks logged in the DFA between December 1, 2008 and November 30, 2016	Average retention level over the DFA will be at least 46 m ³ /ha (50% of average pre- harvest volume) on harvested blocks assessed between December 1, 2008 and November 30, 2016

SFM Objective:

Maintain 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 Section 29(2) of the *FSJPPR* the applicable performance standard is specified by this indicator statement, target statement and acceptable variance.

For the purposes of Section 42 of the *FSJPPR* this indicator statement, target and acceptable variance will be one of the indicators used to determine if forest practices are consistent with the Patch Size, Seral Stage and Adjacency Landscape Level Strategy

Acceptable Variance:

CWD plots will not be assessed for the purposes of this indicator if they fall in blocks where management of non-timber resource values was identified as an overriding priority that was not compatible with CWD retention (e.g. community pastures, etc).

CURRENT STATUS AND COMMENTS

For the purposes of this indicator, coarse woody debris is measured along two 24m transects originating at predetermined points in harvested areas, following established provincial procedures. Figure 4 is included to provide an example of one such transect.

There were three coarse woody debris plots measured by the participants during the reporting period. The post-harvest CWD levels of the samples ranged from 53 m³/ha to 94 m³/ha with an average of 71 m³/ha.

This indicator's target is based on an average CWD retention level in samples measured over the term of the SFMP. The participants exceeded the target for this indicator for the period of December 1 2003 and November 30 2008, and are on track to do so for the current period.





Figure 4: Example of a coarse woody debris measurement transect (Block 01056)

REVISIONS

There are no revisions proposed for this indicator.

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			
Linkage to FSJPPR: For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target and acceptable variance will be one of the indicators used to determine if forest practices are consistent with the Riparian Management Landscape Level Strategy.			
For the purposes of Section 35(5), Section 28(1) (b)(i)(A) of the <i>FSJPPR</i> may be effected by the application of this Riparian Management Landscape Level Strategy, specifically the			



acceptable variance for this indicator.

Acceptable Variance:

No variances, unless authorized by the district manager.

CURRENT STATUS AND COMMENTS

A review of BCTS Compliance issues from April 1, 2012 to March 31, 2013 indicated that BCTS had no non-compliances to riparian reserve zone standards. BCTS achieved the target for this indicator.

A review of licensee participants' compliance issues occurring between April 1, 2012 and March 31, 2013 indicated no non-compliances to riparian reserve zone standards. The licensee participants achieved the target for this indicator.

The participants' activities are consistent with the target and acceptable variance for the 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

This indicator is monitored at each new SFMP, using the most up to date vegetation resource inventory data. The following table (table 7) shows the shrub condition projected through 2016, accounting for harvesting of all blocks presented in the FOS#2. The "2016 Total Shrub Area" includes shrub-type inventory polygons plus harvested areas <20yrs old.

Table 7: Shrub Habitat Projected 2016 Condition and SFMP# 2 Targets

Landscape Unit	LU Net Area (ha)	FOS Area (ha)	2016 VRI Shrub area (ha)	Target	2016 Total Shrub Area (ha)	2016 Shrub Area % of LU
Blueberry	594,972	44,750	114,549	8.0%	159,299	26.8
Crying Girl	67,195	0	6,057	8.0%	6,057	9.0
Graham	334,908	0	77,895	15.0%	77,895	23.3
Halfway	196,436	5,918	27,275	6.0%	33,193	16.9



Kahntah	749,199	2,358	218,714	21.0%	221,072	29.5
Kobes	140,300	13,568	27,542	8.0%	41,110	29.3
Lower Beatton	165,963	1,549	27,318	7.0%	28,867	17.4
Milligan	455,107	0	74,724	13.0%	74,724	16.4
Sikanni	312,148	0	32,149	6.0%	32,149	10.3
Tommy Lakes	705,495	27,379	92,284	8.0%	119,663	17.0
Trutch	436,578	3,504	33,593	6.0%	37,097	8.5
Total all LU's	4,158,301	99,026	732,100		831,126	

The future analysis of Change Monitoring Inventory (CMI) plots – after remearsurement - 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

There are no revisions planned for this indicator.

3.9. WILDLIFE TREE PATCHES

Indicator Statement	Target Statement		
	Cumulative Wildlife Tree Patch % will meet or exceed the minimum target in each LU ⁶		
	Landscape Unit	WTP %	
	Blueberry	6%	
	Halfway	3%	
Cumulative 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.

Maintain 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 29(1) of the *FSJPPR* the applicable performance standard is specified by this indicator statement, target statement and acceptable variance. For the purposes of Section 42 of the *FSJPPR* this indicator statement, target and acceptable

⁶ Targets as per 2004-2005 Annual Report revisions



variance will be one of the indicators used to determine if forest practices are consistent with the Patch Size, Seral Stage and Adjacency Landscape Level Strategy

Acceptable Variance:

Aggregate WTP percentages will only apply if 200 hectares or more has been harvested under the *FSJPPR* 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, 2013.

LU	Gross Block Area (ha)	WTP Area (ha)	WTP %	Target %
Blueberry	32843.4	2413.6	7.3	6
Halfway	2979.1	271.0	9.1	3
Kahntah	1280.4	117.9	9.2	7
Kobes	5256.5	402.5	7.7	5
Lower Beatton	4633.7	410.7	8.9	8
Milligan	201.9	33.9	16.8	6
Tommy Lakes	6393.9	556.0	8.7	3
Trutch	887.2	61.6	6.9	5
Sikanni	0	0	N/A	4
Graham	234.2	31.9	13.6	4
Crying Girl	1718.4	143.2	8.3	6
Grand Total:	56428.7	4442.3		

Table 8: Harvest Area and Proportion of WTPs by Landscape Unit (2001-2013)

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 are no proposed revisions to the indicator or target statements.

3.10. NOXIOUS WEED CONTENT AND INVASIVE PLANT CONTENT

Indicator Statement	Target Statement	
The % prohibited and primary noxious weeds, and known invasive weed species of concern, in seed mix analyses	Seed mix analyses will have 0% content of prohibited and primary noxious weeds, and known invasive weed species of concern, as identified in the most current publication of "Listing of Invasive Plants" available from the Peace River Regional District	
SFM Objective: Suitable habitat elements for indicator species		
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 Range Management Landscape Level Strategy

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 one 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.

One of Canfor's harvesting contractors (COPI contact ID #6420) notified Canfor of the occurrence of Scentless Chamomille (*Mairicaria maritima*) growing along one of Canfor's block roads. This weed species is identified in the SFMP Appendix 8 as a Primary Noxious Weed. Canfor staff immediately actioned the information by removing the weeds and disposing of them in a manner that ensured there would be no further spread of the weed from that source.

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 broadcast seeding completed by BCTS licensees during the reporting period the review of seed tags and seed analysis certificates verified 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 are in conformance to the target for this indicator.

REVISIONS

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

3.11. SPECIES AT RISK STAND LEVEL MANAGEMENT GUIDELINES

Indicator Statement	Target Statement	
The percentage of SLP's prepared annually for 'effected' cutblocks that incorporate one or more stand level species at risk management guidelines	100% of SLP's prepared annually for effected cutblocks will incorporate one or more stand level species at risk management guidelines	
SFM Objective: Maintain habitats for species at risk		
Linkage to FSJPPR: N/A		

Acceptable Variance:

Fort St. John Pilot Project 2012-2013 SFMP Annual Report - Final



A 15% variance below the target will be acceptable. (i.e. 85% or more of SLP's in effected cutblocks must have one or more SLMG applied). The variance from 100% to 85% of effected SLPs would only be invoked in situations where forest health, worker or public safety, or operational concerns make implementation of the stand level management guidelines impracticable. In these situations a rationale detailing the reasons for not implementing stand level management guidelines will be included in the effected SLPs.

CURRENT STATUS AND COMMENTS

Between April 1, 2012 and March 31, 2013, 23 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 23 of these plans.

Between April 1, 2011 and March 31, 2012, 8 Site Level Plans (SLP's) were prepared by BCTS in cutblocks where Stand Level Management Guidelines for species at risk were required. One or more guidelines were applied in 8 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.





Figure 5: Typical habitat favoured by Connecticut Warbler (*Oporornis agilis*) in the Peace River region

(photo by A.Tyrrell)

REVISIONS

There are no revisions planned for this indicator.



3.12. FOREST WORKERS' SAFETY⁷

Indicator Statement	Target Statement			
Implementation and maintenance of certified	Each managing Participant will implement			
safety program	and maintain a certified safety program			
SFM Objectives: Provide a safe work environ	ment for DFA forestry workers and the public			
Linkage to FSJPPR: N/A				

Acceptable Variance:

None

CURRENT STATUS AND COMMENTS

Currently the Managing Participants (B.C.T.S and Canfor) are certified to the B.C. Forest Safety Council S.A.F.E. Companies Standard. Surveilance audits are completed at regular intervals to ensure the managing participants safety programs continue to meet the S.A.F.E. Companies safety criteria, and to identify where there may be opportunities for improving the safety programs. The Managing Participants maintained their certification to the B.C. Forest Safety Council S.A.F.E. Companies Standard during the 2012-13 reporting year.

The participants have achieved the target for this indicator.

REVISIONS

No revisions are anticipated at this time.

3.13. SEED USE⁸

Indicator Statement	Target Statement					
The percentage of seedlings & vegetative material used and planted in accordance with the Chief Forester's Standards for Seed Use (Nov.20, 2004), as amended from time to time. ⁹	100% of seedlings and vegetative material will be used and planted in accordance with the Chief Forester's Standards for Seed Use (Nov.20, 2004), as amended from time to time.					
SFM Objectives: Conserve genetic diversity of tree stock						
Suitable habitat elements for indicator species	Suitable habitat elements for indicator species					
Linkage to <i>FSJPPR</i> : For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Reforestation Landscape Level Strategy. For the purposes of Section 35(5) the indicator this indicator statement, target statement and acceptable variance will replace the requirements of Schedule F Section 99 (Seed Use).						

Acceptable Variance:

As per Section 8 Transfer Limits in 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

⁷ New indicator in SFMP #2. Indicator # 12 (Caribou) in previous SFMP #1 deleted due to impending implementation of WHA and UWR areas for boreal caribou. ⁸ Previously named "Conifer Seed". Changed due to wider applicability of Standard to deciduous as well.

⁹ Revisions to this indicator initially made in 2005/2006 Annual Report



each fiscal year within the DFA will comply with the transfer requirements of section 8.2 through 8.7, of those standards. As the standards are amended from time to time, the allowable variance will change consistent with any amendments.

CURRENT STATUS AND COMMENTS

<u>BCTS</u>

No cone collections performed between April 1, 2012 and March 31, 2013.

419,260 seedlings were planted within the reporting period, and of this, 10,260 seedlings of seedlot 35075 were planted outside the transfer limits.

Licensee Participants (Canfor, Tembec, CRL, Dunne-za, Louisiana-Pacific)

2,624,792 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

No revisions are anticipated at this time.

3.14. ASPEN REGENERATION

Indicator Statement	Target Statement				
% Natural Regeneration of aspen 100% natural regeneration for deciduo					
SFM Objectives: Conserve genetic diversity of tree stock					
Linkage to FSJPPR: N/A					

Acceptable Variance:

A maximum of 10% of the area prescribed for deciduous regeneration may be restocked with deciduous vegetative propagules or seedlings (e.g. 90% minimum natural regeneration of deciduous) in accordance with the Chief Foresters Standards for Seed Use, as amended from time to time. In such cases, records must be kept of vegetative lots used and locations where vegetative lots are planted.

CURRENT STATUS AND COMMENTS

All Participants have relied on 100% natural regeneration for aspen in the 2012-2013 reporting period. The participants have achieved the target for this indicator.

REVISIONS

No revisions are anticipated at this time.



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			
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 variance, other than government direction requiring the forest industry to conduct operations in these areas.

CURRENT STATUS AND COMMENTS

No forestry related harvesting or road construction has occurred, nor was any harvesting planned in FOS#2, in 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 #2 and to ensure proposed blocks or roads did not fall within any of the protected areas.

The participants continue to be in conformance with the indicator target.

REVISIONS

There are no revisions planned for this indicator.

3.16. UNGULATE WINTER RANGES, WILDLIFE HABITAT AREAS AND MKMA

Indicator Statement	Target Statement				
Proportion of activities consistent with 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 the objectives of the MKMA and the 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 MOE.

CURRENT STATUS AND COMMENTS

There are currently 38 approved Wildlife Habitat Area's (WHA's), and 38 Ungulate Winter Range (UWR) units wholly or partially within the Fort St John TSA. General Wildlife Measures – the legal management regimes that dictate operational practices in these areas – have been



developed and enacted by government. The participants will follow the General Wildlife Measures for each specific area when operations are 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 (Boreal ecotype) in the north and eastern portions of the Timber Supply Area that were undergoing discussion during the preparation of the previous annual report were finalized by the provincial government on March 25, 2013. The participants are honouring the boreal caribou WHA and UWR areas by applying the General Wildlife Measures in the UWRs and avoiding operational activities in the WHAs. The Government of Canada (Canadian Wildlife Service) is coordinating a national recovery program for the boreal caribou, but it is not yet known what implications that holds for operations within the DFA, beyond the impacts of the provincial set-asides (WHA and UWR designations).

The following table summarizes harvest activities within grand parented blocks within the Muskwa-Kechika Management Area (MKMA) up to March 31, 2013.

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			

Table 9: Harvest Activities in the MKMA

There are no changes from the 2011-2012 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 #2 (i.e., to 2016) is currently limited to previously 'grandparented' 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			
Percentage of area of forest stands in an unmanaged condition, by leading species, by NDU	100% of baseline targets for forested stands in an unmanaged condition, 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:

10 ha or 10% of area, whichever is greater for Leading Species by NDU that have an uncommon distribution (as noted in Table 21 of SFMP# 2) if required for access purposes.

No acceptable variance for Leading Species by NDU that are not identified as uncommon in Table 21 of SFMP# 2.

CURRENT STATUS AND COMMENTS

An assessment of the future condition of this indicator was completed to confirm consistency of FOS# 2 with SFMP #2. 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 in the table below (table 10) and 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.

A re-analysis of this indicator is required after each Timber Supply Review (TSR) is completed. Data collection for the next TSR for the DFA commenced in the summer of 2013. It is estimated that the Fort St. John TSR will not be completed until early to mid 2014. If a significant amount of block area is added to the Forest Operations Schedule, through an amendment prior to the completion of the TSR, the analysis for this indicator will be redone to ensure ongoing conformance. The above would likely not be necessary for the Boreal Plains NDU due to the amount of area already in the NHLB.



Natural			Total	Unm	anaged 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
Dava al Diaina		Ep	49,117	42,639	87%	12%	1,265
Boreal Plains		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
Boreal Foothills	Valley Total		36,145	18,717	52%		600
Boreal Footnills		AC	146	107	73%	100%	0
		AT	2,880		87%	12%	0
		BL	25,963	25,416	98%	12%	0
	Mountain	Ep	30	26	87%	100%	0
		PL	34,185	15,527	45%	12%	98
		SX	111,890	81,633	73%	12%	0
		SB	918	607	66%	12%	155
	Mountain Tot	al	176,012	125,811	71%		253
Boreal Foothills To	tal		212,157	144,528	68%		
		AC	689	596	87%	70%	0
		AT	8,400	8,132	97%	12%	
Northern Boreal		BL	22,782	22,682	100%	12%	
Mountains		PL	31,040		62%	12%	
		SX	117,804	98,484	84%	12%	
		SB	6,985	6,655	95%	12%	
Northern Boreal Mo	Northern Boreal Mountains Total		187,700	155,696	83%		
		AC	38	37	97%	100%	0
		AT	391	361	92%	50%	0
	Valley	BL*	18	18	100%	100%	0
Qui	vaney	PL	4,364	2,857	65%	12%	
Omineca		SX	5,978	4,747	79%	12%	
		SB	413	374	91%	12%	
	Valley Total		11,202	8,394	75%		
	Mountain	AC*	2	2	100%	100%	0

Table 10: Proportion of Leading Species by NDU Unmanaged (from FOS#2)



		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%		
Om	nineca Total		107,656	95,372	89%		
G	rand 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 10 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

Revision to this indicator are planned following the Timber Supply Review planned for the fall of 2013, and the completion of the Ecosystem Representation Analysis exercise completed for the DFA.

3.18. GRAHAM HARVEST TIMING

Indicator Statement	Target Statement				
The number of clusters in the Graham IRM Plan area where active operational harvesting is concurrently occurring.	Operational harvesting within the Graham IRM Plan area will be constrained to no more than one 'cluster' of cutblocks at any one time.				
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 <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Timber Harvesting Landscape Level Strategy.					



Acceptable Variance:

Operational harvesting (i.e. falling and/or skidding of timber, <u>excluding predevelopment of road</u> <u>right of ways</u>) in more than one cluster at a time may occur concurrently, if required to address significant forest health concerns (e.g. Mountain Pine Beetle infestations, wildfire), with the authorization of the MFLNRO.

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 2012-13 reporting period covered by this Annual Report.

The Forest Operations Schedule Section 3.1, submitted to MFLNRO in January 2011, identifies the approximate proposed harvest dates for clusters 4, 4a, 5, 6 and 6a. The Graham IRM Area harvest sequencing is also noted in Table 17 of the FOS. The harvest sequencing presented in the FOS is consistent with achieving the target for this indicator.

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

REVISIONS

None proposed or anticipated.

3.19. GRAHAM MERCH AREA HARVESTED

Indicator Statement	Target Statement
Cumulative merchantable area (hectares) within blocks harvested within the Graham River IRM Plan area since 1997	The cumulative merchantable area (hectares) within harvested blocks will not exceed the planned maximum cumulative harvest areas as measured at the end of each time period. Period # 2 (ending April 2012): 6569 ha Period # 3 (ending April 2017): 9355 ha
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 indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Timber Harvesting Landscape Level Strategy.

Acceptable Variance:

Operations may only exceed the target in the event of urgent forest health concerns that necessitate increased harvest rates, and after reviewing with the Public Advisory Group, and with the approval of the government.

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.



Table 11: Graham Riv	ver IRM Plan- Cluster	Area and Timing Schedule	(Revised Oct 2006)

Definition	S:									
Total Area	a:			The total siz	e of a Cluster	r including in	operable ar	eas		
Gross Co	ntributing Area:		1	The Contrib	uting Area (ba	ase area) for	FPC Biodiv	ersity calc	ulations	
IRM Net Harvest Area:					mount of Gro aken into acc	•	area consic	lered harve	estable	after IRM
·	Schedule:				ing of harvest um cumulati	•				allowed in
Maximun	n Cumulative Me	erch ha			o period end		cotal co (all	previous	penious	
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	Proposed Sche Start	dule	Harvest Period	# of Years	Maximum Cumulative Merch ha within blocks to be harvested
1	Graham-South	1,946	1,922	706.0	36.3%	June 1998	July 1999			
17	Graham-South	627	620	294.0		Nov. 1999				
	Graham-South	2,208	2,085	312.9		July 2000				
	Crying Girl	2,439	2,115	620.5		Nov 2002				
4	Graham-South	3,975	3,504	<mark>976.6</mark>	29.2%	July 2003	April 2007			
Sub-total		11,195	10,246	<mark>2910.0</mark>		1998	2007	Period 1	9	<mark>3638</mark>
5	Crying Girl	2,228	2,181	748.6		April 2007				
	Graham-South	2,508	2,570	<mark>1078.</mark> 8		Nov. 2008				
	Graham-South	884	775	257.5		Nov. 2009				
	Graham-South	726	541	260.0		April 2010	1			
Sub-total		6,346	5,665	<mark>2344.9</mark>		2007	2012	Period 2	5	<mark>6569</mark>
	Crying Girl	1,848	1,812	577.2		April 2012	•			
	Crying Girl	1,904	1,638	840.0		April 2013				
	Crying Girl	2,184	1,877	812.3	37.0%	April 2013	1	Deried 0	-	005
Sub-total	Omine Oid	5,936	5,327	2229.5	00.00/	2012	2017	Period 3	5	9355
	Crying Girl	952	840	291.0		April 2017				
	Crying Girl Graham-South	966 1,768	788 1,717	317.0 594.0		Nov. 2017 April 2018				
Sub-total	Granani-South	3,686	3,345	1202.0	55.078	2017	2022	Period 4	5	10858
	Graham-North	3,439	3,249	1289.0	37.0%	April 2022	-	T EIIUU 4	5	10050
	Crying Girl	2,493	2,359	745.0		April 2022				
Sub-total		5,932	5,608	2034.0	20.070	2022	2027	Period 5	5	13400
	Crying Girl	2,643	2,583	1034.0	39.0%	April 2027		T CHOU O	0	10400
	Graham-North	3,258	2,565	1072.0		April 2028				
Sub-total		5,901	5,249	2106.0	32.070	2027	2032	Period 6	5	16033
	Graham-North	2,108	1,917	903.0	42.0%	Apr. 2032			~	
Sub-total		2,108	1,917	903.0	/0	2032	2035	Period 7	3	17162
	Graham-North	1,341	1,017	468.0	34.0%	Nov. 2035	Nov. 2037		2	
	Graham-North	3,121	2,782	1022.0		Nov. 2037	April 2040			
Sub-total		4,462	3,999	1490.0	/ •	2036	2040	Period 8	5	19024
	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	ster only)	46883	42946	15746.4				Period 1- 9	47.0	19683
D. Total Pl	an Area	198,140	145,053	15,746	8%					10%



This indicator's Period 1 target was 2,910.4 ha, with a variance of an allowable maximum area harvested of 3,638 ha (including the SFMP# 1 allowable variance of 25% additional area). As noted in the 2009 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 ran until April 1, 2012, with a 6,569 hectare maximum cumulative harvest target. Since the beginning of Period 2 (April 1, 2007) to date of preparation of this report, no harvesting has occurred in the Graham plan area (commencement of time period # 2 to date of preparation of this annual report). Therefore the total cumulative area harvested to the end of Period 2 is 3,515.6 ha (Period 1) +0 ha (Period 2) = 3515.6 ha. This is well within the maximum cumulative harvest area target of 6,569 ha for Period 2.

The Participants performance for Period 2 is therefore in conformance with this indicator.

Period 3 began April 2, 2012 and runs to April 1 2017, with a maximum cumulative harvest area target of 9,355 ha. No harvesting has taken place within the Graham during the first year of Period #3. The Participants are in conformance with this indicator.



Figure 6. Graham River operating area clustered harvest pattern, cluster 2.

(photo by D. Menzies)

REVISIONS

None proposed or anticipated.



3.20. GRAHAM CONNECTIVITY

Indicator Statement	Target Statement
Area (hectares) harvested in cutblocks in the	Zero hectares harvested within cutblocks
Graham IRM area, within the permanent	in the permanent alluvial and non-
alluvial and non-productive/non-commercial	productive/non-commercial components
components of the connectivity corridors	of the connectivity corridors

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

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 Timber Harvesting Landscape Level Strategy.

Acceptable Variance:

Variances may be allowed on a site-specific basis where government approval is attained. The indicator target excludes road rights-of-way needed to cross streams.

CURRENT STATUS AND COMMENTS

No harvesting within the recognized corridors occurred during the time period covered by this report – April 1, 2012 – March 31, 2013.

The Participants performance is therefore in conformance with this indicator.

REVISIONS

None proposed or anticipated.

3.21. MKMA HARVEST

Indicator Statement	Target Statement				
The number of long-term harvest plans within the MKMA completed and submitted to government	A minimum of one long-term harvest plan submitted no later than one year following government approval of a landscape unit objective under the MKMA Act, that applies to the Fort St. John TSA portion of the MKMA				
SFM Objective:					
Provide opportunities for a feasible mix of timber, recreational activities and non-timber commercial activities					
Management strategies address important values ir	SMZ areas				

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 Timber Harvesting Landscape Level Strategy.

Acceptable Variance:

Timing of submission may be delayed no more than one additional 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 FOS# 2. No harvesting of grand parented blocks occurred within the MKMA in the 2012-13 reporting period.

Initial planning for development of an MKMA harvest plan commenced in 2006, and continued in 2007. An area has been selected for plan development. However, Landscape Unit Objectives must be 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 finalized, submitted to government for review and endorsed. As a result of the lack of approval of Landscape Unit Objectives no new clustered harvest plans have been prepared for the MKMA to date.

The Participants performance is therefore in conformance with this indicator.

<u>REVISIONS</u>

There are no revisions planned for this indicator.

3.22. RIVER CORRIDORS

Indicator Statement	Target Statement					
The percentage of harvested areas that create openings greater than 1 hectare within 100 metres of RRZ's in identified major river corridors	No openings exceeding 1 hectare in blocks within the major river corridors harvested under the <i>FSJPPR</i> (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 <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Riparian Management Landscape Level Strategy						

Acceptable Variance:

10% of openings may exceed 1 hectare, but no openings greater than 2 hectares, except where required otherwise by a forest health treatment plan.

CURRENT STATUS AND COMMENTS

As part of the preparation of the Forest Operations Schedule #2, a digital spatial layer was used for those portions of streams identified in the Fort St. John 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, Canfor harvested a very small amount of area (0.08 ha) within the Blueberry River Major River Corridor – part of block 02291. BCTS did not harvest any amount of area from a Major River Corridor. The participants are in conformance with this indicator.

REVISIONS

There are no revisions planned for this indicator.

3.23. TOTAL NUMBER OF CONTRACTS AWARDED TO FIRST NATIONS¹⁰

Indicator Statement	Target Statement					
Value and total number of Contracts awarded annually to First Nations.	Report the annual total value and number of contracts awarded to companies or groups owned or operated by First Nations.					
SFM Objective: Provide opportunities for First Nations to participate in forest economy.						
Linkage to FSJPPR: N/A						

Acceptable Variance:

This is a reporting indicator so no variance is required.

CURRENT STATUS AND COMMENTS

During the 2012-2013 reporting period, the Participants provided seven contracts to companies or groups owned, operated, or sponsored by First Nations. These contracts provided First Nations with the opportunity to be involved in the local forest industry and economy by harvesting and hauling approximately 359,028 m³ of timber and by operating the Peace Valley OSB log yard. The contract to manage the PVOSB logyard was worth approximately \$ 1.9 million in 2012.

REVISIONS

No revisions are planned at this time for this indicator.

3.24. PERMANENT ACCESS STRUCTURES

Indicator Statement	Target Statement						
Percentage of the total area in Managing Participants' cutblocks occupied by permanent access structures in which harvesting was completed.	A maximum of 5% of the total area in Managing Participants' cutblocks occupied by permanent access structures in which harvesting was completed, as determined on a 3 year rolling average.						
SFM Objective:							
Sustain forest lands within our control within the							
Maintain a natural range of variability in ecosys							
allows ecosystems to recover from disturbance							
Linkage to FSJPPR: For the purposes of Sec	tion 35(5) of the <i>FSJPPR</i> , this indicator						
statement, target statement and acceptable val	statement, target statement and acceptable variance will replace Section 30(1) of the						
FSJPPR.							
For the purposes of Section 42 of the FSJPPR	this indicator statement, target statement and						

¹⁰ New indicator in 2010 SFMP. Replaces old indicator # 23 'Visual Screening' which has been deleted



acceptable variance will be used to determine if forest practices are consistent with the Access Management Landscape Level Strategy.

Acceptable Variance:

None.

CURRENT STATUS AND COMMENTS

The current 3-year average area in permanent access structures ending March 31, 2013 is presented in the following Table 12. 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 2.1%

Table 12: Current 3-year Average in Permanent Access Structures (PAS)

Managing Participant	Annual Reporting Period (Ending Mar. 31st of Year Indicated)	PAS Area (ha)	Total Area (ha)	% PAS of Total Area
Canfor	2011	194.3	4265.8	4.6%
Canfor	2012	180.0	3952.2	4.6%
Canfor	2013	200.7	4499.8	4.5%
Canfo	r Total: ¹¹	575.0	12,717.8	4.5%
BCTS	2011	9.4	494.8	1.9%
BCTS	2012	23.0	1059.9	2.2%
BCTS	2013	11.8	527.8	2.2%
BCTS	Total: ¹²	44.2	2082.5	2.1 %
Combined Par	ticipants Totals:	619.2	14800.3	4.2%

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

The following graph (Figure 7) shows the participants' performance relative to the Permanent Access Structure indicator over the last nine reporting periods. BCTS values have trended consistently downward. Area occupied by Permanent Access Structures on Canfor operations has remained relatively consistent. 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.

¹¹ based on 10 metre wide road widths

¹² based on 6 metre wide road widths



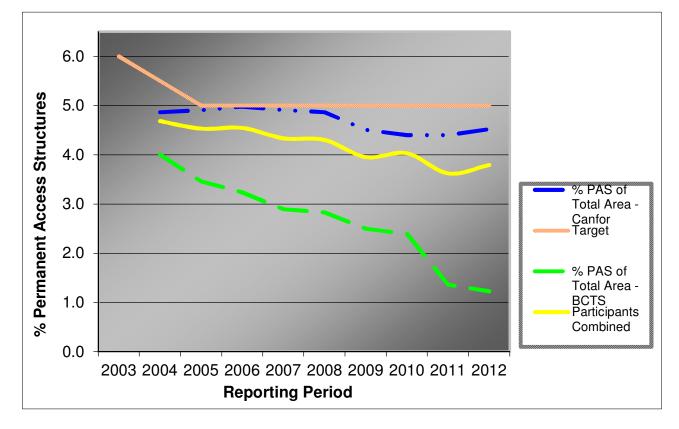


Figure 7: Nine year reporting results of 3-year rolling averages of PAS % (2005-2013)

REVISIONS

There are no revisions proposed for this indicator and target.

3.25. FOREST HEALTH

Indicator Statement	Target Statement					
Percentage of silviculture obligation areas with significant detected forest health damaging agents which have treatment plans developed for them. ¹³	100% of silviculture obligation areas with significant forest health damaging agents will have treatment plans developed for them, and initiated within 1 year of detection.					
SFM Objective: Maintain 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 continue to exist within the DFA Maintain or enhance landscape level productivity						
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 Forest Health Landscape Level Strategy.						
Acceptable Variance:						

¹³ Indicator changed in 2010 SFMP to apply to silviculture obligation areas



A variance of 1 additional year for completing the treatment plan is permissible to provide time for additional information collection and consultation with forest health specialists.

CURRENT STATUS AND COMMENTS

<u>BCTS</u>

From the surveys conducted during the reporting period on BCTS obligation areas, there were minor incidences of some forest health damage, primarily from damaging agents such as western gall rust, northern pitch moth and stalactiform blister rust. Reports of defoliation on some of the deciduous plantations due to Venturia spp were indicated. None of the forest damages identified were considered at levels significant enough to warrant development of a treatment plan however.

What is interesting to note is that two years of prolonged summer drought has had an undesirable impact of putting many plant species under water intake stress. This we believe has caused our efficacy of the BCTS aerial herbicide spray program to be significantly diminished.

Licensee Participants (Canfor, Tembec, CRL, Dunne-za, Louisiana-Pacific, PVOSB)

Licensee Participants fill planted 184.9ha of obligation area in 8 different openings during the reporting period of April 1, 2012 through March 31, 2013. The need for fill planting on these sites was identified during plotted surveys, and the cause was attributed to competition from grass, brush, and/or deciduous species in all cases.

Surveys conducted on obligation areas during the reporting period identified minor incidences of forest health damaging agents, including frost and ungulate browse, and *Venturia* blight. A survey on one block noted heavy conifer seedling damage and mortality due to ungulate browse, and as a result the block was fill planted in the summer of 2012 and will be monitored for future damage. Another block was noted to have some frost damage on 13-25% of the conifer seedlings, but damage was not significant enough to warrant the development of a treatment plan. An additional 5 blocks were found to have light damage on deciduous regeneration due to *Venturia* spp. Although 36-90% of the trees across these blocks showed some damage, the damage was not significant enough to warrant the development of a treatment plan.

The participants are consistent with the targets for this indicator.

REVISIONS

There are no revisions planned for this indicator.



3.26. SALVAGE

Indicator Statement	Target Statement				
The relative proportion of area of merchantable fire-damaged stands salvaged within a management intensity class ¹⁴	The relative proportions of salvage hectares will be highest in the high intensity zones ¹⁵ , and lowest in the low intensity zones over an SFMP period (April 1, 2010- March 31, 2016)				
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 2012 there were 27 forest fires identified within the DFA with a combined area of 8,464 ha. These fires occurred in the Moderate and High Management Intensity Zones. 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 2012-2013 reporting period.

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)
2012	9.76	0	1591.	0	0	0	1598.8	0	1598.8
SFMP Totals	9.76	0	1591.0	0	0	0	1598.8	0	1598.8

Table 13: Area Damaged / Salvaged in Merchantable Timber 2012-2013

*Based on VRI from LRDW on stands with a total estimated volume of >= 140m³/ha and occurring on the Crown Forest Landbase (CFLB).

As no salvage harvesting of fire damaged stands has occurred to date under SFMP #2, the participants are consistent with the target for this indicator.

REVISIONS

There are no revisions proposed for the indicator and target

¹⁴ Modified in 2010 from SFMP # 1 to include only fire damaged stands

¹⁵ See section 1.3.1 for description of LU's in high and low management intensities



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, 2012 and March 31, 2013.

Managing Participant	Even-aged (ha)	Uneven-aged (ha)	Total (ha)
Licensee Participants	4169.9	0	4169.9
BCTS	470.5	0	470.5
Total	4640.4	0	4640.4

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:					
Maintain the diversity and pattern of communiti					
Maintain a natural range of variability in ecosys					
allows ecosystems to recover from disturbance					
Linkage to FSJPPR: For the purposes of Section 42 of the FSJPPR this indicator statement,					
target statement and acceptable variance will b					
consistent with the Reforestation Landscape Le	evel Strategy.				



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, site treatment impacts, annual seedling delivery fluctuations (i.e. nursery production shortfalls/overruns), and to allow site level decisions to be signed off by Professional Foresters for variances (e.g. to address potential forest health concerns such as areas highly susceptible to rusts, insects, etc.)¹⁶

CURRENT STATUS AND COMMENTS

The following table summarizes the blocks planted between April 1, 2012 and March 31, 2013 and the corresponding cruise species percentages by licensee:

2012 Planting Summary			
Division	Data	Total	Percentages
BCTS	Sum of Cruise Spruce (m3)	32,736	47.16%
	Sum of Cruise Pine (m3)	36,681	52.84%
	Sum of Planted Spruce (trees)	354,012	57.57%
	Sum of Planted Pine (trees)	260,895	42.43%
Licensee Participants	Sum of Cruise Spruce (m3)	441,286	63.7%
	Sum of Cruise Pine (m3)	251,988	36.3%
	Sum of Planted Spruce (trees)	1,237,993	51.0%
	Sum of Planted Pine (trees)	1,187,040	49.0%
Total Sum of Cruise Spruce (m3)		474,022	62.2%
Total Sum of Cruise Pine (m3)		288,669	37.8%
Total Sum of Planted Spruce (trees)		1,592,005	52.4%
Total Sum of Planted Pine (trees)		1,447,935	47.6%

Table 14: Planting vs. cruise species comparison

As indicated above the blocks planted in 2012 contained 62.2% spruce volume in the cruise and were planted with 52.4% spruce. These blocks contained 37.8% pine volume in the cruise and were planted with 47.6% 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.

¹⁶ The original variance was amended in the 2006-2007 Annual Report- clarified that the assessment is based on cruised volumes vs seedlings planted



3.29. REFORESTATION ASSESSMENT

Indicator Statement	Target Statement
Predicted Merchantable Volume (PMV) (cubic meters) coniferous and separate deciduous surveyed areas.	Predicted Merchantable Volume will meet or exceed the Target Merchantable Volume (TMV). The TMV is set at 95% of the Maximum Predicted Merchantable Volume attainable on coniferous areas. The TMV is set at 90% of the Maximum Predicted Merchantable Volume attainable on deciduous areas.

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% below the Target Merchantable Volume will be acceptable (i.e. 90% of the Maximum Predicted Merchantable Volume for coniferous areas, and 85% of the Maximum Predicted Merchantable Volume for deciduous areas). 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 conifer target population's Predicted Merchantable Volume is less than the Target Merchantable Volume, individual cutblocks will be required to meet a minimum cutblock Mean Stocked Quadrant (MSQ) value of 2.0 well growing crop trees, for a target stocking of 1200 stems/ha or greater. For a target stocking of 1000 stems/ha and 800 stems/ha the minimum cutblock MSQ values will be 1.7 and 1.3 respectively. If the cutblock has areas of different target stocking the MSQ will be prorated by area.

Damage events beyond the control or influence of the Participants (e.g. wildfire) will result in the block being deleted from the assessment population, and assessed as noted in the Strategy and Implementation section.

The MSQ values for deciduous will be developed in conjunction with development of a deciduous volume compiler. The TMV target for deciduous blocks will be reviewed in conjunction with development of the deciduous compiler and MSQ values. An amendment to the SFMP will be submitted prior to implementation of the landscape level assessment of deciduous reforestation performance. In the interim deciduous reforestation will be assessed based on the revised applicable performance standards outlined in Appendix 6, and summarized in Section 8.1.3.3.



Situations may arise in which despite due diligence in prescribing and implementing the silviculture regimes the Participant has not met the target. Where further treatment options are limited the District Manager may waive a requirement for further treatment.

CURRENT STATUS AND COMMENTS

Canfor

A total of 62 blocks were surveyed from the 1997/1998 harvest year, accounting for a sample size of 1903.8 ha. The field data collected in August and September of 2012 was compiled over the winter using a compiler developed by J.S. Thrower & Associates. The 1903.8 ha were grouped into 28 different strata 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 1997/1998 harvest year was 1,445,470 m³ and the TMV was 1,396,927 m³. This put the PMV at 103.5% of the TMV, which means the target was met. See Table 34, "Predicted and Target Volumes by Stratum – Canfor 2012" in Appendix 5.

Table 31, "Mean MSQ by Block – Canfor (2012)" in Appendix 5 shows the mean MSQ by block.

One block from the 1997/1998 harvest year was mistakenly not surveyed. The block was harvested over three consecutive years, and the wrong harvest date was used when compiling the survey population. This block will be surveyed in 2013 and included in that year's population, as it is expected that there will be a negligible effect on total PMV/TMV as the block will represent 67ha of the 2440ha expected to be surveyed in the 2013 population.

Three strata were determined to be Satisfactorily Restocked (SR) but not Well Growing (WG) due to competition from deciduous species on site, meaning that they had adequate conifer density but that deciduous trees were overtopping the conifer. These SR strata had PMV's calculated at 59.6%, 62.5%, and 72.9%, reflecting the impact of the deciduous competition on the predicted future conifer volumes. The SR strata accounted for 88.4ha of the total 1903.8ha population size, so the effect of the low PMV strata is minimal over the landscape and reflects the variability expected by employing a landscape-level reforestation assessment. The majority of the SR strata occurred adjacent to riparian areas which were inaccessible during vegetation management activities.

One stratum was determined to be Not Satisfactorily Restocked (NSR), as it was a 7.0ha portion of a block which burned in a wildfire. The fire was not known to Canfor, and the block had been viewed last in 2008 where no incidation of fire was seen. As a result, the extent of the fire was only found at the 15-year survey. Due to the remoteness of the block and the cost it would take to get the small area to its pre-fire state, the decision was made not to apply for government funding as it is unlikely to be approved. There are approximately 220 healthy well-spaced conifer trees per hectare in the burned area, but the stratum compilation resulted in 13.3% PMV. The stratum is small in comparison to the population size, and so has little effect on the population's PMV%.

See Table 44, "Predicted and Target Volumes by Stratum – Canfor 2012" in Appendix 5.

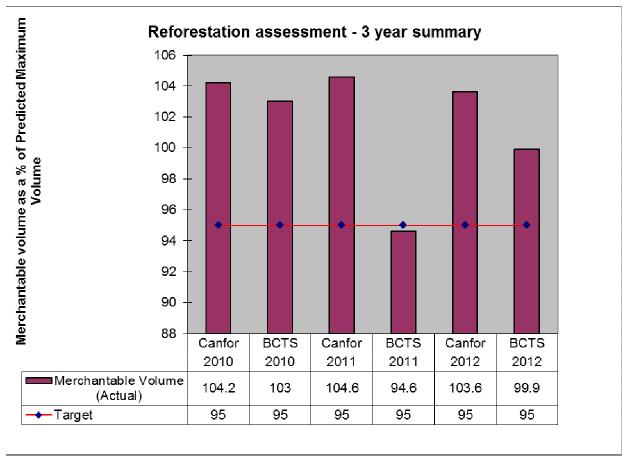
<u>BCTS</u>

A total of 16 BCTS blocks were surveyed from the 1997/1998 harvest year. This accounted for a sample size of 473.3 ha. The field data collected in August through October was compiled over the winter using a compiler developed by Timberline Natural Resource Group. The 473.3 ha were broken down into 10 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 1997/1998 harvest year was 307,062m³ and the TMV was 307,247m³. This put the PMV at 99.9 % of the TMV, which means that the target has been achieved.

See Table43, "Predicted and Target Volumes by Stratum – BCTS 2012" in Appendix 5.



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

Figure 8: Reforestation assessment merchantable volume prediction

The participants' activities in 2010 and 2012 were consistent with the target for this indicator. However the participants' activities in 2011 were not consistent with the indicator target.

REVISIONS

There are no proposed revisions to this indicator.



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 The area weighted average establishment delay for mixedwood stands regeneration will not exceed three years.				
SFM Objectives: Maintain the diversity and pattern of communities and ecosystems within a natural range					
Maintain 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 Reforestation Landscape Level Strategy.

Acceptable Variance:

To allow for variations in site preparation requirements, access, and delays in harvest the acceptable variance for establishment delay is an additional one half year (e.g. 2.5 years for conifer, 3.5 years for deciduous and mixedwood).

CURRENT STATUS AND COMMENTS

Coniferous Regeneration:

BCTS coniferous establishment delay was 1.4 years, which is within the acceptable performance range for coniferous establishment timelines for this indicator.

On all other participants' licences, coniferous establishment delay was 1.1 years, which is within the acceptable performance range for coniferous establishment timelines for this indicator.

Deciduous Regeneration:

The BCTS deciduous establishment delay was 2.1 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 deciduous establishment timelines for this indicator.

Mixedwood Regeneration

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

On all other participants' licences, mixedwood establishment delay was 4.9 years, which is not within the acceptable performance range for mixedwood establishment timelines for this indicator. There are currently 5 mixedwood strata totaling 104.8ha which have not met establishment delay, because the blocks have complicated stratification with multiple reforestation obligations on them, with some blocks being regenerated under trial techniques to



see which reforestation techniques work best. All of the blocks are scheduled to be surveyed in 2013 or 2014 to declare regeneration.

Refer to Appendix 5, Reforestation, Table 48 for BCTS and Table 49 for all other participants for a detailed listing of how this establishment delay value was calculated.

The Figure below shows a 3-year summary for the coniferous and deciduous regeneration for indicator:

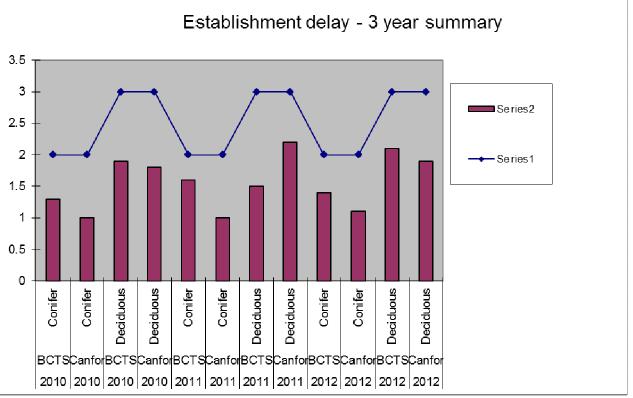


Figure 9: Establishment delay summary

REVISIONS

There were minor revisions made 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 ³ /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:

At the time of SFMP #1 government policy direction was to have TSR's prepared by industry for the Chief Forester's consideration, and determination of the AAC. It is unclear at this time whether industry will be involved in future TSR development. Therefore this indicator will only apply if the Participants are involved in the preparation of the TSR.

The Participants may propose an AAC however, the Chief Forester (Ministry 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 was to occur no later than January 2013. Work on the Timber Supply Review was scheduled to commence in the fall of 2011, but was delayed and commenced in the summer of 2013. Government staff have indicated that they will be doing the majority of the work for the TSR, with the Participants being involved from a review and comment perspective. Currently the AAC remains at the levels set in 2003. The participants are in conformance with the target for this indicator.

REVISIONS

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

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, 2012 and March 31, 2013 include site index. Blocks for which licensees developed SLP's during the reporting period have Site Index identified for each Standard Unit.

This indicator applies to blocks harvested since Nov. 15, 2001 that have undergone completion of a well growing assessment as per the required well growing assessment schedule. No well growing assessments were required to be completed during the 2012-13 reporting period, therefore there are no results to be reported for the 2012 reporting year. 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. FIRST NATIONS CONSULTATION & INFORMATION SHARING¹⁷

Indicator Statement	Target Statement				
Percentage of affected First Nations invited to participate in information sessions or presentations related to the participants' practices and /or plans (SFMP, FOS, and PMP's)	100% of affected First Nations will be invited to participate in information sessions or presentations related to the participants' practices and /or plans (SFMP, FOS, and PMP's).				
SFM Objective: Involve First Nations in review of forest management plans, provide understanding of forest management plans					
Linkage to FSJPPR: N/A					

Acceptable Variance:

No acceptable variance.

CURRENT STATUS AND COMMENTS

During the 2012-2013 reporting period there were two major FOS amendment (#133 and #142).

Both BCTS and Canfor continued with implementation of the new *Integrated Vegetation Management Plans* during the reporting period.

FOS#2 amendments #133 and 142

Information sharing related to FOS amendment #133 was conducted with three of the Treaty 8 First Nations – **Halfway River**, **West Moberly**, and **Blueberry River First Nations**. Information sharing related to FOS amendment #142 was conducted with the following three the Treaty 8 First Nations – **Halfway River**, **Doig River**, and **Blueberry River First Nations**. In both cases the selection of the above "affected" First Nations was based on the geographic location of the proposed amendment areas. Confirmation was received from the MFLNRO that in both cases 100% of "affected" First Nations were invited to participate in information sharing.

Integrated Vegetation Management Plans (IVMP)

Both Canfor and BCTS operated under their 2011-2016 IVMPs (formerly PMPs) during the reporting period. Consultation and information sharing for the new plans concluded in 2011. No new information sessions related to the IVMPs were conducted during the reporting period.

BC Timber Sales

BCTS completed annual sales notification for impacted First Nations. The sales notification was sent out to the First Nations affected, but no meetings specific to the sales schedule were requested.

¹⁷ New indicator in 2010 SFMP- previous SFMP#1 Indicator # 33 was Landslides, which has been deleted



Table 15 Summary of information sessions related to IVMPs or SFMP, to which First Nations were invited (2012-2013)

PLAN	First Nation	Forum for information session	Date
2012-2013 Sales Notification	West Moberly First Nation	Letters and maps	May 9 2012
2012-2013 Sales Notification	Blueberry First Nation	Letters and maps	May 9 2012
2012-2013 Sales Notification	Doig River First Nation	Letters and maps	May 9 2012
2012-2013 Sales Notification	Halfway River First Nation	Letters and maps	May 9 2012

The participants are consistent with the target for this indicator.

REVISIONS

There are no revisions planned for this indicator statement or target.

3.34. PEAK FLOW INDEX

Indicator Statement	Target Statement				
The percentage of watersheds achieving baseline targets for the peak flow index and the percent of watershed reviews completed where the baseline target is exceeded	 95% or more 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					
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:

A variance to a minimum of 90% of the watersheds 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

As part of the preparation of Forest Operations Schedule #2, a DFA-wide analysis of watersheds was conducted. The analysis determined the impact of FOS #2 to each watershed's peak flow index, by modelling the impact of the participants' total proposed harvest and the projected growth of forest stands. The analysis showed that all watersheds (105 of 105,



100%) are within the target threshold for peak flow upon completion of all harvest activities proposed in FOS# 2 through 2016. Table 16 identifies the peak flow index expected upon completion of all harvest activities proposed in FOS# 2 in 2016. The Participants are consistent with the Indicator and Target for the current reporting year.

Watershed Group	Watershed Name	Class	Size (km2)	Elevation range (m)	H60 Elevation (m)	Baseline Threshold PFI	PFI FOS# 2
Fontas	Bedji Creek		230.42	460 - 600	508	50	2.6
Fontas	Chasm Creek		168.21	539 – 680	599	50	0.2
Fontas	Dazo Creek		260.27	360 - 494	460	50	1.9
Fontas	FONT Unnamed 1		117.73	361 – 481	461	50	1.2
Fontas	Fontas River		320.35	536 - 800	660	50	1.1
Fontas	Kataleen Creek		162.95	380 – 451	413	50	0.7
Fontas	Teklo Creek		212.81	380 – 474	426	50	0.6
Fontas	Upper Etthithun River		404.45	620 - 842	680	50	6.2
Fontas	Ekwan Creek	LB	850.5	360 – 481	420	50	1.2
Fontas	Etthithun River	LB	1161.6	440 - 842	535	50	3.6
Fontas	Fontas River - LB	LB	714.32	440 - 800	580	50	0.6
Kahntah	Dahl Creek		412.84	535 – 943	700	50	0.9
Kahntah	Helicopter Creek		147.32	505 - 742	613	62	1.2
Kahntah	KAHN Unnamed 4		226.87	640 - 944	720	50	6.7
Kahntah	KAHN Unnamed 5		126.05	538 – 721	624	62	1.0
Kahntah	Upper Cautley Creek		478.27	660 - 1022	740	62	5.5
Kahntah	Cautley Creek	LB	865.02	518 – 1022	680	62	4.3
Kahntah	Kahntah Creek	LB	1096.59	518 - 944	700	50	2.5
Lower Beatton	Aitken Creek		828.45	654-985	815	43	31.2
Lower Beatton	Charlie Lake		292.66	690-889	773	62	53.3
Lower Beatton	Doig River		983.34	623-852	731	43	7.6
Lower Beatton	Osborn River		735.95	623-987	745	43	17.3
Lower Beatton	Umbach Creek		430.91	611-866	741	43	27.3
Lower Beatton	Upper Blueberry		857.77	655-1048	820	50	27.6
Lower Halfway	Aikman Creek		118.74	640 - 1120	815	43	31.0
Lower Halfway	Blair Creek		230.44	698 - 1142	902	43	25.3
Lower Halfway	Cameron Creek		495.18	699 – 1203	944	43	22.3
Lower Halfway	Colt Creek		158.53	719 – 1701	913	43	16.7
Lower Halfway	Deadhorse Creek		208.99	560 - 959	820	43	33.6
Lower Halfway	Ground Birch Creek		338.39	558 – 1062	735	43	24.6
Lower Halfway	Horn Creek		426.61	1079 – 2347	1474	37	0.01
Lower Halfway	Kobes Creek		299.88	620 – 1648	828	50	21.9
Lower Halfway	LHAF Unnamed 1		216.47	699 – 1022	860	43	31.4
Lower Halfway	Needham Creek		328.94	938 – 2269	1430	43	0.04
Lower Halfway	Poutang Creek		179.97	1098 – 2393	1453	43	0.0

Table 16: PFI FOS#2 Condition and Targets



Watershed Group	Watershed Name	Class	Size (km2)	Elevation range (m)	H60 Elevation (m)	Baseline Threshold PFI	PFI FOS# 2
Lower Halfway	Townsend Creek		295.8	698 – 1081	880	43	37.7
Lower Halfway	Cameron River - Residual	LB	2029.32	538 - 1205	837	37	30.8
Lower Halfway	Graham River	LB	2309.94	530 – 2404	1279	43	4.7
Lower Sikanni	Bull Creek		351.34	639 – 981	752	50	19.5
Lower Sikanni	Dechacho Creek		172.51	378 – 762	516	50	2.4
Lower Sikanni	Katah Creek		594.82	419 – 915	660	50	13.6
Lower Sikanni	Kenai Creek		78.86	400 - 621	1000	50	2.9
Lower Sikanni	LSIK Unnamed 2		162.43	536 – 858	720	43	12.6
Lower Sikanni	LSIK Unnamed 4		59.29	519 – 721	641	50	2.2
Lower Sikanni	Niteal Creek		516.6	359 – 520	475	50	0.2
Lower Sikanni	Upper Gutah Creek		806.45	559 – 901	728	62	7.3
Lower Sikanni	West Conroy		248.28	638 – 1020	782	50	22.7
Lower Sikanni	Conroy Creek	LB	1096.67	417 – 1020	720	50	16.4
Lower Sikanni	Gutah Creek	LB	1450.99	380 – 901	645	50	5.6
Milligan	Dede Creek		128.35	680 - 740	720	62	22.4
Milligan	Flick Creek		203.24	700 – 859	780	62	5.0
Milligan	Little Beaverdam Creek		334.14	690 – 854	732	62	2.7
Milligan	MILL Unnamed 3		325.52	780 – 962	880	62	0.7
Milligan	Milligan Creek		432.38	680 – 941	780	50	4.6
Milligan	Upper Milligan Creek		382.2	719 – 941	832	50	2.1
Milligan	Milligan Creek - LB	LB	1836.56	619 – 941	758	50	6.7
Upper Beatton	Arrow Creek		507.02	661 – 902	783	50	2.2
Upper Beatton	Beatton River		1071.09	777 – 1780	984	43	15.0
Upper Beatton	Black Creek		666.11	700 – 1022	807	50	6.7
Upper Beatton	Grewatsch Creek		269.73	736 – 1103	927	50	19.2
Upper Beatton	Holman Creek		150.18	719 – 1080	896	50	27.9
Upper Beatton	Jedney Creek		128.76	779 – 1101	952	43	19.7
Upper Beatton	La Prise Creek		338.99	717 – 1021	860	50	18.3
Upper Beatton	Martin Creek		120.24	700 – 980	830	50	17.3
Upper Beatton	McMillan Creek		103.34	659 – 770	736	43	1.9
Upper Beatton	Nig Creek		476.81	680 - 920	782	50	21.0
Upper Beatton	UBTN Unnamed 9		156.26	677 – 880	757	50	2.5
Upper Beatton	Upper Beatton Lrg	LB	2345.63	719 - 1782	924	50	18.9
Upper Halfway	Blue Grave Creek		158.63	720 – 1722	960	37	12.0
Upper Halfway	Horseshoe Creek		197.41	739 - 1762	1060	37	8.5
Upper Halfway	Two Bit Creek		160.23	980 – 1888	1235	37	0.6
Upper Halfway	UHAF Unnamed 3		127.86	922 - 1862	1221	37	0.0
Upper Halfway	UHAF Unnamed 6		211.34	778 – 1981	976	37	14.5
Upper Halfway	Upper Chowade		426.75	925 – 2336	1395	37	0.0
Upper Halfway	Upper Cypress		334.89	1099 – 2316	1493	37	0.0
Upper Halfway	Upper Halfway River		629.22	1103 – 2590	1235	37	0.0
Upper Halfway	Chowade River	LB	988.88	779 - 2331	1475	43	3.9
Upper Halfway	Cypress Creek	LB	620.07	840 – 2229	1200	37	5.6
Upper Halfway	Upper Halfway River - LB	LB	1096.06	914 – 3057	1241	37	0.2



Watershed Group	Watershed Name	Class	Size (km2)	Elevation range (m)	H60 Elevation (m)	Baseline Threshold PFI	PFI FOS# 2
Upper Peace	Coplin Creek		350.04	582-942	773	43	36.5
Upper Peace	Farrel Creek		646.01	447-1686	713	43	27.6
Upper Peace	North Cache Creek		187.89	548-909	759	43	29.7
Upper Peace	Red Creek		239.85	446-919	753	43	32.5
Upper Prophet	Besa Creek		515.61	1136 – 2993	1568	43	0.01
Upper Prophet	Minaker River		170.31	859 – 1742	1060	43	0.8
Upper Prophet	Nevis Creek		182.43	1019 – 2102	1422	37	0.01
Upper Prophet	Pocketknife Creek		235.85	860 - 1884	1110	43	0.2
Upper Prophet	Upper Keily Creek		269.62	1137 – 2920	1683	37	0.0
Upper Prophet	Minaker River - Residual	LB	555.08	819 – 1820	1070	43	0.8
Upper Prophet	Upper Prophet	LB	1177.85	1020 - 2993	1569	37	0.00
Upper Sikanni	Boat Creek		391.83	455 – 1081	719	50	0.0
Upper Sikanni	Buckinghorse River		389.18	840 – 1936	1119	43	1.6
Upper Sikanni	Coal Creek		214.49	637 – 1079	900	43	9.7
Upper Sikanni	Daniels Creek		223.39	758 – 1263	1041	43	2.6
Upper Sikanni	Donnie Creek		122.16	520 – 1043	822	50	13.2
Upper Sikanni	Loranger Creek		132.18	1025 – 2018	1390	43	0.0
Upper Sikanni	Medana Creek		138.68	702 – 1183	1000	43	2.5
Upper Sikanni	Middle Fork Creek		207.97	857 – 1269	1060	43	0.3
Upper Sikanni	Sidenius Creek		460.87	1119 – 2619	1489	43	0.04
Upper Sikanni	Sikanni Chief		470.52	1119 – 2739	1488	43	0.53
Upper Sikanni	Temple Creek		216.19	458 – 901	760	43	10.6
Upper Sikanni	Trimble Creek		160.27	1082 – 2122	1439	43	0.0
Upper Sikanni	Trutch Creek		858.44	491 – 1262	781	43	6.3
Upper Sikanni	Buckinghorse River - Residual	LB	1239.18	618 - 1936	1029	43	2.1
Upper Sikanni	Sikanni Chief - Residual	LB	2902	618 – 2739	1143	43	4.1

REVISIONS

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



3.35. WATER QUALITY CONCERN RATING

Indicator Statement	Target Statement
The percentage of surveyed stream crossings annually identified with a high WQCR rating on forestry roads within the DFA for which Participants have stewardship *WQCR – water quality concern rating	On an annual basis fewer than 30% of the total number of surveyed stream crossings on roads for which the Participants have stewardship will have 'High' WQCR. ¹⁸
SFM Objective:	
Maintenance of water quality	
Linkage to FSJPPR: N/A	

Acceptable Variance:

Maximum 'high' WQCR allowable will be 35%.

CURRENT STATUS AND COMMENTS

Water Quality Concern Rating field surveys were conducted on forty-one crossings in 2012. Results of the field surveys conducted are presented below (table 17).

The participants achieved the indicator target for the 2012/13 reporting period.

Table 17: Summary of WQCR data collected during 2012

Status	WQCR 'High' (# crossings)	WQCR 'Medium' (# crossings)	WQCR 'Low' (# crossings)	WQCR 'None' (# crossings)	Total (#)	% crossings rated 'High'
All combined	2	10	24	5	41	4.8

The following photos are included to give the reader an impression of what 'high' and 'low' Water Quality Concern Ratings may relate to in the field. Figure 10 is an example of a crossing rated 'high'. Sites assessed soon after deactivation often look like this and can require further application of reclamation seed to lower the concern rating. Incorporating pieces of woody debris along the exposed soil surfaces can further reduce risk of soil erosion and sediment delivery, but can interfere with recreation traffic if excessive.

¹⁸ 2010 SFMP target revised to annual measurement from three year rolling average of 2004 SFMP





Figure 10: Example of a crossing with a 'High' Water Quality Concern Rating

Figure 11 is an example of a crossing rated 'low'. Abundant reclamation mix and natural vegetation has colonized soil exposures and lowered the risk of soil erosion and sediment delivery to waterbodies.



Figure 11: Example of a crossing with a 'Low' Water Quality Concern Rating

REVISIONS

There are no revisions proposed to this indicator.



3.36. PROTECTION OF STREAMBANKS AND RIPARIAN VALUES ON SMALL STREAMS

Indicator Statement	Target Statement	
The number of annual non-conformances to SLP measures related to protecting stream bank, stream channel stability and riparian vegetation from harvesting or silviculture activities.	No non-conformances to SLP measures related to protecting stream bank, stream channel stability and riparian vegetation from harvesting or silviculture activities.	
SFM Objective: Maintenance of water quality		
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 maximum allowable variance is one non-conformance per Managing 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, 2012 to March 31, 2013 indicated that there were no non-conformances to SLP measures 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, 2012 to March 31, 2013 indicated that there were no non-conformances to SLP measures during that period of time

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

REVISIONS

None proposed.

3.37. SPILLS ENTERING WATERBODIES

Indicator Statement	Target Statement
Number of spills of a reportable substance (i.e. antifreeze, diesel fuel, gasoline, greases, hydraulic oil, lubricating oil, methyl hydrate, paints and paint thinners, solvents, pesticides, and explosives) 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 Incident Tracking Systems (ITS) incidents indicate that the licensee participants as well as BCTS, had no spills of a reportable substance that entered water bodies during the 2012-13 reporting period.

Participants are in conformance with the target for this indicator.

REVISIONS

None.

3.38. CARBON SEQUESTRATION RATE

Indicator Statement	Target Statement	
Maintenance of DFA average carbon sequestration rates.	Maintain DFA average carbon 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 SFMP#1. The strategy to manage sequestration rates is through prompt reforestation (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.

Updating of the carbon sequestration rates for the DFA will be initiated following the completion of a revised carbon budget modeling analysis, which is expected to be a component of the next timber supply analysis to be completed by the MFLNRO.

REVISIONS

There are no revisions planned for this indicator.

3.39. ECOSYSTEM CARBON STORAGE

Indicator Statement	Target Statement
The percentage of ecosystem carbon stored in the Fort St. John DFA relative to projected natural levels.	Maintain ecosystem carbon storage at a minimum of 95% of projected natural storage levels.
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 SFMP#1. 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) and adherence to cut control requirements (section 3.53) which will sustain the long term harvest level for the DFA (section 31). The participants are in conformance with the requirements of indicators 29, 30, 31 and 53.

Updating of the natural carbon storage levels for the DFA will be initiated following the completion of a revised carbon budget modeling analysis, which is expected to be a component of the next timber supply analysis to be completed by the MFLNRO.

REVISIONS

There are no revisions planned for this indicator

3.40. COORDINATED DEVELOPMENTS

Indicator Statement	Target Statement	
Number of coordinated developments	Report annually the number of proposed coordinated developments that occurred.	
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 participants' plans readily available will be viewed as a positive step in reducing the conversion of forested lands to non-forest conditions. No variance is necessary as the target is to report out on coordinated activities that occurred between the industries.

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, 2012 and March 31, 2013.

Licensee participants received 202 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 multiple projects.

- Nine pipelines crossings to be built to minimize future incurred costs



- Thirty Seven referrals were received that resulted in spatial impacts to one or more Canfor blocks that will now require a mapping update and corresponding SLP amendment. Eleven separate requests for removal of Water storage, remote sump, work spaces, or decking sites from Canfor blocks to minimize impacts to plantations.
- Several requests for hand cut lines through WTPs to minimize seismic impacts.
- Three cases where companies were asked to utilize existing access as opposed to building new roads for proposed projects.
- Thirty-one requests for oil companies to salvage merchantable timber harvested during construction of proposed projects.

The licensees provided oil and gas companies with a total of 205 road use agreements for use of licensee road by oil and gas companies. Oil and gas companies consequently provided a number of road use agreements for use of oil and gas roads to the licensees. In most of the referrals received, planned access to the oil and gas development had considered information from the Forest Operations Schedule.

Canfor had several opportunities during the reporting period to share resources with oil and gas companies. The following are incidences where Canfor partnered with various companies to develop new access or maintain or improve existing access.

- An oil and gas company maintained the Kobes Creek Rd on behalf of Canfor during road bans.
- Canfor made improvements to the Right-of-way and road surface at km 28 on the Mile 98 rd on behalf of an oil and gas company.
- Canfor made improvements to a road pull-out on the Mile 121rd on behalf of an oil and gas company .
- Canfor cleared a road junction along the Mile 109 rd on behalf of and oil and gas company
- Canfor co-ordinated with an oil and gas company on the permitting, Right-of-way-logging and construction of an oil and gas road, the Suncor Road.
- Canfor cost-shared the daily maintenance of the Harold Ellis Road, an oil and gas road, during active hauling.

Following is a summary of proposed changes to activities related to coordinating development between BCTS and the oil and gas industry between April 1, 2012 and March 31, 2013.

BCTS received 43 oil and gas referrals between April 1, 2012 and March 31, 2013 of the 43 referrals BCTS received, there were 22 proposed changes. The changes consisted of the following:

- Fourteen borrow pits, decking site and work spaces, were requested to be moved outside of BCTS blocks,
- Two oil companies to reforest temporary work spaces within BCTS's block,
- Three fully developed BCTS blocks to be recompiled mapped and amended due to oil and gas activity within block,
- Three projects to have pipeline crossings installed on BCTS licenses and roads

The 21 other referrals had very little or no impact to BCTS blocks and required minor or no changes to the proposed oil and gas activity.

In most of the referrals it appeared that the oil and gas industry utilized the FOS maps provided to them and took in to consideration our existing and proposed blocks and roads.



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

REVISIONS

There are no revisions planned for this indicator.

3.41. RANGE ACTION PLANS

Indicator Statement	Target Statement			
Percent 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 no mutually agreed-upon specific actions required to be completed by the licensee participants during the reporting period. There were no new Timber Range Action Plans (TRAPs) completed and signed between Canfor and range tenure holders during the reporting period. TRAP discussions occurred with tenure holders of RAN 075019 and RAN 074976.

BCTS has a signed TRAP agreement with the tenure holder of RAN 074976. A TRAP is near completion on RAN 075020 regarding TSL A85686, A85687 and A85688. Due to the significant portion of this range tenure that will be potentially affected by the harvesting of these TSL's, BCTS has been in discussions with the range tenure holder on numerous occasions to ensure that the stakeholders' interests will be considered and managed towards to the greatest extent possible. A TRAP agreement with the Range Tenure holder of RAN 076309 has also been productive and is near completion in the interest of accommodating stakeholder interests specific to TSL A89968 and A90800.

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.

3.42. DAMAGE TO RANGE IMPROVEMENTS

Indicator Statement	Target Statement				
Number of range improvements damaged by Participants' activities.Zero range improvements damaged by 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 is permissible. However repairs to or replacement of improvements must be completed in less than one year from the time they were damaged. The indicator target would not apply if a Participant can implement alternative mitigation measures to the satisfaction of the range tenure holder.

CURRENT STATUS AND COMMENTS

There was one new case of a range improvement being damaged by licensee participants' activities during the reporting period (COPI reference #3955). This case involves a block that will be harvested over a two-year period, with a fence repair and second entry required afterwards. Final repair will be completed after road deactivation in fall 2013 and followed up on in the 2013/14 Annual Report.

The following table lists cases identified in the 2011/12 report and presents the resolution, as a follow up.

Table 18.	Follow up of Range	e Improvement issue	es identified in 2011/	12 Annual Report

Range Tenure(s)	COPI action reference	Nature of damage	Resolution
RAN 073257	3896	Fence breach, block S26001	repaired May 2012
RAN 076539	3892	Fence breach, block 01186	Repaired Oct. 2012
RAN 076539, 076309	3897	Logging debris along fence line; blocks 01020 and 01021	Fence R/W cleared as per action. Oct. 2012
RAN 076539	3894	Fence breaches, block 01100	Repaired 2012, breached again 2013. To be repaired May. 2014 (ref 3955)
RAN 076539	3895	Fence breach, block 01105	repaired Nov. 2012
RAN 075986	3785	Fence breach, block 01015	repaired Sept. 2011



During the reporting period BCTS did not incur any instances whereby a range improvement was damaged

The participants are consistent with the target for this indicator.

REVISIONS

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

3.43. RECREATION SITES

Indicator Statement	Target Statement				
The number of recreation sites maintained by ParticipantsParticipants will 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

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

<u>REVISIONS</u>

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

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:

A variance to the requirement for consistency with established VQO's, where approved by the District Manager, is permitted on a site-specific basis, where required to address risks to resource values or safety issues (e.g. fire salvage, sanitation harvesting for forest pest control),



as identified in a SLP. A rationale will be prepared by a professional forester, and must specify the reasons for the variance and the measures that will be implemented to address the resource value at risk and mitigate impacts on the visual resource.

CURRENT STATUS AND COMMENTS

For the 2012 reporting period, Canfor had 17 blocks that fell within areas requiring management of Visual Quality Objectives. Of the 17 blocks, four blocks had variances approved by the Ministry of Forests Lands & Natural Resource Operations for the requirement to achieve the Visual Quality Objectives, which waived the requirement to complete a post harvest Visual Quality Assessment. Therefore 13 post harvest visual quality assessments were required to be completed. Of the required 13 assessments, 10 were completed. The Visual Quality objectives were met on the 10 blocks that were assessed. Three assessments were not completed within the required timeframe. Canfor is unsure if activities on these 3 blocks are consistent with the indicator target.

Canfor is not in conformance with this indicator. This has been entered as a minor nonconformance within the Incident Tracking System, with actions to create procedures to prevent recurrence. ITS-FSJO-2013-1003

BCTS completed 0-post harvest visual quality assessments due to the fact that none of the blocks developed during the reporting period were located within VQO polygons. On this basis, the objective is met.

REVISIONS

There are no proposed revisions to this indicator.

3.45. RECREATION OPPORTUNITY SPECTRUM

Indicator Statement	Target Statement						
Area in primitive and semi-primitive non- motorized classifications of the Recreation Opportunity Spectrum (ROS) for the Graham, Sikanni, and Crying Girl LU's.	A minimum of 65,839 ha in primitive ROS area (100% of 1996 primitive ROS area) and 180,726 ha in semi primitive non-motorized ROS area (50% of the 1996 total semi primitive NM ROS area) in the combined Graham, Crying Girl and Sikanni LU's (excluding the Graham Laurier and Redfern- Keily PA'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:

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

During development of the 2010 – 2016 FOS, the FOS was analyzed to project the potential impact on the ROS targeted percentages; all of proposed development was 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 were proposed in FOS #2. The following table identifies the condition of the recreation opportunity spectrum expected upon the completion of all harvest operations in FOS# 2. In the event that the FOS is amended to include new block or road area that may impact the Participants' performance to this indicator, the ROS analysis will be redone to determine the potential impact.

Crying	ROS Class Projection to 2016- After Modeling Impact of Proposed Development in 2010 FOS											
Ğirl Graham &	Prim	itive	Semi Pri Non-Mot		Semi Primitive Motorized Roaded		Roaded			Total Area	Total %	
Sikanni LU	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	(ha)	
Total 1996 ha	65,839	12.1%	361,451	66.2%	116,090	21.3%	269	0.0%	2287	0.4%	545,936	100.0%
Total 2010 Projected ha (from 2004 FOS)	65,839	12.1%	344,488	63.1%	133,056	24.4%	269	0.0%	2,287	0.4%	545,939	100.0%
2010 SMFP Target	65,839		180,726		NA		NA		NA		NA	

Table 18: Projection of Changes to ROS Class from 1996 to 2016

No logging occurred in this area between 2008 and 2013. The current status remains consistent with the target range for this indicator.

As the minimum targets of 65,839 ha in primitive ROS area (100% of 1996 primitive ROS area) and 180,726 ha in semi primitive non-motorized ROS area have been identified to be maintained through completion of harvesting of all blocks in FOS# 2, the participants are therefore in conformance with the target for this indicator.

REVISIONS

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



3.46. ACTIONS ADDRESSING GUIDES, TRAPPERS AND OTHER INTERESTS

Indicator Statement	Target Statement				
Percentage of operations consistent with mutually agreed upon action plans for guides, trappers and other known non-timber commercial interests.	100% of operations will be consistent with action plans for guides, trappers and other non-timber commercial interests.				
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

There were no new mutually agreed upon actions developed by BCTS or Canfor with guides, trappers, or other non-timber commercial interests during the reporting period, nor were there any outstanding actions relating to guides, trappers, or other non-timber commercial interests.

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

REVISIONS

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

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 ¹⁹				
SFM Objective: Viable timber processing facilities in the DFA					
Linkage to FSJPPR: N/A					

Acceptable Variance:

An acceptable negative variance of 5% (i.e. a minimum of 65% of the harvest processed in the DFA) is permissible. 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, 2012.

¹⁹ Indicator as revised in Oct 30,2005 submission of 2004-2005 Annual Report



	Total Scaled Volume of Timber Delivered to Local Processing Plants	(a) Total Scaled Volume of Timber Originating Within the DFA	(b) Total Volume of Timber Originating Within the DFA Processed within the DFA	(b/a) % of Total DFA Volume Processed Locally
Conifer volume (m ³)	949,263 m ³	912,689 m ³	910,667 m ³	99.8%
Deciduous volume (m ³)	890,888m ³	697,501 m ³	697,501 m ³	100%
All	1,840,151m ³	1,610,190m ³	1,608,168 m3	99.9 %

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 majority of the timber harvested in the DFA was processed at facilities within the DFA.

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

REVISIONS

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

3.48. SUMMER AND FALL VOLUMES

Indicator Statement	Target Statement				
Volume of timber (m ³) delivered annually to wood processing facilities within the Fort St. John Defined Forest Area (DFA) wood processing facilities between May 1 st and November 30 th	Minimum of 100,000 m ³ to conifer mills in the DFA Minimum of 185,000 m ³ to deciduous mills in the DFA				
SFM Objective: Maintain 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. Allowable variances for the minimum acceptable deliveries may be reduced proportionally for 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, 2012 and November 30th, 2012, a total of 380584 m³ were delivered to the Fort St. John sawmill, and a total of 403253m³ 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 no proposed revisions to this indicator or the target.

3.49. FOREST HEALTH FOS PLANNING²⁰

Indicator Statement	Target Statement					
Percentage of new conifer-leading harvest	A minimum of 60% of new conifer-leading					
blocks in the 2010 Forest Operations	harvest blocks in the 2010 FOS will be pine-					
Schedule that are pine-leading.	leading.					
SFM Objective: Maintain or enhance landscape level productivity						
Maintain a natural range of variability in ecosystem function, composition and structure which						
allows ecosystems to recover from disturbance						
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 Forest Health Management	Landscape Level Strategy.					
—						

Acceptable Variance:

A 10% variance (i.e. minimum of 50% new conifer leading blocks in the 2010 FOS will be pine leading) is required in the event some FOS proposed blocks are dropped prior to submission of the final FOS due to public input during or after the public review and comment period.

CURRENT STATUS AND COMMENTS

There were 626 new conifer-leading blocks included in the second Forest Operations Schedule for the Fort St. John Pilot Project area. Of those, 344 blocks (55%) were pine-leading. No blocks were added to the FOS in 2011 or 2012. The participants are consistent with the target for this indicator, within the bounds of the acceptable variance.

REVISIONS

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

3.50. COORDINATION²¹

Indicator Statement	Target Statement					
Percentages of SFMP's and FOS's jointly	100% of all SFMP's and FOS's will be jointly					
prepared by the Participants	prepared by the Participants					
SFM Objective: Maintain viable timber processing facilities in the DFA						
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 Timber Harvesting Landscape Level Strategy						

Acceptable Variance:

May exclude new Participants that join the Pilot Project and can be assigned blocks from an existing plan, or Participants that are not required to complete a plan (e.g. TSL holders).

²⁰ New indicator in 2010- previous # 49 in SFMP # 1 was Harvest Systems which has been deleted

²¹ The indicator was made a legal indicator in SFMP#2 to emphasize the commitment to coordinated planning by the Participants



CURRENT STATUS AND COMMENTS

There were twenty-two amendments to the FOS during the reporting year, two requiring public review and comment, and the balance not requiring public review. FOS amendments continue to be coordinated through a mutual notification protocol. 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.

There were no amendments to the SFMP during the reporting period.

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

REVISIONS

There are no revisions to this indicator and target.

3.51. TIMBER PROFILE-DECIDUOUS²²

Indicator Statement	Target Statement					
The area (ha) of deciduous-leading cutblocks identified in Supply Block F for harvest during the term of the SFMP.	A minimum of 200 ha of deciduous-leading cutblocks located in Supply Block F will be identified for harvest during the term of the new SFMP.					
SFM Objective: No decrease in the LTHL in the DFA						
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 Timber Harvesting Landscape Level Strategy.						

Acceptable Variance:

None.

CURRENT STATUS AND COMMENTS

To date there has been no harvesting in deciduous-leading cutblocks located in Supply Block F. Some incidental deciduous volumes have been delivered from coniferous leading blocks.

During the development of Forest Operations Schedule #2, a substantial amount of deciduousleading area was identified for harvest in Supply Block F – over 3900 ha. The following table presents a summary by block.

²² New indicator in 2010 SFMP. Previous Indicator # 51 in SFMP # 1 was 'Utilization' which has been dropped



BLOCK ID	At %	Ac%	PI %	S %	BI %	Gross Area (ha)
14011	90	0	2	8	0	103.7
14012	60	0	20	20	0	172.5
41024	75	0	0	25	0	18.5
41025	75	0	0	25	0	2.6
41026	75	0	0	25	0	6.7
41030	85	5	0	10	0	25.7
41035	63	3	22	12	0	422.9
41040	58	0	18	24	0	266.2
41044	89	0	11	0	0	245.4
41053	51	18	27	4	0	112.9
41054	48	6	31	15	0	80.9
41055	94	0	3	3	0	241.7
41059	63	0	37	0	0	275.9
41062	54	0	0	46	0	290.8
41068	63	0	2	35	0	409.1
41070	90	0	5	5	0	136.7
50001	68	12	0	20	0	75.9
50002	95	0	0	5	0	20.9
50003	95	0	0	5	0	80.2
50004	60	10	3	27	0	169.7
50005	60	10	3	27	0	37.7
50007	95	0	0	5	0	38.3
50008	90	0	0	10	0	25.5
50009	90	0	0	10	0	17.5
50010	70	10	5	10	5	84.5
50011	90	0	0	10	0	4.4
50012	88	0	0	12	0	7.6
50013	80	10	2	8	0	57.6
50014	90	0	0	10	0	4.7
50015	70	10	0	20	0	10.7
50016	70	10	0	20	0	123.9
50017	70	10	0	20	0	49.3
50018	80	10	5	5	0	107.5
50020	90	0	0	10	0	17.5
50022	90	0	0	10	0	17.0
50023	90	0	0	10	0	7.0
50025	75	0	0	25	0	19.9
50026	90	0	2	8	0	114.2
TOTAL						3903.5

Table 20: Supply Block F Deciduous Leading Stand Area

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

REVISIONS

There are no revisions proposed for this indicator.

3.52. TIMBER PROFILE-CONIFER

Indicator Statement	Target Statement				
The percentage of the total cutblock area in harvested blocks that was identified as preharvest height-class two pine inventory types	April 1, 2006 - March 31, 2011: 8% or more of the total coniferous cutblock area harvested by managing Participants during the 5-year period will be in height-class two pine inventory types. April 1, 2011- March 31, 2016: 8% or more of the total coniferous cutblock area harvested by managing Participants during the 5-year period will be in height-class two pine inventory types.				
SFM Objective: No decrease in the LTHL in the DFA					
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:

April 1st, 2006-March 31st, 2011: Allowable minimum reduced to 0% for this five-year period to provide flexibility to address urgent forest health issues.

April 1st, 2011-March 31st, 2016: Allowable Minimum 0%. This indicator is to be reviewed after the next TSR to ensure relevance to the new TSR.

The recent dramatic shift in harvesting directed at Mountain Pine Beetle (MPB) infested or "at risk" stands is expected to continue for the next few years. The impacts on mid-term AAC sustainability in the TSA are likely to be less if harvesting and subsequent reforestation activities are directed towards the currently infested MPB areas, (which tend to be in larger diameter mixed pine/spruce stands) and away from lower risk, smaller diameter pine stands (i.e. Height class two pine polygons).

CURRENT STATUS AND COMMENTS

The indicator target is based on a 5-year summation of harvesting in height class 2 pine stands. The third five-year period commenced in April of 2011, and will conclude in March of 2016. During the 2012 reporting period Canfor harvested 9.5 ha in height-class two pine inventory types of a total of 5743 ha (0.2%) harvested and BCTS harvested 0 ha in height-class two pine inventory types out of a total 492 ha (0%). The combined conifer harvest in height class 2 pine stands for the 2012 reporting period is 0.2% (9.5 ha out of a total of 6236 ha harvested).

At the end of the current 5 yr period the participants' activities will be assessed for consistentcy with the indicator. At this point in time the participants' activities are consistent with the indicator target variance.

Due to improved inventory typing (VRI), it is expected that the next Timber Supply Review (TSR III), to be completed by 2014/15, will better define the merchantable pine stands from the non-merchantable stands that the old inventory had lumped together under height class two pine. As



a consequence, it would be prudent to review this indicator's relevance to sustainability of the harvest levels at that time.

REVISIONS

There are no revisions proposed for this indicator at this time.

3.53. CUT CONTROL

Indicator Statement	Target Statement				
Percentage of total Allowable Annual Cut (AAC) charged to licensee tenure holders or BCTS Participants during the term of the SFMP.	Jan 1 2010- Dec 31 2016: <u>Industry Participants</u> : -Not to exceed 110% of the combined cumulative coniferous AAC for the 6 year period -Not to exceed 110% of the combined cumulative deciduous AAC for the 6 year period <u>BCTS Participant</u> : -Not to exceed 110% of the combined cumulative coniferous commitment offered for sale for the 6 year period -Not to exceed 110% of the combined cumulative deciduous commitment offered for sale for the 6 year period				
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, however the actual volume permissible to be harvested may be adjusted through time if additional licenses are awarded to Participants to address past undercuts, or changes made by the Chief Forester to the approved AAC for the TSA.

CURRENT STATUS AND COMMENTS



License	AAC (m3)	Planning Period 6 year cumulative	Volume Harvested by Calendar Year (m3)					Total Volume Harvested (m3)	
		volume AAC (m3)	2010	2011	2012	2013	2014	2015	
Canfor A18154	394,952	2,369,712	403,541	495,464	516,174				
DZ A56771	150,000	900,000	0	0	33,774				
CRL A59959	70,000	420,000	26,286	54,783	133,031				
Tembec A60972	83,494	500,964	71,267	68,879	21,292				
Total	698,446	4,190,676	503,104	619,126	704,271				1,826,501
Maximum	Maximum Cumulative AAC (m3) 4,609,744								
Maximum cumulative AAC = 110% of cumulative AAC									

Table 21: Licensee Conifer License AAC

Table 22: Licer	nsee Deciduous	License AAC
-----------------	----------------	-------------

License	AAC (m3)	Planning Period 6 year cumulativ	Volum	Volume Harvested by Calendar Year (m3)					Total Volume Harvested (m3)
		e volume AAC (m3)	2010	2011	2012	2013	2014	2015	
LP A60049	193,000	1,158,000	79,325	103,496	173,997				
LP A60050*	119,300	238,600	52,168	86,407	0				
PVOSB A85946	150,000	900,000	0	0	0				
Canfor PA 12	500,000	3,000,000	247,056	0	219,792				
Total	962,300	5,296,600	133,503	189,903	393,789				717,195
Maximum Cumulative AAC 5,826,260 (m3)									
*A60050 e	*A60050 expires Dec 31, 2011								
Maximum	Maximum cumulative AAC = 110% of cumulative AAC								



Species	AAC (m3)	Planning Period 6 year	Volume Harvested by Calendar Year (m3)						Total Volume Harvested (m3)
		cumulative volume commitment offered for sale (m3)	2010	2011	2012	2013	2014	2015	
Coniferou s	372,059	2,232,354	341,222	233,819	233,872				808,913
Deciduous	180,000	1,080,000	73,783	109,335	32,327				141,682
Maximum	i cumulativ AAC	e coniferous	2,455,589						
Maximum	i cumulativ AAC	e deciduous	1,188,000						
Maximum	Maximum cumulative $\Lambda\Lambda C = 110\%$ of cumulative $\Lambda\Lambda C$								

Table 23: BCTS Volume Allotment

Maximum cumulative AAC = 110% of cumulative AAC

The annual BCTS coniferous allotment in 2012/13 was 372,059 m3. Between April 1, 2012 and March 31, 2013, BC Timber Sales' offered 233,872 m3 (62.8%) of the annual allocation. Of the 233,872 m3 offered, six TSL's with a volume of 215,005 m3 sold.

The annual BCTS deciduous allotment in 2012/13 was 220,000 m3. Between April 1, 2012 and March 31, 2013, BC Timber Sales' offered 32,327 m3 (14.6%) of the annual allocation. Of the 32,327 m3 offered for sale, one TSL with a volume of 32,927 m3 sold.

2010 represents the first year of this 6 year cumulative cut review period, which will conclude December 31, 2015.

To date of this annual report, the participants' activities are consistent with the indicator and target.

REVISIONS

There are no revisions proposed for this indicator at this time.

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 5% 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 to the minimum target (e.g. logging/hauling 10% lower than 80%= 72% of costs) 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 of the participants relative to the targets for this reporting period.

Woodlands Phase	Total dollars expended	Total dollars spent locally	Local %	Indicator target
Logging and Hauling	\$58,790,132	\$55,641,356	94.6	80%
Reforestation	\$2,323,744	\$264,102	11.4	5%
Road construction and Maintenance	\$4,797,947	\$4,539,809	94.6	80%
Planning and Administration	\$6,291,927	\$5,008,095	79.6	50%
Total	\$72,203,750	\$65,453,362	90.7	

Table 24 Dollars Spent Locally by Woodlands Phase - 2012

The percentage of dollars spent locally met targets for all phases. Approximately 91% of all expenditures were made locally.

It should be noted that BCTS costs for this indicator refer to April 1, 2012-March 31, 2013, 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 4 of the 4 targets associated with the indicator.

REVISIONS:

The reforestation spend target was amended to 5% for the 2012 reporting year. This change became effective April 1, 2012.

3.55. DIRECT AND INDIRECT EMPLOYMENT

Indicator Statement	Target Statement	
Level of direct and indirect employment.	Report the current level of direct and indirect employment expressed as a factor of harvest level times employment multiplier.	
SFM Objective: Diverse local forest employment opportunities exist in the DFA		
Linkage to FSJPPR: N/A		

Acceptable Variance:

None



CURRENT STATUS AND COMMENTS

Using 2002 data from British Columbia Stats specific to the Fort St John TSA the employment multiplier is approximately 1.44 direct, indirect, and induced jobs per 1000 m³ of harvest.

Forestry Activity	TSA employment (person years)	TSA coefficients (person-years/'000s m ³)	Provincial employment (person years)	Provincial coefficients (person-years/'000s m³)
Harvesting	173	0.22	208	0.24
Silviculture	9	0.01	43	0.05
Processing	294	0.34	329	0.38
Total Direct	493	0.57	579	0.67
Indirect & induced	277	0.32	666	0.77
Total employment	770	0.89	1,245	1.44

Table 25: Fort St. John TSA employment and employment coefficients

Note that the employment estimates are reported in person years based on average 1998-2000 employment levels and the 2012 Fort St John TSA quota harvest of 864,560 m^3 .

2012 harvest level = $\frac{864,560m^3}{100}$

REVISIONS

Indicator and target were revised for the 2012 reporting year. This change became effective April 1, 2012.

3.56. MAINTENANCE OF WILDLIFE AND FISHERIES HABITAT VALUES

Indicator Statement	Target Statement	
Conformance to the SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat.	Participants will conform to the identified SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat.	
SFM Objective: Recognition of Treaty 8 rights maintenance of landscape level biodiversity	and respect of aboriginal rights through	
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, 2012 to March 31, 2013 the participants conformed to 7 of 7 (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 no revisions proposed for this indicator at this time.

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

Indicator Statement	Target Statement	
Percentage of known traditional site-specific aboriginal values and uses identified that are addressed in operational plans	100% of known traditional site-specific aboriginal values and uses identified 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, 2012 and March 31, 2013 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. Assessments by professional archaeologists are another method used by the participants to gather information on site-specific First Nations' values.

BCTS received site specific information from Halfway River First Nations. This sensitive information triggered BCTS to make commitments regarding any future harvesting activities in the area identified.

BCTS also received a request from Doig River First Nations (DRFN) regarding a proposed cut block (25011) in the area DRFN identifies as the K'ih tsaa?dze Tribal Park. BCTS committed to delay the development of the block until March 31, 2015.

Canfor also received a request from Doig River First Nations (DRFN) regarding 6 FOS cut blocks in the area DRFN identifies as the K'ih tsaa?dze Tribal Park. Canfor committed to delay the decision to develop these blocks until April 2015.

Canfor received notification of some site-specific aboriginal value features – mineral licks and wildlife habitat in the vicinity of blocks 04021 and 04022 – that were potentially impacted by block operations. The values identified were addressed in operational plans by way of altering the amount of area planned to be harvested and a reduction of the amount of road used, to protect the integrity of the sites. In addition there was some in-block vegetation retention over and above the level originally prescribed.

Canfor commissioned the completion of five archaeological assessments during the reporting period. No artifiacts were identified during the assessments, as the field work was at a Preliminary Field Recconnaissance level. However several "Areas of Potential" were identified and ribboned. The AOP were prescribed for avoidance by machine traffic, to protect disturbing any potential existing archaeological materials.

One potential cultural heritage feature, a stick teepee, was located by a Canfor employee in a pre-harvest setting in block S25018 (fig. 12). The feature's discovery was communicated to the First Nation who's traditional interest area included the block. The area around the teepee was removed from the harvest area, to prevent direct damage to the feature.



Figure 12: 'Stick teepee' discovered in S25018

Neither Canfor or BCTS received any site-specific comments in response to Notification of Intent to Treat (NIT) referrals conducted under the new IVMP.

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

REVISIONS

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

3.58. REGULATORY PUBLIC REVIEW AND COMMENT PROCESSES

Indicator Statement	Target Statement	
Compliance with the public review and comment process identified in the FSJ Pilot Project Regulation	100% compliance with the public review and comment processes identified in the FSJ Pilot Project Regulation	
SFM Objective: To facilitate a satisfactory public participation process		
Linkage to FSJPPR: N/A		



Acceptable Variance:

No variances, unless authorized by the Regional Executive Director (MFLNRO) or his designate.

CURRENT STATUS AND COMMENTS

During the reporting period there were two cases where the participants were required to follow formal Public Review and Comment Process identified in the *Fort St. John Pilot Project Regulation*. The licensee participants initiated two separate public reviews regarding amendments to Forest Operations Schedule for the Fort St. John Pilot Project area.

The review and comment period for FOS amendment #133 was between April 11 and June 11 2012. The review and comment period for FOS amendment #142 was between November 13 2012 and January 13 2013. In both cases the amendment proposals were advertised in the Alaska Highway News, in a form acceptable the District Manager of the Ministry of Forests, Lands, and Natural Resource Operations.

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.

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

Indicator Statement	Target Statement	
Current Terms of Reference (TOR) for the <i>FSJPPR</i> public participation process	Biennial review of the TOR for the <i>FSJPPR</i> public participation process (PAG)	
SFM Objective: To facilitate a satisfactory put	blic participation process	
Linkage to FSJPPR: N/A		

Acceptable Variance:

The TOR will be reviewed at some point every second year (in even years). Due to the timing of meetings, the TOR review may not be in the same month each year.

CURRENT STATUS AND COMMENTS

- The Public Advisory Group and the Pilot Participants conducted their biennial review of the Terms of Reference during the February 23, 2012 PAG meeting. Each of the sections were discussed as follows:
 - A) Updated the reference to the CSA Z809-08 standard.
 - B) Revised section b to align with the CSA Z809-08 standard.
 - C) No changes proposed.
 - D) Updates the timeline to indicate the events occurred in the past.
 - E) No changes proposed.
 - F) No changes proposed.
 - G) Updates list of participants to include PVOSB.
 - H) No changes proposed.
 - I) No changes proposed
 - J) No changes proposed
 - K) Proposed the next revision date to be February 2014.



The PAG approved an updated TOR on February 23RD, 2012. The complete Terms of Reference is located on the pilot project website (<u>http://fsjpilotproject.com</u>). The next review is scheduled for the spring meeting of 2014.

The participants are in conformance with this indicator.

REVISIONS

There are no revisions proposed for this indicator at this time.

3.60. PUBLIC INQUIRIES

Indicator Statement	Target Statement	
The percentage of timely responses to Public Inquiries	Respond to 100% of public inquiries regarding Participants' forestry practices, that are additional to the Pilot Public Review and Comment processes, within one month of receipt.	
SFM Objective:		
To facilitate a satisfactory public participation process		
Relevant information used in decision making process is provided to PAG, 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.

CURRENT STATUS AND COMMENTS

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

1. Cypress Creek area operations (BCTS)

The following public inquiry was referenced in the 2010/11 Annual Report. However the resolution of the issues occurred during the 2011/12 reporting year. For completeness, the information presented in last year's report is included below.

2010/11: BCTS received a public inquiry via a third party representing the concerns of a local trapper. The Peace River Regional District Director for Area 'B', contacted BCTS via letter with their concerns that one of her constituents in the area had not felt his concerns were adequately addressed during the BCTS Pest Management plan public review and comment phase. The Director requested that all herbicide projects relative to the Cypress valley be placed on hold. Discussions on this topic continued past the reporting period.

2011/12: Communications between BCTS and the concerned individual continued and eventually morphed into the trapper expressing further concerns around the general location of some BCTS blocks that were in the current FOS. Eventually a field trip was arranged and conducted with the trapper to view his concerns on the ground. A number of commitments were



made by BCTS regarding such things as notifying the trapper at the time these blocks are being developed, to ensuring that riparian areas were given significant consideration, and finally that efforts would be made to ensure species at risk were specifically considered in the operational planning.

The initial issue of a ban on herbicide projects virtually took a backseat to these new concerns. With that said however, BCTS communicated to the trapper that each block proposed for brushing treatment within his trapline would be referred to him and his concerns would be considered in the brushing treatment options.

2. Doig River TSL

The following public inquiry was referenced in the 2011/12 Annual Report. However the resolution of the issues occurred during the 2012/13 reporting year. For completeness, the information presented in last year's report is included below.

2011/12: A public inquiry came to BCTS via a group of First Nation trapline holders, who are also members of the Doig River First Nations. These trappers had received a letter from the TSL tenure holder as part of the obligations of the tenure, to notify the trappers of their intention to begin harvest obligations in 14 days, and to please remove the trap set-ups within the area. The trappers were upset that not only were they being requested to remove their traps, but they responded that there should not be any harvest in this particular area because it was part of a community trapline, that it was directly adjacent to the recently tabled Tribal park, and that it was one of the last vestiges of old growth timber in close proximity to the Reserve. The trappers through the Doig River FN representative indicated that no consultation had taken place on these blocks.

The BCTS Timber Sales Manager (TSM) was now in a quandary. When a timber sale license tenure has been awarded to a Licensee, the Licensee is now in charge of the site. The Licensee had every legal right to continue with plans to commence harvest operations. The TSM felt it was necessary to interject and politely asked the Licensee to delay harvest operations until this issue was resolved recognizing that continued positive First Nation relations was paramount. Following a number of back and forth communications through various means a face to face meeting was scheduled and took place. During the course of this meeting, a number of misunderstandings were cleared up. For example, the blocks had indeed been consulted on but it occurred in 2000, which was almost 10 years previous. BCTS made a commitment to adjust the block boundary to meet certain concerns of the band members, provided that the TSL remained acceptable to the Band from a harvesting perspective.

2012/13: During the current reporting period, BCTS made a commitment to adjust the block boundary to meet certain concerns of the band members. The block harvest proceeded after a specific area of concern was identified as a wildlife tree patch within the block.

3. <u>Halfway River First Nation harvesting concern</u>

Canfor received a request via email (Oct. 18 2012) from a representative of the Halfway River First Nation, regarding several blocks in the 2013 winter harvest plan. The HRFN rep requested that Canfor consider not harvesting the blocks identified. This iniatied a series of discussions that resulted in some modification of Canfor's operational plans and practices in the area specified.

4. Gundy Creek Road land owner

Canfor received an inquiry from a local land owner, concerned about logging traffic that would be passing his house during the upcoming harvest season. Canfor staff addressed the inquiry immediately, and documented actions to be taken prior to start-up of harvesting. (COPI contact ID #3651).



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 revisions proposed for this indicator at this time.

3.61. EDUCATIONAL OUTREACH

Indicator Statement	Target Statement	
Number of people to whom information, presentations or field trips provided annually.	Minimum of 40 people provided information, presentations or field trips.	
SFM Objective:		
Develop improved public understanding of SFM		
Linkage to FSJPPR: N/A		

Acceptable Variance:

None

CURRENT STATUS AND COMMENTS

The Participants operated an information booth at the 2012 CKNL Trade show in Fort St. John. At the trade show the participants answered various questions posed by 14 different members of the public including questions on Mountain Pine Beetle, forest management, tree planting, and employment opportunites. Attendance at the 2012 trade show was over 15,000 people. The Participants handed out seedlings, and information on the care and planting of the seedlings, to approximately 550 people.

The Participants hosted a field trip for the PAG on July 11 2012. There were three people present at the meeting who were not acting in a Participant or advisory role and therefore counted for the purposes of this indicator.

Canfor employees were involved as workshop leaders in the 2012 Council of Forest Industries (COFI) fall field camp for high school students. The sessions focused on the following themes: block and road development, soils and ecology, timber cruising, and silviculture, and also included tours of the Peace Valley OSB plant and Fort St. John Canfor sawmill. Canfor was involved in a similar activity on March 6 2013 when one of its employees led a group of 32 high-school students and teachers on a tour of an active logging operation.

Canfor staff participated in the BC Jobs Plan Career Fair held in FS John on November 9 2012. Twenty-seven people were provided information regarding career opportunities in forestry and information regarding general forest management activities in the Fort St John area

In addition to the above activities, the Participants submitted a copy of the 2011/12 SFMP Annual Report to the Fort St. John Public Library for reference for the general public.

The participants are consistent with the target for this indicator.

REVISIONS

There are no revisions proposed for this indicator at this time.



3.62. BRUSHING PROGRAM AERIAL HERBICIDE USE

Indicator Statement	Target Statement	
The number of hectares removed annually from the participants' aerial herbicide plans based on input from First Nations or the public and final treatment layout.	The participants will report annually, the number of hectares removed from the participants' aerial herbicide plans based on input from First Nations or the public and final treatment layout.	
SFM Objective: Involve First Nations in review of forest management plans, provide		
understanding of forest management plans		
Linkage to FSJPPR: N/A		

Acceptable Variance:

None.

CURRENT STATUS AND COMMENTS

In 2012 the participants had originally proposed to aerially herbicide 1688.2 ha as a vegetation management treatment. Based on input received from First Nations, the public and final treatment layout conducted by the participants, the actual aerial herbicide program was reduced by 479.4 ha to a total of 1208.8 ha actually treated.

Table 26: Herbicide Area Removal

Number of Hectares Removed Annually From Plan			
Participant	Notification of Intent to Treat (NIT) (hectares)	Post Input from First Nation and Public and Final layout (hectares)	Final Treatment Area Reported (hectares)
BCTS	403.1	403.1	377.9
Canfor	1285.1	1239.4	830.9
Participants Total	1688.2	1642.5	1208.8

Approximately 28.4% of the total area originally planned for treatment was removed from the final treatment plan.

REVISIONS

There are no revisions proposed for this indicator at this time.



3.63 WORKER TRAINING

Indicator Statement	Target Statement	
Percentage of managing participants' employees training that is consistent with training plans.	100% of managing participants' employees will have training consistent with training plans.	
SFM Objective:		
Development of skilled workers		
Linkage to FSJPPR: N/A		

Acceptable Variance:

10%. Employees having achieved a minimum of 90% of their training requirements will be considered as being consistent with their training plans provided there is an action plan in place to complete outstanding training requirements. Action plans to rectify the training deficiencies are to be developed prior to completion of the SFMP annual report.

CURRENT STATUS AND COMMENTS

For the 2012 reporting period, it was found that at least 7 of the 37 Canfor woodland employee records were outside of the 90% tolerance. This, in the majority of cases, is attributed to shortcomings within the tracking system.

Canfor is not in conformance with this indicator. This was also an opportunity identified in the internal audit in August of 2013. As a result of the audit finding, an action has been entered into ITS to prevent recurrence. ITS-FSJO-2013-0991

At the conclusion of the reporting period (March 31, 2013) 10 out of the 11 (91%) of BCTS Fort St John field office staff had their full complement of mandatory training requirements based on their position as compared to the training needs matrix. An action plan is in place to have this staff member complete the required training in 2013.

The staff mentioned in last year's annual report who were scheduled to take the Violence Prevention and Discrimination training in Fall 2012 were unable to complete the training until June 2013, after the reporting period. The delay in completing the course was due to trainers not being available..

BCTS is in conformance with the target of this indicator.

REVISIONS

This is a new indicator that did not previously exist in SFMP #2.



6.64 PAG SATISFACTION SURVEYS

Indicator Statement	Target Statement				
Level of satisfaction with the public participation process as measured by PAG surveys.	At least an 80% (average score of 4 out of 5) satisfaction level as measured from PAG surveys.				
SFM Objective: Develop satisfaction with the public participation process					
Linkage to FSJPPR: N/A					

Acceptable Variance:

- 10%. An average satisfaction level less than 80% will result in follow-up discussions with the PAG to identify opportunities for improving the level of satisfaction with the public participation process.

CURRENT STATUS AND COMMENTS

PAG members were asked to complete an anonymous online Public Advisory Group satisfaction survey. The results were favorable. The average score for the satisfaction survey was 86.4%. The satisfaction survey continues to provide insight into areas for future improvement.

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

REVISIONS

This is a new indicator that did not previously exist in SFMP #2.

6.65 AVAILABILITY OF INFORMATION ON ISSUES OF CONCERN

Indicator Statement	Target Statement						
SFM monitoring report made available to the public.	SFM monitoring report made available to public annually.						
SFM Objective: Develop improved public under	SFM Objective: Develop improved public understanding of SFM						
Linkage to FSJPPR: N/A							

Acceptable Variance:

- No variance.

CURRENT STATUS AND COMMENTS

The 2011 SFM Annual Report was posted to the Fort St. John Pilot project website and to the Canfor external website for access by the public. A copy of the 2011 SFM Annual Report ws provided to the Fort St. John Public Library for access by the public. A copy of the 2011 SFM Annual Report was provided to the Fort St. John Public Advisory Group, the MFLNRO and MOE.

REVISIONS

No revisions planned.

6.66 DELETIONS TO FOREST AREA

Indicator Statement	Target Statement					
Percentage of the gross crown forest landbase in the DFA converted to non-forest land use through forest management activities of the participants during the term of SFMP# 2.	Less than 0.6% of the gross crown forest landbase in the DFA will be converted to non-forest land use through forest management activities of the participants during the term of SFMP# 2.					
SFM Objective: Sustain forest lands within the participant's control within the DFA						
Linkage to FSJPPR: N/A						

Acceptable Variance:

Additional +0.2%. The acceptable variance of +0.2% is required to provide the Participants flexibility to exceed the 0.6% target in the event that additional permanent road construction is needed to address unforeseen catastrophic forest disturbance events such as wildfires, insect or disease outbreaks, etc.

CURRENT STATUS AND COMMENTS

The current status of forest deletions resulting from forest management activities is described in Table 2 (Determination of the timber harvesting land base for the Fort St. John TSA), of the "Fort St. John Timber Supply Area Analysis Report – June 2002". A subset of this information is reproduced below. Note that the timber supply review for the Fort St. John Timber Supply Area is scheduled to be completed in 2012 by the ministry of Forests Lands and Natural Resource Operations (MFLNRO).

Table 27 TSR2 Determination of the Timber harvesting land base for the Fort St. John TSA

Classification	Area (ha)	Per cent (%) of TSA area
Total Timber Supply Area	4,676,636	100
Non forest land	2,121,261	45.4
Woodlots	13,299	0.3
Land not managed by the MFLNRO	208,696	4.5
Range lease	10,373	0.2
Parks and reserves	79,750	1.7
Crown forest area managed by the MFLNRO	2,243,257	48.0
Reductions to crown forest area		
Existing roads, trails and landings	6,670	0.1
Other crown forest reductions	1,178,047	25.4
Timber harvesting landbase component of crown forest area	1,058,540	22.6
Total crown forest landbase area	2,243,257	48.0



The 2002 timber supply analysis revealed that reductions to the crown forest area managed by the MFLNRO attributable to existing roads, trails and landings totaled 6,670 ha or 0.1% of the area managed by the MFLNRO. This included roads constructed by various industries, including forestry to that point in time.

During the implementation of forest management activities under SFMP# 1 between 2004 and 2010, the participants constructed a total of 1,605.8 km of new road. The Participants assumed an average disturbance width of 20m (for out of block road) and 8m (for in block road) in the calculation of area disturbed due to permanent access construction. This 1,605.8 km of road equates to 3,211.7 ha or 0.14% of the crown forest landbase disturbed by the participants up to and includingMarch 31, 2011.

	2004	2005	2006	2007	2008	2009	2010		
	(m)	Total (m)	Total (ha)						
BCTS	121,435	169,810	71,994	57,873	50,288	33,745	22,281	527,426	1,054.9
Canfor	144,376	177,226	221,155	191,347	126,425	90,483	127,398	1,078,410	2,156.8
Total	265,811	347,036	293,149	249,220	176,713	124,228	149,679	1,605,836	3,211.7

Table 28: Road Area Constructed by Managing Participants since 2004 SFMP # 1

Since the implementation of forest management activities under SFMP# 2, the participants have constructed a total of 540.02km of new road. The Participants will measure their performance to the indicator at the end of the term of SFMP#2.

Table 29: Road Area Constructed by Managing Participants since 2011 SFMP # 2

	2011 (m)	2012 (m)	2013 (m)	2014 (m)	2015 (m)	2016 (m)	2016 (m)	Total (m)	Total (ha)
BCTS	26,918	19,547							
Canfor	234,983	258,571							
Total	261,901	278,118							

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

REVISIONS

This is a new indicator that did not previously exist in SFMP #2.



4. SUMMARY OF ACCESS MANAGEMENT

Table 30 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	19,547	11,549	0	31,096
Cameron River	0	2,380	0	0	2,380
Canfor Fort St. John	1	241,480	3,621	7,933	253,034
Canfor purchase	0	2,805	0	0	2,805
L.P.	0	4,348	2,888	0	7,236
Tembec	0	0	0	0	0
Dunne Za	0	4,900	0	0	4,900
Grand Total	1	267,462	6,509	39,029	301,451

 Table 30:
 Summary of Participants' Road and Bridge Construction Activities

BC Timber Sales access management activities for the period April 1, 2012 to March 31, 2013 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 38** 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 39** (Establishment Delay Complete-Inventory Label), **Table 40** (Establishment Delay Complete- Silviculture Label), **Table 41** (MSQ data by Block), **Table 43** (Planting Activities), and **Table 44** (Predicted and Target Volumes by Stratum).

All other Participants activities are shown in **Table 47** (Establishment Delay Report-Inventory Layer), **Table 41** (MSQ data by Block), **Table 46** (Planting Activities), and **Table 45** (Predicted and Target Volumes by Stratum).

Mixedwood Management

The commitment for the term of SFMP# 2 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 5,966 ha of forested lands over the time period of SFMP #1. Of this area, 2,708 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# 1 by BCTS.

Licensee Participants

Licensees' tenures harvested 24,049 ha of forested lands over the time period of SFMP# 1. 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

Over the term of SFMP # 1, a total of 9% of harvested mixedwood stands are being managed as operational trials of intimate species mixtures in the Fort St John Pilot Project Area. For SFMP #2 areas designated and managed as intimate species mixtures are tracked annually by the participants and results shall be reported in the 2015/16 Annual Report.

7. INCREMENTAL FOREST MANAGEMENT (STAND TENDING)

There were no stand tending activities carried out between April 1, 2012 and March 31, 2013.

8. SUMMARY OF ANY VARIANCES GIVEN

The following is a summary of variances given for licensee participants between April 1, 2012 and March 31, 2013.

Table 31: List of Variances

Licence	FOS Blk # or Location	Regulatory Requirement	Description of Variance	Date Approved	Approval
A89968	01279	Section 28(1)(c)	Visual Quality Objective	2012-08-20	MOF – District Manager



9. COMPLIANCE

9.57. CONTRAVENTIONS REPORTED

Licensee participants reported ten contraventions to government agencies (MFLNRO and MOE) between April 1, 2012 and March 31, 2013. Six of the contraventions discovered in 2012, actually occurred prior to the reporting period (November of 2007 and August of 2011) and were reported to MFLNRO & MOE in 2012.

BCTS reported two contraventions to government agencies between April 1, 2012 and March 31, 2013.

A summary of the contraventions reported can be found in **Appendix 6**.

9.58. 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 for activitiescompleted between April 1, 2011 and March 31, 2012.

There was one compliance and enforcement measure imposed by the Government under Part 6 of the *Forest Practices Code of B.C. Act* between April 1, 2012 and March 31, 2013 on licensee participants. This measure was issued in the form of a "warning Ticket". Refer to Appendix 6 for further detail regarding the compliance and enforcement measure 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, 2012 and March 31, 2013.

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, 2012 to March 31, 2013.

FOS Amendments 100 and 101 were made during the 2011 reporting year, but were not recorded in the 2011 SFM Annual Report. These 2 amendments are included in the 2012 SFM Annual Report Table 32 for completeness.



Table 32:Summary of Amendments with No Publication Requirement (Apr1/12-Mar 31/13)

Plan	Licence	Amendment ID	Date	Block / Road	Amendment Description	MOF Notified of Change
FOS	PA 12/ A18154	132	Sept 17 2012	06088	Amend Block 06088 from LP License A60049 to PA 12	Sept 17 2012
FOS	Canfor	134	April 26 2012	Access to Block 10024	Minor revision to access for 10024 due to steep slopes	April 26 2012
FOS	Canfor	135	April 27 2012	Access to Block 01122	Relocate road to avoid steep slopes.	April 27 2012
FOS	Canfor	136	June 1 2012		combine blocks 02193 and 02194 in order to create one opening.	June 1 2012
FOS	A18154	137	June 6 2012	02195/02196	combine blocks 02195 and 02196 in order to create one opening.	June 6 2012
FOS	A18154	138	June 6 2012	02139/02140/02141	Combine blocks 02139, 02140 and 02141 to create 1 opening	June 6 2012
FOS	Canfor	139	June 27 2012	02135	Access change to block 02135	June 27 201202
FOS	18154/ PA12	140	August 8 2012	02140	Change license from A18154 to PA 12	August 8 2012
FOS	PA 12/18154	141	October 1 2012	S25018	Change license from PA 12 to A18154	October 1 2012
FOS	A89968	143	October 4, 2012	01279	Decrease block size	October 4 2012
FOS	A85946/ A56711	144	November 2 2012	09059	Re allocate the license for block 09059 from A85946 to A56711	November 2 2012
FOS	A18154	145	November 2 2012	02294, 02293, 02297	Merge 02294,02293 and 02297 into one block identified as 02294	November 2 2012
FOS	BCTS	146	November 7 2012	04244,04245,04246,0424 7, 04248	Combine 04244, 04245, 04246, 04247,04248 into one block 04244	November 7 2012
FOS	A60049/ A18154	147	December 12 2012	01009	Transfer block from license A60049 to A18154	December 12 2012
FOS	Canfor	148	January 4 2013	02120/02119	Combine 02119 and 02120 into one block to be identified as 02120	January 4 2013
FOS	A89117	149	January 21 2013	04021	Road access to block 04021 as shown on the FOS map is operationally problematic due to its gullied and steep nature. Access to block 04021 is relocated via the existing (PDR 9 Branch 3) road as identified on the map.	January 21 2013
FOS	A89117	150	February 5 2013	04244	Block 04244 has increased in size because an 18 hectare	February 5 2013



Plan	Licence	Amendment ID	Date	Block / Road	Amendment Description	MOF Notified of Change
					external Wildlife Tree Patch(WTP) has been added to the block.	
FOS	A76795 and A76795	151	March 7 2013	272 Road/ Access to licenses A76795 and A76797	Access to Timber Sale Licences A76795 and A76796 has been changed from the proposed FOS Route due to a gas lease being built on the original route	March 7 2013
FOS	A60049/ A56771	152	March 18 2013	Block 05026	After the completion of the cruise the block was found to have >50% conifer ; originally identified as a deciduous licence	March 18 2013
FOS	BCTS	153	March 28 2013	01280/01282/01283	BC Timber Sales has decided to combine blocks 01280, 01282 and 01283 into one opening is identified as 01282	March 28 2013
FOS	Canfor	100	May 25, 2011	01106 & 01107	Transfer block 01106 from PA 12 to A59959 and block 01107 from A18154 to A59959.	May 25, 2011
FOS	Canfor	101	May 26, 2011	S01049	Transfer block S01049 from PA 12 to A60049.	May 26, 2011

The following is a summary of major amendments made from April 1, 2012 to March 31, 2013 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	Canfor	133	June 27 2012	Major Amendment- 60 day Review 1. Rerouting of roads in the Kobes Creek operating area to coordinate multi-user access and reduce the cumulative amount of industrial road 2. Addition of two roads in the Blair Creek operating (06035, 06092). 3. Addition of two roads in the West Farrell Creek operating area to facilitate access to one previously proposed block (45043). 4. Addition of attribute data for block 09100 to the FOS information table.		June 27 2012
FOS	Canfor	142	March 19 2013	Amendment prepared to Inga Operating Area, and	y public review and comment deal with road access in the re route the roads in the South operating area	March 19 2013



No other major amendments were processed during the annual reporting period (April 1, 2012 to March 31, 2013).

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.

The SFMP# 2 also includes a Landscape Level Reforestation Strategy and a Soil Management strategy.

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



	Performance Indicators				
SFMP # 2 Landscape Level Strategy	Affecting Part 3 Division 5 of the FSJPPR (Indicator #) ²³	For Evaluation of LLS - Sec 42 of FSJPPR (Indicator #) ²⁴	Additional - not for regulatory approval (Indicator #)		
4.1 Timber Harvesting	N/A	18,19, 20, 21, 50, 51,52	27, 48, 53		
4.2 Road Access Management	24	24, 45	40		
4.3 Riparian Management	7, 22	7, 22, 34, 36			
4.4 Range and Forage Management	N/A	10, 42	41		
4.5 Patch Size, Seral Stage Distribution and Adjacency	6, 9	2, 3, 6, 9			
4.6 Forest Health Management	N/A	1, 2, 3, 25, 49	26		
4.7 Reforestation	13, 29	13, 28, 29, 30	14		
4.8 Soil	N/A	4			
4.9 Visual Quality Management	44	44			

Table 33: Landscape Level Strategies and Related Performance Indicators

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: 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. Operational harvest activities will be concentrated in one 'cluster' during a harvesting season to minimize costs, and to minimize the extent of industrial disturbance to wildlife. The total extent of allowable harvesting area will be consistent with the GRIMP harvest schedule. Exceptions to this that may be required to address abnormal forest health and damaging events will be reviewed with the PAG and government agencies prior to conducting activities.

Indicator #18 - Graham Harvest Timing (3.18): No harvesting occurred in the reporting period in the Graham. The participants were within the targeted number of clusters for harvest, and therefore in compliance with 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

²³ Includes indicators related to both Sec35(5) and Sec35(6)of FSJPPR

²⁴ Indicators 2 (Seral Stage) and 3 (Patch Size) are Performance Indicators for both Strategy 4.5 and 4.6



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). The second reporting period commenced April 1, 2007 and concludes March 31, 2012. Since the beginning of period 2 to date of preparation of this report, no harvesting has occurred in the Graham. The participants are therefore consistent with the indicator's targeted range.

Harvesting Strategy #2: The Forest Connectivity Corridors that are identified in the Graham River IRM Plan area provide substantial connectivity for wildlife throughout the Plan area. Operational plans will respect the long-term primary components of these connectivity corridors. To ensure consistency with the original objectives of the GRIMP, government agencies will be consulted and their agreement obtained prior to proposing harvesting activities in any portion of the permanent corridors.

Indicator # 20 Graham Connectivity (Section 6.20)- No new harvesting occurred in the Graham in the 2012 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 #3: Long term harvest plans will be prepared depicting the approximate location of blocks and roads, to address key wildlife and road access issues for one or more drainages within the MKMA. These plans will be submitted to government and the public for review and comment prior to inclusion of any new proposed blocks in any FOS or similar plan.

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 2012.

Timber Harvesting Strategy #4: Participants will plan harvesting activities in a manner that supports the maintenance of the current Allowable Annual Cut over the term of the SFMP, balancing economic considerations with the management assumptions included in the current AAC determination (TSRII) rationale.

Indicator # 51 Timber Profile - Deciduous (Section 3.52): During the development of Forest Operations Schedule #2, a substantial amount of deciduous-leading area was identified for harvest in Supply Block F – over 3,900 ha.

Indicator # 52 Timber Profile – Coniferous (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.

Very little 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. During the 2012 reporting period Canfor harvested 9.5 ha in height-class two pine inventory types of a total of



5743 ha harvested (0.2%) and BCTS harvested 0 ha in height-class two pine inventory types out of a total 492 ha harvested (0%). The combined conifer harvest in height class 2 pine stands for the 2012 reporting period is 0.2% (9.5 ha out of a total of 6,236 ha harvested).

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

Harvesting Strategy #5: Support sustainable harvest levels by managing cut control levels and timber sale volumes sold that are consistent with the approved apportioned volumes within the TSA.

Indicator # 53 Cut Control (Section 6.53). This is year two of the six-year cut control period identified for the term of SFMP# 2. The licensee six-year target cumulative coniferous cut control volume is 4,190,676 m3. The actual harvested coniferous volume for years one - three was 1,826,501 m3 (43.5% of the 6 year cumulative target). The licensee six-year target cumulative deciduous cut control volume is 5,296,600 m3. The actual harvested volume for years one - three was 717,195 m3 (13.5% of the 6 year cumulative target).

The BCTS six-year target cumulative coniferous allotment volume is 2,232,354 m3. The actual volume offered for sale in years one - three was 808,913 m3 (36% of the 6 year target allocation). The BCTS six-year target cumulative deciduous allotment volume is 1,080,000 m3. The actual volume offered for sale in years one - three was 141,682 m3 (13% of the 6 year target allocation).

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

Harvesting Strategy #6: Participants will coordinate the planning of forestry operations to achieve business efficiencies, facilitate analyses of cumulative forest management impacts in relation to SFMP strategies, and provide consolidated information sharing and consultation products to interested parties in a Forest Operations Schedule.

Indicator # 50- Coordination (Section 3.50): The participants completed and submitted a coordinated FOS in 2010-11, and continued to coordinate and collaborate on FOS amendments in 2012, therefore meeting the target for this indicator.

Harvesting Strategy #7: 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 2012.

Harvesting Strategy #8: 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.

<u>Summary</u>: The participants conformed to all seven (100%) legal indicators, and 3 of 3 non legal indicators (100%) used to quantify conformance to the timber harvesting strategies.

Road Access Management Strategy

Road Access Management Strategy #1: The percentage of permanent access structures may vary significantly within cutblocks, depending on block size, terrain, season, and the need to address other resource features. The revised field performance requirement, identified in the 2004 SFMP, will continue unchanged. Permanent Access Structure % will be assessed on a DFA-wide basis, rather than block-by-block, using three year rolling average measure expressed as a percent value. The value will be less than the original regulatory 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 2.1%, the participants combined PAS is 4.2%, therefore the participants are consistent with the target for this indicator.

Road Access Management Strategy #2: Forest industry road access in the Sikanni, Graham 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 non motorized ROS classes.

Indicator # 45, Recreation Opportunity Spectrum (Section 3.45): As no logging occurred in this area since 2007, the current status remains consistent with the target range for this indicator. As well, projections of proposed roads and blocks from the FOS# 2 indicate that harvest plans will allow future activities through 2016 to be consistent with achieving these targets.

Road Access Management Strategy #3: Participants will 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 includes 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). 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 impacts on other resources.

Indicator # 40 Coordinated Developments (Section 3.40) - The participants proposed changes to 78 of the 202 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 many of these proposed changes. Participants noted that in many referrals oil and gas activities were already designed to reduce impacts to the timber



harvesting land base. Licensee participants issued 205 Road use agreements to oil and gas companies.

<u>Summary</u>: The participants conformed to the two (100%) legal indicators, and 1 of 1 (100%) non legal indicators used to quantify conformance to the access management strategies.

Patch Size, Seral Stage Distribution And Adjacency Strategy

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 are presented. Where harvesting is proposed in areas falling below thresholds, there are requirements to spatially identify recruitment areas in Forest Operations Schedule.

The seral stage analyses conducted in 2010 to identify the current condition of the indicator and to identify the future condition of the indicator assuming all blocks in FOS# 2 are harvested by 2016, identified that the participants' activities are in conformance with the requirements of this indicator.

Patch Size Strategy

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)**: the patch size analyses conducted in 2010 to identify the current condition of the indicator and to identify the future condition of the indicator assuming all blocks in FOS# 2 are harvested by 2016, identified that the participants' activities are in conformance with the requirements of this indicator.

In FOS# 2 harvesting is proposed only in one of the of the ten NDU patch size combinations where the desired patch size distribution is not achieved by 2016.

Of the three NDUs where harvesting is proposed, the patch targets are achieved in 8 of 9, or 89%, of the relevant patch size NDU combinations. In the 1 NDU patch size combination where harvesting does not achieve the desired patch size distribution, it must be noted that a slight improvement over the baseline condition (2010 condition) is achieved. This demonstrates a trend to moving toward achieving the desired patch size distribution over the course of implementation of FOS# 2

Forest Structure and Adjacency

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

Coarse Woody Debris (Indicator #6) twenty-twq plots have been measured to date under the FSJPPR, up to the end of the reporting period (3 plots measured in 2012). 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 4 of 4 legal 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: Qualified personnel will conduct assessments of streams that do not have mandatory reserve zones. Site-specific management practices will be incorporated into SLP's to protect streambanks, stream channel stability, and riparian vegetation, water quality, and other riparian values.

Indicator # 36, Protection of Stream banks and Riparian Values on Small Streams (Section 3.36). During the 2012 reporting period the participants each had no issues of nonconformance to SLP riparian management measures; the participants were therefore in conformance with the target for this indicator during the reporting period.

Riparian Management Strategy #3: Plans developed for harvesting within the riparian corridors of major rivers will provide for a high level of forest retention for wildlife habitat, with new patch openings normally being one hectare or less in size within 100 metres of the rivers' Riparian Reserve Zone. 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, Canfor harvested a very small amount of area (0.08 ha) within the Blueberry River Major River Corridor. BCTS did not harvest any amount of area from a Major River Corridor. The participants' activities are therefore consistent with the target for this indicator.



Riparian Management Strategy #4: 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

Indicator # 34, Peak Flow Index (Section 3.34): The participants are consistent with the target for this indicator. No non-conformances to this indicator were identified to have taken place during this reporting period. As part of the preparation of Forest Operations Schedule #2, a DFA-wide analysis of watersheds was conducted. The analysis determined the impact of FOS #2 to each watershed's peak flow index, by modelling both the impact of the participants' total proposed harvest and the projected growth of forest stands. The analysis showed that all watersheds (105 of 105, 100%) are within the target threshold for peak flow upon completion of all harvest activities proposed in FOS# 2 through 2016.

Summary: The participants conformed to the target or acceptable variance for 4 of the 4 (100%) legal 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 (Canfor) completed 10 of 13 required assessments during the reporting period. The 10 completed assessments concluded the VQO's were achieved. A conclusion could not be made regarding the 3 outstanding assessments, which have been scheduled for completion.

Summary: The participants did not conform to the target or acceptable variance for the one (0%) legal indicator used to quantify conformance to the visual quality management strategy. An action plan has been developed to prevent re-occurrence of this non conformance.

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) and Indicator #26 Salvage. 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 within their silviculture obligation areas (harvested blocks), and prioritize those that may have a significant impact on forest resources. Within their silviculture obligation areas, 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.

Forest Health Indicator (Section 3.25), the participants' activities were consistent with the targets for this indicator. A number of fill plants were completed by the participants to deal with biotic and abiotic factors.

Forest Health Strategy #3: Where practical, prioritize harvesting of conifer blocks to those areas that are most susceptible to prevalent significant and/or catastrophic forest health damaging agents.

Indicator # 49, Forest Health FOS Planning (Section 3.49), There were 626 new coniferleading blocks included in Forest Operations Schedule # 2 for the Fort St. John Pilot Project area. Of those, 344 blocks (55%) were pine-leading. The participants are consistent with the target for this indicator, within the bounds of the acceptable variance.

Summary: The participants' activities conformed to the target or acceptable variance for 5 of 5 (100%) legal indicators and 1 of 1 (100%) non legal indicators used to quantify conformance to the forest health strategy.

Range And Forage Management Strategy

Range and Forage Management Strategy # 1: The Participants will ensure range improvements damaged as a result of Participants' activities are restored to their pre-harvest condition in a timely manner, or as otherwise agreed to between the range tenure holder and Participant.

Indicator # 42, Damage to Range Improvements (Section 3.42) In this reporting period the participants damaged 1 range improvement on 1 range tenure in order to allow short-term access for harvesting equipment. The damages are planned to be repaired within the time period indentified in the indicator (one year). Consequently the participants are consistent with the indicator's target.

Range and Forage Management Strategy # 2: The participants will implement measures for grass seeding activities to minimize the risk introduction or spread of invasive plants due to forest management activities.

Indicator # 10, Noxious Weed Content (Section 3.10) 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.

Range and Forage Management Strategy #3: The Participants will endeavor to create and implement mutually agreed action plans (T.R.A.P.s) with range tenure holders that address



forage and forest management overlap issues and other concerns, over the areas identified in the current Forest Operations Schedule.

Indicator #41, Range Action Plans (Section 3.41) is the indicator which shows progress on this strategy. There were 0 mutually agreed specific actions required to be completed and 0 Timber Range Action Plan (TRAP) were completed (signed) by the participants during the reporting period. A total of 2 TRAPs were initiated during the reporting period. Participants' operations were 100% consistent with the mutually agreed upon action plans for range during the reporting period.

Summary: The participants conformed to the target or acceptable variance for 2 of 2 legal indicators, and 1 of 1 (100%) non legal indicators used to quantify conformance to the range and forage management strategy.

Reforestation Strategy

A) Discrete areas within cutblocks will be assigned an initial forest type designation (conifer, deciduous, or mixedwood). Applicable reforestation standards (coniferous, deciduous, or intimate mixedwood standard) that apply to each area will be tied to stocking standard ID's, which correspond to conifer, deciduous, or mixedwood stocking standards (i.e. declarations). These ID's will be submitted into the MFR tracking system (e.g. RESULTS). Changes to stocking standard designations within cutblocks may occur prior to final assessment, and will be revised in RESULTS.

B) Timely establishment of new forests is important to support timber production objectives, and will be assessed based on the average length of time to establish trees on harvested sites.

C) Flexibility in the intensity of silviculture treatments will be used to enhance landscape level timber production, while allowing natural variability in stand development. This will be enabled by assessing reforestation success based on a cumulative 'landscape level' assessment of the area from each year's logging. Assessments will be completed separately for all deciduous and all coniferous declarations, based on a comparative measure of projected future volume production.

The strategy includes the following components:

- 1. Assigning Reforestation Standards to areas within cutblocks
- 2. Landscape Level Assessment of Reforestation
- 3. Stocking Standards and Crop Tree Requirements
- 4. Silviculture Performance Indicators

The Reforestation strategy has the following key features to:

- Set standards for reforestation to provide restocking of harvested areas.
- Provide a landscape level assessment of reforestation success for *coniferous and deciduous 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.

The following 4 indicators measure performance to the overall reforestation strategy of the participants:

Indicator # 13, Coniferous Seed (Section 3.13), measures conformance to the Chief Foresters Standards for Seed Use. All seedlings planted by the participants were in conformance with the Chief Foresters Standards for Seed Use. The participants are in compliance with the indicator.

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. 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.

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. The participants are in compliance with this indicator.

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. BCTS is within the acceptable variance range of the target, but licensee participants exceeded the acceptable variance for mixedwood establishment delay. The license participants achieved the target for conifer and deciduous establishment delay. The participants are not in compliance with this indicator.

Indicator #14 Aspen Regeneration (Section 3.14) – ensures that reforestation of deciduous stands utilizes natural regeneration to ensure that the regenerated stand is gentically suitable for the site. The Participants are in conformance with this indicator.

Summary: The participants conformed to 3 of the 4 legal indicator targets (75%) and 1 of 1 (100%) non legal indicators that measure conformance with the reforestation strategy.

Soil Management Strategy

Soil Management Strategy #1: The Participants will implement measures that ensure operations are conducted in a manner that addresses the inherent sensitivity of a site to soil degrading processes.

Indicator # 4, Soil Disturbance, (Section 3.4) measures whether detrimental soil disturbance occurred during harvesting or reforestation activities on cutblocks. There were no incidents of detrimental soil disturbance reported by the participants during the reporting period.



<u>Summary</u>: The participants conformed to 1 of the 1 (100%) of the legal indicators that measure conformance to the soil management 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.

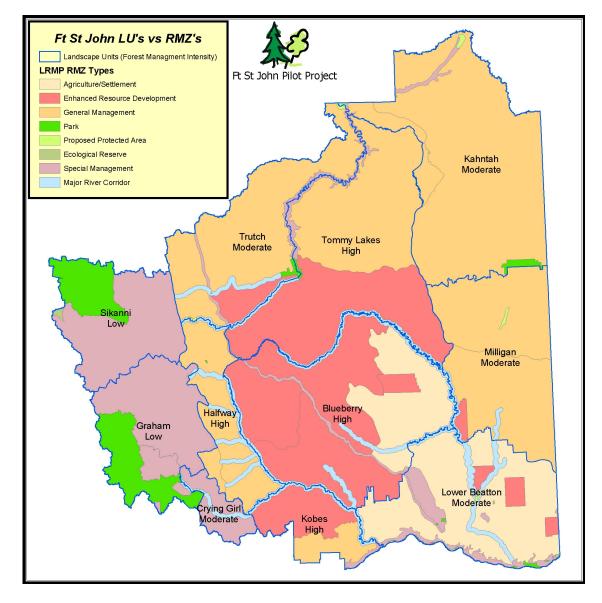


Figure 13: Fort St. John LU's and RMZ's





Appendix 2: CSA Sustainable Forest Management Matrix





43.0 CSA Matrix²⁶ Fort St. John Pilot Project SFM Matrix (Effective April 1, 2012)

6.0 The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements				SFMP 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 6.1-6.6, as well as any other values associated with DFA.	Value	Objective	CSA core Indicator (for reference only)	Indicator - a variable that measures or describes 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 1 – Conservation of Biological Diversity							
Conser	ve biological div	versity by maintain	ing integrity, functi	on and diversity of	living organisms and the	e complexes of which they are part.	
	diversity pattern o Ecosystem commun Diversity and ecosyste		1.1.1 - Ecosystem area by type	17 - Representative Examples of Ecosystems	Percentage of area of forest stands in an unmanaged condition, by leading species, by NDU	100% of baseline targets for forested stands in an unmanaged condition, by leading species, by NDU will be met	
Element 1.1 Ecosystem Diversity - Conserve ecosystem diversity at the stand and landscape levels by maintaining the variety of communities and ecosystems that naturally occur in the DFA		ecosystems within a natural	1.1.2 - Forest area by type or species	1 - Forest Types	Percent distribution of forest type (deciduous, deciduous mixedwood, conifer mixedwood, conifer) >20 years old by landscape unit	All forest type groups by landscape unit will meet or exceed the minimum area percentage in table 9	
			composition	28 - Species Composition	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)	

²⁶ matrix number reflects the PAG meeting at which it was approved.



			1.1.3 - Forest Area by seral stage or age class	2 - Seral Stage 3 - Patch Size	The minimum proportion (%) of late seral forest by NDU Percent area by Patch Size Class (0- 50, 51-100, and >100 ha) by NDU	The minimum proportion (%) of late seral forest by NDU as identified in table 11 will be met A minimum of 9 of 18 of the baseline targets for early patches will be achieved during the term of this SFMP
			1.1.4 - Degree of within- stand structural retention	5 - Snags / cavity Sites	Number of snags and/or live trees (>23 cm dbh) per ha on prescribed areas	Retain annually an average of at least 6 snags and/or live trees (>23cm dbh) per hectare on prescribed areas
				9 - Wildlife Tree Patches	Cumulative Wildlife Tree Patch percentage in blocks harvested under the FSJPPR in each Landscape 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%)
			1.2.1 - Degree of habitat	5 - Snags / Cavity Sites	See indicator # 5	
Element 1.2 Species Diversity - Conserve species diversity by ensuring that	Species Richness Species Richness Species. Maintain habitats for species at risk	elements for	protection for selected focal species, including species at risk	6 - Coarse Woody Debris Volume	See indicator # 6	
		species. Maintain habitats for	1.2.2 - Degree of suitable habitat in the	7 - Riparian Reserves	The number of non- compliances to riparian reserve zone standards	No non-compliances to riparian reserve zone standards
		long term for selected focal species, including	8 - Shrubs	The proportion of shrub habitat (%) by Landscape Unit	Each landscape unit will meet or exceed the baseline target (%) proportion of shrub habitat	



species at risk			
	9 - Wildlife Tree patches	See indicator # 9	
	11 - Species at Risk Stand Level Management Guidelines	The percentage of SLP's prepared annually for 'effected' cutblocks that incorporate one or more stand level species at risk management guidelines	100% of SLPs prepared annually for effected cutblocks will incorporate one or more species at risk management guidelines
	16 - Ungulate Winter Ranges, Wildlife Habitat Areas & MKMA	Proportion of activities consistent with the objectives of the Muskwa-Kechika Management Area (MKMA), and general wildlife measures for Ungulate Winter	All pilot Participant activities will be consistent with the objectives of the MKMA, and general wildlife measures for Ungulate Winter Ranges and Wildlife Habitat Areas
	17 - Representative Examples of Ecosystems	See indicator # 17	
1.2.3 - Proportion of regeneration comprised of native species	10 - Invasive Plants / Noxious Weeds	The % prohibited and primary noxious weeds, and known invasive weed species of concern, in seed mix analysis	Seed mix analyses will have 0% content of prohibited and primary noxious weeds and known invasive plants, as identified in the most current publication of: "Listing of Invasive Plants", available from the Peace River Regional District



				13 - Coniferous Seeds	The percentage of seedlings and vegetative material used and planted in accordance with the Chief Forester's Standards for Seed Use (Nov.20, 2004) as amended from time to time	100% of seedlings and vegetative material will be used and planted in accordance with the Chief Forester's Standards for Seed Use (Nov.20, 2004), as amended from time to time
				14 - Aspen Regeneration	% natural regeneration of deciduous	100% natural regeneration for deciduous
Element 1.3 Genetic Diversity - Conserve genetic diversity by maintaining the variation of genes within	Genetic	Conserve genetic diversity of tree stock	Non-Core	13 - Coniferous Seeds	See indicator # 13	
species and ensuring that reforestation programs are free of genetically modified organisms	Diversity			14 - Aspen Regeneration	See indicator # 14	
Element 1.4 Protected areas and sites of special biological and cultural significance - Respect protected areas identifierd through government processes. Co-operate in broader landscape management related to protected areas and sites of special biological and cultural	Protect areas and Conservation Emphasis areas, for example Special Management Zones,	To have representative areas of naturally occurring and important ecosystems and rare physical environments protected at	1.4.1 - Proportion of identified sites with implemented management	15 - Class A Parks, Ecological Reserves & LRMP Designated Protected Areas	Hectares of forestry related harvesting or road construction within Class A parks, protected areas, ecological reserves, or 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
significance. Identify sites with special geological, biological, or cultural significance within the DFA, and implement management strategies appropriate to their long-term	Ecological Reserves, etc	both the broad and site-specific levels across or adjacent to the DFA.	strategies.	16 - Ungulate Winter Ranges, Wildlife Habitat Areas & MKMA	See indicator # 16	



maintenance.		17 - Representative Examples of Ecosystems	See indicator # 17	
		18 - Graham Harvest Timing	The number of clusters in the Graham IRM Plan area where active operational harvesting is concurrently occurring	Operational harvesting within the Graham IRM Plan area will be constrained to no more than 1 'cluster' of cutblocks at any one time
		19 - Graham Merch Area	Cumulative merchantable area (hectares) within blocks harvested in the Graham IRM Plan area since 1997	The cumulative merchantable area (hectares) within harvested blocks will not exceed the planned maximum cumulative harvest areas, as measured at the end of each time period: Period 2 (April 2012): 6569 ha; Period 3 (April 2017): 9355 ha
		20 - Graham Connectivity	Area (hectares) harvested in cutblocks in the Graham IRM area, within the permanent alluvial and non- productive/non- commercial components of the connectivity corridors	Zero hectares harvested within cutblocks in the permanent alluvial and non-productive/non- commercial components of the connectivity corridors
		21 - MKMA harvest	The number of long term harvest plans within the MKMA completed and submitted to government	A minimum of one long-term harvest plan submitted no later than 1 year following governmen approval of a landscape unit objective under the MKMA Act, that applies to the Fort St. John TSA portion of the MKMA



		22 - River Corridors	The percentage of harvested areas that create openings greater than 1 hectare within 100 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)
		57 - Number of known Values and Uses addressed in Operational Planning	Percentage of known traditional site- specific aboriginal values and uses that are addressed in operational plans	100% of known traditional site- specific aboriginal values and uses identified will be addressed in operational plans
		15 - Class A Parks, Ecological Reserves & LRMP Designated Protected Areas	See indicator # 15	
Management strategies address important	1.4.2 - Protection of identified sacred and culturally important sites	16 - Ungulate Winter Ranges, Wildlife Habitat Areas & MKMA	See indicator # 16	
values in SMZ areas		17 - Representative Examples of Ecosystems	See indicator # 17	
		18 - Graham Harvest Timing	See indicator # 18	
	-	19 - Graham Merch Area	See indicator # 19	
		20 - Graham Connectivity	See indicator # 20	



				21 - MKMA harvest 22 - River Corridors 57 - Number of known Values and Uses addressed in Operational Planning	See indicator # 21 See indicator # 22 See indicator # 57	
					est Ecosystem Condition	and Productivity tes of biological production.
Element 2.1 Forest Ecosystem Resilience - Conserve ecosystem resilience Eco	Ecosystem Resilience R	Maintain a	2.1.1 - Reforestation success	25 - Forest Health	Percentage of silviculture obligation areas with significant detected forest health damaging agents which have treatment plans developed for them	100% of silviculture obligation areas with significant forest health damaging agents will have treatment plans developed for them, and initiated within 1 year of detection
		variability in ecosystem function, composition and structure with allows ecosystems to		27 - Silviculture Systems	Percentage of area harvested annually using even aged silviculture systems	Even aged silviculture systems will be employed on at least 80% of the total area harvested annually in the DFA
		disturbance		28 - Species Composition	See indicator 28	
			29 - Reforestation Assessment	Predicted Merchantable Volume (PMV) (cubic meters) coniferous and separate deciduous surveyed	Predicted Merchantable Volume will meet or exceed the Target Merchantable Volume (TMV). The TMV is set at 95% of the Maximum Predicted Merchantable Volume attainable	



		areas.See indicator #2	on coniferous areas. The TMV is set at 90% of the Maximum Predicted Merchantable Volume attainable on deciduous areas
	30 - Establishment Delay	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. The area weighted average establishment delay for mixedwood stands regeneration will not exceed three years
	2 - Seral Stage	See indicator # 2	
	9 - Wildlife Tree Patches	See indicator # 9	
Non-Core	24 - Permanent Access Structures	Percentage of the total area in Managing Participants' cutblocks occupied by permanent access structures, in which harvesting was completed	A maximum of 5% of the total area in Managing Participants' cutblocks occupied by permanent access structures in which harvesting was completed, as determined on a 3 year rolling average
	26 - Salvage	The relative proportion of area of merchantable fire- damaged stands salvaged within a management intensity class	The relative proportions of salvage will be highest in the high intensity zones, and lowest in the low intensity zones over the SFM Plan period (April 1, 2010 - March 31, 2016)

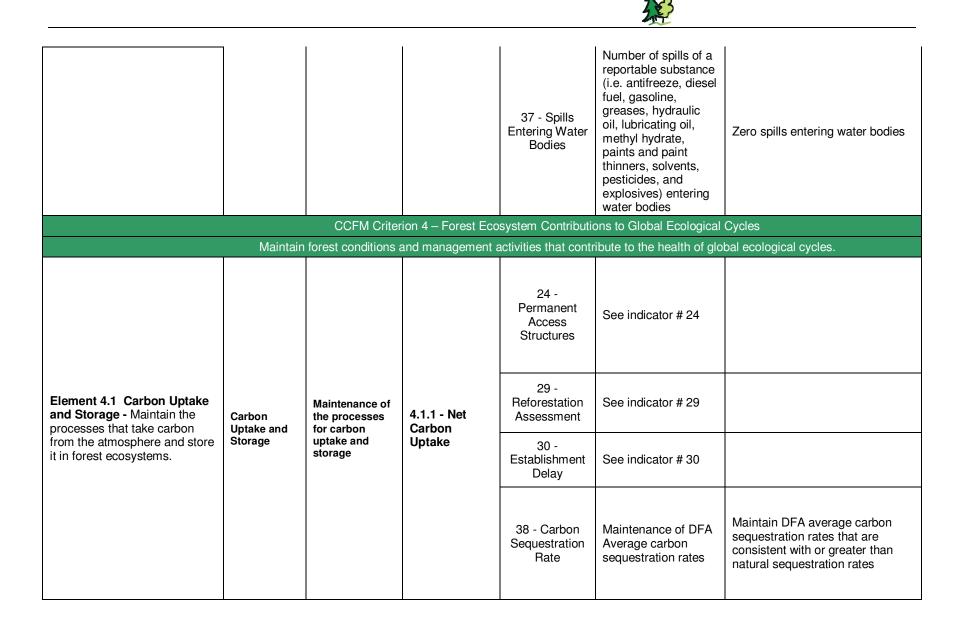


				49 - Forest Health FOS Planning	Percentage of new conifer-leading harvest blocks in the 2010 FOS that are pine-leading	A minimum of 60% of new conifer-leading harvest blocks in the 2010 FOS will be pine-leading
				24 - Permanent Access Structures	See indicator # 24	
	Ecosystem	Ecosystem functions capable of supporting naturally occurring species exist within the range of natural variability	2.2.1 -	40 - Coordinated Developments	Coordinated coordinated	Report annually the number of proposed coordinated developments that occurred
Element 2.2 Forest Ecosystem Productivity - Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally	Productivity		Additions and deletions to the forest area	66 - Deletions to Forest Area	Percentage of gross corwn forest landbased in the DFA converted to non-forest land use through forest management activities of theparticipants during the term of SFMP #2.	Less than 0.6% of the gross crown forest landbase in the DFA will be converted to non-forest land use through forest management activities of the participants during the term of SFMP #2.
occurring species. Reforest promptly and use tree species ecologically suited to the site			2.2.2 - Proportion of the calculated long-term sustainable	25 - Forest Health	See indicator # 25	
	Productive Capacity for Timber Maintain or enhance landscape level productivity	enhance landscape level		31 - Long Term Harvest Level	Long-term harvest level (LTHL) as measured in cubic metres per year (m ³ /yr)	We will propose an Allowable Annual Cut (AAC) that sustains the LTHL of the Defined Forest Area (DFA)
		productivity	harvest level that is actually harvested	32 - Site Index	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

				53 - Cut Control	Percentage of total Allowable Annual Cut (AAC) charged to licensee tenure holders or BCTS Participants during the term of the SFMP	Jan 1 2010- Dec 31 2016: Industry Participants: -Not to exceed 110% of the combined cumulative coniferous AAC for the 6 year period, -Not to exceed 110% of the combined cumulative deciduous AAC for the 6 year period. BCTS Participant: -Not to exceed 110% of the combined cumulative coniferous commitment offered for sale for the 6 year period, -Not to exceed 110% of the combined cumulative deciduous commitment offered for sale for the 6 year period
					and Water Resources	est ecosystems.
-	Soil Productivity	Protect soil resources to	3.1.1 - Level of	4 - Soil Disturbance	Number of blocks with non- conformances to soil disturbance limits reported annually by Managing Participant	Zero blocks will have non conformances to soil disturbance limits
			Soil Disturbance	32 - Site Index	See indicator # 32	
			3.1.2 - Level of downed woody debris	6 - Coarse Woody Debris Volume	See indicator # 6	



		Maintenance of water quantity	3.2.1 - Proportion of watershed or water management areas with recent stand- replacing disturbance	34 - Peak Flow Index	The percentage of watersheds achieving baseline targets for the peak flow index and the percent of watershed reviews completed where the baseline target is exceeded	95% or more 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
			Non-Core	7 - Riparian Reserves	See indicator # 7	
Element 3.2 Water Quality and Quantity - Conserve water resources by maintaining water quality and quantity				35 - Water Quality Concern Ratings	The percentage of surveyed stream crossings annually identified with a high WQCR rating on forestry roads within the DFA for which participants have stewardship (*WQCR – water quality concern rating)	On an annual basis, fewer than 30% of the total number of surveyed stream crossings on roads for which the participants have stewardship will have 'High' WQCR
				36 - Protection of Stream banks and Riparian Values of Small Streams	The number of annual non- conformances to SLP measures related to protecting stream bank, stream channel stability and riparian vegetation from harvesting or silviculture activities	No non-conformances to SLP measures related to protecting stream bank, stream channel stability and riparian vegetation from to harvesting or silviculture activities





				39 - Ecosystem Carbon Storage	The percentage of ecosystem carbon stored in the Fort St. John DFA relative to projected natural levels	Maintain ecosystem carbon storage at a minimum of 95% of projected natural storage levels		
Element 4.2 Forest Land Conversion - Protect forest	Forest Land	Sustain forest	2.1.1 - Reforestation Success	See indicators	# 25, 27, 28, 29, 30 (rela 2.1.1 abo	ted to CSA z809-08 Core Indicator ove)		
ands from deforestation or conversion to non-forests, where ecologically appropriate.	as from deforestation or version to non-forests, Base control within the DEA	control within	2.2.1 - Additions and deletions to the forest area	See indicators	See indicators # 24, 40, 55 (related to CSA z809-08 Core Indicator 2.2.1 above)			
CCFM Criterion 5 – Multiple Benefits to Society								
	Sustain	flows of forest ber	nefits for current ar	id future generatio	ns by providing multiple	goods and services.		
				18 - Graham Harvest Timing	See indicator # 18			
				19 - Graham Merch Area	See indicator # 19			
Element 5.1 Timber and Non-Timber Benefits - Manage the forest sustainably		Provide opportunities	5.1.1 - Quantity and quality of	21 - MKMA harvest	See indicator # 21			
Manage the forest sustainably to produce an acceptable and feasible mix of timber and non- timber benefits. Evaluate timber and non-timber forest products and forest-based services.	Non-Timber Multi-use Benefits non-timber	mix of timber, recreational activities, and non-timber commercial	hon-timber	31 - Long Term harvest Level (Timber)	See indicator # 31			
		activities	produced in the DFA	41 - Range Action Plan	Percent consistency with mutually agreed upon action plans for range	Operations 100% consistent with resultant range action plans		
			42 - Damage to Range Improvements	Number of range improvements damaged by Participants' activities	Zero range improvements damaged by Participants' activities			



43 - Recreation Sites (Non - Timber)	The number of recreation sites maintained by Participants	Participants will maintain a minimum of one recreational site within the DFA
44 - Visual Quality Objectives	Consistency with Visual Quality Objectives (VQO's)	Pilot Participants' forest operations will be consistent with the established VQO's
45 - Recreation Opportunity Spectrum	Area in primitive and semi-primitive non- motorized classifications of the Recreation Opportunity Spectrum (ROS) for the Graham, Sikanni and Crying Girl LU's	A minimum of 65,839 ha in primitive ROS area (100% of 1996 primitive ROS area) and 180,726 ha in semi primitive non- motorized ROS area (50% of the 1996 total semi primitive NM ROS area) in the combined Graham, Crying Girl and Sikanni LU's (excluding the Graham Laurier and Redfern-Keily PA's)
46 - Actions Addressing Guides, Trappers, and Other Intersts	Percentage of operations consistent with mutually agreed upon action plans for guides, trappers and other known non- timber commercial interests	100% of operations will be consistent with action plans for guides, trappers and other non- timber commercial interests
47 - Timber processed in the DFA (Timber)	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



				48 - Summer and Fall Volume Deliveries 51 - Timber Profile - Deciduous (Timber)	See Indicator # 48 The area(ha) of deciduous leading cutblocks identified in Supply Block F for harvest during the term of the SFMP	A minimum of 200 ha of deciduous leading cutblocks located in Supply Block F will be identified for harvest during the term of the new SFMP
			Non - Core	52 - Timber Profile - Coniferous (Timber)	The percentage of the total cutblock area in harvested blocks that was identified as preharvest height- class two pine inventory types	April 1, 2006 - March 31st, 2011: 8% or more of the total coniferous cutblock area harvested by managing Participants during the 5-year period will be in height- class two pine inventory types. April 1, 2011- March 31st, 2016: 8% or more of the total coniferous cutblock area harvested by managing Participants during the 5-year period will be in height- class two pine inventory types.
				53 - Cut Control (Timber)	See indicator # 53	
Element 5.2 Communities		Maintain viable		47 - Timber Processed in the DFA	See Indicator # 47	
and Sustainability - Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and by supporting local community economies.	Sustainable and Viable Communities	timber processing facilities in the DFA. No decrease in the LTHL in the DFA	5.2.1 - Level of investment in initiatives that contribute to community sustainability	48 - Summer and Fall Volume Deliveries	Volume of timber (m ³) delivered annually to wood processing facilities within the Fort St. John Defined Forest Area (DFA) wood processing facilities between May 1st and November 30th	Minimum of 100,000 m ³ to conifer mills in the DFA, Minimum of 185,000 m ³ to deciduous mills in the DFA



	50 - Coordination	Percentages of SFMP's and FOS's prepared jointly by the Participants	100% of all SFMP's and FOS's will be jointly prepared by the Participants
	51 - Timber Profile - Deciduous	Profile - See indicator # 51	
	52 - Timber Profile - Coniferous	See Indicator # 52	
		each woodlands phase in dlands proportion to total	Woodlands Phases to be monitored:
	E4 Dellare		Logging/hauling: minimum of 80%
	Spent Locally on each		Road construction and maintenance: minimum of 80%
	Phase		Silviculture: minimum of 5%
			Planning and administration: minimum of 50%
	55 - Direct and Indirect Employment	Level of direct and indirect employment	Report the current level of direct and indirect employment expressed as a factor of harvest level times employment multiplier
Non - Core	31 - Long Term Harvest Level	See Indicator # 31	
	53 - Cut Control	See Indicator # 53	



	Contribute to Worker and Public Safety DF		5.2.2 - Level of investment in training and skills development	63 - Worker Training 12 - Forest Workers Safety	Percentage of managing participants' employees training that is consistent with training plans Implementation and maintenance of certified safety program	100% of managing participants' employees will have training consistent with training plans Each managing participant will implement and maintain a certified safety program
		Worker and Public Safety DFA forestry	to work environment for DFA forestry	48 - Summer and Fall Volume Deliveries	See Indicator # 48	
Communities Participate in the Use and Management of the Forest	workers and the public. Diverse local forest employment opportunities exist in the DFA	54 - Dollars Spent Locally on Each Woodlands Phase	See Indicator # 54			
				55 - Direct and Indirect Employment	See Indicator # 55	
			5.2.4 - Level of Aboriginal participation in the forest economy	23 - Value and Total Number of contracts Awarded to First Nations	Value and total number of contracts awarded annually to First Nations	Report the annual total value and number of contracts awarded to companies or groups owned or operated by First Nations
					ility for Sustainable Deve	
Socie	ty's responsibili	ty for sustainable f	orest managemen	t requires that fair, made.	equitable, and effective	forest management decisions are
Element 6.1 Aboriginal and Treaty Rights - Recognize and respect Aboriginal title and rights, and treaty rights. Understand and comply with curent legal requirements related to aboriginal title and rights, and treaty rights.	Aboriginal and Treaty Rights	Recognition of Treaty 8 rights and respect of aboriginal rights through maintenance of landscape level biodiversity	6.1.1 - Evidence of a good understanding of the nature of Aboriginal title and rights	33- First Nations Consultation & Information Sharing	Percentage of affected First Nations invited to participate in information sessions or presentations related to the participants' practices and /or plans (SFMP, FOS, and PMP's)	100% of affected First Nations will be invited to participate in information sessions or presentations related to the participants' practices and /or plans (SFMP, FOS, and PMP's)



	56 - Maintenance of Wildlife and Fisheries Habitat	Conformance to the SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat	Participants will conform to the identified SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat
6.1.2 - Evidence best effor obtain acceptane managem plans bas on aborig communi having a understar of the pla	ts to ce of ent ed inal ties clear nding	See Indicator # 33	
6.1.3 - Lev managem and/or protection areas whe culturally	ent Nations Consultation & Information Sharing	See Indicator # 33	
important practices activities (hunting, fishing, gathering occur	and 57 - Number of Known values and Uses Addressed in	See Indicator # 57	



				62 - Brushing Program Aerial Herbicide Use	The number of hectares removed annually from the participants' aerial herbicide plans based on input from First Nations or the public and final treatment layout	The participants will report annually, the number of hectares removed from the participants' aerial herbicide plans based on input from First Nations or the public and final treatment layout
			6.2.1 - Evidence of understanding	33 - First Nation Consultation & Information Sharing	See Indicator # 33	
Element 6.2 Respect for Aboriginal Forest Values, Knowledge and Uses - Respect traditional Aboriginal forest values, knowledge, and uses as identified through the Knowledge and Uses - Respect traditional Aboriginal forest values, and uses backgroup of for management plans, prov	aboriginal forest values and uses. Involve First	and use of Aboriginal Knowledge through the engagement of willing Aboriginal communities, using a	57 - Number of Known values and Uses Addressed in Operational Planning	See Indicator # 57		
Aboriginal input process.		of forest management plans.	process that identifies and manages culturally important resources and values	62 - Brushing Program Aerial Herbicide Use	See Indivator # 62	
Element 6.3 Forest Community Well-Being and Resilience - Encourage, co- operate with, or help to provide opportunities for economic diversity within the community	Fair Distribution of Benefits and Costs	Provide organization opportunities has co- for a range of operated with	Evidence that the organization has co- operated with other forest -	23 - Value and Total Number of contracts Awarded to First Nations	See Indicator # 23	
bu fo	businesses, forest users, and the local	41 - Range Action Plan	See indicator # 41			



	community to strengthen and diversify the local economy	46 - Actions Addressing Guides, Trappers, and Other Intersts	See Indicator # 46	
		47 - Timber Processed in the DFA	See Indicator # 47	
		54 - Dollars Spent Locally on Each Woodlands Phase	See indicator # 54	
		55 - Direct and Indirect Employment	See Indicator # 55	



Provide opportunities for First	opportunities for First Nations to in all DFA -	12 - Forest Workers Safety	See Indicator # 12	
participate in forest economy Development of Skilled Workers	related workplaces and affected communities 	63 - Worker Training	See Indicator # 63	



			Non - Core	23 - Value and Total Number of contracts Awarded to First Nations	See Indicator # 23	
			6.4.1 - level of participant satisfaction with the public	59 - Terms of Reference (TOR) for the Public Participation Process.	Current Terms of reference (TOR) for the FSJPPR public participation process	Biennial review of the TOR for the FSJPPR public participation process (PAG)
Element 6.4 Fair and effective decision - making - Demonstrate that SFM public participation process is designed and functioning to the satisfaction of the	Opportunity for Public participation	To facilitate a satisfactory public participation process. To develop satisfaction	participation process	64 - PAG Satisfaction Surveys	Level of satisfaction with the public participation process as measured by PAG surveys	At least an 80% (average score of 4 out of 5) satisfaction level as measured from PAG surveys
participants and that there is general public awareness of the process and its progress.		with the public participation process	6.4.2 - Evidence of efforts to promote	41 - Timber Range Action Plans	See Indicator # 41	
			capacity development and meaningful participation in general	46 - Actions Addressing Guides, Trappers, and Other Intersts	See indicator # 46	



	58 - Regulatory Public Review and comment Process	Compliance with the public review and comment process identified in the FSJ Pilot Project Regulation	100% compliance with public review and comment processes identified in the FSJ Pilot Project Regulation
	59 - Terms of Reference (TOR) for the Public Participation Process.	See Indicator # 59	
	60 - Public Inquiries	The percentage of timely responses to public inquiries	Respond to 100% of public inquiries regarding Participants' forestry practices, that are additional to the Pilot Public Review and Comment processes, within one month of receipt
	61 - Educational Outreach	Number of people to whom information, presentations, or field trips provided annually	Minimum of 40 people provided information, presentations, or field trips
	64 - PAG Satisfaction Surveys	See Indicator # 64	
6.4.3 - Evidence of efforts to promote capacity development and	23 - Value and Total Number of contracts Awarded to First Nations	See Indicator # 23	



			meaningful participation for Aboriginal communities	33 - First Nations Consultation & Information Sharing	See Indicator # 33	
				57 - Number of Known values and Uses Addressed in Operational Planning	See Indicator # 57	
				60 - Public Inquiries	See Indicator # 60	
Element 6.5 Information for decision - making - Provide relevant information and		Relevant information used in the	6.5.1 - Number of people reached through educational outreach	61 - Educational Outreach	See Indicator # 61	
educational opportunities to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and	Information for Decision- making	decision making process is provided to PAG, general public, and	6.5.2 - Availability of summary	60 - Public Inquiries	See Indicator # 60	
human interactions with forest ecosystems.		affected parties	information on issues of concern to the public	65 - Availability of Information on Issues of Concern	SFM Monitoring report made available to the public	SFM monitoring report made available to the public annually



List of CSA Matrix Revisions

SFMP Amendment #2

- CSA SFM Elements re-numbered and core indicators included, to align with CSA Z809-08 standard.
- Existing Indicators #54 & #55 revised as indicated via SFMP Amendment #2, became effective April 1, 2012.
- New Indicator #66 added to SFMP, via Amendment #2, became effective April 1, 2012.



Appendix 3: Access Management



Table 34: Road / Bridge Construction Activity – Forest Licensees 2012-2013

Steward	Road Name	Start (m)	End (m)	Meters Constructe d	Completio n Date	Season	Operating Area	Construc tion Type
Canfor	01-031-12	0	230	230	10/5/2012	Summer	Inga Lake	Subgrade
Canfor	01-137-01	0	521	521	11/26/2012	Winter	Inga Lake	Subgrade
Canfor	01-203-00	0	629	629	11/5/2012	Summer	Inga Lake	Subgrade
Canfor	02-100-01	0	7034	7034	11/16/2012	Summer		Subgrade
Canfor	02-105-00	0	602	602	11/15/2012		South Blueberry	Subgrade
Canfor	02-115-00	0	891	891	1/14/2013	Winter	South Blueberry	Subgrade
Canfor	02-117-00	0	1034	1034	1/14/2013	Winter	South Blueberry	Subgrade
Canfor	02-117-01	0	313	313	1/14/2013	Winter	South Blueberry	Subgrade
Canfor	02-117-02	0	654	654	1/14/2013	Summer	South Blueberry	Subgrade
Canfor	02-127-01	0	371	371	1/14/2013	Summer	South Blueberry	Subgrade
Canfor	02-140-00	0	1796	1796	11/1/2012	Summer	South Blueberry	Subgrade
Canfor	02-140-01	0	1230	1230	11/11/2012	Summer	South Blueberry	Subgrade
Canfor	02-140-02	0	230	230	11/11/2012	Summer	South Blueberry	Subgrade
Canfor	02-140-03	0	1104	1104	11/11/2012	Summer	South Blueberry	Subgrade
Canfor	02-150-00	0	675	675	10/3/2012	Summer	South Blueberry	Subgrade
Canfor	02-150-01	0	716	716	10/3/2012	Summer	South Blueberry	Subgrade
Canfor	02-150-02	0	517	517	10/3/2012	Summer	South Blueberry	Subgrade
Canfor	02-150-03	0	225	225	10/3/2012	Summer	South Blueberry	Subgrade
Canfor	02-151-00	0	289	289	10/3/2012	Summer	South Blueberry	Subgrade
Canfor	02-156-00	0	3817	3817	10/2/2012	Summer	South Blueberry	Subgrade
Canfor	02-156-01	0	1034	1034	10/2/2012	Summer	South Blueberry	Subgrade
Canfor	02-178-00	0	644	644	7/15/2012	Winter	South Blueberry	Subgrade
Canfor	02-180-00	0	3725	3725	8/1/2012	Summer	South Blueberry	Subgrade
Canfor	02-198-00	0	2335	2335	9/25/2012	Summer	South Blueberry	Subgrade
Canfor	02-198-01	0	655	655	9/25/2012	Summer	South Blueberry	Subgrade
Canfor	02-198-02	0	528	528	9/25/2012	Summer	South Blueberry	Subgrade
Canfor	02-198-03	0	517	517	9/11/2012	Summer	South Blueberry	Subgrade
Canfor	02-199-00	0	1121	1121	9/25/2012	Summer	South Blueberry	Subgrade

I	1	Í	1	1	1	1		1
Canfor	02-204-00	0	1627	1627	11/11/2012	Summer	South Blueberry	Subgrade
Canfor	02-204-01	0	296	296	11/11/2012	Summer	South Blueberry	Subgrade
Canfor	02-204-02	0	575	575	11/11/2012	Summer	South Blueberry	Subgrade
Canfor	02-206-00	0	1443	1443	8/30/2012	Winter	South Blueberry	Subgrade
Canfor	02-206-01	0	2442	2442	8/30/2012	Winter	South Blueberry	Subgrade
Canfor	02-207-01	0	833	833	8/30/2012	Winter	South Blueberry	Subgrade
Canfor	02-208-00	0	2301	2301	8/30/2012	Winter	South Blueberry	Subgrade
Canfor	02-208-03	0	400	400	8/30/2012	Winter	South Blueberry	Subgrade
Canfor	02-235-00	675	1856	1181	1/10/2013	Summer	South Blueberry	Subgrade
Canfor	02-235-01	0	3294	3294	1/10/2013	Summer	South Blueberry	Subgrade
Canfor	02-235-02	0	640	640	1/10/2013	Summer	South Blueberry	Subgrade
Canfor	02-235-03	0	401	401	1/10/2013	Summer	South Blueberry	Subgrade
Canfor	02-238-00	0	1083	1083	1/10/2013	Winter	South Blueberry	Subgrade
Canfor	02-290-00	0	1468	1468	2/1/2013	Winter		Subgrade
Canfor	02-291-00	0	1542	1542	2/5/2013	Summer	South Blueberry	Subgrade
Canfor	02-291-01	0	592	592	2/10/2013	Summer	South Blueberry	Subgrade
Canfor	02-291-02	0	465	465	2/10/2013	Summer	South Blueberry	Subgrade
Canfor	02-294-00	0	1323	1323	2/1/2013	Winter	South Blueberry	Subgrade
Canfor	02-294-01	0	2026	2026	2/1/2013	Winter	South Blueberry	Subgrade
Canfor	02-294-02	0	213	213	2/1/2013	Winter	South Blueberry	Subgrade
Canfor	02-294-03	0	635	635	2/1/2013	Winter	South Blueberry	Subgrade
Canfor	02-296-00	5884	6891	1007	2/20/2013	Summer	South Blueberry	Subgrade
Canfor	04-021-01	0	2049	2049	2/1/2013	Winter	Wonowon	Subgrade
Canfor	04-021-02	0	303	303	2/1/2013	Winter	Wonowon	Subgrade
Canfor	04-021-03	0	624	624	2/1/2013	Winter	Wonowon	Subgrade
Canfor	04-021-04	0	1486	1486	2/1/2013	Winter	Wonowon	Subgrade
Canfor	04-021-05	0	162	162	2/1/2013	Winter	Wonowon	Subgrade
Canfor	04-104-00	0	3915	3915	11/5/2012		Wonowon	Subgrade
Canfor	04-104-02	0	1391	1391	11/22/2012	Winter	Wonowon	Subgrade
Canfor	04-106-01	0	1242	1242	1/20/2013	Winter	Wonowon	Subgrade
Canfor	04-106-02	0	803	803	2/1/2013	Winter	Wonowon	Subgrade



	I	I	1	1	1	1	I	1 1
Canfor	04-106-03	0	801	801	11/15/2012	Winter	Wonowon	Subgrade
Canfor	04-106-03	801	1248	447	11/15/2012	Winter	Wonowon	Subgrade
Canfor	04-106-04	0	472	472	2/22/2013	Winter	Wonowon	Subgrade
Canfor	04-106-05	0	2199	2199	2/1/2013	Winter	Wonowon	Subgrade
Canfor	04-106-06	0	989	989	2/22/2013	Winter	Wonowon	Subgrade
Canfor	04-108-01	0	413	413	12/1/2012		Wonowon	Subgrade
Canfor	04-108-02	0	942	942	12/10/2012		Wonowon	Subgrade
Canfor	04-108-03	0	1029	1029	11/20/2012	Winter	Wonowon	Subgrade
Canfor	04-108-04	0	8379	8379	12/19/2012	Summer	Wonowon	Subgrade
Canfor	04-109-00	1300	2285	985	2/10/2013	Winter		Subgrade
Canfor	04-110-01	0	1214	1214	2/22/2013	Summer	Wonowon	Subgrade
Canfor	04-111-01	0	252	252	2/22/2013	Summer	Wonowon	Subgrade
Canfor	05-023-00	0	3167	3167	12/12/2012	Summer	Aikman Creek	Subgrade
Canfor	05-025-00	0	4670	4670	2/28/2013	Winter	Aikman Creek	Subgrade
Canfor	05-025-01	0	759	759	2/28/2013	Winter	Aikman Creek	Subgrade
Canfor	05-025-02	0	1052	1052	2/28/2013	Winter	Aikman Creek	Subgrade
Canfor	05-025-03	0	792	792	2/28/2013	Winter	Aikman Creek	Subgrade
Canfor	05-026-00	0	540	540	9/20/2012	Summer	Aikman Creek	Subgrade
Canfor	05-026-01	0	431	431	9/24/2012	Summer	Cache Creek	Subgrade
Canfor	05-060-01	0	588	588	9/24/2012	Winter	Aikman Creek	Subgrade
Canfor	05-107-00	0	2915	2915	9/20/2012	Summer	Aikman Creek	Subgrade
Canfor	05-107-00	2915	3045	130	2/27/2013	Summer	Aikman Creek	Subgrade
Canfor	05-107-00	3045	11515	8470	2/27/2013	Winter	Aikman Creek	Subgrade
Canfor	05-108-01	0	663	663	2/28/2013	Winter	Aikman Creek	Subgrade
Canfor	05-129-00	0	1689	1689	9/20/2012	Summer	Aikman Creek	Subgrade
Canfor	06-018-00	0	398	398	2/15/2013	Summer	Blair Creek	Subgrade
Canfor	06-020-00	0	1217	1217	12/28/2012	Winter	Blair Creek	Subgrade
Canfor	06-020-01	0	276	276	12/28/2012	Winter	Blair Creek	Subgrade
Canfor	06-021-00	0	532	532	12/28/2012	Winter	Blair Creek	Subgrade
Canfor	06-025-00	0	819	819	1/31/2013	Winter	Blair Creek	Subgrade

		1						
Canfor	06-042-01	0	3440	3440	11/20/2012	Summer	Blair Creek	Subgrade
Canfor	06-042-02	0	464	464	11/20/2012	Summer	Blair Creek	Subgrade
Canfor	06-042-03	0	700	700	11/20/2012	Summer	Blair Creek	Subgrade
Canfor	06-042-03	700	2110	1410	1/25/2013	Summer	Blair Creek	Subgrade
Canfor	06-042-05	0	404	404	11/20/2012	Summer	Blair Creek	Subgrade
Canfor	06-042-06	0	429	429	11/20/2012	Summer	Blair Creek	Subgrade
Canfor	06-042-07	0	2414	2414	11/20/2012	Summer	Blair Creek	Subgrade
Canfor	06-046-01	0	215	215	1/25/2013	Summer	Blair Creek	Subgrade
Canfor	06-046-02	0	277	277	1/25/2013	Summer	Blair Creek	Subgrade
Canfor	06-046-03	0	382	382	1/25/2013	Summer	Blair Creek	Subgrade
Canfor	06-051-01	0	778	778	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	06-051-01	1479	5781	4302	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	06-051-02	0	603	603	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	06-051-03	0	1458	1458	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	06-051-05	0	593	593	9/9/2012	Summer	Blair Creek	Subgrade
Canfor	06-051-06	0	1256	1256	9/9/2012	Summer	Blair Creek	Subgrade
Canfor	06-051-07	0	416	416	9/9/2012	Summer	Blair Creek	Subgrade
Canfor	06-057-01	0	2263	2263	9/30/2012	Winter	Blair Creek	Subgrade
Canfor	06-057-02	0	1005	1005	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	06-057-03	0	711	711	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	06-057-04	0	1802	1802	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	06-057-05	0	847	847	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	06-057-06	0	1084	1084	8/6/2012	Summer	Blair Creek	Subgrade
Canfor	06-060-00	0	176	176	9/30/2012	Summer	Blair Creek	Subgrade
Canfor	09-058-00	0	2829	2829	2/1/2013	Summer	Kobes Creek	Subgrade
Canfor	09-058-01	0	573	573	2/15/2013	Summer	Kobes Creek	Subgrade
Canfor	09-059-00	0	1095	1095	2/1/2013	Summer	Kobes Creek	Subgrade
Canfor	09-071-00	0	540	540	11/20/2012	Winter		Subgrade
Canfor	09-071-01	0	604	604	11/20/2012	Winter		Subgrade
Canfor	09-071-02	0	968	968	12/10/2012	Winter		Subgrade
Canfor	09-072-00	0	3924	3924	11/15/2012	Summer		Subgrade



Canfor	09-072-01	0	639	639	1/10/2013	Summer		Subgrade
Canfor	09-072-02	0	574	574	1/20/2013	Summer		Subgrade
Canfor	09-072-03	0	239	239	1/15/2013	Summer		Subgrade
Canfor	09-072-04	0	461	461	2/1/2013	Summer		Subgrade
Canfor	09-072-05	0	399	399	1/20/2013	Summer		Subgrade
Canfor	09-073-00	0	501	501	2/5/2013	Winter	Kobes Creek	Subgrade
Canfor	09-100-05	0	267	267	9/1/2012	Summer	Kobes Creek	Subgrade
Canfor	10-018-01	0	2597	2597	7/30/2012	Winter	Blue Grave Creek	Subgrade
Canfor	10-020-01	0	718	718	2/1/2013	Winter	Chowade River	Subgrade
Canfor	10-020-02	0	487	487	2/1/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-021-00	0	1641	1641	8/1/2012	Winter	Blue Grave Creek	Subgrade
Canfor	10-021-00	1641	3685	2044	1/15/2013	Winter	Blue Grave Creek	Subgrade
Canfor	10-021-02	0	525	525	2/1/2013	Winter	Blue Grave Creek	Subgrade
Canfor	10-021-03	0	808	808	2/1/2013	Winter	Blue Grave Creek	Subgrade
Canfor	10-021-04	0	2824	2824	8/1/2012	Winter	Chowade River	Subgrade
Canfor	10-022-01	0	1231	1231	1/1/2013	Winter	Blue Grave Creek	Subgrade
Canfor	10-022-02	0	1496	1496	1/10/2013	Winter	Blue Grave Creek	Subgrade
Canfor	10-024-05	0	1251	1251	10/15/2012	Summer	Blue Grave Creek	Subgrade
Canfor	10-026-00	0	3474	3474	3/5/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-026-01	0	216	216	2/25/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-026-02	0	2004	2004	3/1/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-026-03	0	916	916	3/1/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-026-04	0	265	265	3/1/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-026-05	0	900	900	3/20/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-026-06	0	302	302	3/20/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-027-00	2341	3746	1405	2/25/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-027-01	0	209	209	2/25/2013	Summer	Blue Grave Creek	Subgrade
Canfor	10-030-00	0	668	668	12/1/2012	Winter	Blue Grave Creek	Subgrade
Canfor	10-030-01	0	190	190	12/1/2012	Summer	Blue Grave Creek	Subgrade
Canfor	10-030-02	0	330	330	12/1/2012	Winter	Blue Grave Creek	Subgrade

				1			I	1
Canfor	118-302	304	1726	1422	11/15/2012	Summer	Inga Lake	Subgrade
Canfor	24-011-00	0	2883	2883	2/15/2013	Winter		Subgrade
Canfor	24-011-01	0	540	540	2/15/2013	Winter		Subgrade
Canfor	24-011-02	0	959	959	2/15/2013	Winter		Subgrade
Canfor	24-012-01	0	399	399	7/10/2012	Winter	Jedney Creek	Subgrade
Canfor	24-012-02	0	238	238	7/15/2012	Winter	Jedney Creek	Subgrade
Canfor	24-012-03	0	312	312	7/22/2012	Winter	Jedney Creek	Subgrade
Canfor	24-014-00	0	1007	1007	11/5/2012	Winter	Jedney Creek	Subgrade
Canfor	24-014-01	0	278	278	11/5/2012	Winter	Jedney Creek	Subgrade
Canfor	24-014-03	0	619	619	11/5/2012	Winter	Jedney Creek	Subgrade
Canfor	24-014-04	0	384	384	11/5/2012	Winter	Jedney Creek	Subgrade
Canfor	24-052-08	0	1022	1022	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor	24-052-09	0	992	992	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor	24-056-01	0	339	339	1/20/2013	Winter	Jedney Creek	Subgrade
Canfor	24-056-02	0	1010	1010	1/15/2013	Winter	Jedney Creek	Subgrade
Canfor	24-056-03	0	425	425	1/15/2013	Winter	Jedney Creek	Subgrade
Canfor	24-056-04	0	805	805	1/25/2013	Winter	Jedney Creek	Subgrade
Canfor	45-052-00	0	2672	2672	11/15/2012	Summer	West Farrell Creek	Subgrade
Canfor	45-052-01	0	327	327	10/30/2012	Summer	West Farrell Creek	Subgrade
	Deserve Trees							
Canfor	Progress Town	0	2989	2989	1/1/2013	Summer	Blair Creek	Subgrade
	C-002-K-094-B16		1546	1546	9/15/2012	Summer		Subgrade
Canfor	<u>S10-012-00</u>	0				Summer	Blue Grave Creek	
Canfor	<u>S24-094-00</u>	0	512	512	12/1/2012	0	Jedney Creek	Subgrade
Canfor	S24-095-05	0	213	213	12/15/2012	Summer	Jedney Creek	Subgrade
Canfor	S24-101-00	0	1621	1621	9/1/2012		Jedney Creek	Subgrade
Canfor	S24-101-01	0	1260	1260	9/1/2012		Jedney Creek	Subgrade
Canfor	S24-101-02	0	1657	1657	2/10/2013		Jedney Creek	Subgrade
Canfor	<u>S24-101-03</u>	0	306	306	9/10/2012	Summer	Jedney Creek	Subgrade
Canfor	S24-103-00	0	965	965	12/10/2012		Jedney Creek	Subgrade
Canfor	S24-104-00	0	1006	1006	9/25/2012	Summer	Jedney Creek	Subgrade



I	1	1	1	1	1	1	1	1 1
Canfor	S24-104-01	0	309	309	9/25/2012	Summer	Jedney Creek	Subgrade
Canfor	S24-108-00	0	1338	1338	1/10/2013	Summer	Jedney Creek	Subgrade
Canfor	S24-111-00	0	4788	4788	11/5/2012	Summer	Jedney Creek	Subgrade
Canfor	S24-132-00	0	253	253	2/25/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-133-00	0	1217	1217	3/1/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-133-01	0	339	339	3/1/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-134-00	0	573	573	3/3/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-136-00	0	305	305	2/15/2013	Summer	Jedney Creek	Subgrade
Canfor	S24-138-00	0	935	935	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-139-00	0	331	331	3/2/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-141-00	0	399	399	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-155-00	0	1387	1387	2/20/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-156-00	0	166	166	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-156-01	0	175	175	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-158-00	0	401	401	2/20/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-158-01	0	1122	1122	2/25/2013	Winter	Jedney Creek	Subgrade
Canfor	S24-158-02	0	1400	1400	2/25/2013	Winter	Jedney Creek	Subgrade
Canfor	S25-018-00	0	5830	5830	12/31/2012	Summer	Alces River	Subgrade
Canfor	S25-018-01	0	1029	1029	2/20/2013	Summer	Alces River	Subgrade
Canfor	S25-018-02	0	553	553	2/10/2013	Winter	Alces River	Subgrade
Canfor	S25-018-03	0	1411	1411	1/15/2013	Winter	Alces River	Subgrade
Canfor	S25-018-04	0	1615	1615	1/15/2013	Summer	Alces River	Subgrade
Canfor	S25-018-05	0	348	348	12/15/2012	Summer	Alces River	Subgrade
Confer	COE 010 0C	0	040	240	10/15/0010	Cummer		Cubarada
Canfor	S25-018-06	0	249	249	12/15/2012	Summer	Alces River	Subgrade
Canfor/Cameron River	01-003-01	0	1401	1401	2/25/2013	Winter	Inga Lake	Subgrade
Canfor/Cameron River	01-003-02	0	979	979	2/25/2013	Winter	Inga Lake	Subgrade
Canfor/Dunne za	24-052-01	0	375	375	1/25/2013	Winter	Jedney Creek	Subgrade
Canfor/Dunne za	24-052-02	0	405	405	2/25/2013	Winter	Jedney Creek	Subgrade
Canfor/Dunne za	24-052-03	0	441	441	2/15/2013	Winter	Jedney Creek	Subgrade

						1		
Canfor/Dunne za	24-052-04	0	1574	1574	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor/Dunne za	24-052-05	0	691	691	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor/Dunne za	24-052-06	0	353	353	2/15/2013	Winter	Jedney Creek	Subgrade
Canfor/LP	02-239-00	0	781	781	2/1/2013	Winter	South Blueberry	Subgrade
Canfor/LP	02-240-00	0	2838	2838	2/1/2013	Winter	South Blueberry	Subgrade
Canfor/LP	18-031-01	0	290	290	2/25/2013	Winter	Nig Creek	Subgrade
Canfor/LP	S18-013-01	0	439	439	3/1/2013	Winter	Nig Creek	Subgrade
Dunne za/Canfor	24-057-00	0	1061	1061	1/10/2013	Winter	Jedney Creek	Subgrade
purchase	A63436-06026-00	0	2805	2805	12/10/2012	Winter	Blair Creek	Subgrade
Canfor	02-198-01	655	656	1	9/25/2012		South Blueberry	Subgrade
Canfor	04-110-01	1214	1517	303	2/22/2013	Summer	Wonowon	Subgrade
Canfor	06-042-01	3440	3461	21	11/20/2012		Blair Creek	Subgrade
Canfor	10-021-04	2824	2827	2	8/1/2012	Winter	Chowade River	Subgrade
Total				255,913 m				



Table 35: Annual report on roads constructed in the Fort St. John BCTS field office area.

April 1 st 2012 to	March 31 st 2013
-------------------------------	-----------------------------

Steward Name	Road Name	Start (m)	End (m)	Length (m)	Completion Date	Season	Area	Method
BCTS	36-100	0	2513	2513	2013-02-02	Winter	Bluegrave Creek	REACTIVATE
BCTS	36-100 to 36-200	0	392	392	2013-02-02	Winter	Bluegrave Creek	REACTIVATE
BCTS	36-200	2382	3751	1369	2013-02-02	Winter	Bluegrave Creek	REACTIVATE
BCTS	38-100	0	2089	2089	2013-02-02	Winter	Bluegrave Creek	REACTIVATE
BCTS	38-200	0	2173	2173	2013-02-02	Winter	Bluegrave Creek	REACTIVATE
BCTS	A63422-001-01	0	2975	2975	2012-11-01	Winter	Osborne River	NEW ROAD
BCTS	A63422-001-01	2975	3139	164	2012-11-01	Winter	Osborne River	NEW ROAD
BCTS	A63422-001-02	0	2126	2126	2012-11-01	Winter	Osborne River	NEW ROAD
BCTS	A63422-001-03	0	610	610	2012-11-01	Winter	Osborne River	NEW ROAD
BCTS	A63422-002-03	0	542	542	2012-11-01	Winter	Osborne River	NEW ROAD
BCTS	A63436-06026-00	0	1424	1424	2012-11-19	Winter	Blair Creek	NEW ROAD
BCTS	A63436-06026-00	1424	2420	996	2012-11-19	Winter	Blair Creek	NEW ROAD
BCTS	A63436-06026-01	0	82	82	2012-11-10	Winter	Blair Creek	NEW ROAD
BCTS	A63436-06026-01	82	722	640	2012-11-10	Winter	Blair Creek	NEW ROAD
BCTS	A76797-10031-01	0	802	802	2013-02-02	Winter	Bluegrave Creek	NEW ROAD
BCTS	A76797-10031-02	0	384	384	2013-02-02	Winter	Bluegrave Creek	NEW ROAD
BCTS	A76797-10031-A	0	533	533	2013-02-02	Winter	Bluegrave Creek	NEW ROAD
BCTS	A76797-10031-B	0	251	251	2013-02-02	Winter	Bluegrave Creek	NEW ROAD
BCTS	A76797-10031-B	251	555	304	2013-02-02	Winter	Bluegrave Creek	NEW ROAD
BCTS	A76797-10031-C	0	251	251	2013-02-02	Winter	Bluegrave Creek	NEW ROAD
BCTS	A76797-10031-C	251	466	215	2013-02-02	Winter	Bluegrave Creek	NEW ROAD
BCTS	A82099-01078-00	0	70	70	2013-01-31	Winter	Inga Lake	REACTIVATE

DOTO		0007	0000	070	0010 00 10	M ⁽¹⁾		
BCTS	A84642-04045-00	2027	2903	876	2013-02-16	Winter	Wonowon	REACTIVATE
BCTS	A85800-09015-00	0	220	220	2012-10-15	Winter	Kobes Creek	REACTIVATE
BCTS	A85800-09015-00	220	2520	2300	2012-10-15	Winter	Kobes Creek	NEW ROAD
	A85800-09017-00	0	404	404	2012-10-15	Winter	Kobes Creek	REACTIVATE
	A89118-04250-00	0	1285	1285	2013-02-05	Winter	Wonowon	NEW ROAD
	A89118-04250-01	0	286	286	2013-02-05	Winter	Wonowon	NEW ROAD
	A89118-04250-02	0	1882	1882	2013-02-05	Winter	Wonowon	NEW ROAD
	A89118-04250-03	0	135	135	2013-02-05	Winter	Wonowon	NEW ROAD
	A89968-01279-00	0	100	100	2013-01-21	Winter	Inga Lake	NEW ROAD
	A89968-01279-00	100	1219	1219	2013-01-21	Winter	Inga Lake	NEW ROAD
	A89968-01279-00	1219	1260	41	2013-01-01	Winter	Inga Lake	NEW ROAD
	Access to Wellsite	0	370	370	2013-02-14	Winter	Inga Lake	REACTIVATE
	Un-named Wellsite Access	0	465	465	2012-11-10	Winter	Blair Creek	REACTIVATE
	Wellsite Access Road 2	0	608	608	2012-11-01	Winter	Osborne River	REACTIVATE
Total:				31,096 m				



Steward	Road Name	Start Meter	End Meter	Road Length (m)	Deactivatio n Date	Method	Operating Area	Access Type	Deactivation Level
Canfor	01-018-00	0	3,300	3,300	7/1/2012	Cross Ditches	Inga Lake	4WD	Temporary
Canfor	01-020-00	2,888	4,099	1,211	4/2/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-020-01	0	204	204	4/3/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-020-02	0	742	742	4/3/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-025-00	0	1,941	1,941	4/10/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-031-01	0	1,428	1,428	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-031-02	0	307	307	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-031-03	0	223	223	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-031-08	0	671	671	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-031-09	0	346	346	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-031-10	0	419	419	12/12/2012	Cross Ditches	inga lake	Quad/ATV	Semi-Permanent
Canfor	01-031-11	0	334	334	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-031-12	0	230	230	11/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-137-01	0	521	521	11/26/2012	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor	01-149-00	0	2,133	2,133	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-149-03	0	196	196	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-149-04	2,898	3,276	378	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent

Table 36: Road Deactivation Activities – Licensee Participants (2012 – 2013)

Canfor	01-149-05	0	691	691	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-149-06	0	445	445	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-149-07	0	797	797	4/4/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-153-00	0	420	420	11/20/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-155-01	0	977	977	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-156-00	0	1,034	1,034	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-171-00	0	527	527	4/17/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-171-01	0	481	481	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-171-02	0	280	280	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-172-00	0	1,302	1,302	4/10/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-201-00	0	797	797	4/1/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-203-00	0	629	629	12/1/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
				453					
Canfor	01-205-00	0	453	453	4/20/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-205-01	0	265	265	4/20/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	01-206-00	0	1,056	1,056	4/20/2012	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor	01-206-01	0	271	271	4/20/2012	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor	01-206-02	0	315	315	4/20/2012	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor	02-060-01	0	1,259	1,259	5/7/2012	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor	02-060-02	0	468	468	5/7/2012	Cross Ditches	South Blueberry	Quad/ATV	Permanent
Canfor	02-235-00	0	1,856	1,856	2/20/2013	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor	02-235-02	0	640	640	3/15/2013	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Oractor	00.005.00		404	404	0/15/0010	Over Ditabas	South	Quad/AT	T
Canfor	02-235-03	0	401	401	3/15/2013	Cross Ditches	Blueberry	V	Temporary



Canfor	02-238-00	0	1,083	1,083	3/20/2013	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor	02-291-00	0	1,542	1,542	3/20/2013	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor	02-291-01	0	592	592	3/20/2013	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor	02-291-02	0	465	465	3/20/2013	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor	04-024-01	0	2,355	2,355	5/30/2012	Cross Ditches	Wonowon	Quad/ATV	Temporary
Canfor	04-024-02	0	1,734	1,734	5/30/2012	Cross Ditches	Wonowon	Quad/ATV	Temporary
Canfor	04-024-03	0	293	293	5/30/2012	Cross Ditches	Wonowon	Quad/ATV	Temporary
Canfor	04-024-04	0	211	211	5/30/2012	Cross Ditches	Wonowon	Quad/ATV	Temporary
Canfor	04-024-05	0	189	189	5/30/2012	Cross Ditches	Wonowon	Quad/ATV	Temporary
Canfor	04-024-06	0	253	253	5/30/2012	Cross Ditches	Wonowon	Quad/ATV	Temporary
Canfor	05-002-00	0	1,717	1,717	5/5/2012	Cross Ditches	Aikman Creek	Quad/ATV	Semi-Permanent
Canfor	05-002-01	0	1,142	1,142	5/5/2012	Cross Ditches	Aikman Creek	Quad/ATV	Semi-Permanent
Canfor	05-002-02	0	753	753	5/5/2012	Cross Ditches	Aikman Creek	Quad/ATV	Semi-Permanent
Canfor	05-002-04	0	419	419	5/5/2012	Cross Ditches	Aikman Creek	Quad/ATV	Semi-Permanent
Canfor	05-007-00	0	692	692	4/11/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Canfor	05-007-01	0	803	803	4/8/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Canfor	05-007-02	0	923	923	4/1/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Canfor	05-008-00	0	2,179	2,179	4/20/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Canfor	05-008-01	0	746	746	4/20/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Canfor	05-008-02	0	261	261	4/20/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Canfor	05-008-03	0	508	508	4/20/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Canfor	05-009-06	0	284	284	4/15/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent

Canfor	05-009-07	0	1,134	1,134	4/5/2012	Combination	Aikman Creek	Quad/ATV	Permanent
Canfor	05-132-00	0	7,557	7,557	4/20/2012	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Canfor	09-018-01	0	4,341	4,341	6/20/2012	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-018-03	0	367	367	6/20/2012	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-019-01	0	1,641	1,641	6/15/2012	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-019-03	0	413	413	6/20/2012	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-059-00	0	1,095	1,095	3/18/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-071-00	0	540	540	3/5/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-071-01	0	604	604	3/15/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-071-02	0	968	968	3/10/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-072-00	0	3,924	3,924	3/18/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-072-01	0	639	639	3/15/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-072-02	0	137	137	3/15/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-072-03	0	87	87	3/10/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-072-04	0	129	129	3/12/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-072-05	0	399	399	3/10/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-073-00	0	501	501	3/16/2013	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	09-104-02	0	506	506	6/20/2012	Cross Ditches	Kobes Creek	Quad/ATV	Temporary
Canfor	10-021-04	0	2,824	2,824	5/24/2012	Cross Ditches	Chowade River	Quad/ATV	Semi-Permanent
Canfor	117-100	1,500	2,772	1,272	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	118-302	0	1,726	1,726	1/5/2013	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	18-010-00	0	572	572	4/28/2012	Cross Ditches	Nig Creek	Quad/ATV	Semi-Permanent



		- T		1					
Canfor	18-012-00	0	225	225	4/27/2012	Cross Ditches	Nig Creek	Quad/ATV	Semi-Permanent
Canfor	24-011-00	0	2,883	2,883	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-011-01	0	540	540	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-011-02	0	959	959	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-014-00	0	1,007	1,007	3/20/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-014-01	0	278	278	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-014-03	0	619	619	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-014-04	0	384	384	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-052-08	0	1,022	1,022	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-052-09	0	992	992	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-056-01	0	339	339	2/25/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-056-02	0	1,010	1,010	2/25/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	24-056-03	0	425	425	2/25/2013	Cross Ditches	Jedney Creek		Temporary
Canfor	24-056-04	0	805	805	2/25/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	45-031-08	290	2,611	2,321	7/30/2012	Cross Ditches	West Farrell	Quad/ATV	Semi-Permanent
Canfor	45-031-09	0	395	395	7/30/2012	Cross Ditches	West Farrell	Quad/ATV	Semi-Permanent
Canfor	45-031-10	0	936	936	7/30/2012	Cross Ditches	West Farrell	Quad/ATV	Permanent
Canfor	45-031-11	0	652	652	7/30/2012	Cross Ditches	West Farrell	Quad/ATV	Permanent
Canfor	45-031-12	0	255	255	7/30/2012	Cross Ditches	West Farrell	Quad/ATV	Permanent
Canfor	45-052-01	0	327	327	10/30/2012	Cross Ditches	West Farrell	Quad/ATV	Permanent

	Bonavista								
	D-075-								
Canfor	B/094-H-04 RD	0	1,018	1,018	4/26/2012	Cross Ditches	North Blueberry	4WD	Temporary
Canfor	S01-023-00	0	688	688	4/5/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	S01-023-01	0	501	501	4/5/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	S01-023-02	0	530	530	4/5/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	S01-023-03	0	242	242	4/5/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	S01-023-04	0	600	600	4/8/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	S01-048-00	2,380	5,206	2,826	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	S01-048-01	0	1,119	1,119	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	S01-048-02	0	471	471	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	S01-048-03	0	1,013	1,013	12/21/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	S01-048-04	0	575	575	12/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	S01-049-00	0	557	557	4/12/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	S01-237-01	2,184	2,800	616	1/5/2013	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor	S02-061-014	0	2,312	2,312	5/7/2012	Cross Ditches	South Blueberry	4WD	Semi-Permanent
Canfor	S03-026-00	0	1,756	1,756	4/22/2012	Cross Ditches	North Blueberry	Quad/ATV	Semi-Permanent
Canfor	S03-026-01	0	300	300	4/26/2012	Cross Ditches	North Blueberry	Quad/ATV	Semi-Permanent



	1					ſ			1
Canfor	S03-030-00	0	155	155	4/26/2012	Cross Ditches	North Blueberry	Quad/ATV	Semi-Permanent
Canfor	S03-030-01	0	130	130	4/29/2012	Cross Ditches	North Blueberry	Quad/ATV	Semi-Permanent
Canfor	S03-040-00	0	768	768	4/26/2012	Cross Ditches	North Blueberry	Quad/ATV	Semi-Permanent
Canfor	S03-046-00	0	142	142	4/25/2012	Cross Ditches	North Blueberry	Quad/ATV	Semi-Permanent
Canfor	S09-166-01	0	6,769	6,769	4/4/2012	Cross Ditches	Kobes Creek	Quad/ATV	Semi-Permanent
Canfor	S09-166-02	0	598	598	4/2/2012	Cross Ditches	Kobes Creek	Quad/ATV	Semi-Permanent
Canfor	S09-166-03	0	850	850	4/4/2012	Cross Ditches	Kobes Creek	Quad/ATV	Semi-Permanent
Canfor	S24-094-00	0	512	512	3/20/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-095-05	0	213	213	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-101-00	0	1,621	1,621	3/1/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-101-01	0	1,260	1,260	3/10/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-101-02	0	1,657	1,657	3/15/2013	Cross Ditches	Jedney Creek		Temporary
Canfor	S24-101-03	0	306	306	3/10/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-103-00	0	965	965	3/20/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-104-00	0	1,006	1,006	3/20/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-104-01	0	309	309	3/20/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-108-00	0	1,338	1,338	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary

Canfor	S24-111-00	0	4,788	4,788	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-132-00	0	253	253	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-133-00	0	1,217	1,217	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-133-01	0	339	339	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-134-00	0	573	573	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-136-00	0	305	305	3/25/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-138-00	0	935	935	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-139-00	0	331	331	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-141-00	0	399	399	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-155-00	0	1,387	1,387	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-156-00	0	166	166	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-156-01	0	175	175	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-158-00	0	401	401	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-158-01	0	1,122	1,122	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor	S24-158-02	0	1,400	1,400	3/30/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Canfor/Cam eron River	01-002-00	575	2,040	1,465	4/12/2012	Cross Ditches	Inga Lake	4WD	Temporary
Canfor/Cam eron River	01-002-00	0	1,401	1,401	3/30/2013	Cross Ditches		Quad/ATV	
Canfor/Cam eron River	01-003-02	0	979	979	3/30/2013	Cross Ditches	Inga Lake Inga Lake	Quad/ATV Quad/ATV	Temporary Temporary

Fort St. John Pilot Project 2012-2013 SFMP Annual Report – Final



	T	1		Т					
Canfor/Cam eron River	01-003-04	0	1,874	1,874	4/10/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor/Cam eron River	01-005-00	709	3,047	2,338	4/16/2012	Cross Ditches	Inga Lake		Temporary
Canfor/Cam eron River	01-005-01	0	3,179	3,179	8/16/2012	Cross Ditches	Inga Lake		Temporary
Canfor/Cam eron River	01-005-03	0	869	869	4/16/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor/Cam eron River	01-005-05	0	1,808	1,808	4/16/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor/Cam eron River	01-005-06	0	649	649	4/16/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor/Cam eron River	01-136-00	0	1,487	1,487	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor/Cam eron River	01-136-01	0	816	816	4/15/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor/Cam eron River Canfor/Dunn	02-061-00	0	842	842	4/5/2012	Cross Ditches	South Blueberry	Quad/ATV	Semi-Permanent
e za Canfor/Dunn	24-052-01	0	375	375	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
e za Canfor/Dunn	24-052-02	0	405	405	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
e za Canfor/Dunn	24-052-03	0	441	441	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
e za Canfor/Dunn	24-052-04	0	1,574	1,574	3/22/2013	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
e za Canfor/Dunn e za	24-052-05	0	691 353	691 353	3/22/2013	Cross Ditches Cross Ditches	Jedney Creek	Quad/ATV Quad/ATV	Temporary Temporary
Canfor/LP	01-020-00	0	2,888	2,888	4/2/2012	Cross Ditches	Inga Lake	Quad/ATV	Temporary
Canfor/LP	02-239-00	0	781	781	3/20/2013	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor/LP	02-240-00	0	2,838	2,838	3/20/2013	Cross Ditches	South Blueberry	Quad/ATV	Temporary
Canfor/LP	S01-050-00	0	1,275	1,275	4/22/2012	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor/LP	S18-013-01	0	439	439	3/22/2013	Cross Ditches	Nig Creek	Quad/ATV	Permanent

Canfor/LP	S18-031-00	0	4,406	4,406	4/30/2012	Cross Ditches	Nig Creek	Quad/ATV	Semi-Permanent
Dunne za/Canfor	24-057-00	0	1,061	1,061	2/10/2013	Water Bars	Jedney Creek	Quad/ATV	Temporary
MOF	209-100	491	2,362	1,871	4/4/2012	Combination	Kobes Creek	Quad/ATV	Semi-Permanent
Ministry of Forest	JB2	0	132	132	5/3/2012	Cross Ditches	Blue Grave	Quad/ATV	Semi-Permanent
	02-060-02	468	489	21	5/7/2012	Cross Ditches	South Blueberry	Quad/ATV	Permanent
	10-021-04	2,824	6,317	3,493	5/24/2012	Cross Ditches	Chowade River	Quad/ATV	Semi-Permanent
	38-108	0	496	496	5/24/2012	Cross Ditches	Blue Grave Ck	Quad/ATV	Semi-Permanent
				185,603					
Total				meters					



Table 37: Annual report on roads deactivated in the Fort St John BCTS field office area.

April 1st 2012 to March 31st 2013

		Start Chainage	End Chainage	Length	Deactivation				
Steward	Road Name	(m)	(m)	(m)	Date	Method	Operating Area	Access Type	Level
						Maintained -			
BCTS	36-100	0	1500	1500	2013-04-27	Inactive	Bluegrave Creek	4WD	Temporary
						CROSS			
BCTS	36-100	1500	2513	1013	2013-04-27	DITCHES	Bluegrave Creek	Quad/ATV	Permanent
	36-100 to 36-					Maintained -			
BCTS	200	0	392	392	2013-04-27	Inactive	Bluegrave Creek	4WD	Temporary
						Maintained -			
BCTS	36-200	2382	3751	1369	2013-04-27		Bluegrave Creek	4WD	Temporary
						Maintained -			
BCTS	38-100	0	2100	2100	2013-04-27		Bluegrave Creek	4WD	Temporary
						Maintained -			
BCTS	38-200	0	2151	2151	2013-04-27		Bluegrave Creek	4WD	Temporary
	A63422-001-					Maintained -			
BCTS	01	0	966	966	2013-02-10		Osborne River	Quad/ATV	Permanent
	A63422-001-					CROSS			
BCTS	01	966	3139	2173	2013-02-10		Osborne River	Quad/ATV	Permanent
	A63422-001-					CROSS			
BCTS	02	0	2250	2250	2013-02-10		Osborne River	Quad/ATV	Permanent
	A63422-001-					CROSS			_
BCTS	03	0	610	610	2013-02-10		Osborne River	Quad/ATV	Permanent
	A63422-002-					CROSS		o	
BCTS	03	0	542	542	2015-02-10		Osborne River	Quad/ATV	Permanent
D CTC	A63436-					CROSS		0 //AT)/	
BCTS	06026-01	0	722	722	2013-02-01		Blair Creek	Quad/ATV	Permanent
D CTC	A76797-			201		CROSS			
BCTS	10031-02	0	384	384	2013-04-27		Bluegrave Creek	Quad/ATV	Permanent
DOTO	A76797-			522	0010 00 07	Maintained -			T
BCTS	10031-A	0	533		2013-02-27		Bluegrave Creek	4WD	Temporary
BCTS	A76797-	0	555	555	2013-04-27	CROSS	Bluegrave Creek	Quad/ATV	Permanent

Total:				1	29,333 m				
BCTS	Wellsite Access Road 2	0	608	608	2013-02-10	Maintained Inactive	Osborne River	4WD	Permanent
BCTS	Un-named Wellsite Access	0	465	465	2013-02-01	Maintained - Inactive	Blair Creek	4WD	Permanent
BCTS	A89968- 01279-00	0	1260	1260	2013-03-10	CROSS DITCHES	Inga Lake	Quad/ATV	Permanent
BCTS	A89118- 04250-03	0	135	135	2013-04-12		Wonowon	Quad/ATV	Temporary
BCTS	A89118- 04250-02	0	1882	1882	2013-04-12	Seasonal	Wonowon	Quad/ATV	Temporary
BCTS	A89118- 04250-01	0	286	286	2013-04-12	Seasonal	Wonowon	Quad/ATV	Temporary
BCTS	A89118- 04250-00	0	1285	1285	2013-04-10	Seasonal	Wonowon	Quad/ATV	Temporary
BCTS	A89117- 04062-00	0	1142	1142	2012-04-16	CROSS DITCHES	Wonowon	Quad/ATV	Permanent
BCTS	A85800- 09017-00	0	404	404	2012-12-14		Kobes Creek	Quad/ATV	Permanent
BCTS	A85800- 09015-00	0	2520	2520	2012-12-14	CROSS DITCHES	Kobes Creek	Quad/ATV	Permanent
BCTS	A82099- 01078-00	0	70	70	2013-03-10	Maintained - Inactive	Inga Lake	4WD	Permanent
BCTS	A76797- 10031-C	0	466	466	2013-04-27	CROSS DITCHES	Bluegrave Creek	Quad/ATV	Permanent
	10031-B					DITCHES			



Appendix 4: Timber Harvesting



Table 38: Summary of Completed Timber Harvesting by Participants (April 1, 2012 to
March 31, 2013)

Participant	Gross Area (ha)	Merch Area (ha)
DOTO	500.0	100.0
BCTS	522.2	492.0
Dunne-za/Canfor	310.9	279.4
Cameron River Logging	346.6	310.3
Tembec	254.0	232.7
Canfor (conifer)	2128.7	1891.9
Canfor (decid)	930.5	878.0
LP	802.2	730.7
Total	5295.1 ha	4815 ha

Appendix 5: Reforestation



Harvest Date	Opening	License	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1	Sp 1 %	Sp. 2	Sp 2 %
14-Nov-08	94A061-34	A66542	1	Regen/Stocking(Walkthrough)	01-Aug-12	А	53.7	I	At	100		
05-Dec-08	94A063-69	A76788	01035	Regen/Stocking(Walkthrough)	06-Aug-12	А	64.4	I	At	60	Sx	20
24-Nov-08	94A064-36	A76789	01039	Regen/Stocking(Walkthrough)	06-Aug-12	А	56.0	I	At	60	Sx	20
26-Jan-09	94A064-37	A76789	01040	Regen/Stocking(Walkthrough)	06-Aug-12	А	52.4	I	At	60	Sx	20
13-Nov-07	94H054-01	A76792	41003	Regen/Stocking(Walkthrough)	25-Jul-12	В	9.8	I	Sx	60	At	40
13-Nov-07	94H054-01	A76792	41003	Regen/Stocking(Walkthrough)	25-Jul-12	A2	32.1	I	Sx	80	At	20
13-Nov-07	94H054-01	A76792	41003	Regen/Stocking(Walkthrough)	25-Jul-12	A1	36.9	I	Pli	70	At	30
10-Nov-10	94A093-29	A82096	18008	Regen/Stocking(Walkthrough)	10-Aug-12	А	61.3	I	Sx	50	At	30
28-Nov-11	94A094-37	A82097	29018	Regen/Stocking(Walkthrough)	02-Aug-12	А	39.4	I	Sx	50	Pl	40
15-Dec-09	94A064-41	A82098	01042	Regen/Stocking(Walkthrough)	17-Jul-12	В	18.1	I	At	90	Ac	10
15-Dec-09	94A064-41	A82098	01042	Regen/Stocking(Walkthrough)	17-Jul-12	А	70.1	I	At	90	Sw	10

Table 40: BCTS Establishment Delay Complete (Silviculture Label) 2012

Herricet Dete	Ononing	Liconco	Block ID	Antivity	Regen Met	Ctratum	A		Cm 1	Sp 1		Sp 2
Harvest Date 14-Nov-08	Opening 94A061-34	License A66542			Date 01-Aug-12	Stratum A	53.7	Layer S	-		Sp. 2 Ac	% 1
					06-Aug-12		64.4	-				- 40
				0	06-Aug-12		56.0					40
26-Jan-09	94A064-37	A76789	01040		06-Aug-12	A	52.4	S	Sx	60	PI	40
13-Nov-07	94H054-01	A76792	41003	Regen/Stocking(Walkthrough)	25-Jul-12	В	9.8	S	Sw	60	At	40
13-Nov-07	94H054-01	A76792	41003	Regen/Stocking(Walkthrough)	25-Jul-12	A2	32.1	S	Sx	100		
13-Nov-07	94H054-01	A76792	41003	Regen/Stocking(Walkthrough)	25-Jul-12	A1	36.9	S	Pli	100		
10-Nov-10	94A093-29	A82096	18008	Regen/Stocking(Walkthrough)	10-Aug-12	А	61.3	S	Sx	70	PI	30
28-Nov-10	94A094-37	A82097	29018	Regen/Stocking(Walkthrough)	02-Aug-12	А	39.4	S	Sx	50	PI	40
15-Dec-09	94A064-41	A82098	01042	Regen/Stocking(Walkthrough)	17-Jul-12	В	18.1	S	At	97		
15-Dec-09	94A064-41	A82098	01042	Regen/Stocking(Walkthrough)	17-Jul-12	A	70.1	S	Sw	100		



Licence	Block	Opening Number	Block MSQ Average
A31981	1	94A.094-026	2.47
A31993	1	94H012-011	3.4
A32916	1	94H012-017	3.75
A51996	1	94H080-014	4.0
A51996	3	94H080-15	3.7
A51996	4	94H080-16	3.4
A51996	6	94H080-17	3.0
A52289	1	94A094-028	3.6
A52290	3	94A094-025	2.2
A52767-1	1	94A021-016	3.4
A52773	1	94A021-022	0.90
A54878A	Α	94H024-003	2.83
A54878C	1	94H024-004	2.75
A54878F	1	94G040-023	3.7
A54878G	1	94A073-25	3.9
A54610	1	94B030-107	3.5

Table 41: Mean MSQ by Block-BCTS (2012)

Licensee	Block	Block-Level Mean MSQ
Canadian Forest Products Ltd.	117001	3.7
Canadian Forest Products Ltd.	117002	3.7
Canadian Forest Products Ltd.	117003	3.8
Canadian Forest Products Ltd.	117004	3.7
Canadian Forest Products Ltd.	117011	3.7
Canadian Forest Products Ltd.	117012	3.7
Canadian Forest Products Ltd.	117001	3.7
Canadian Forest Products Ltd.	139006	3.9
Canadian Forest Products Ltd.	139007	3.9
Canadian Forest Products Ltd.	140002	3.7
Canadian Forest Products Ltd.	140003	3.5
Canadian Forest Products Ltd.	140004	3.7
Canadian Forest Products Ltd.	140005	3.6
Canadian Forest Products Ltd.	140008	3.7
Canadian Forest Products Ltd.	142001	3.8
Canadian Forest Products Ltd.	142002	4.0
Canadian Forest Products Ltd.	142003	3.7
Canadian Forest Products Ltd.	142004	4.0
Canadian Forest Products Ltd.	142005	3.7
Canadian Forest Products Ltd.	142006	3.7
Canadian Forest Products Ltd.	142007	3.7
Canadian Forest Products Ltd.	142008	3.7
Canadian Forest Products Ltd.	142009	3.3
Canadian Forest Products Ltd.	150001	3.5
Canadian Forest Products Ltd.	206010	3.9
Canadian Forest Products Ltd.	211003	3.7
Canadian Forest Products Ltd.	322007	3.7
Canadian Forest Products Ltd.	328003	3.4
Canadian Forest Products Ltd.	506002	3.2
Canadian Forest Products Ltd.	506004	3.7
Canadian Forest Products Ltd.	513001	1.9
Canadian Forest Products Ltd.	513003	3.6
Canadian Forest Products Ltd.	513004	3.5
Canadian Forest Products Ltd.	513005	3.8
Canadian Forest Products Ltd.	513021	4.0
Canadian Forest Products Ltd.	513022	3.1
Canadian Forest Products Ltd.	513023	3.0

Table 42: Mean MSQ by Block-Canfor (2012)



Canadian Forest Products Ltd.	616002	3.8
Canadian Forest Products Ltd.	616003	3.9
Canadian Forest Products Ltd.	616005	3.9
Canadian Forest Products Ltd.	618002	3.1
Canadian Forest Products Ltd.	618003	3.2
Canadian Forest Products Ltd.	618004	3.4
Canadian Forest Products Ltd.	618009	2.7
Canadian Forest Products Ltd.	623003	4.0
Canadian Forest Products Ltd.	623004	3.8
Canadian Forest Products Ltd.	623005	3.9
Canadian Forest Products Ltd.	623006	3.7
Canadian Forest Products Ltd.	623008	4.0
Canadian Forest Products Ltd.	623009	3.9
Canadian Forest Products Ltd.	623010	3.8
Canadian Forest Products Ltd.	623011	3.9
Canadian Forest Products Ltd.	623012	3.6
Canadian Forest Products Ltd.	802001	3.4
Canadian Forest Products Ltd.	802002	3.9
Canadian Forest Products Ltd.	802003	3.4
Canadian Forest Products Ltd.	802005	3.8
Canadian Forest Products Ltd.	802006	3.9
Canadian Forest Products Ltd.	802007	3.1
Canadian Forest Products Ltd.	802008	2.2
Canadian Forest Products Ltd.	802009	1.9
Canadian Forest Products Ltd.	802010	3.2
Canadian Forest Products Ltd.	802013	3.8



Table 43:	BCTS	Planting	Activities	(2012)
-----------	------	----------	------------	--------

Harvest Start Date	Opening	License	Permit	Block ID	Activity	Activity Date	Area	Seedlot	# Trees
18-Feb-10	94A06100 47	A66542		2	Road/Pile Plant - FSJ	06-Aug-12	3.5	60455	4400
05-Dec-08	94A06300 69	A76788		01035	Fill Plant (Container) - FSJ	06-Aug-12	33.61	60455	48390
26-Jan-09	94A06400 37	A76789		01040	Fill Plant (Container) - FSJ	06-Aug-12	28.26	60455	51520
24-Nov-08	94A06400 36	A76789		01039	Fill Plant (Container) - FSJ	06-Aug-12	29.49	60455	51640
13-Nov-07	94H05400 1	A76792		41003	Planting (Container) - FSJ	23-Jul-12	36.86	02116	59400
13-Nov-07	94H05400 1	A76792		41003	Planting (Container) - FSJ	23-Jul-12	41.81	02116	15930
13-Nov-07	94H05400 1	A76792		41003	Planting (Container) - FSJ	23-Jul-12	41.81	35075	10260
13-Nov-07	94H05400 1	A76792		41003	Planting (Container) - FSJ	23-Jul-12	41.81	60455	42550
10-Nov-10	94A09300 29	A82096		18008	Planting (Container) - FSJ	29-Jul-12	61.34	60455	27640
10-Nov-10	94A09300 29	A82096		18008	Planting (Container) - FSJ	29-Jul-12	61.34	02116	49590
28-Nov-11	94A09400 37	A82097		29018	Planting (Container) - FSJ	04-Aug-12	39.38	60455	32050
28-Nov-11	94A09400 37	A82097		29018	Planting (Container) - FSJ	04-Aug-12	39.38	60455	26190
			Total				274.25		419,260

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
A54878C-1(A2) A31981-1 (A2)	PISx/SR/17-19/1200-1400	34	20.3	14	1.6	1200	336.5	11442	3.7	14	507.9	17268	66.3
A52290-3 (A2) A58610-1 (B) A32916-1 (B) A31981-1 (A1) A31993-1 (B)	PISx/WG/19-21/1200- 1400	57.9	20.5	15.4	3.5	1200	543	31440	3.7	14	515.7	29862	105.3
A58610-1 (A) A54878F-1 (A) A54878G-1 (A) A31981-1 (B)	PISx/WG/21-23/1200- 1400	78.4	22.9	12.4	3.8	1182	661.4	51853	3.7	14	634.2	49723	104.3
A54878A-A (A3) A54878C-1 (A1) A32916-1 (A)	PISx/WG/23-25/1200- 1400	83.6	23.4	15.2	3.6	1200	694.2	58032	3.7	14	658.2	55025	105.5
A52290-3 (A1)	PISx/WG/9-11/1200-1400	13.4	21	12.1	3.4	1200	547.5	7337	3.7	14	539.3	7227	101.5
A52773-1 (A) A54878A-A (A2)	Sx/SR/17-19/1200-1400	31.3	24.5	15	1.6	1200	523.5	16384	3.7	14	758	23724	69.1
A52289-1 (A) A52767-1 (A)	Sx/WG/17-19/1200-1400	37.8	19.7	15	3.6	1200	531.5	20091	3.7	14	504.6	19074	105.3
A54878A-A (A1) A5431993-1 (D) A51996-1 (A)	Sx/WG/21-23/1200-1400	42	23	17.2	3.5	1154	724.2	30417	3.7	14	678	28475	106.8
A31993-1 (A) A31993-1 (C) A51996-6 (A)	Sx/WG/23-25/1200-1400	73.6	25.2	16.4	3.2	1200	823	60573	3.7	14	792.4	58323	103.9
A51996-3 (A) A51996-4 (A)	Sx/WG/25-27/1200-1400	21.3	26.7	15	3.5	1200	915.2	19494	3.7	14	870.8	18548	105.1
	Total	473.3	22.8	14.9	3.3	1193	648.8	307062	3.7	14	649.2	307247	99.9

 Table 44: Predicted and Target Volumes by Stratum-BCTS 2012



Table 45: Predicted and Target Volumes by Stratum – Canfor 2012

B18004-B2 PV/SR/19-21/1200-1400 1.5 22.7 11.1 1.5 1200 355.7 534 3.7 14 596.8 685 59.6 211003-A 616002-B PI/WG/17-19/1200-1400 16.7 19.7 11.4 3.6 1200 469.8 7846 3.7 14 456.0 7615 103.0 140002-D 142006-A 328003-D 60.1 19.8 13.4 3.7 1200 469.8 7846 3.7 14 456.0 7615 103.0 140002-D 142008-A 328003-D 60.1 19.8 13.4 3.7 1200 478.2 28.738 3.7 14 457.4 27.91 104.5 1440002-C 616005-C 22.8 11.2 3.9 1200 550.7 37.395 3.7 14 523.1 35.519 105.3 142006-C PI/WG/21-21/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15.316 3.7 14 60.5	Block Strata Summary	Stratum	Net Area(ha)	Mean Sl	Mean Effective Age	Mean MSQ	Mean TSS	PMV/ha	Total PMV	Target MSQ	Target Effective Age	TMV/ha	Total TMV	PMV % of Target
211003-A 616002-B 623011-F PIWG/17-19/1200-1400 16.7 19.7 11.4 3.6 1200 469.8 7846 3.7 14 456.0 7615 103.0 14 456.0 7615 103.0 140002-C 816002-C 822013-A 140002-C 816005-C 823003-B PIWG/19-21/1200-1400 60.1 19.8 13.4 3.7 1200 478.2 28.738 3.7 14 457.4 27.91 104.5 14002-C 816005-C 823003-B PIWG/23-25/1200-1400 67.9 21.2 13.4 3.9 1200 622.6 15.316 3.7 14 523.1 35.519 105.3 14 457.4 27.91 104.5 105.3 14 457.4 27.91 104.5 105.3 14 14.773 103.7 14 60.5 14.773 103.7 14 653.8 4119 62.5 142006-A PIWG/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 406.3 2573 3.7 14 653.8 4119 62.5 14 63.2 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 4119 62.5 14 53.8 16,332 105.5 117001-B 117001-B 117002-B 12.8 12.8 13.7 14 59.5 15 10.0 10.8 14.3 17.23 3.7 14 59.5 15,316 3.7 14 59.5 16,332 16,332 105.5 17 17,238 3.7 14 59.5 16,332 16,332 105.5 117 17,238 3.7 14 59.5 15,316 15,316 15,316 15,316 15,316 14 53.8 16,322 15,51 15 15 15 15 15 15 15 15 15				•••	, a									U
616002-8 623011-F 140002-0 142008-A 328003-0 616002-C 623003-8 623009-C 623003-8 623009-C 623003-8 623009-C 623009		FI/SR/19-21/1200-1400	1.5	22.1	11.1	1.5	1200	300.7	554	3.7	14	590.0	695	59.0
BE3011-F PIWG(17-19/1200-1400 16.7 19.7 11.4 3.6 1200 469.8 7846 3.7 14 456.0 7615 103.0 140002-0 142008-A 328003-D 5 7 74 457.4 27,91 104.5 140002-C 61605-C 623003-B PIWG/21-23/1200-1400 67.9 21.2 13.4 3.9 1200 550.7 37.395 3.7 14 60.5 14.773 103.7 618005-B PIWG/22-25/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15.316 3.7 14 60.5 14.773 103.7 618005-D2 PISx/SR/19-21/1200-1400 6.3 23.3 1.5 1.5 120 408.3 2573														
140002-D 140008-A 28003-D 5 5 28,738 3.7 14 457.4 27,91 104.5 140008-A 28003-D 618002-C 60.1 19.8 13.4 3.7 1200 478.2 28,738 3.7 14 457.4 27,91 104.5 140002-C 616005-C 623003-B 623003-C PIWG/21-23/1200-1400 67.9 21.2 13.4 3.9 1200 550.7 37.395 3.7 14 523.1 35,519 105.3 142008-A 616005-B PIWG/23-25/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15,316 3.7 14 600.5 14,773 103.7 618009-02 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 257.3 3.7 14 653.8 4119 62.5 142008-C 26610-A 2 28.07 1.5 1200 408.3 257.3 3.7 14 653.8 4119 62.5 142008-C 268010-8 28.7 1.5 120 <td></td> <td>PI/WG/17-19/1200-1400</td> <td>16.7</td> <td>19.7</td> <td>11.4</td> <td>3.6</td> <td>1200</td> <td>469.8</td> <td>7846</td> <td>3.7</td> <td>14</td> <td>456.0</td> <td>7615</td> <td>103.0</td>		PI/WG/17-19/1200-1400	16.7	19.7	11.4	3.6	1200	469.8	7846	3.7	14	456.0	7615	103.0
328003-D 618002-C 623003-B PIWG/19-21/1200-1400 60.1 19.8 13.4 3.7 1200 478.2 28,738 3.7 14 457.4 27,91 104.5 140002-C 623003-B 60.1 19.8 13.4 3.7 1200 550.7 37,395 3.7 14 457.4 27,91 104.5 623009-C PIWG/21-23/1200-1400 67.9 21.2 13.4 3.9 1200 550.7 37,395 3.7 14 600.5 14,773 103.7 618005-B PIWG/23-25/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15,316 3.7 14 600.5 14,773 103.7 618009-C2 618009-C2 62.6 15,316 3.7 14 653.8 4119 62.5 142008-C 206010-A 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 618002-B 618002-B 23.3 12.5 1.5 1200 408.3 2573 3.7 14 53.2 16.32 </td <td></td>														
616002-C PIWG/19-21/1200-1400 60.1 19.8 13.4 3.7 1200 478.2 28,738 3.7 14 457.4 27,91 104.5 04002-C 616005-C 623003-B -														
B02013-A PI/WG/19-21/1200-1400 60.1 19.8 13.4 3.7 1200 478.2 28,738 3.7 14 457.4 27,91 104.5 140002-C 616005-C 623003-B 623003-B 737.95 3.7 14 523.1 35.519 105.3 142006-A PI/WG/23-25/1200-1400 67.9 21.2 13.4 3.9 1200 550.7 37.995 3.7 14 523.1 35.519 105.3 142006-A PI/WG/23-25/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15.316 3.7 14 600.5 14,773 103.7 618009-A2 -<														
140002-C 616005-C 52003-B PIWG/21-23/1200-1400 67.9 21.2 13.4 3.9 1200 550.7 37.395 3.7 14 523.1 35.519 105.3 623003-B PIWG/21-23/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15.316 3.7 14 600.5 14,773 103.7 618009-A2 618009-C2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 618009-C2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 206010-A 206010-B 208012-E 17.8 14.4 3.7 1189 403.7 17.238 3.7 14 382.5 16.332 105.5 117001-B 11														
616005-C 623003-B PIWG/21-23/1200-1400 67.9 21.2 13.4 3.9 1200 550.7 37,395 3.7 14 523.1 35,519 105.3 142006-A PIWG/21-23/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15.316 3.7 14 600.5 14,773 103.7 618009-A2 PIWG/23-25/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15.316 3.7 14 600.5 14,773 103.7 618009-D2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C 206010-A 206010-A 208013-A 14.8 14.4 3.7 180 403.7 17.238 3.7 14 653.8 4119 62.5 206010-A 208013-A 14.9 17.8 14.4 3.7 1189 403.7 17.238 3.7 14 38		PI/WG/19-21/1200-1400	60.1	19.8	13.4	3.7	1200	478.2	28,738	3.7	14	457.4	27,91	104.5
623003-B PIWG/21-23/1200-1400 67.9 21.2 13.4 3.9 1200 550.7 37,395 3.7 14 523.1 35,519 105.3 142006-A PIWG/21-23/1200-1400 24.6 22.8 11.2 3.9 1200 652.6 15,316 3.7 14 600.5 14,773 103.7 618009-02 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C PISx/WG/17-19/1200-1400 42.9 17.8 14.4 3.7 1189 403.7 17.238 3.7 14 382.5														
623009-C PIWG/21-23/1200-1400 67.9 21.2 13.4 3.9 1200 550.7 37.395 3.7 14 523.1 35,519 105.3 142006-A PIWG/23-25/1200-1400 24.6 22.8 11.2 3.9 1200 62.6 15.316 3.7 14 600.5 14,773 103.7 618009-A2 618009-Q2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 618009-D2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C 206010-A 206010-A 206010-B 200														
142006-A 616005-B PIWG/23-25/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15.316 3.7 14 600.5 14,773 103.7 618009-A2 618009-D2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 600.5 14,773 103.7 618009-D2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C 206010-A 206010-B 208010-B		BIANC /21 22/1200 1400	67.0	01.0	10.4	20	1200	550 7	27 205	27	14	E00.1	25 510	105.2
GT6005-B PIWG/23-25/1200-1400 24.6 22.8 11.2 3.9 1200 622.6 15,316 3.7 14 600.5 14,773 103.7 618009-C2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C 206010-A 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 206010-A 206010-B 23003-A 618002-B 618002-B 618002-B 618002-B 623008-B 623009-D 623012-E PISx/WG/17-19/1200-1400 42.9 17.8 14.4 3.7 1189 403.7 17.238 3.7 14 382.5 16,332 105.5 117001-B 142001-C 42.9 17.8 14.4 3.7 1189 403.7 17.238 3.7 14 382.5 16,332 105.5 117001-B 117001-B 12.4		FI/WG/21-23/1200-1400	07.9	21.2	13.4	3.9	1200	550.7	37,395	3.7	14	525.1	35,519	105.5
618009-A2 618009-C2 0		PI/WG/23-25/1200-1400	24.6	22.8	11.2	3.9	1200	622.6	15.316	3.7	14	600.5	14,773	103.7
618009-D2 PISx/SR/19-21/1200-1400 6.3 23.3 12.5 1.5 1200 408.3 2573 3.7 14 653.8 4119 62.5 142008-C 206010-A 206010-B 20002-B 2000			2.10			0.0		00	.0,0.0	0			,, / 0	
142008-C 206010-A 206010-B 20000-D 20000-	618009-C2													
206010-A 206010-B 328003-A 616003-B 618002-B 618002-C 623008-B 623009-D 62309-D 623	618009-D2	PISx/SR/19-21/1200-1400	6.3	23.3	12.5	1.5	1200	408.3	2573	3.7	14	653.8	4119	62.5
206010-B 328003-A 616003-B 618002-B 618002-C 623008-B 623009-D 623012-E PISx/WG/17-19/1200-1400 42.9 17.8 14.4 3.7 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117001-B 117002-B 117002-B 117002-B 117002-B 117002-B 117002-B 117003-B 616003-C 618004-B1 623011-B 802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117001-C	142008-C													
328003-A 616003-B 618002-C 623008-B 623009-D 623012-E PISx/WG/17-19/1200-1400 42.9 17.8 14.4 3.7 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117001-B 117001-B 117002-B 142005-A 211003-B 616003-C 618004-B1 623011-B 802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C														
616003-B 618002-B 618002-C 623008-B 623009-D 623009-D 623012-E PISx/WG/17-19/1200-1400 42.9 17.8 14.4 3.7 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117001-B 117002-B 117002-B 117003-B 117003-B 117003-B 117003-B 117003-B 117003-B 11703-B 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117001-C 142005-A 1103-B 1103-B 1103-B 1103-B 1103-B 1103-B 1103-B 1103-B 1103-B 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117001-C 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117001-C 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3														
618002-B 618002-C 623008-B - <td></td>														
618002-C 623008-B 623009-D 17.8 14.4 3.7 1189 403.7 17.238 3.7 14 382.5 16,332 105.5 105.00 117001-B 117001-B 117002-B 117.8 14.4 3.7 1189 403.7 17.238 3.7 14 382.5 16,332 105.5 117001-B 117002-B 142001-C 1142001-C 1142001-C 1142005-A 114 114 114 114 114 114 114 114 114 114 114 115 114 114 115 115 114 115 1														
623008-B PISx/WG/17-19/1200-1400 42.9 17.8 14.4 3.7 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117001-B 117002-B 117.8 14.4 3.7 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117001-B 117002-B 11200-1400 104.8 14.4 3.7 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117002-B 112005-A 1142005-A 114 114 114 114 114 114 114 114 114 114 114 114 114 114 115 114 115 115 114 116 115 114 116 116 115 115 115 114 116 116 115 115 116 115 116 115 116 115 116 115 116 116 116 115 116 115 116 115 117 116 116 116 116 11														
623009-D PISx/WG/17-19/1200-1400 42.9 17.8 14.4 3.7 1189 403.7 17.238 3.7 14 382.5 16,332 105.5 117001-B 117002-B 117001-C 117001-C 117001-C 117001-C 117001-C 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117001-B 117002-B 117001-C 117001-C 117001-C 117001-C 117001-C 1104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C														
623012-E PISx/WG/17-19/1200-1400 42.9 17.8 14.4 3.7 1189 403.7 17,238 3.7 14 382.5 16,332 105.5 117001-B 117002-B 117001-C 117001-C </td <td></td>														
117001-B 117002-B 142005-A 211003-B 616003-C 618004-B1 623011-B 802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 105.3		PISx/WG/17-19/1200-1400	42.9	17.8	14.4	3.7	1189	403.7	17.238	3.7	14	382.5	16.332	105.5
142001-C 142005-A 211003-B 616003-C 618004-B1 623011-B 802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117002-A			-			-			,				- ,	
142005-A 211003-B 616003-C 616003-C 618004-B1 518004-B1 53011-B 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117002-A 117002-A 111	117002-B													
211003-B 616003-C 618004-B1 623011-B 802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117002-A														
616003-C 618004-B1 623011-B 802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117002-A														
618004-B1 623011-B 802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117002-A														
623011-B 802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117002-A														
802007-B PISx/WG/19-21/1200-1400 104.8 21.6 13.7 3.8 1200 599.5 62,829 3.7 14 569.3 59,661 105.3 117001-C 117002-A Image: Constraint of the second sec														
117001-C 117002-A		PISX/MC/10-21/1200 1400	104 9	21 6	19.7	30	1200	500 F	62 020	37	14	560.2	50 661	105.2
117002-A		F15X/WG/19-21/1200-1400	104.0	21.0	13.7	3.0	1200	099.0	02,029	3.7	14	009.3	09,001	105.5
113900/-A [FI3X/W0/21-23/1200-1400] 214.0 22.3 13.7 3.7 1199 043.4 130.070 3.7 14 013.5 131.051 104.9	139007-A	PISx/WG/21-23/1200-1400	214.6	22.5	13.7	3.7	1199	643.4	138.076	3.7	14	613.5	131,651	104.9

142005-B 142008-B 328003-C 616002-A 618002-A1 618004-C 623005-C 623005-C 623009-A 623010-A 623010-E 623012-A													
142006-C	PISx/WG/23-25/1000-1200	6.2	23.9	13.8	3.6	1000	710.1	4403	3.5	14	671.9	4166	105.7
117001-A 140004-A 140005-C 328003-B 616005-A 618009-A1 623004-F 623005-B 623005-D 623005-D 623008-A													
802013-B	PISx/WG/23-25/1200-1400	99.6	23.9	13.3	3.8	1200	714.8	71,196	3.7	14	680.3	67,757	105.1
142003-A 142007-A 618004-A 628005-A	PISx/WG/25-27/1200-1400	56.9	25.3	13.2	3.8	1200	786.1	44,731	3.7	14	749.1	42,621	104.9
618009-C1 618009-D1	PISx/WG/27-29/1200-1400	22.7	27.2	12.9	3.4	1200	868.8	19,721	3.7	14	846.3	19,211	102.7
010009-01	FI3X/WG/27-29/1200-1400	22.1	21.2	12.9	3.4	1200	000.0	19,721	3.7	14	040.3	19,211	102.7
513022-A2 513001-A2 513023-A2 618002-A2 618002-D 618003-A2 802008-A2 802008-B 802008-A	Sx/NSR/19-21/1200-1400 Sx/SR/19-21/1200-1400	7.0	26.2	16.9	0.1	1200	581.7	787 46.707	3.7	14	848.3	5938 64,094	13.3
117002-C 117012-C 139006-B 140003-C 140005-B 513003-D 513004-B 513005-B 513005-B 513021-B 513022-C	Sx/WG/19-21/1000-1200	25.8	25.4	15.5	3.2	1032		21,247	3.5	14	795.3	20,518	103.6



513023-B													
623010-C													
802003-B													
802003-C													
802006-B													
117003-B													
117004-B													
139006-C													
142002-A													
142009-A													
506002-B													
506004-B													
513003-A													
513005-C													
618004-D													
618009-B													
623003-C													
623003-D													
623004-A													
623004-E													
623009-B													
623011-D													
623012-D													
802003-A													
	Sx/WG/19-21/1200-1400	91.2	28.0	111	3.3	1200	946.6	87,971	3.7	14	938.7	85,609	102.8
802007-A	5x/WG/19-21/1200-1400	91.2	28.0	14.1	3.3	1200	940.0	87,971	3.7	14	938.7	85,609	102.8
142005-C		40.0				1000	0004					0.400	100.0
142009-B	Sx/WG/21-23/1000-1200	13.2	22.5	15.7	3.8	1000	696.1	9189	3.5	14	643.8	8498	108.2
117004-A													
117012-A													
140002-A													
140003-A													
140003-B													
140005-A													
140008-A													
140008-B													
142006-B													
322007-A													
513003-C													
623010-B	Sx/WG/21-23/1200-1400	182.6	23.9	15.2	3.6	1200	769.6	140,525	3.7	14	727.1	132,775	105.8
	57/ W G/21-20/ 1200-1400	102.0	20.9	10.2	3.0	1200	109.0	140,525	3.7	14	121.1	132,113	105.0
142001-A													
142003-D													
142007-B													
142008-D													
623010-D	Sx/WG/23-25/1000-1200	68.1	24.7	15.1	3.6	1000	811.7	55,276	3.5	14	758.4	51,648	107.0
117003-A													
117011-A													
117012-B													
140004-C	Sx/WG/23-25/1200-1400	177.2	24.4	15.5	3.8	1200	802.6	142,216	3.7	14	753.3	133,476	106.5
			- 67	10.0	0.0	1200	002.0		0.7	17	,	100,470	100.0

142003-B 142004-A 513001-A1 513004-A 623003-A 623011-A 623011-C 802002B													
802010-A													
142002-C													
142003-C 142004-B	Sx/MG/25 27/1000 1200	40.7	26.0	16 1	3.9	1000	896.3	44,548	3.5	14	825.5	41.020	109.6
142004-B 117011-B	Sx/WG/25-27/1000-1200	49.7	20.0	16.1	3.9	1000	896.3	44,548	3.5	14	820.0	41,029	108.6
139006-A 140004-B													
142002-B													
150001-A													
506004-A 618003-A1													
623004-B													
623004-C													
623004-D													
623006-B													
623011-E													
623012-B													
623012-C 802001-A													
802001-A 802002-A													
802005-A													
802006-A													
802008-A1	Sx/WG/25-27/1200-1400	299.7	26.2	14.9	3.7	1200	894.9	268,207	3.7	14	846.2	253,616	105.8
523021-A	Sx/WG/25-27/400-600	4.8	26.0	17.9	4.0	400	906.0	4349	1.7	14	566.7	2720	159.9
513022-B		07.0	07.4	10.0		1000	0574	00.070				o 4 o o -	100.0
513023-C	Sx/WG/27-29/1000-1200	37.9	27.4	16.2	3.4	1000	957.1	36,276	3.5	14	897.8	34,027	106.6
142007-C 506002-A													
506002-A 513001-B													
513003-B													
513005-A													
513022-A1													
513023-A1													
616003-A		(a · -					a		. –				105 -
623006-A	Sx/WG/27-29/1200-1400	124.3	27.2	15.8	3.4	1200	942.5	117,154	3.7	14	897.9	111,615	105.0
142001-B 623006-C	Sx/WG/31-33/1200-1400	12.8	31.3	12.4	3.8	1200	1159.4	14,840	3.7	14	1112.6	14,242	104.2
142003-E	Sx/WG/33-35/1000-1200	4.5	32.9	11.6	4.0	1000	1240.8	5584	3.7	14	1180.2	5311	105.1
	Totals/Averages	1903.7	24.4	14.5	3.6	1176	759.3	1,445,470	3.7	14	733.8	1,396,927	103.5



Table 46: Licensee Participant Planting Activities 2012

<u>Harvest Start</u> Date	<u>Licence</u>	<u>Permit</u>	Block ID	Planting Activity	<u>Planting</u> Date	<u>Planted</u> <u>Area</u> (ha)	Seedlot	<u># of</u> <u>Trees</u>
02/27/2012	A59959	785	01005	Planting - Establishment	06/01/2012	33.0	31310	555
02/27/2012	A59959	785	01005	Planting - Establishment	06/01/2012	33.0	31310	315
02/27/2012	A59959	785	01005	Planting - Establishment	06/01/2012	33.0	60460	40540
03/12/2010	A59959	720	01016	Planting - Burn Piles	07/01/2012	2.0	48555	2040
03/10/2010	A18154	720	01018	Planting - Burn Piles	07/01/2012	1.0	48555	1080
01/01/2012	A18154	777	01019	Planting - Establishment	07/10/2012	37.0	48555	38325
01/01/2012	A18154	777	01019	Planting - Establishment	07/10/2012	52.0	60460	55360
07/04/2011	A18154	722	01023	Planting - Establishment	07/04/2012	41.0	31310	50740
03/06/2012	A18154	766	01025	Planting - Establishment	06/21/2012	3.0	60460	3090
10/01/2010	A18154	754	01031	Planting - Establishment	07/04/2012	67.0	48555	28835
10/01/2010	A18154	754	01031	Planting - Establishment	07/04/2012	67.0	48555	45575
10/01/2010	A18154	754	01031	Planting - Establishment	07/04/2012	116.0	60460	136365
10/01/2010	A18154	754	01031	Planting - Establishment	07/04/2012	116.0	60460	6735
12/01/2011	A18154	766	01043	Planting - Establishment	06/21/2012	38.0	60460	39035
12/01/2011	A18154	766	01043	Planting - Establishment	06/21/2012	38.0	60460	3180
12/06/2007	A18154	713	01064	Planting - Fill Plant	07/01/2012	8.0	31310	6900
07/20/2010	A60972	723	01074	Planting - Establishment	06/05/2012	22.0	48555	31300
10/05/2011	A59959	764	01106	Planting - Establishment	07/20/2012	36.0	48555	36570
10/05/2011	A59959	764	01107	Planting - Establishment	07/20/2012	11.0	48555	10930
01/26/2012	A59959	764	01134	Planting - Establishment	07/18/2012	28.0	60460	6565
01/26/2012	A59959	764	01134	Planting - Establishment	07/18/2012	28.0	48555	7140
01/26/2012	A59959	764	01134	Planting - Establishment	07/18/2012	28.0	48555	6890
01/26/2012	A59959	764	01134	Planting - Establishment	07/18/2012	28.0	60460	5375
01/26/2012	A59959	764	01134	Planting - Establishment	07/18/2012	7.0	31310	9130
02/13/2012	A59959	764	01135	Planting - Establishment	07/14/2012	15.0	60460	7495
02/13/2012	A59959	764	01135	Planting - Establishment	07/14/2012	15.0	60460	2325
02/13/2012	A59959	764	01135	Planting - Establishment	07/14/2012	15.0	48555	4795
02/13/2012	A59959	764	01135	Planting - Establishment	07/14/2012	15.0	48555	2340

10/12/2011	A18154	758	01153	Planting - Establishment	07/14/2012	6.0	48555	2015
10/12/2011	A18154	758	01153	Planting - Establishment	07/14/2012	6.0	60460	480
10/12/2011	A18154	758	01153	Planting - Establishment	07/14/2012	6.0	60460	2740
10/12/2011	A18154	758	01153	Planting - Establishment	07/14/2012	6.0	48555	495
10/05/2011	A18154	758	01154	Planting - Establishment	05/24/2012	15.0	60460	8770
10/05/2011	A18154	758	01154	Planting - Establishment	05/24/2012	15.0	60460	1370
10/05/2011	A18154	758	01154	Planting - Establishment	05/24/2012	15.0	48555	4650
10/05/2011	A18154	758	01154	Planting - Establishment	05/24/2012	15.0	48555	1575
10/07/2011	A18154	758	01155	Planting - Establishment	05/25/2012	5.0	60460	4095
10/20/2011	A18154	758	01156	Planting - Establishment	07/14/2012	12.0	48555	780
10/20/2011	A18154	758	01156	Planting - Establishment	07/14/2012	12.0	48555	13470
03/09/2012	A59959	785	01171	Planting - Establishment	06/21/2012	32.0	48555	34315
02/15/2010	A18154	174	02004	Planting - Burn Piles	07/30/2012	2.0	48555	2595
11/23/2011	A18154	906	02011	Planting - Establishment	07/14/2012	9.0	48555	5760
11/23/2011	A18154	906	02011	Planting - Establishment	07/14/2012	49.0	60460	6195
11/23/2011	A18154	906	02011	Planting - Establishment	07/14/2012	49.0	60460	31175
11/23/2011	A18154	906	02011	Planting - Establishment	07/14/2012	49.0	48555	16805
11/22/2011	A18154	906	02016	Planting - Establishment	07/14/2012	25.0	48555	9870
11/22/2011	A18154	906	02016	Planting - Establishment	07/14/2012	25.0	60460	150
11/22/2011	A18154	906	02016	Planting - Establishment	07/14/2012	25.0	48555	15180
11/22/2011	A18154	906	02016	Planting - Establishment	07/14/2012	25.0	60460	1980
10/12/2007	PAG12	APR-82371	02017	Planting - Burn Piles	07/10/2012	1.0	48555	945
01/31/2008	A60972	717	02027	Planting - Burn Piles	07/01/2012	1.0	48555	2205
11/29/2011	A18154	765	02028	Planting - Establishment	07/10/2012	7.0	48555	7335
10/17/2006	A18154	070	02033	Planting - Fill Plant	05/01/2012	9.0	31310	5849
03/09/2011	A60972	752	02049	Planting - Burn Piles	06/06/2012	1.0	48555	630
11/25/2010	A60972	752	02057	Planting - Burn Piles	06/01/2012	6.0	48555	5490
07/29/2011	A60972	752	02058	Planting - Establishment	07/14/2012	31.0	60460	4185
07/29/2011	A60972	752	02058	Planting - Establishment	07/14/2012	31.0	48555	29255
09/10/2011	A18154	761	02061	Planting - Establishment	07/14/2012	6.0	48555	5695
10/01/2011	A60972	773	02069	Planting - Establishment	07/14/2012	15.0	48555	315
10/01/2011	A60972	773	02069	Planting - Establishment	07/14/2012	15.0	48555	15390
01/07/2011	A18154	753	02083	Planting - Establishment	07/04/2012	5.0	60460	4800
01/07/2011	A18154	753	02083	Planting - Establishment	07/04/2012	5.0	48555	1650
12/10/2009	A18154	901	02085	Planting - Burn Piles	07/01/2012	1.0	48555	2685





08/16/2010	A18154	901	02086	Planting - Burn Piles	06/06/2012	1.0	48555	5460
12/15/2011	PAG12	APR-89518	02160	Planting - Establishment	07/10/2012	16.0	48555	9810
11/15/2011	PAG12	APR-89088	02244	Planting - Establishment	07/10/2012	11.0	48555	7065
11/15/2011	PAG12	APR-89088	02244	Planting - Establishment	07/10/2012	11.0	60460	4570
01/01/2011	A18154	360	03068	Planting - Establishment	05/01/2012	54.0	60460	80960
02/13/2012	A18154	783	03109	Planting - Establishment	07/13/2012	32.0	48555	34435
07/30/2009	A18154	904	04035	Planting - Burn Piles	07/01/2012	1.0	48555	1710
07/30/2009	A18154	904	04035	Planting - Burn Piles	07/01/2012	1.0	48555	500
01/28/2009	A59959	903	04054	Planting - Burn Piles	07/01/2012	4.0	48555	2300
08/31/2009	A18154	904	04056	Planting - Burn Piles	07/01/2012	3.0	48555	2500
01/27/2009	A59959	903	04057	Planting - Fill Plant	07/01/2012	15.0	31310	21455
12/01/2010	A18154	905	04058	Planting - Burn Piles	07/01/2012	2.0	48555	1475
01/25/2010	A18154	904	04059	Planting - Burn Piles	07/01/2012	1.0	48555	1200
01/01/2010	A60972	909	04060	Planting - Burn Piles	07/01/2012	1.0	48555	765
11/20/2010	A18154	905	04061	Planting - Establishment	06/01/2012	25.0	60460	35165
09/01/2011	A18154	762	04226	Planting - Establishment	07/21/2012	30.0	48555	29130
08/18/2011	A18154	757	04228	Planting - Establishment	07/21/2012	22.0	60460	690
08/18/2011	A18154	757	04228	Planting - Establishment	07/21/2012	22.0	48555	22840
10/10/2011	A18154	903	05002	Planting - Establishment	07/14/2012	86.0	48555	56665
10/10/2011	A18154	903	05002	Planting - Establishment	07/14/2012	92.0	31310	44445
11/27/2006	A60050	272	05003	Planting - Fill Plant	07/01/2012	48.0	60460	34290
11/27/2006	A60050	272	05003	Planting - Fill Plant	07/01/2012	48.0	60460	1500
08/14/2009	A18154	189	05004	Planting - Burn Piles	07/01/2012	3.0	48555	4110
09/01/2010	A18154	920	05006	Planting - Establishment	07/22/2012	103.0	48555	5865
09/01/2010	A18154	920	05006	Planting - Establishment	07/22/2012	103.0	48555	112305
11/15/2011	A18154	912	05007	Planting - Establishment	07/14/2012	54.0	48555	20520
11/15/2011	A18154	912	05007	Planting - Establishment	07/14/2012	54.0	60460	13610
11/15/2011	A18154	912	05007	Planting - Establishment	07/14/2012	54.0	48555	10530
11/15/2011	A18154	912	05007	Planting - Establishment	07/14/2012	54.0	60460	19235
11/16/2011	A18154	912	05008	Planting - Establishment	07/14/2012	27.0	60460	35825
11/16/2011	A18154	912	05008	Planting - Establishment	07/14/2012	10.0	31310	14605
11/16/2011	A18154	912	05008	Planting - Establishment	07/14/2012	35.0	48555	36755

11/16/2011	A18154	912	05008	Planting - Establishment	07/14/2012	35.0	48555	1620
12/22/2011	A18154	913	05009	Planting - Establishment	07/03/2012	132.0	48555	46395
12/22/2011	A18154	913	05009	Planting - Establishment	07/03/2012	132.0	60460	55685
12/22/2011	A18154	913	05009	Planting - Establishment	07/03/2012	132.0	48555	63925
12/22/2011	A18154	913	05009	Planting - Establishment	07/03/2012	132.0	60460	15135
01/28/2011	A18154	189	05018	Planting - Burn Piles	07/01/2012	1.0	48555	630
02/10/2011	A18154	189	05019	Planting - Burn Piles	07/01/2012	2.0	48555	615
09/24/2009	A18154	189	05020	Planting - Establishment	07/01/2012	33.0	48555	260
09/24/2009	A18154	189	05020	Planting - Establishment	07/01/2012	33.0	31310	24870
09/24/2009	A18154	189	05020	Planting - Establishment	07/01/2012	15.0	31310	21175
09/24/2009	A18154	189	05020	Planting - Establishment	07/01/2012	33.0	48555	11370
09/24/2009	A18154	189	05020	Planting - Establishment	07/01/2012	33.0	60460	495
09/24/2009	A18154	189	05020	Planting - Establishment	07/01/2012	33.0	60460	7485
09/24/2009	A18154	189	05020	Planting - Establishment	07/01/2012	33.0	48555	8275
10/23/2011	A18154	903	05021	Planting - Establishment	07/14/2012	12.0	48555	12825
02/01/2012	A18154	914	05132	Planting - Establishment	06/16/2012	58.0	48555	8095
02/01/2012	A18154	914	05132	Planting - Establishment	06/16/2012	58.0	48555	32100
02/01/2012	A18154	914	05132	Planting - Establishment	06/16/2012	58.0	60460	26400
01/20/2007	A18154	172	06012	Planting - Burn Piles	06/01/2012	4.0	48555	2150
01/20/2011	A18154	731	06022	Planting - Burn Piles	07/01/2012	3.0	48555	2340
08/08/2010	A18154	223	09005	Planting - Burn Piles	07/01/2012	1.0	48555	1260
06/08/2010	A18154	222	09006	Planting - Burn Piles	07/01/2012	2.0	48555	2490
01/13/2011	A59959	231	09009	Planting - Burn Piles	07/01/2012	3.0	48555	3315
08/15/2010	A59959	229	09010	Planting - Establishment	07/01/2012	8.0	48555	6970
08/15/2010	A59959	229	09010	Planting - Establishment	07/01/2012	8.0	31310	2595
01/25/2011	A59959	231	09011	Planting - Establishment	07/01/2012	2.0	31310	3540
01/21/2010	A60049	246	09027	Planting - Burn Piles	07/01/2012	0.0	48555	630
06/23/2010	A18154	907	09035	Planting - Establishment	07/01/2012	97.0	48555	13150
06/23/2010	A18154	907	09035	Planting - Establishment	07/01/2012	96.0	31310	119198
01/22/2001	A18154	347	10009	Planting - Fill Plant	07/01/2012	3.0	60460	2550
02/07/2012	A59959	772	18010	Planting - Establishment	07/09/2012	27.0	48555	26200
02/09/2012	A59959	772	18011	Planting - Establishment	07/10/2012	11.0	48555	10735
02/12/2012	A59959	772	18012	Planting - Establishment	07/12/2012	9.0	48555	9605





12/11/2007	A60050	275	S45043	Planting - Fill Plant	06/01/2012	75.0	60460	37600
12/11/2007	A60050	275	S45043	Planting - Fill Plant	06/01/2012	75.0	60460	1155
11/20/2010	A60050	250	S43022	Planting - Establishment	07/04/2012	4.0	48555	3000
11/20/2010	A60050	250	S43022	Planting - Establishment	07/04/2012	4.0	48555	4400
01/20/2011	A18154	363	S27007	Planting - Establishment	07/04/2012	50.0	31310	53205
01/20/2011	A18154	363	S27007	Planting - Establishment	07/04/2012	50.0	31310	14700
01/07/2012	A60049	235	S09166	Planting - Establishment	07/11/2012	37.0	48555	26005
01/07/2012	A60049	235	S09166	Planting - Establishment	07/11/2012	37.0	60460	16445
11/17/2010	A18154	909	S09133	Planting - Establishment	06/01/2012	49.0	31310	19785
11/17/2010	A18154	909	S09133	Planting - Establishment	06/01/2012	49.0	60460	46860
06/26/2007	A60049	240	S09115	Planting - Fill Plant	06/01/2012	16.0	31310	19360
06/26/2007	A60049	240	S09115	Planting - Fill Plant	06/01/2012	16.0	60455	2170
02/08/2010	A60049	246	S09067	Planting - Burn Piles	06/21/2012	1.0	31310	1005
08/04/2010	PAG12	APR-87683	S02037	Planting - Establishment	07/04/2012	22.0	31310	25475
02/23/2011	PAG12	APR-87649	S02035	Planting - Establishment	06/23/2012	21.0	60455	24850
03/13/2008	PAG12	APR-83869	S02027	Planting - Fill Plant	06/04/2012	10.0	60460	11415
11/01/2011	A18154	770	S02026	Planting - Establishment	07/10/2012	5.0	48555	5355
01/20/2011	A18154	753	S02021	Planting - Establishment	07/04/2012	6.0	60460	7610
01/20/2011	A18154	753	S02021	Planting - Establishment	07/04/2012	6.0	60460	735
11/08/2010	A18154	755	S01048	Planting - Establishment	07/04/2012	112.0	48555	46840
11/08/2010	A18154	755	S01048	Planting - Establishment	07/04/2012	112.0	48555	76005
09/26/2011	A18154	758	S01047	Planting - Establishment	07/10/2012	32.0	48555	17365
09/26/2011	A18154	758	S01047	Planting - Establishment	07/10/2012	32.0	48555	6550
09/26/2011	A18154	758	S01047	Planting - Establishment	07/10/2012	32.0	60460	1125
09/26/2011	A18154	758	S01047	Planting - Establishment	07/10/2012	32.0	60460	7965
02/01/2011	A18154 A18154	245	45018	Planting - Burn Piles	07/01/2012	0.0	48555	2520
02/01/2012	A39959 A18154	245	45018	Planting - Burn Piles	07/01/2012	9.0 0.0	48555	930
02/08/2012 01/25/2012	A59959 A59959	439	25005	Planting - Establishment Planting - Establishment	07/16/2012	39.0 9.0	48555 60460	8595
02/08/2012	A59959 A59959	439 439	25005 25005	Planting - Establishment	07/16/2012	50.0	60460 48555	48030 7750
01/25/2012	A59959	439	25002	Planting - Establishment	07/11/2012	9.0	60460	8595



Harvest Start Date	Licensee	Licence	СР	Block ID	Regen Met Date	Stratum Name	Stratum Area	Layer	Species	Species %	Species 2	Species %	Species 3	Species %
02/27/2012	CRL	A59959	785	01005	07/19/2012	a1	28.7		Sx	100		/0	5	/0
02/27/2012	CRL	A59959	785	01005	07/19/2012	b1	4.2		Sx	100				
01/01/2012	CANFOR	A18154	777	01019	07/22/2012	а	25.9	Ι	Sx	100				
01/01/2012	CANFOR	A18154	777	01019	07/22/2012	b1	36.5	Ι	Pli	100				
01/01/2012	CANFOR	A18154	777	01019	07/22/2012	b2	25.8	I	Sx	100				
07/04/2011	CANFOR	A18154	722	01023	07/01/2012	b1	40.9	I	Sx	100				
03/06/2012	CANFOR	A18154	766	01025	07/13/2012	a1	3.1		Sx	100				
10/01/2010	CANFOR	A18154	754	01031	07/07/2012	a1	90.3		Sx	100				
10/01/2010	CANFOR	A18154	754	01031	07/07/2012	b1	18.1	I	Sx	100				
10/01/2010	CANFOR	A18154	754	01031	07/07/2012	b2	61.3		Pli	100				
12/01/2011	CANFOR	A18154	766	01043	07/17/2012	а	38.3	I	Sx	100				
12/19/2007	CANFOR	A18154	716	01061	06/08/2012	А	5.2		At	70	Pli	30		
12/06/2007	CANFOR	A18154	713	01064	07/01/2012	а	4.9	I	Sx	100				
12/06/2007	CANFOR	A18154	713	01064	07/01/2012	b	3.4		Sx	100				
12/12/2007	CANFOR	A18154	708	01065	06/04/2012	А	16.9	I	At	70	Pli	30		
07/20/2010	TEMBEC	A60972	723	01074	07/17/2012	а	22.2	I	Pli	100				
01/18/2009	TEMBEC	A60972	724	01075	06/11/2012	А	8.6	-	At	80	Sw	20		
01/15/2009	TEMBEC	A60972	723	01076	06/05/2012	А	5.1	Ι	At	80	Act	10	Sx	10
01/12/2009	TEMBEC	A60972	723	01077	06/06/2012	А	4.9	Ι	At	50	Pli	30	Sx	20
12/15/2008	CRL	A59959	902	01081	07/30/2012	А	6.6	Ι	At	60	Pli	40		
12/09/2008	CRL	A59959	902	01085	06/13/2012	А	7.0	Ι	Pli	60	At	40		
10/05/2011	CRL	A59959	764	01106	07/22/2012	а	35.9	Ι	Pli	100				
10/05/2011	CRL	A59959	764	01107	07/22/2012	а	10.8	I	Pli	100				
01/26/2012	CRL	A59959	764	01134	07/10/2012	a1	26.1	I	Pli	50	Sx	50		
01/26/2012	CRL	A59959	764	01134	07/10/2012	a2	1.7	I	Sx	100				
01/26/2012	CRL	A59959	764	01134	07/10/2012	b1	1.8	I	Pli	50	Sx	50		
02/13/2012	CRL	A59959	764	01135	07/13/2012	а	4.5	I	Pli	50	Sx	50		
02/13/2012	CRL	A59959	764	01135	07/13/2012	b	11.2	I	Pli	50	Sx	50		

Table 47: Establishment Delay Report – Inventory Layer – Licensee Participants 2012

10/12/2011	CANFOR	A18154	758	01153	07/19/2012	а	6.3	I	Sx	60	Pli	40	1	
10/05/2011	CANFOR	A18154	758	01154	07/15/2012	а	10.6	I	Sx	60	Pli	40		
10/05/2011	CANFOR	A18154	758	01154	07/15/2012	b	4.7	I	Sx	60	Pli	40		
10/07/2011	CANFOR	A18154	758	01155	07/15/2012	а	5.0		Sx	100				
10/20/2011	CANFOR	A18154	758	01156	07/16/2012	а	5.4	I	Pli	100				
10/20/2011	CANFOR	A18154	758	01156	07/16/2012	b	6.7	I	Pli	100				
03/09/2012	CRL	A59959	785	01171	07/21/2012	а	32.4	l	Pli	100				
11/23/2011	CANFOR	A18154	906	02011	07/13/2012	а	35.1	I	Sx	70	Pli	30		
11/23/2011	CANFOR	A18154	906	02011	07/13/2012	b	13.7	l	Pli	80	Sx	20		
11/22/2011	CANFOR	A18154	906	02016	07/16/2012	b	24.6	I	Pli	80	Sx	20		
10/02/2008	CRL	A59959	902	02022	06/11/2012	А	70.0	l	At	60	Pli	20	Sx	20
10/02/2008	CRL	A59959	902	02022	06/11/2012	В	43.0	l	At	60	Pli	30	Sx	10
01/31/2008	TEMBEC	A60972	717	02027	06/06/2012	А	91.6	l	At	70	Pli	30		
11/29/2011	CANFOR	A18154	765	02028	07/07/2012	а	6.9	l	Pli	100				
10/17/2006	CANFOR	A18154	070	02033	07/02/2012	aa	11.6	l	Sx	100				
11/11/2008	CANFOR	PAG12	APR- 83863	02046	09/19/2012	A	24.1	I	At	100				
07/29/2011	TEMBEC	A60972	752	02058	07/07/2012	а	30.6		Pli	90	Sx	10		
09/10/2011	CANFOR	A18154	761	02061	07/20/2012	а	6.0		Pli	100				
11/25/2008	CANFOR	PAG12	APR- 84979	02064	11/15/2012	A	54.3	Ι	At	100				
11/25/2008	CANFOR	PAG12	APR- 84979	02064	11/15/2012	В	8.3	I	Sw	60	Pli	40		
11/25/2008	CANFOR	PAG12	APR- 84979	02064	11/15/2012	С	10.7	I	At	100				
10/01/2011	TEMBEC	A60972	773	02069	07/20/2012	а	14.8	l	Pli	100				
01/07/2011	CANFOR	A18154	753	02083	07/17/2012	а	5.0	I	Pli	100				
11/15/2011	CANFOR	A18154	906	02101	07/21/2012	а	13.8	I	Pli	100				
12/15/2011	CANFOR	PAG12	APR- 89518	02160	07/15/2012	b	16.3	Ι	Pli	70	Sx	30		
11/15/2011	CANFOR	PAG12	APR- 89088	02244	07/17/2012	а	10.7	Ι	Pli	60	Sx	40		
02/06/2007	CANFOR	A56771	703	03046	08/15/2012	В	24.8	I	At	70	Pli	20	Sb	10
01/01/2011	CANFOR	A18154	360	03068	07/12/2012	aaa	52.2	I	Sx	100				
02/13/2012	CANFOR	A18154	783	03109	07/11/2012	a1	15.7	I	Pli	100				
02/13/2012	CANFOR	A18154	783	03109	07/11/2012	b1	16.2	I	Pli	100				
10/03/2006	LP	A60049	192	04031	07/26/2012	А	4.3	I	At	100				
10/03/2006	LP	A60049	192	04031	07/26/2012	В	1.9	1	Sx	100				



01/27/2009	CRL	A59959	903	04057	07/03/2012	aa	14.9	Ι	Sx	100				
11/20/2010	CANFOR	A18154	905	04061	07/19/2012	bb	23.8	I	Sx	100				
09/01/2011	CANFOR	A18154	762	04226	07/22/2012	а	29.1	Ι	Pli	100				
08/18/2011	CANFOR	A18154	757	04228	07/22/2012	a1	22.4	Ι	Pli	95	Sx	5		
10/10/2011	CANFOR	A18154	903	05002	07/06/2012	a1	1.5	I	Pli	60	Sx	40		
10/10/2011	CANFOR	A18154	903	05002	07/06/2012	a2	5.5	Ι	Sw	100				
10/10/2011	CANFOR	A18154	903	05002	07/06/2012	b1	84.2	I	Pli	60	Sx	40		
10/10/2011	CANFOR	A18154	903	05002	07/06/2012	b2	1.0	Ι	Sx	100				
11/27/2006	LP	A60050	272	05003	07/05/2012	bb	47.9	I	Sx	100				
09/01/2010	CANFOR	A18154	920	05006	07/21/2012	aa1	100.3	I	Pli	100				
09/01/2010	CANFOR	A18154	920	05006	07/21/2012	b1	2.8	Ι	Pli	100				
11/15/2011	CANFOR	A18154	912	05007	07/07/2012	a1	54.1	Ι	Pli	50	Sx	50		
11/16/2011	CANFOR	A18154	912	05008	07/07/2012	a1	34.5	Ι	Pli	100				
11/16/2011	CANFOR	A18154	912	05008	07/07/2012	a2	27.3	Ι	Sx	100				
11/16/2011	CANFOR	A18154	912	05008	07/07/2012	a3	10.0	I	Sx	100				
12/22/2011	CANFOR	A18154	913	05009	07/01/2012	a1	98.7	Ι	Pli	60	Sx	40		
12/22/2011	CANFOR	A18154	913	05009	07/01/2012	b1	32.8	I	Pli	60	Sx	40		
09/24/2009	CANFOR	A18154	189	05020	06/26/2012	aa1	27.7	I	Sx	60	Pli	40		
09/24/2009	CANFOR	A18154	189	05020	06/26/2012	aa2	2.1	Ι	Sx	100				
09/24/2009	CANFOR	A18154	189	05020	06/26/2012	bb1	9.0	I	Sx	60	Pli	40		
09/24/2009	CANFOR	A18154	189	05020	06/26/2012	bb2	12.8	Ι	Sx	100				
10/23/2011	CANFOR	A18154	903	05021	06/23/2012	a1	12.4	I	Pli	100				
02/01/2012	CANFOR	A18154	914	05132	07/04/2012	a1	57.7	Ι	Pli	60	Sx	40		
06/22/2005	CANFOR	A18154	222	09003	06/12/2012	А	20.2	I	At	60	Pli	40		
06/22/2005	CANFOR	A18154	222	09003	06/12/2012	В	24.6	I	At	80	Pli	20		
06/22/2005	CANFOR	A18154	222	09003	06/12/2012	С	4.9	I	Pli	60	Ep	40		
08/15/2010	CRL	A59959	229	09010	07/03/2012	A1	8.0	I	Pli	70	Sx	30		
01/25/2011	CRL	A59959	231	09011	07/03/2012	a2	2.1	I	Sx	100				
01/22/2001	CANFOR	A18154	347	10009	07/05/2012	aa	0.6	I	Sx	100				
01/22/2001	CANFOR	A18154	347	10009	07/05/2012	bb	2.6	Ι	Sx	100	T			
02/07/2012	CRL	A59959	772	18010	07/13/2012	a1	26.8	Ι	Pli	100				
02/09/2012	CRL	A59959	772	18011	07/13/2012	a1	10.6	Ι	Pli	100	T			
02/12/2012	CRL	A59959	772	18012	07/12/2012	a1	9.2	Ι	Pli	100	T			
03/04/2002	CANFOR	A18154	336	20011	08/21/2012	А	8.1	Ι	BI	40	Pli	30	Sx	30
03/04/2002	CANFOR	A18154	336	20011	08/21/2012	В	5.7	Ι	Pli	40	Sx	40	BI	20

11/08/2006	CRL	A59959	361	20058	08/21/2012	А	16.8	Ι	At	60	Pli	20	Sx	20
11/08/2006	CRL	A59959	361	20058	08/21/2012	В	26.5		Pli	80	Sx	20		
01/25/2012	CRL	A59959	439	25002	07/12/2012	а	8.5	I	Sx	100				
02/08/2012	CRL	A59959	439	25005	07/12/2012	a1	50.0	I	Sx	85	Pli	15		
03/03/2008	LP	A60049	715	S01038	09/25/2012	А	11.0		At	100				
09/26/2011	CANFOR	A18154	758	S01047	07/15/2012	a1	32.4		Pli	70	Sx	30		
11/08/2010	CANFOR	A18154	755	S01048	07/06/2012	a1	112.0	I	Pli	100				
01/20/2011	CANFOR	A18154	753	S02021	07/20/2012	а	6.4	I	Sx	100				
11/01/2011	CANFOR	A18154	770	S02026	07/09/2012	а	4.8		Pli	100				
03/13/2008	CANFOR	PAG12	APR- 83869	S02027	07/11/2012	а	9.9	I	Sx	100				
03/14/2008	CANFOR	PAG12	APR- 83869	S02028	06/04/2012	A	8.5	I	Pli	60	Sx	40		
02/23/2011	CANFOR	PAG12	APR- 87649	S02035	07/03/2012	Ар	21.0	I	Sx	100				
02/23/2011	CANFOR	PAG12	APR- 87649	S02035	07/03/2012	bp	0.2	I	Sx	100				
08/04/2010	CANFOR	PAG12	APR- 87683	S02037	06/27/2012	aa	0.7	I	Sx	100				
08/04/2010	CANFOR	PAG12	APR- 87683	S02037	06/27/2012	bb	21.3	I	Sx	100				
01/12/2010	CANFOR	PAG12	APR- 86101	S02069	09/19/2012	A	28.8	I	At	100				
01/12/2010	CANFOR	PAG12	APR- 86101	S02070	09/19/2012	A	21.7	I	At	100				
11/18/2009	CANFOR	PAG12	APR- 86101	S02071	09/19/2012	A	80.7	I	At	90	Act	10		
10/02/2008	CANFOR	PAG12	APR- 84845	S03001	08/16/2012	A1	40.8	I	At	100				
11/26/2008	CANFOR	PAG12	APR- 85059	S03002	08/16/2012	A	5.6	I	At	100				
12/01/2008	CANFOR	PAG12	APR- 85059	S03005	08/16/2012	A	9.0	Ι	At	100				
07/02/2008	LP	A60049	199	S04033	09/18/2012	А	315.3	I	At	90	Act	10		
12/07/2005	LP	A60050	226	S05008	07/26/2012	b	6.7	I	Sx	60	Pli	40	T	
06/26/2007	LP	A60049	240	S09115	06/27/2012	afp	15.9	I	Sx	100				
06/26/2007	LP	A60049	240	S09115	06/27/2012	cfp	0.1	I	Sx	100				
11/17/2010	CANFOR	A18154	909	S09133	07/07/2012	aa	8.4	I	Sx	100			T	
11/17/2010	CANFOR	A18154	909	S09133	07/07/2012	bb	39.3	I	Sx	100			T T	



01/07/2012	LP	A60049	235	S09166	06/28/2012	aa	28.1	I	Pli	60	Sx	40	
01/07/2012	LP	A60049	235	S09166	06/28/2012	bb	4.5		Pli	60	Sx	40	
12/06/2008	CANFOR	PAG12	APR- 84787	S18031	08/19/2012	A	31.2	I	At	100			
10/29/2008	CANFOR	PAG12	APR- 84876	S25011	08/08/2012	A1	49.4	I	At	90	Act	10	
12/07/2009	CANFOR	PAG12	APR- 86408	S26009	08/10/2012	A	83.2	I	At	100			
11/17/2006	CANFOR	PAG12	APR- 81151	S26014	05/30/2012	С	12.8	I	At	80	Sx	20	
11/17/2006	CANFOR	PAG12	APR- 81151	S26014	05/30/2012	D	14.5	I	At	90	Sx	10	
01/20/2011	CANFOR	A18154	363	S27007	07/22/2012	aa	50.4	I	Sx	100			
11/20/2010	LP	A60050	250	S43022	07/16/2012	В	3.3	I	Pli	100			
12/11/2007	LP	A60050	275	S45043	07/05/2012	aaa	19.9	I	Sx	100			
12/11/2007	LP	A60050	275	S45043	07/05/2012	bbb	47.4	I	Sx	100			
02/27/2012	CRL	A59959	785	01005	07/19/2012	a1	28.7	I	Sx	100			
02/27/2012	CRL	A59959	785	01005	07/19/2012	b1	4.2		Sx	100			
01/01/2012	CANFOR	A18154	777	01019	07/22/2012	а	25.9		Sx	100			
01/01/2012	CANFOR	A18154	777	01019	07/22/2012	b1	36.5		Pli	100			
01/01/2012	CANFOR	A18154	777	01019	07/22/2012	b2	25.8	I	Sx	100			
07/04/2011	CANFOR	A18154	722	01023	07/01/2012	b1	40.9	I	Sx	100			
03/06/2012	CANFOR	A18154	766	01025	07/13/2012	a1	3.1	I	Sx	100			
10/01/2010	CANFOR	A18154	754	01031	07/07/2012	a1	90.3		Sx	100			
10/01/2010	CANFOR	A18154	754	01031	07/07/2012	b1	18.1		Sx	100			
10/01/2010	CANFOR	A18154	754	01031	07/07/2012	b2	61.3	I	Pli	100			
12/01/2011	CANFOR	A18154	766	01043	07/17/2012	а	38.3		Sx	100			
12/19/2007	CANFOR	A18154	716	01061	06/08/2012	А	5.2		At	70	Pli	30	

Table 48: BCTS establishment delay calculation for reporting period of April 1, 2012 to March31, 2013

Conifer					
Harvest Start Date	Net Area to be Reforested (NAR)	Cutblock #	TSL	# of days from harvest start through reporting period of March 31, 2013	# days * NAR
2013-02-16	35.4	4250	A89118	44	1557.6
2010-02-18	9.9	1	A63402	1,138	11291.81
2012-11-12	47.8	1	A63422	140	6692
2012-11-12	82.1	2	A63422	140	11494
2012-11-19	20.0	06026	A63436	133	2660
2012-02-01	14.4	04039	A66536	425	6120
2010-01-12	15.8	1	A66547	1,175	18565
2012-01-05	38.9	03059	A76782	452	17582.8
2012-01-06	29.5	03060	A76782	451	13304.5
2011-12-08	31.6	03063	A76783	480	15168
2011-12-09	47.7	03064	A76783	479	22848.3
2012-01-05	118.6	03050	A76784	452	53607.2
2012-02-21	15.7	03051	A76784	405	6358.5
2012-02-10	26.6	03052	A76784	416	11065.6
2007-11-30	38.1	29012	A80054	1,949	74256.9
2011-03-10	78.0	18002	A82094	753	58734
2009-11-16	56.5	04045	A84642	1,232	69608
2012-10-25	90.0	09015	A85800	158	14220
2011-12-28	24.1	18006	A89520	460	11086
2013-01-07	11.8	04249	A89842	84	991.2
2013-01-31	28.0	01279	A89968	60	1680
Totals	860.5	Weighted number of days Weighted number of years		11,026	428891.4 498.4081 1.4
Deciduous		- J C C C			
Harvest Start Date	Net Area to be Reforested (NAR)	Cutblock #	TSL	# of days from harvest start through reporting period of March 31, 2013	# days * NAR
2011-01-10	110.5	01082	A63400	812	89726
2010-11-22	53.4	01084	A63400	861	45977.4
2010-02-18	9.6	01027	A63402	1138	10924.8
2010-02-18	4.4	1	A63402	1138	5007.2
2011-03-07	64.4	01083	A63433	756	48686.4
2012-11-19	36.2	06026	A63436	133	4814.6
2012-02-01	27.3	04039	A66536	425	11602.5
2010-11-10	101.0	1	A66539	873	88173
2010-02-18	123.9	2	A66542	1,138	140998.2
2010-02-10	123.9	1	A66547	1,175	
2010-01-12	11.8	03052	A76784	416	13865
2012-02-10	10.3	03052	7/0/04	410	7696



2007-11-30	14.8	29012	A80054	1,949	28845.2
2011-02-17	78.9	18001	A82094	774	61068.6
2011-03-10	43.5	18002	A82094	753	32755.5
2011-01-03	62.3	18003	A82096	819	51023.7
2011-01-10	42.0	18004	A82096	812	34104
2012-02-03	63.0	05011	A87359	423	26649
2012-02-20	72.6	1	A87359	406	29475.6
2011-12-28	39.4	18006	A89520	460	18124
Totals	977.5			15,261	749516.7
		Weighted number of days			766.769
		Weighted number of years			2.1

Mixedwood

Harvest Start Date	Net Area to be Reforested (NAR)	Cutblock #	TSL	# of days from harvest start through reporting period of March 31, 2013	# days * NAR
2009-11-16	30.6	04045	A84642	1232	37699.2
2012-03-14	15.6	02278	A89117	383	5974.8
2012-03-23	17.1	04062	A89117	374	6395.4
2012-02-04	2.3	04021	A89117	56	128.8
2012-02-02	18.6	43081	A89248	424	7886.4
2013-01-07	9.0	04122	A89842	84	756
2013-01-07	38.0	04249	A89842	84	3192
2010-01-12	21.7	1	A66547	1175	25497.5
Totals	152.9			3812	87530.1
		Weighted number of days Weighted number of			572.4663
		years			1.6

Table 49: Licensee Participants establishment delay calculation for reporting period of April1, 2012 to March 31, 2013

Harvest Start Date	Net Area to be Reforested (NAR)	Block ID	Licence	# of days from harvest start through reporting period of March 31, 2013	# days * NAR
01/19/2013	59.6	04021	A18154	71	4231.6
12/18/2012	5.3	04025	A18154	103	545.9
12/06/2012	5.0	04026	A18154	115	575.0
12/06/2012	5.9	04027	A18154	115	678.5
12/18/2012	8.5	04028	A18154	103	875.5
12/18/2012	5.4	04028	A18154	103	556.2
01/15/2013	3.5	04022	A18154	75	262.5
10/25/2012	85.8	04023	A18154	157	13470.6
10/25/2012	104.7	04023	A18154	157	16437.9
02/01/2012	63.2	04024	A18154	424	26796.8
02/01/2012	10.7	04024	A18154	424	4536.8
02/01/2012	11.4	04024	A18154	424	4833.6
06/22/2012	14.1	02178	A18154	282	3976.2
09/11/2012	45.8	02208	A18154	201	9205.8
11/09/2012	145.8	04108	A18154	142	20703.6
01/20/2011	64.0	S27007	A18154	801	51264.0
01/10/2013	38.7	10020	A18154	80	3096.0
01/10/2013	3.2	10020	A18154	80	256.0
12/20/2012	51.5	10021	A18154	101	5201.5
03/30/2012	89.1	10018	A18154	366	32610.6
03/30/2012	32.1	10018	A18154	366	11748.6
02/01/2012	85.8	10022	A18154	424	36379.2
02/01/2012	49.7	10022	A18154	424	21072.8
02/01/2012	13.0	10022	A18154	424	5512.0
11/20/2012	8.2	10030	A18154	131	1074.2
11/20/2012	7.4	10030	A18154	131	969.4
11/05/2012	89.7	S25018	A18154	146	13096.2
11/05/2012	21.6	S25018	A18154	146	3153.6
02/25/2008	1.3	01063	A18154	1861	2419.3
03/28/2012	125.0	01021	A18154	368	46000.0
08/11/2011	48.5	04224	A18154	598	29003.0
08/06/2011	42.2	04230	A18154	603	25446.6
08/06/2011	15.2	04230	A18154	603	9165.6
03/01/2013	14.4	02296	A18154	30	432.0
03/01/2013	3.8	02296	A18154	30	114.0
12/13/2012	23.2	06020	A18154	108	2505.6
12/26/2012	4.1	06021	A18154	95	389.5
12/26/2012	6.8	06021	A18154	95	646.0
02/11/2013	14.4	06018	A18154	48	691.2
02/01/2013	6.8	06025	A18154	58	394.4





02/01/2013	3.8	06025	A18154	58	220.4
01/25/2011	18.5	S02016	A18154	796	14726.0
10/01/2010	118.0	01031	A18154	912	107616.0
02/21/2011	23.9	02008	A18154	769	18379.1
02/21/2011	7.9	02008	A18154	769	6075.1
02/10/2011	16.1	02010	A18154	780	12558.0
02/10/2011	13.7	02010	A18154	780	10686.0
08/18/2011	28.5	04228	A18154	591	16843.5
08/15/2011	31.1	02060	A18154	594	18473.4
10/13/2011	61.9	01015	A18154	535	33116.5
10/13/2011	12.7	01015	A18154	535	6794.5
08/27/2011	10.0	04225	A18154	582	5820.0
12/05/2011	10.0	02245	A18154	482	4820.0
03/08/2012	12.3	01024	A18154	388	4772.4
01/02/2012	6.0	01201	A18154	454	2724.0
11/26/2011	103.1	S01264	A18154	491	50622.1
12/14/2011	65.5	02081	A18154	473	30981.5
11/15/2012	12.2	02236	A18154	136	1659.2
11/15/2012	4.2	02237	A18154	136	571.2
03/01/2012	99.1	01149	A18154	395	39144.5
11/05/2012	11.2	02126	A18154	146	1635.2
11/05/2012	10.0	02127	A18154	146	1460.0
11/05/2012	69.4	02156	A18154	146	10132.4
01/21/2013	57.6	02294	A18154	69	3974.4
01/21/2013	48.9	02294	A18154	69	3374.1
12/15/2009	62.6	02018	A18154	1202	75245.2
11/17/2010	56.3	S09133	A18154	865	48699.5
08/31/2011	34.1	09019	A18154	578	19709.8
11/30/2011	5.1	09105	A18154	487	2483.7
11/15/2011	64.6	05007	A18154	502	32429.2
12/22/2011	100.6	05009	A18154	465	46779.0
12/22/2011	80.5	05009	A18154	465	37432.5
06/25/2012	149.9	09100	A18154	279	41822.1
06/25/2012	7.1	09100	A18154	279	1980.9
02/01/2013	28.7	09073	A56771	58	1664.6
09/10/2012	90.4	10024	A56771	202	18260.8
09/10/2012	69.0	10024	A56771	202	13938.0
02/25/2013	17.4	10027	A56771	34	591.6
02/20/2013	117.2	10026	A56771	39	4570.8
02/20/2013	22.6	10026	A56771	39	881.4
02/20/2013	14.7	10026	A56771	39	573.3
12/06/2012	101.0	24052	A56771	115	11615.0
11/15/2012	55.5	24056	A56771	136	7548.0
11/12/2012	29.7	24057	A56771	139	4128.3
02/20/2013	20.2	05107	A56771	39	787.8
07/18/2010	59.2	09007	A59959	987	58430.4
07/18/2010	3.0	09007	A59959	987	2961.0

03/02/2012	43.6	01172	A59959		394	171	78.4
02/27/2012	57.1	01005	A59959		398		25.8
02/27/2012	58.9	01005	A59959		398		42.2
03/17/2012	67.3	01003	A59959		379		06.7
03/17/2012	30.5	01003	A59959		379		59.5
03/17/2012	0.4	01287	A59959		379		1.6
03/19/2012	9.8	01288	A59959		377		94.6
01/28/2009	106.2	04054	A59959		523		742.6
02/19/2007	13.4	S09104	A60049		232		08.8
01/21/2010	14.2	09027	A60049		165		43.0
02/08/2010	22.7	S09067	A60049		147		36.9
10/25/2012	112.2	06042	A60049		157		15.4
01/09/2013	28.6	24011	A60972		81	23	16.6
07/02/2010	111.3	02070	A60972		003		633.9
07/02/2010	15.4	02070	A60972		003		46.2
11/13/2012	71.5	02117	A60972		138		67.0
12/15/2012	4.7	02115	A60972		106		8.2
09/28/2009	101.3	02082	A60972	1	280	1296	64.0
09/28/2009	20.7	02082	A60972		280	264	96.0
07/09/2012	59.2	24012	A60972		265	156	88.0
10/24/2012	49.9	24014	A60972		158		34.2
01/31/2008	54.6	S27004	PAG12	1	886	1029	975.6
11/25/2008	8.3	02064	PAG12	1	587	131	72.1
09/21/2011	12.6	02042	PAG12	Į	557	70-	18.2
11/15/2011	19.2	02243	PAG12	Į	502	963	38.4
10/09/2012	7.1	S24094	PAG12		173	122	28.3
08/13/2012	8.6	S24101	PAG12		230	197	78.0
07/23/2012	11.5	02179	PAG12		251		36.5
08/02/2012	16.5	02180	PAG12		241		76.5
08/15/2012	27.9	02198	PAG12		228		61.2
08/15/2012	52.0	02206	PAG12		228		56.0
01/22/2013	52.1	06046	PAG12		68	354	42.8
Totals	4748.7					2090	273.4
	Weighted	number of days					440.2
	Weighted	number of years					1.2
Deciduous	1		1	T	1		1
					# of harves	days from at start	
						h reporting	
Harvest	Net Area to be	Reforested			period	of March	# days *
Start Date	(NAR)		Block ID	Licence	31, 201		NAR
06/22/2012		28.8	02178 S25018	A18154		82	8121.6
11/05/2012		113.7		A18154		46	16600.2
11/05/2012		47.8	S25018	A18154		46	6978.8
12/21/2007		18.6	01055	A18154		927	35842.2
10/11/2011		44.0	01020	A18154	537		23628.0
07/04/2011		43.3	01023	A18154	636		27538.8
02/01/2011		6.7	S02007	A18154		89	5286.3
10/13/2011		16.9	01015	A18154	5	35	9041.5



12/05/2011	33.7	02246	A18154	482	16243.4
12/09/2011	33.0	02240	A18154	478	15774.0
10/09/2012	46.8	02101	A18154	173	8096.4
11/05/2012	44.2	02100	A18154	146	6453.2
11/22/2011	19.1	02130	A18154	495	9454.5
10/30/2011	64.1	S02025	A18154	518	33203.8
				58	
02/01/2013	16.2	09059 25005	A56771	417	939.6
02/08/2012	15.5		A59959		6463.5
11/08/2010	21.2	04036	A60049	874	18528.8
11/07/2007	54.8	S09036	A60049	1971	108010.8
11/07/2007	3.9	S09036	A60049	1971	7686.9
02/02/2007	24.2	S09068	A60049	2249	54425.8
09/20/2007	72.7	S09081	A60049	2019	146781.3
09/20/2007	2.9	S09081	A60049	2019	5855.1
01/21/2010	45.8	09027	A60049	1165	53357.0
02/08/2010	56.8	S09067	A60049	1147	65149.6
01/05/2011	4.3	S09157	A60049	816	3508.8
01/05/2011	1.0	S09159	A60049	816	816.0
01/05/2011	6.2	S09160	A60049	816	5059.2
01/05/2011	4.8	S09161	A60049	816	3916.8
01/05/2011	4.3	S09162	A60049	816	3508.8
01/05/2011	2.7	S09165	A60049	816	2203.2
11/30/2009	76.1	09014	A60049	1217	92613.7
07/01/2011	95.8	09018	A60049	639	61216.2
06/09/2011	54.2	09104	A60049	661	35826.2
10/05/2011	11.2	S09114	A60049	543	6081.6
08/28/2012	25.6	S10012	A60049	215	5504.0
07/25/2011	149.9	S10025	A60049	615	92188.5
07/25/2011	22.0	S10025	A60049	615	13530.0
11/15/2012	42.6	09071	A60049	136	5793.6
12/15/2012	99.4	09072	A60049	106	10536.4
10/25/2012	81.3	06042	A60049	157	12764.1
01/23/2013	3.8	S24139	A60049	67	254.6
01/23/2013	6.5	S24141	A60049	67	435.5
01/23/2013	3.6	S24156	A60049	67	241.2
02/22/2010	86.1	S01071	A60049	1133	97551.3
07/20/2009	333.2	S01277	A60049	1350	449820.0
03/12/2011	8.8	S03042	A60049	750	6600.0
03/06/2011	23.6	S03043	A60049	756	17841.6
02/20/2011	36.2	S03044	A60049	770	27874.0
03/01/2011	11.8	S03045	A60049	761	8979.8
08/31/2011	34.2	S06124	A60049	578	19767.6
10/01/2011	16.3	S06125	A60049	547	8916.1
08/18/2011	25.5	S06141	A60049	591	15070.5
01/22/2013	12.5	04107	A60049	68	850.0
01/25/2011	5.0	S02029	A18154	796	3980.0

02/17/2012	80.4	S01023	A60049	408	32803.2
03/06/2012	13.8	S01049	A60049	390	5382.0
11/05/2011	23.9	S01050	A60049	512	12236.8
10/09/2011	18.7	01105	A60049	539	10079.3
02/13/2012	9.9	01136	A60049	412	4078.8
10/11/2012	18.4	01137	A60049	171	3146.4
02/01/2013	8.6	02240	A60049	58	498.8
03/24/2012	23.6	01150	A60049	372	8779.2
02/15/2013	18.5	05108	A60049	44	814.0
10/25/2012	166.8	04104	A60049	157	26187.6
12/04/2012	162.0	04106	A60049	117	18954.0
12/04/2012	21.5	04106	A60049	117	2515.5
01/25/2013	25.4	04109	A60049	65	1651.0
01/28/2013	33.2	04111	A60049	62	2058.4
11/20/2010	168.5	S43022	A60050	862	145247.0
02/01/2011	83.6	S43025	A60050	789	65960.4
11/08/2010	146.7	S26003	A60050	874	128215.8
01/20/2011	89.4	S26007	A60050	801	71609.4
12/14/2010	100.3	S26012	A60050	838	84051.4
08/01/2011	16.5	S01251	A60050	608	10032.0
08/18/2008	369.6	S01256	A60050	1686	623145.6
07/20/2010	10.1	01074	A60972	985	9948.5
11/25/2010	79.2	02059	A60972	857	67874.4
11/17/2010	32.1	S09133	A18154	865	27766.5
07/24/2012	3.5	24013	A60972	250	875.0
10/12/2007	26.2	02017	PAG12	1997	52321.4
01/25/2011	5.0	S03038	PAG12	796	3980.0
01/20/2011	33.0	S03066	PAG12	801	26433.0
11/05/2007	131.8	S25006	PAG12	1973	260041.4
04/01/2008	31.4	27001	PAG12	1825	57305.0
02/22/2011	16.5	S27002	PAG12	768	12672.0
02/15/2013	8.6	S18013	PAG12	44	378.4
02/15/2013	8.7	S18014	PAG12	44	382.8
10/29/2008	58.4	S25011	PAG12	1614	94257.6
09/27/2011	37.7	02068	PAG12	551	20772.7
11/20/2011	9.0	S29016	PAG12	497	4473.0
11/16/2011	13.2	S29017	PAG12	501	6613.2
02/01/2010	13.3	S29018	PAG12	1154	15348.2
02/01/2010	20.7	S29019	PAG12	1154	23887.8
01/20/2012	9.2	S03110	PAG12	436	4011.2
10/13/2010	1.3	25004	PAG12	900	1170.0
10/10/2010	14.4	S25013	PAG12	903	13003.2
10/13/2010	4.2	S25014	PAG12	900	3780.0
10/13/2010	8.2	S25015	PAG12	900	7380.0
01/18/2010	130.0	S26005	PAG12	1168	151840.0
03/20/2010	31.2	02043	PAG12	1107	34538.4
02/02/2010	53.7	02019	PAG12	1153	61916.1



	78.6	02020	PAG12	1182	92905.2
01/04/2010 02/15/2010	9.0	02020	PAG12	1140	10260.0
02/16/2010	5.5	02038	PAG12	1139	6264.5
01/25/2010	50.8	S02089	PAG12	1161	58978.8
09/10/2010	5.6	S02000	PAG12	933	5224.8
02/03/2010	6.7	S02091	PAG12	1152	7718.4
02/05/2010	2.6	S02092 S02093	PAG12	1150	2990.0
05/07/2011	210.0	18007	PAG12	694	145740.0
11/14/2011	11.9	S29007	PAG12 PAG12	503	5985.7
11/16/2011	4.2	S29007 S29013	PAG12 PAG12	503	2104.2
12/16/2010	4.2 59.5	S02032	PAG12 PAG12	836	49742.0
			PAG12 PAG12		
01/20/2011	51.0	S02033		801 767	40851.0
02/23/2011	36.9	S02035	PAG12		28302.3
08/04/2010	200.7	S02037	PAG12	970	194679.0
01/13/2011	21.9	S02039	PAG12	808	17695.2
10/05/2010	20.5	03069	PAG12	908	18614.0
01/01/2012	23.6	S03023	PAG12	455	10738.0
01/18/2012	56.9	S03024	PAG12	438	24922.2
03/01/2011	13.9	S03025	PAG12	761	10577.9
02/14/2012	11.7	S03026	PAG12	411	4808.7
01/02/2012	9.5	S03028	PAG12	454	4313.0
02/16/2012	7.6	S03027	PAG12	409	3108.4
02/24/2012	8.1	S03030	PAG12	401	3248.1
02/24/2012	8.2	S03040	PAG12	401	3288.2
02/16/2012	1.6	S03046	PAG12	409	654.4
01/03/2011	8.0	S02010	PAG12	818	6544.0
01/03/2011	37.1	S02011	PAG12	818	30347.8
01/22/2011	14.2	S02018	PAG12	799	11345.8
01/20/2011	10.0	02047	PAG12	801	8010.0
09/20/2011	8.3	S02077	PAG12	558	4631.4
09/06/2011	5.3	S02078	PAG12	572	3031.6
09/16/2011	8.4	S02079	PAG12	562	4720.8
08/15/2011	57.7	S29014	PAG12	594	34273.8
09/10/2011	26.4	S29021	PAG12	568	14995.2
12/06/2011	41.6	S02023	PAG12	481	20009.6
04/01/2012	331.9	01100	PAG12	364	120811.6
11/01/2011	22.8	01186	PAG12	516	11764.8
10/22/2012	24.2	01203	PAG12	160	3872.0
11/08/2011	28.2	01205	PAG12	509	14353.8
10/24/2011	54.6	01206	PAG12	524	28610.4
11/15/2012	32.6	01209	PAG12	136	4433.6
10/28/2011	122.9	S26001	PAG12	520	63908.0
12/23/2011	16.2	S26018	PAG12	464	7516.8
12/07/2011	22.6	S26021	PAG12	480	10848.0
01/11/2012	6.3	S26022	PAG12	445	2803.5
12/15/2011	64.4	02160	PAG12	472	30396.8

r				1	
10/25/2012	77.3	02235	PAG12	157	12136.1
11/20/2011	30.4	02103	PAG12	497	15108.8
01/15/2013	25.7	02239	PAG12	75	1927.5
01/11/2012	28.5	26021	PAG12	445	12682.5
01/03/2012	16.2	26022	PAG12	453	7338.6
03/06/2012	11.8	S18015	PAG12	390	4602.0
09/25/2012	7.4	S24095	PAG12	187	1383.8
08/13/2012	76.2	S24101	PAG12	230	17526.0
10/10/2012	12.0	S24103	PAG12	172	2064.0
09/11/2012	14.6	S24104	PAG12	201	2934.6
07/23/2012	27.1	02179	PAG12	251	6802.1
08/02/2012	27.1	02180	PAG12	241	6531.1
08/15/2012	59.4	02198	PAG12	228	13543.2
08/22/2012	23.7	02199	PAG12	221	5237.7
08/15/2012	13.0	02206	PAG12	228	2964.0
09/01/2012	52.8	02207	PAG12	211	11140.8
01/04/2013	3.4	S24105	PAG12	86	292.4
01/04/2013	12.1	S24108	PAG12	86	1040.6
01/04/2013	6.9	S24111	PAG12	86	593.4
01/09/2013	2.3	S24132	PAG12	81	186.3
01/21/2013	11.0	S24133	PAG12	69	759.0
01/21/2013	3.8	S24134	PAG12	69	262.2
01/21/2013	24.9	S24138	PAG12	69	1718.1
02/20/2013	2.6	S24153	PAG12	39	101.4
02/01/2013	6.9	S24155	PAG12	58	400.2
02/02/2013	1.8	S24157	PAG12	57	102.6
02/02/2013	25.5	S24158	PAG12	57	1453.5
03/26/2013	71.1	06088	PAG12	5	355.5
01/10/2013	4.7	S24136	PAG12	80	376.0
01/10/2013	33.5	02290	PAG12	80	2680.0
Totals	7234.1				5276947.8
	Weighted number of days				729.5
	Weighted number of years				2.0
Mixedwood					
				# of days from	
				harvest start	
Hemicet	Net Area to be Deferrented			through reporting	# dava *
Harvest Start Date	Net Area to be Reforested (NAR)	Block ID	Licence	period of March 31, 2013	# days * NAR
08/16/2010	19.8	02086	A18154	958	18968.4
01/03/2011	11.2	09036	A18154	818	9161.6
02/19/2007	7.9	S09104	A60049	2232	17632.8
02/02/2007	42.2	S09068	A60049	2249	94907.8
09/20/2007	23.7	S09081	A60049	2019	47850.3
Totals	104.8	00001	7.00045	2015	188520.9
101010	Weighted number of days				1798.86
	Weighted number of years				4.9
					4.9



Appendix 6: Compliance

Incident ID	Occurrence Date	Tenure	Location	Date Reported	Agency	Status	Issue Description
ITS-FSJ- 2012-0640	July 1, 2010	Block 09007	Fort St. John TSA	Sept 17, 2012	MFLNRO	Open	Potential Impact to Archaeological SiteBlock 09007 was harvested in summer 2010. During road construction in July 2010, a previously unknown archaeological site may have been disturbed. The potential issue was discovered in 2012 when artifacts were found on an in block road by an archaeologist working for an oil and gas company. The

Table 50: Contraventions Reported to Agencies - April 1, 2012- March 31, 2013



							 AIA. An investigative permit has been requested by the consulting archaeologist and to the date of writing this report the field assessment (AIA) has not been completed. MFLNRO has not initiated any compliance or enforcement action other than directing the completion of an AIA.
ITS-FSJ- 2012- 0603,	August 2011	Blocks: 01066. 04049, 04014, 01052, 01066	Fort St. John TSA	Dec 20, 2012	MOE	Closed	Herbicide application outside planned area Herbicide overspray incidents from August 2011 that were discovered during a brushing program block review audit completed in July 2012. These non-compliances were officially reported to the MOE on December. 20, 2012. Minor off target herbicide applications into non treatment zones occurred on 5 bocks. Off target herbicide applications out of the block boundary, into non treatment areas on block 01066 (approx 0.02 ha), block 01066 (approx 0.076 ha) and block 04014 (0.05 ha) and into 6m x 10m area of pesticide free zone on block 04049 and a 0.035 ha area of a PFZ in block 01052 . The MOE has taken no compliance and enforcement action to date. No penalties were issued by MOE.

ITS-FSJ- 2012-070	November 19, 2012	Block 10030	Simpson Road km 9	November 20, 2012	MFLNRO	Closed	Trespass Boundary ribbons in field obscured with snow, darkness and snowfing conditions resulted in buncher operator failing to recognize the block boundary resulting in a trespass outside of the authorized block boundary. The boundary ribbons in the field were GPS'd and mapped, however, approximately 0.2 ha of unathorized harvest occured outside the block . The trespass was reported to MFLNRO on Nov 20, 2012. MFLNRO reviewed the incident area with Canfor. MFLNRO did not issue a compliance notice. To date of preparation of this report MFLNRO has not taken any enforcement or punitive action. No penalties were issued by MFLNRO.
ITS-FSJ- 2012-0835	Nov 5, 2007	A60049 Block S09115	Kobes Crek	Dec 2012	MFLNRO	Closed	Trespass Boundary ribbons in the field were not consistent with the mapped authorized block boundary location, which resulted in the buncher trespassing outside of the authorized block boundary during harvesting of the a small finger of the block in November 2007. The trespass was discovered by Canfor and MFLNRO staff while conducting a brushing inspection in 2012. MFLNRO



ITS-FSJ- 2013-0840	Jan 17, 2013	A60049 Bk 04111	Wonowon	Jan 22, 2013	MFLNRO	Closed	issued a warning ticket. No penalties were issued by MFLNRO. Trespass Two buncher operators received a bush orientation from thier supervisor but one operator made a mistake reading the block map. The operators were to harvest the right of way for the 602 loop road in Block 04106, working in opposite directions. The 602 loop road intersects with the 001 road in authorized block 0411. At the intersection of thre 2 roads one operator began harvesting the 001 road and did not discover his mistake until called by the other buncher operator working the 602 Loop road to inquire about his location. All but 300 m of the 001 road was harvested without an approved site plan. The incident was reported to MFLNRO C&E on Jan 22, 2013. MFLNRO did not issue a compliance notice. To date of preparation of this report MFLNRO has not taken any enforcement or punitive action. No penalties were issued by MFLNRO.
ITS FSJ 2013 0844	Jan 30, 2013	A60049 Bk 04107	Gundy Creek	Feb 5, 2013	MFLNRO	Closed	Trespass Boundary ribbons in the field at the southwest corner of block 04107 (junction of pipeline and west bk boundary) had been removed

							when a new pipeline was constructed. The boundary ribbons were refreshed prior to harvest but the falling corners for the SW boundary were not hung. This inadequate ribboning contributed to the buncer operator not seeing the boundary and harvesting approximately 13 aspen trees (0.024 ha area) outside of the block during low light conditions. The incident was reported to MFLNRO C&E on Feb 5, 2013. MFLNRO did not issue a compliance notice. To date of preparation of this report MFLNRO has not taken any enforcement or punitive action. No penalties were issued by MFLNRO.
ITS-TPL- 2012-0097	2011-09-04	A66555	BR10TDB001 YR3 / A66555	January 2013	Ministry of Environment	Closed	Herbicide application outside planned area During the herbicide treatment efficacy review completed on June 26, 2012 it was noted that an area had been sprayed outside of the prescribed area, but still within the block. The area is approximately 0.2 hectares. No streams or sensitive area were affected. The over spray occurred during the 2011 reporting period and



							was discovered outside of the reporting period. Entry updated in the 2012 annual report.
ITS-TPL- 2013-121	2012-11-29	R17956	Blue Grave Creek	2013-03-26	MFLNRO C&E	Closed	Trespass TSL A76797 and Road permit R17956 issued to Joseph Bergen on December 19, 2012. Licensee was pre-worked January 30, 2013, Licensee started logging February 25, 2013 and logging was complete on March 22, 2013. Licensee was in the office to discuss deactivation and potential summer hauling on March 25, 2013 when the potential noncompliance was discovered. The file was reviewed immediately and it was noted that the licensee had been using an alternate route that was allowed for in the Site Level Plan for R17956, it was also noted that parts of the alternate route required a road permit and one had not been issued for use of the alternate route. After further review it was also noted that the harvest plan maps were laid out so the alternate route was to be used. And a road authorization for the alternate route was applied for on November

	29, 2010 and was approved on January 14, 2011. How ever there was no road permit put in place.
	Contributing Factors -A76797 was put up for sale 4 times in a period of 26 months, the first sale was October 7, 2010, second sale date was December 2, 2010 the third sale date was August 25, 2011 and the forth sale date was November 29, 2012 and Joseph Bergen was the successful bidder. And mistakes from the first sale date may have carried forward.