Annual Report

Sustainable Forest Management Plan

Forest Licence FL A17007 & Pulpwood Agreement 14
Fort Nelson Operations

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Table of Contents

Tables

Figures

Appendices

Executive Summary

Purpose

This report is prepared as part of the annual assessment to confirm Canfor's and BC Timber Sales continued implementation of the CSA SFM standard. This report provides a status from April 1, 2005 to March 31, 2006 of the locally developed measures of the SFMP. The SFM Annual Reporting period has changed from January 1st annually to April 1st to March 31st, annually, with the final report due May 15th. The new reporting period dovetails with MOFR reporting timelines (RESULT). Canfor's Management Information System GENUS will be updated with all information required to be reported to the MOFR, much of which is also required for SFM reporting. Reporting during the logging season would have lead to the problem that accurate block information is not always available and results in inaccurate analysis. Due to the fact that the first annual report has not been completed prior to the CSA-SFM required management review it was agreed to complete a shorter form of management review shortly after the Annual Report due date of May 15th to specifically discuss the SFM performance trends. The SFM Management Review date will from this point forward follow the reporting date of May 15th annually.

In this report, each measure is re-iterated, and a brief status update is provided. For further reference to the intent of the measures, or the practices involved, the reader should refer to Canfor's Sustainable Forest Management Plan for the Fort Nelson DFA (SFMP, March 15, 2005, revised date). Reporting for BC Timber Sales is included in this Annual Report. Where separate reporting is required, BC Timber Sales reporting follows the Canfor discussion section. Jointly reported measures do not distinguish between Canfor and BCTS.

During compilation of the annual report it became obvious, that differences between the baseline data and data used in this report occurred for some measures. Canfor discovered significant differences between the baseline data set (2003 vintage) and the most recent dataset provided by government, used to report out on various measures. The current dataset is much newer and from the time that the baseline information was prepared, there has been approximately 200 map sheets updated with new Vegetation Resource Inventory information (VRI), replacing the older Forest Cover. Some ecological measures show these differences in the data sets, for example presence of shrub and hardwoods,

measure 1-2.1 e and f. Although there are significant differences between the data sets it seems logical to go forward with the new dataset, update the baseline data in the SFM Plan and to revise the target accordingly.

Overview of Achievements Canfor

For the 2005 reporting year 69 % of the 100 locally developed measures have been met, 25% are pending and 6% of the indicator objectives were not met. The overview of achievement of targets in this section captures only Canfor's measures. BC Timber sales status on achievement of targets are captured within each measure, where separate reporting was required. Following is a summary of 2005 measures:

Table 1: Summary of Canfor's 2005 measure status

Measure		Target Met	Target Pending	Target Not Met
1-1.1	Ecosystem Representation	x		
1-1.2	Representation Targets – FSP		x	
1-1.3	Seral Stages			X
	Habitat Elements			
1-2.1a	Dead standing trees	x		
1-2.1b	Stand Level Retention			X
1-2.1c	Coarse Woody Debris	x		
1-2.1d	Riparian areas	x		
1-2.1e	Shrub areas		X	
1-2.1f	Hardwood areas	x		
1-2.1g	Interim – Patch size			X
1-3.1	Vertebrate Species	x		
1-3.2	Vertebrate Species Populations		x	
1-3.3	Management Strategies	x		
1-3.4	Listed Species		x	
1-4.1	Protected Areas	x		
1-4.2	Operations in Parks, reserves and protected areas	x		
1-4.3	Special Sites – Biological Significance		x	
1-4.4	Management Activities Consistent – Muskwa-Kechika	x		
1-4.5	Management Activities Consistent – Legal Objectives	x		
1-5.1	Stream Crossings – Compliance	x		
1-5.2	Stream Crossings – Surveyed WQCR	x		
1-5.3	Stream Crossings – Installed	x		
1-5.4	Stream Crossings – Inspections	x		

Measure		Target Met	Target Pending	Target Not Met
1-5.5	Stream Crossings – Removed	x		
1-6.1	Conifer Seeds – accordance with regulation	x		
1-6.2	Aspen Regeneration – Natural Regeneration	x		
1-6.3	Maintaining Genetic Diversity – Species Diversity	x		
2-1.1	Site Index	x		
2-1.2	Coarse Woody Debris	x		
2-2.1	Forest Converted to Non-Forest Land use	x		
2-2.2	Road/Landing Construction	x		
2-2.3	Long Term Detrimental Soil Disturbance	x		
2-2.4	Landslides	x		
2-3.1	Regeneration Delay	x		
2-3.2	Compliance with Regeneration Standards			X
2-3.3	Compliance with Free Growing			X
2-4.1	Treatment plans for natural disturbance events	x		
2-4.2	Percent of catastrophic natural disturbance events	x		
3-1.1	Carbon stored in trees	x		
3-1.2	Carbon stored in Non Tree Vegetation	x		
3-2.1	Carbon Pool – Forest Products	x		
3-3.1	Carbon Sequestration	x		
4-1.1	Total Value of Timber Harvested	x		
4-1.2	Timber Supply Certainty	x		
4-1.3	Percentage Harvested Area Regenerated to Target Species	x		
4-2.1	Employment in Forestry Sub-sector	x		
4-2.2	Income from Forestry Sub-sector	x		
4-2.3	Indirect/Induced Employment and Income Estimates	x		
4-2.4	Percentage of Dollars Spent			X
4-2.5	Opportunity to Purchase Wood	x		
4-3.1	Fees Paid by Forest Industry	x		
4-3.2	Personal Income Taxes Paid	x		
4-4.1	Opportunities for First Nations	x		
4-5.1	Competitiveness of Delivered Logs Costs		x	
4-5.2	Competitive Primary Milling Facility	x		
4-6.1	Assessment of Damaging Events or Agents	x		
4-6.2	Management Strategies for Damaging Events or Agents		x	
5-1.1	Potential for Marketed Non-Timber Benefits		x	
5-1.2	Number of Jobs in NTF Sector		x	
5-1.3	Income from Jobs in NTF Sector		x	
6-1.1	Employment by Sector – Local Economy	x		
6-1.2	Income by Sector – Local Economy	x		

Measure		Target Met	Target Pending	Target Not Met
7-1.1	Stakeholder Analysis	x		
7-1.2	Communication / Participation Plan		x	
7-1.3	Effective Public Advisory Group	x		
7-1.4	Equitable and Inclusive Deliberation Process	x		
7-1.5	Open and Transparent Reciprocal Exchange of Social Values / Opinions		x	
7-1.6	Endorsed SFM Plan	x		
7-2.1	Effective Communication with the Public of Information	x		
7-2.2	Reciprocal Knowledge Exchange		x	
7-3.1	Adaptive Management Strategy		x	
7-3.2	Monitoring Plan for Indicators	x		
7-3.3	Forecasting Plans for Indicators	x		
7-3.4	Information Management System	x		
7-3.5	Reporting and Analysis	x		
8-1.1	Percentage of Resolved Disputes	x		
8-1.2	Dispute Resolution Mechanism		x	
8-2.1	Participation in Implementation of Treaty & Use Rights Strategies		x	
8-2.2	Access to Resources for First Nations	x		
8-2.3	Satisfaction with Access to Resources for First Nations		x	
8-3.1	Reciprocal Knowledge Exchange with First Nations		x	
8-3.2	Consideration and Accommodation of Known First Nations Cultural Issues	x		
8-3.3	Consideration and Accommodation of First Nations Rights and Interests of Non-Timber Forest Products		x	
8-4.1	Baseline Cultural Uses of Local Forest Resources		x	
8-4.2	Logging Details Accessibility to First Nations	x		
8-4.3	Meaningful First Nations Participation		x	
8-4.4	Comprehension of Management Plans		x	
9-1.1	Area and Percentage of Forests Managed for Recreation Activities	x		
9-1.2	Number of Recreation Sites/Facilities	x		
9-1.3	Access Routes, Appropriate For Recreational Use	x		
9-1.4	Recreation Opportunities Maintained	x		

Measure		Target Met	Target Pending	Target Not Met
9-2.1	Compliance with Visual Quality Objectives	x		
9-2.2	Compliance with LRMP Comment Concerning Visuals	x		
9-3.1	Identification and tracking of existing – Unique or Significant Places and Features and Protected Areas	X		
9-3.2	Track – newly discovered - Unique or Significant Places and Features and Protected Areas		x	
9-3.3	Degree of Protection Described		x	
9-4.1	Safety Incidences	x		
9-4.2	Observance of Recognized Safety Standards		x	
9-4.3	Written Safety Policies – Implemented & Effective	x		
9-4.4	Safety Occurrence Summary	x		

Overview of Achievements BC Timber Sales

The following table reports the status of measures that require separate reporting by BC Timber Sales. The highlighted measures report BC Timber Sales achievement of targets and the non-highlighted measures are shared measures (Canfor and BCTS) and are reported as per Table 1. For the 2005 reporting year, 70% of the 100 locally developed measures have been met, 28% are pending, and 2% of the indicator objectives were not met.

Table 2: Summary of BC Timber Sales 2005 measure status

Measure		Target Met	Target Pending	Target Not Met
1-1.1	Ecosystem Representation	x		
1-1.2	Representation Targets – FSP		x	
1-1.3	Seral Stages	x		
	Habitat Elements			
1-2.1a	Dead standing tress	x		
1-2.1b	Stand Level Retention	x		
1-2.1c	Coarse Woody Debris	x		
1-2.1d	Riparian areas	x		
1-2.1e	Shrub areas		X	

Measure		Target Met	Target Pending	Target Not Met
1-2.1f	Hardwood areas	x		
1-2.1g	Interim – Patch size			X
1-3.1	Vertebrate Species	x		
1-3.2	Vertebrate Species Populations		x	
1-3.3	Management Strategies	x		
1-3.4	Listed Species		x	
1-4.1	Protected Areas	x		
1-4.2	Operations in Parks, reserves and protected areas	x		
1-4.3	Special Sites – Biological Significance		x	
1-4.4	Management Activities Consistent – Muskwa-Kechika	x		
1-4.5	Management Activities Consistent – Legal Objectives		x	
1-5.1	Stream Crossings – Compliance	x		
1-5.2	Stream Crossings – Surveyed WQCR	x		
1-5.3	Stream Crossings – Installed	x		
1-5.4	Stream Crossings – Inspections	x		
1-5.5	Stream Crossings – Removed	x		
1-6.1	Conifer Seeds – accordance with regulation	x		
1-6.2	Aspen Regeneration – Natural Regeneration	x		
1-6.3	Maintaining Genetic Diversity – Species Diversity	x		
2-1.1	Site Index	x		
2-1.2	Coarse Woody Debris	x		
2-2.1	Forest Converted to Non-Forest Land use	x		
2-2.2	Road/Landing Construction	x		
2-2.3	Long Term Detrimental Soil Disturbance	x		
2-2.4	Landslides	x		
2-3.1	Regeneration Delay	x		
2-3.2	Compliance with Regeneration Standards			x
2-3.3	Compliance with Free Growing	x		
2-4.1	Treatment plans for natural disturbance events		x	
2-4.2	Percent of catastrophic natural disturbance events	x		
3-1.1	Carbon stored in trees	x		
3-1.2	Carbon stored in Non Tree Vegetation	x		
3-2.1	Carbon Pool – Forest Products	x		
3-3.1	Carbon Sequestration	x		
4-1.1	Total Value of Timber Harvested	x		
4-1.2	Timber Supply Certainty	x		
4-1.3	Percentage Harvested Area Regenerated to Target Species	x		
4-2.1	Employment in Forestry Sub-sector	x		

Measure		Target Met	Target Pending	Target Not Met
4-2.2	Income from Forestry Sub-sector	x		
4-2.3	Indirect/Induced Employment and Income Estimates	x		
4-2.4	Percentage of Dollars Spent	x		
4-2.5	Opportunity to Purchase Wood	x		
4-3.1	Fees Paid by Forest Industry	x		
4-3.2	Personal Income Taxes Paid	x		
4-4.1	Opportunities for First Nations	x		
4-5.1	Competitiveness of Delivered Logs Costs		x	
4-5.2	Competitive Primary Milling Facility	x		
4-6.1	Assessment of Damaging Events or Agents	x		
4-6.2	Management Strategies for Damaging Events or Agents		x	
5-1.1	Potential for Marketed Non-Timber Benefits		x	
5-1.2	Number of Jobs in NTF Sector		x	
5-1.3	Income from Jobs in NTF Sector		x	
6-1.1	Employment by Sector – Local Economy	x		
6-1.2	Income by Sector – Local Economy	x		
7-1.1	Stakeholder Analysis	x		
7-1.2	Communication / Participation Plan		x	
7-1.3	Effective Public Advisory Group	x		
7-1.4	Equitable and Inclusive Deliberation Process	x		
7-1.5	Open and Transparent Reciprocal Exchange of Social Values / Opinions		x	
7-1.6	Endorsed SFM Plan	x		
7-2.1	Effective Communication with the Public of Information	x		
7-2.2	Reciprocal Knowledge Exchange		x	
7-3.1	Adaptive Management Strategy		x	
7-3.2	Monitoring Plan for Indicators	x		
7-3.3	Forecasting Plans for Indicators	x		
7-3.4	Information Management System	x		
7-3.5	Reporting and Analysis	x		
8-1.1	Percentage of Resolved Disputes	x		
8-1.2	Dispute Resolution Mechanism		x	
8-2.1	Participation in Implementation of Treaty & Use Rights Strategies		x	
8-2.2	Access to Resources for First Nations	x		
8-2.3	Satisfaction with Access to Resources for First Nations		x	
8-3.1	Reciprocal Knowledge Exchange with First		x	

Measure		Target Met	Target Pending	Target Not Met
	Nations			
8-3.2	Consideration and Accommodation of Known First Nations Cultural Issues	x		
8-3.3	Consideration and Accommodation of First Nations Rights and Interests of Non-Timber Forest Products		x	
8-4.1	Baseline Cultural Uses of Local Forest Resources		x	
8-4.2	Logging Details Accessibility to First Nations	x		
8-4.3	Meaningful First Nations Participation		x	
8-4.4	Comprehension of Management Plans		x	
9-1.1	Area and Percentage of Forests Managed for Recreation Activities	x		
9-1.2	Number of Recreation Sites/Facilities	x		
9-1.3	Access Routes, Appropriate For Recreational Use	x		
9-1.4	Recreation Opportunities Maintained	x		
9-2.1	Compliance with Visual Quality Objectives	x		
9-2.2	Compliance with LRMP Comment Concerning Visuals	x		
9-3.1	Identification and tracking of existing – Unique or Significant Places and Features and Protected Areas	x		
9-3.2	Track – newly discovered - Unique or Significant Places and Features and Protected Areas		x	
9-3.3	Degree of Protection Described		x	
9-4.1	Safety Incidences	x		
9-4.2	Observance of Recognized Safety Standards		x	
9-4.3	Written Safety Policies – Implemented & Effective	x		
9-4.4	Safety Occurrence Summary	x		

Continuous Improvement

To facilitate reporting and continuous improvement of the measures and targets in the SFM Plan, and to ensure that data is collected in a timely and orderly fashion, each measure will be recorded and tracked. This will occur either in Canfor's 'GENUS Environment' module or in a separate database specific to the measure. GENUS acts like a warehouse for all SFM tasks, tracking responsibilities, due dates, and progress comments.

1-1.1 - Ecosystem Representation

Measure

A representation analysis exists that describes the number, size and type of distinct habitat types in both the THLB and NHLB and recommends proportion of area that should be represented in an unmanaged state.

Statement

Maintaining representation of the full range of distinct habitat types across the land base is a critical component of managing to sustain biological diversity. An ecosystem representation analysis (ERA) is necessary first to establish the number and area of ecosystem types within a given area (and thus determine which types are common and which are rare), and second to identify which ecosystem types are poorly represented in the NHLB.

Target

1 (0)

Data

An Ecosystem Representation Analysis exists?
Yes

Target Met		
Yes ✓	No	Pending

Discussion

An Ecosystem Representation Analysis for the Fort Nelson DFA was completed March 31, 2005 by Forest Ecosystem Solutions Ltd. The analysis showed that the Fort Nelson Timber Supply Area consists of 55% inoperable area and 21% in the Timber Harvest Land Base. The high proportion of 73% Non-Harvestable Land Base (NHLB) provides reasonably high representation in all ecosystem groups if the NHLB is contiguous. Targets need to be set for judging the adequacy of representation by each of the 22 ecosystem units. Following targets for this measure were proposed by experts: If the representation of an ecosystem group is > 30% within the Non-Harvestable Land Base (NHLB) no management strategy is required as the risk to biological conservation is low. If the representation of an ecosystem group is < 30% within the NHLB, a management strategy for that ecosystem group is required. Following steps are to be taken to address underrepresented ecosystem group:-Mapping of underrepresented ecosystems-Field check if block overlap exists.-Wildlife Tree Patch (WTP) will be increased to >/ 15 % for the block targeting the underrepresented ecosystem; As of March 31, 2006 the PAG has not officially agreed on the proposed target. The Public Advisory Group (PAG) indicated that discussion of any potential issues of underrepresented ecosystem groups and decision on the target will be reached once a map showing the Ecosystem groups in the NHLB below the target threshold of 30% including a tabular overview will be presented to the PAG.

1-1.2 - Representation Targets - FSP

Measure

Forest Stewardship Plan consistency with agreed upon representation targets.

Statement

Ecosystem representation ensures FSP compliance regarding ecosystem representation in the non-harvested land base.

Target

100% (0)

Data

# recommendations being followed	% recommendations for an unmanaged state followed
0	0

Target Met		
Yes	No	Pending ✓

Discussion

The Public Advisory Group has not agreed on a representation target within the reporting period and is waiting on a map showing the underrepresented ecosystem groups prior to reaching consensus. The FSP has not been approved to date. Once the map, showing the underrepresented ecosystem group, is available, declared FSP blocks will be compared against. A Standard Operating Procedure (SOP) will be developed for blocks that fall within the underrepresented ecosystem groups to provide guidance on how to implement the management strategies identified for underrepresented ecosystem groups.

1-1.3 - Seral Stages

Measure

Interim Measure: Percent area by old and mature+old seral stage by Landscape Unit and BEC variant for crown forest land base (CFLB) affected by forest management operations.

Statement

This is a 'state of the forest' indicator and portrays the percentage of the landscape that is represented by the older age classes.

Target

Targets as per Provincial Non-Spatial Old Growth Order (NSOGO) and Landscape Unit Planning Guide (LUPG)

Data

Table 3: Seral Stage Distribution in the Fort Nelson DFA

	NHLB vs THLB Comparison		Mature + Old	Old	Total (Ha)
	NHLB (Ha)	THLB (Ha)	Current (Ha)	Current (Ha)	
Total	**6572112**	**1211794**	**2274033**	**863507**	**7783904**

Table 4: Summary of seral stage distribution for mature+old and old

	Mature + Old Summary			Old Summary			Drawn Down Old Summary		
	Count of Target Met	Count of BEO/BEC	% Target Met	Count of Target Met	Count of BEO/BEC	% Target Met	Count of Target Met	Count of BEO/BEC	% Target Met
BWBS dk 1	11	12	91.67%	11	12	91.67%	22	24	91.67%
BWBS dk 2	28	38	73.68%	28	38	73.68%	62	76	81.58%
BWBS mw 2	105	126	83.33%	65	126	51.59%	160	252	63.49%
BWBS wk 2	0	2	0.00%	0	2	0.00%	0	4	0.00%
BWBS wk 3	23	39	58.97%	7	39	17.95%	18	78	23.08%
SWB mk	47	47	100.00%	0	47	0.00%	2	94	2.13%
SWB mks	34	34	100.00%	0	34	0.00%	0	68	0.00%

Target Met		
Yes	No ✓	Pending

Discussion

The purpose of this measure is to identify the amount of old forest that will be maintained to address biodiversity values across the DFA. Maintaining the full range of seral stages across the landscape sustains the multitude of species associated with different forest ages and structural stages.

In order to contribute to the conservation of biodiversity, Canfor/BCTS must maintain old forest by biogeoclimatic (BEC) variant within each landscape unit (LU) according to the targets identified in the LUPG and NSOGO.

The summary of meeting the targets for Mature + Old and Old seral stages is presented in Table 4 and the detailed analysis in Appendix 1.

A high percentage of the target was met for both: Mature + Old and Old seral stage for LU/BEC combination represented by ***BWBS dk1*** and ***BWBS dk 2.***

A high percentage of the target was met for Mature + Old, but only half the target has been met for Old seral stages for LU/BEC combination ***BWBS mw2***.

For LU/BEC combination represented by ***BWBS wk2*** zero percent of the target was met for Mature + Old, as well for Old seral stage.

For the LU/BEC combination represented by ***BWBS wk3*** the target for Mature + Old seral stage has been met more than half, and only a quarter of the target was met for Old seral stage.

The target was met for LU/BEC combination represented by ***SWB mk*** and ***SWmks*** for Mature + Old, and not met for Old seral stage.

Potential reasons for measures not meeting the retention targets of old forest is a) insufficient amount of old forest due to natural disturbance, or b) forest health or catastrophic events c) harvesting activities or d) a combination of the above.

The results are higher for meeting targets for Old + Mature seral stage and indicate, that we have generally a bigger pool of mature forest available in the DFA that will eventually grow into Old seral stages. Harvesting activities, including harvesting activities for this reporting period, have historically been restricted to the biogeoclimatic variant BWBS mw2, which represents the majority of the DFA. The results show that a high amount of Mature + Old seral stage is available within BWBSmw2, compared to just Old seral stages. This implies that a lot of mature forest is available that will provide a pool of forest to grow into the Old seral stage, with the potential to meet the target in the future.

The need for recruitment strategies has been identified in Canfor's proposed Forest Stewardship Plan (which is currently pending upon MOFR approval) for areas where a shortfall exists to ensure progression towards meeting the target in the future.

The management strategy in the proposed FSP is, that for biogeoclimatic variants, that are deficient in old forest, no new cutting permits that contain more than 1% old forest will be applied for until the BEC variant within the Landscape Unit is not in a deficient status anymore and the balance of the old forest target percentage will be made up of recruitment stands of younger forest.

BCTS has not yet submitted a FSP, but the FSP will include a strategy similar to Canfor's strategy explained above. BCTS will maintain at least the minimum percent of old seral forest within a BEC zone of a landscape unit, as set out in the Order and where a particular landscape until is deficient in old seral forest, BCTS will not plan for new Timber Sales Licenses within that BEC zone. The target submission date for the BCTS FSP is September 2006.

Potential reduction of old forest retention targets in low biodiversity emphasis areas is shown in the 'drawn down' column in the 'Old' section. The 'drawn down

target' for old forest retention, which is a reduction by up to 2/3 in the landscape units with low biodiversity emphasis to the extent necessary to address timber supply impacts is shown for information purposes only.

Baseline data (2003 vintage) analyzed in 2004 indicated 139 (55%) of the 251 LU-BEC combinations met the old forest target. The current (2006 vintage) forest cover data set indicates a total of 298 LU-BEC combinations. This improved dataset captures the impact of natural disturbance and reveals that 111 (37.24%) LU-BEC combinations meet the old forest target. Of the active operating areas in the DFA (BWBS mw2) 51.6% of the BEC-LU combinations meet the old forest target. This reveals the significant impact of natural disturbance on old forest target achievement.

1-2.1 a) - Dead Standing

Measure

Dead standing trees on harvested areas in the THLB

Statement

Snags and coarse woody debris (CWD) have been identified as one of the key elements to maintain in forested landscapes in order to conserve biodiversity (Bunnell et al. 1999). Together with coarse woody debris, deciduous trees, riparian, seral/structural stages, and landscape pattern indices, snags are considered 'medium filter' measures under Canfor's SFM Criteria 1, Indicator 2, and are intended to capture habitat requirements of many species.

Target

Average of >= 7 snags and/or live trees/ha where prescribed after harvesting in THLB. (-2)

Data

Table 5: Canfor Dead Standing Trees on harvested areas

	CP/TSL	Block	Operating area	Net area [ha]	SU area Ret. Presc./ [x=sample area].	Total Stub count	Total Mature tree count	Net snag area (excl. roads, PA)	Average # of stubs/ha	Average # of trees/ha	Average # of total snags/trees /ha where prescribed
1	A70423	P5842	Tsoo	47.0	47.0	122	0	30.2	4.0	0	4.0
2	A70451	P2223	Kiwigana	82.0	82.0	273	0	65.1	4.2	0	4.2
3	A65226	P3320	Raspberry	32.8	32.8	190	0	25.05	7.5	0	7.5

4	A65226	P3319	Raspberry	20.5	20.5	87	0	13.0	6.7	0	6.7
5		P895	Raspberry	114.7	114.7	485	211	91.2	5.3	2.3	7.6
6	A69684	P128	North Dunedin	139.5	139.5	325	355	109.5	3.0	3.2	6.4
7	A69690	P6937A	Parker	121.5	121.5	509	0	91.5	5.6	0	5.6
8	453	2603	Irene	187.7	109.8 (x)	533	0	67.55	7.9	0	7.9
9	454	2614	Irene	91.1	78.7 (x)	698		46.6	15	0	15
10	457	31A	Irene	66.0	48.8	258	0	34.9	7.4	0	7.4
11	457	31	Irene	78.3	24.4	78	0	9.56	8.2	0	8.2
12	501	843	Capot-Blanc	234.8	234.8	0	108	67.2	0	1.6	1.6
13	497	848	Zus	55.9	55.9	214	0	39.4	0	5.4	5.4
14	425	2219	Kiwigana	69.5	69.5	213	0	53.5	4.0	0	4.0
15	425	2220	Kiwigana	116.4	116.4	488	0	74.9	6.5	0	6.5
										Total avg.	**6.5**

Combined reporting for both snags and live/mature trees were reported in the stub area.

Table 6: BCTS Dead Standing Trees on harvested areas

TSL	Block	Operating Area	Net Area (ha)	SU Area Retention Prescribed	Net SU area retention prescribed	Total Stub count	Total Mature tree count	Average # stubs/ha	Average # mature trees/ha	Average Total stubs/mat trees/ha
58702		Poplar Hills	27.6	27.6	19.8	150	18	7.6	0.9	8.5
78136		Raspberry	87.1	42	32.7	109	41	3.3	1.3	4.6
78137		Raspberry	65.7	65.7	45.8	47	183	1.0	4.0	5.0
78138		Raspberry	39.4	39.4	20.4	52	70	2.5	3.4	6.0
78147		Raspberry	86.1	61.9	33.9	51	180	1.5	5.3	6.8
66622	2	Stanolind	48.9	48.9	34.3	98	32	2.9	0.9	3.8
66622	1	Stanolind	34.4	24.7	18	89	14	4.9	0.8	5.7
66582		Raspberry	50.8	50.8	34.9	97	32	2.8	0.9	3.7
66583		Raspberry	48.8	48.8	36.8	73	73	2.0	2.0	4.0
66626		Patry Lake	61.4	61.4	39.8	138	36	3.5	0.9	4.4
66629	2	Patry Lake	25.1	25.1	19.7	51	20	2.6	1.0	3.6
66629	3	Patry Lake	12.6	12.6	6.7	34	12	5.1	1.8	6.9
66629	4	Patry Lake	14.3	14.3	11.47	64	14	5.6	1.2	6.8
66643		Capot Blanc	26.6	26.6	15.9	28	39	1.8	2.5	4.2
58699		Kiwigana	215.9	215.9	152.1	330	0	2.2	0.0	2.2
36093		Goguka	54.5	54.5	37.5	143	0	3.8	0.0	3.8
78380		Capot Blanc	12.3	12.3	8.6	18	14	2.1	1.6	3.7
									Total ave	**4.9**

Target Met		
Yes ✓	No	Pending

Discussion

During the harvesting season 2005/2006 Canfor prescribed snag retention in the Site Plan on a total of 15 blocks. Average snag retention by block is listed in Table 5. Snag retention has either been prescribed for the entire block or on separate Standard Units (SU's). Parameters around snag retention are laid out in

the Snag Retention SOP, which has been implemented in late fall of 2005. The Snag retention SOP allows for an acceptable variance of snags retained over 3 harvesting seasons to provide the operation with the possibility to adjust practices as needed to fully meet the measure's target.

The target for this measure was met with a total average of 7 (6.5) snags/ha where prescribed. Considering, that block 2614 actually overachieved with an average of 15 snags per hectare, the exclusion of this particular block would still provide an average of 6 snags per hectare, thus meeting the target as per variance identified in the Snag Retention SOP and the SFM Plan target of '7', considering the variance of (-2).

The snag retention on reported blocks included both, stubs only, as well as a combination of stubs and live, mature trees.
In order to meet safety requirements, snags were stubbed between heights of 3 to 5 meters. Some of the selection parameters for snag retention are dead or dying trees off all species, preferable with existing cavity nests and a minimum diameter of 17.5 cm at breast height. Retention of some dispersed full height live trees has been implemented on most blocks to supplement snag recruitment and to provide for vertical structure.

Even distribution of snags was not a requirement, and therefore clumps of snags can be found in some areas, often concentrated closer towards the block boundaries or Wildlife tree patches.

Dead standing trees were not required to be retained on areas/cut blocks with steep slopes; blocks with narrow boundaries, blocks with more than 10% of the gross area designated as Wildlife tree patch; in salvage areas where worker safety is a potential concern; in stands with an average diameter less than 17.5 cm at breast height, within roadside processing areas, in conifer leading blocks (over 80% conifer) due to the necessity for stand re-entry and potential stand treatments.

A Snag and Coarse woody debris project is impending to identify baseline data on snag and CWD loading on pre-harvest areas, post harvest areas. The project will provide intelligent recommendations, regarding a target for snags/live trees and CWD that is achievable at low cost and provides some benefit to biodiversity.
Once the project deliverables are available the current targets and thresholds identified should be discussed and reviewed.

BCTS has provided the following to report on this measure:

During the harvesting season (2005/2006) 17 out of 18 blocks had snag retention prescribed in the Site Plan. Snag retention has either been prescribed for the entire block or on separate Standard Units (SU's) as shown in Table 6.

Parameters around snag retention are laid out in the Snag Retention SOP, which was implemented in the late fall of 2005. The Snag retention SOP allows for an acceptable variance of snags retained over 3 harvesting seasons (2005/06 = 1 snag/ha, 2006/07 = 4 snags/ha, and 2007/08 = 7 snags/ha) to provide the operation with the possibility to adjust practices as needed to fully meet the measure's target.

The target for this measure with the permitted variance was met with a total average of 5 snags/ha where prescribed.

1-2.1 b) - Stand Level Retention

Measure

Stand level retention by Landscape Unit and BEC variant

Statement

Abundance, Distribution and characteristics of important habitat elements, including Wildlife Tree Patches, is essential to assess the long-term effects of forest management strategies on Forest –dwelling vertebrate species.

Target

LUPG targets as developed locally

Data

Table 7 :Stand Level Retention for all Canfor cutblocks harvested between April 1/05 and March 31/06

Landscape Unit		Biogeo	Harvested Area (ha)	WTP Area (ha)	Retention (%)	Target Retention (%)
11	Elleh	BWBSmw	77.9	3.4	4.2	5.0
16	Kiwigana	BWBSmw	456.8	30.2	6.2	4.0
19	Capot_Blanc	BWBSmw	359.7	12.1	3.3	4.0
21	Etane	BWBSmw	185.9	12.7	6.4	5.0
22	Stanolind	BWBSmw	509.9	46.9	8.4	7.0
23	Pouce	BWBSmw	674.7	42.6	5.9	6.0
34	Kledo	BWBSmw	175.1	6.3	3.5	3.0
65	Liard_River_C	BWBSmw	745.4	79.5	9.6	7.0

66	Fort_Nelson_River_B	BWBSmw	8.4	1.0	11.0	10.0
68	Muskwa_River_B	BWBSmw	12.8	6.9	34.9	11.0
36E	Irene_E	BWBSmw	113.4	2.6	2.3	2.0
36W	Irene_W	BWBSmw	781.1	25.6	3.2	2.0
			4,101.1	**269.8**		

Table 8: BCTS Retention

TSL	Blk	Location	Gross Area	Net Area	WTP Int (ha)	Ext (ha)	total (ha)	LU	Retention %	Target %
A66589	1	Poplar Hills	30.3	28	1.6	0	1.6	23	5.7	1
A58702	1	Poplar Hills	31.8	28.6	1.4	0.6	2	23	7.0	1
A78136	1	Raspberry Creek	103.1	80.8	15.1	0	15.1	23	18.7	1
A78137	1	Raspberry Creek	78.4	66	9	0	9	23	13.6	1
A78138	1	Raspberry Creek	63.2	39.3	8.3	0.5	8.8	23	22.4	1
A78147	1	Raspberry Creek	151.2	86.2	7.8	13	20.8	23	24.1	1
A66566	1	Apache Creek	54.1	44	10.4	0	10.4	12	23.6	3
A66622	2	Stanolind Creek	87.1	76	9.5	0	9.5	22	12.5	7
A66582	1	Raspberry Creek	55.2	51.1	3.1	0.3	3.4	23	6.7	1
A66583	1	Raspberry Creek	54.5	47.4	3.5	0	3.5	23	7.4	1
A66626	1	Liard	68.7	61.8	3.1	3.5	6.6	20	10.7	6
A66629	3	Liard	61.4	52	3.6	0.5	4.1	20	7.9	6
A66643	1	Capot Blanc	31.1	26.6	0	3.6	3.6	19	13.5	4
A58699	1	Kiwigana Creek	298.8	216	24.4	55.6	80	16	37.0	4
A36093	1	Goguka Creek	57.4	53.9	1.4	1.5	2.9	14	5.4	2
A78380	1	Patry Lake	38.5	38.5	1.7	0	1.7	19	4.4	4

Target Met		
Yes	No ✓	Pending

Discussion

The current practice is to follow the LUPG targets for wildlife tree patch retention. All Canfor cutblocks under Licence FL 17007 and PA 14 harvested between April 1, 2005 and March 31, 2006 and the respective target retention as per LUPG are listed in Table 7. The table shows, that retention of Wildlife tree patches have been underachieved in the Elleh, Capot Blanc and Pouce Landscape Units. Within these three LU's, the retention targets are only underachieved by a range of 0.1 to 0.8 percent. Overall, 4, 101.1 hectares have been harvested within the reporting period and 6.6 %, or 269.8 hectares, of the harvest area has been retained as Wildlife Tree Patches (WTP's).Canfor will consider the underachieved targets in the respective landscape units during upcoming layout to increase the trend towards meeting the target.

Although 75% of the LUPG targets have been met and the remaining retention targets within three LU's are within a close range the measure has technically not been met.

BCTS has following to report:

LUPG targets are summarized in the SFM Plan in Table 17.

Table 8 summarizes blocks harvested in the 2005/2006 reporting period. All blocks are within the BWBSmw2 biogeoclimatic zone. Blocks have higher retention than prescribed by the LUPG as smaller blocks had internal WTP's prescribed that would not be viable if created as small as the percentage required. Larger blocks have larger WTP's to address block specific biodiversity characteristics. Blocks that exceed the LU target also had features such as sticknests that required additional protection (A66643). A66566 is a spruce shelterwood block so wind buffers were required to protect the retained spruce resulting in a higher retention percentage. A78136, A78136, A78138, and A78147 are essentially one opening and have higher retention percentages to create connectivity and more viable WTP's. A58699 has higher retention due to concerns raised by the local trapper in that area. The block was designed to retain more corridors and larger WTP's to accommodate the trappers concerns.

1-2.1 c) - Coarse Woody Debris

Measure

Coarse woody debris on harvested areas in the THLB

Statement

The Sustainable Forest Management Plan (SFMP) requires Canfor and BCTS to report on levels of Coarse Woody Debris (CWD) within the operating area to maintain key habitat elements and landscape structure.

Target

Coarse woody debris: Interim -> 4 logs (2m or greater length; 7.5 cm or greater top diameter)/ha after harvesting (0)

Data

Table 9: Canfor CWD volumes based on Waste and Residue surveys

2005-2006 Waste		
CP/TSL	**Blk**	**Dispersed**
		[m3/ha]
123	5827	2.5
123	5831	2.2
124	5048	3.4
195	2904	1.5
195	2096	1.4
197	2095	1
357	1831	1.6
357	1803	1.3
425	2220	1.2
425	2219	0.9
448	2512	2.1
450	2598	2
451	2602	1.6
453	2603	1.3
454	2614	2
457	31	1.4
457	31A	1.2
458	5838	2.7
497	848	2.6
501	843	4
503	844	2.9
A62090	P2463	2
A65226	P3320	2.5
A65226	P3319	2.4
A65230	P3317	2.9
A65237	P104	2.8
A67177	P5915	2.8
A67177	P5914	2.3
A67177	P5913	2.6
A67177	P5917	2.5
A67177	P1673	2
A67208	P919	1.6
A67208	P918	1.6
A67208	P917	2.3
A67214	P6096	2.6

2005-2006 Waste		
CP/TSL	**Blk**	**Dispersed**
A69684	P128	2.4
A69690	P6937A	2.2
A70422	P6091	1.9
A70422	P6092	2.6
A70422	P6090	2
A70422	P6088	2.2
A70422	P6087	2
A70422	P6086	2
A70423	P5842	1.7
A70451	P2223	2.1
A70453	P895	1.4
A74692	P2009	1.7
		97.9
Total average m3/ha:		**2.08**

Table 10: BCTS CWD volumes based on Waste and Residue surveys

TSL and block number	Geographic Area	Net Area Reforested (ha)	CWD m3 per hectare	CWD m3 total for the block
A66566	Apache	42.2	15.0	633.0
A66643	Capot-blanc	26.6	6.5	172.9
A78380	Capot-blanc	12.3	5.5	62.2
A36093	Goguka	54.5	5.0	269.0
A58699	Kiwigana	215.9	8.5	1835.2
A66629 blocks 2,3,4	Liard	52	7.0	364.0
A66626	Liard	61.4	7.5	460.5
A58702	Poplar Hills	27.6	12.7	350.5
A66588	Poplar Hills	22.4	9.0	207.9
A78136	Raspberry	87.1	5.5	444.9
A78137	Raspberry	65.7	7.0	459.9
A78138	Raspberry	39.4	6.5	257.4
A78147	Raspberry	86.1	7.5	640.5
A66582	Raspberry	50.8	6.5	335.4
A66583	Raspberry	48.8	6.0	292.6
A66622 blocks 1,2,3	Stanolind	83.3	7.0	536.9

Target Met		
Yes ✓	No	Pending

Discussion

The target for Canfor has been met as an average of 2.08 m3/ha of Coarse Woody Debris (CWD) has been maintained.

In order to compare the volume of 2.08 m3 to the number of logs as defined in the target, following conversion has been done. A log, of 2 m length with 7.5 cm top and butt converts to 0.01 m3. Four logs of this size would amount to only 0.04 m3 per hectare and represent the minimum target. The CWD amount reported this year exceeds the target by 52 times, or is equivalent to 208 logs of the size indicated in the target.

For this reporting period the Waste and Residue survey data were used as a surrogate to derive Coarse Woody Debris estimates. The data reported reflect only the dispersed areas. Therefore, processing and road side areas are not included as high accumulations in those areas are not reflective of the entire block. Table 9 shows that as an average over all 47 harvesting blocks 2.08 m3/hectare were left, which shows that the target is exceeded by far.

Since Canfor and BCTS did not have actual data available to support an initial target, the decision was made to set the initial target as per the current FRPA Forest Planning and Practices Regulation default requirements until actual baseline data becomes available. The Public Advisory Group had several discussions in the past, agreeing that FRPA default values are seen as quite low.

The lack of baseline information was identified as a knowledge gap and resulted in scheduling the development of standards for CWD data collection by January 2007. A project has been completed in March 31, 2006 to determine appropriate methods for collecting CWD information. The project, titled 'Wildlife Trees and Coarse Woody Debris: Baseline Data and Procedural Considerations for the Fort Nelson TSA' has been completed by Silvicon Services Inc. The report provides operational guidance on pre-harvest and post-harvest procedures relative to the maintenance and retention of CWD and wildlife trees.

A field project will be completed in 2006 to provide accurate PRE-harvest baseline information for the DFA within applicable biogeoclimatic zones. A Standard Operating Procedure (SOP) will be developed and implemented to indicate POST harvest CWD data collection standards. The SOP will capture that data collection will be completed by Harvesting Supervisors shortly after completion of the harvesting unit. Intensity and type of survey is subject to discussion prior to the development of the SOP.

BCTS has following to report on this measure:

A CWD Standard Operating Procedure has been drafted and will be implemented May 15, 2006. The new procedure will entail establishing CWD plots on representative stands within BC Timber Sales blocks.

For this reporting period, Canfor and BC Timber Sales have used Waste and Residue Estimates to determine CWD levels.

Table 10 summarizes the CWD volumes, based on Waste and Residue, for the 2005/2006 reporting window. BC Timber Sales has met the target noted above.

1-2.1 d) - Riparian Areas

Measure

Riparian areas in THLB

Statement

In conjunction with the remaining sub-measures for this indicator, riparian areas can provide critical foraging, breeding or shelter habitat to many species of birds, mammals, amphibians, insects, bryophytes and fungi. For example, riparian-associated shrubs are used differently by shrub-nesting birds than are upland-associated shrubs.

Target

Riparian areas: 100% compliance with riparian reserve zone strategy/standards as defined in approved FSP/FDPs (0)

Data

Table 11: Canfor streams (S1 to S3) with Riparian Reserve Zones (RRZ's)

	Classification		
Harvested blocks with Riparian Reserve Zones(RRZ)	**S1**	**S2**	**S3**
1831			1
2512	1	1	
843	1		
844	1		
P5913		1	
P6087			1
P6088			1
P6090			2
Total in block RRZ's	**3**	**2**	**5**
3324		1	
3346			1
Tsoo M/L @ 10.5 km		1	
Tsoo M/L @ 19 km			1
Kiwigana M/L		1	2
Luyben M/L	1	2	9
Patry M/L			4
Steamboat	0	1	5

Kledo M/L		1	1
Total Road RRZ's	**1**	**7**	**23**
Total	**4**	**9**	**28**

Table 12: BCTS blocks showing type of stream classes and activity

TSL Number	Opening Number	Location	Stream class	Number of Streams or water bodies	Activity
A78138	94J-093-017	Raspberry Creek	S6	1 'S6' creek	Stream Crossing
A66622	94O-005-029	Stanolind Creek	S6	2 'S6' creeks	Stream Crossing
A66629	94O-031-023	Liard Mainline	S4	1 'S4' creek	Stream Crossing
A66629	94O-032-028	Liard Mainline	S6	1 'S6' creek	Stream Crossing
			S4	1 'S4' creek	Stream Crossing
A36093	94J-047-016	Goguka	S4	1 'S4' creek	Stream Crossing
A58699	94O-035-022	Kiwigana	S6	4 'S6" creeks	Stream Crossing
			S3	1 'S3' creek	Stream Crossing
A61739	94N-070-026	Nelson Forks	S4	1 'S4' creek	Aerial Herbicide
A54005	94J-095-028	Poplar Hills	Borrow pit pool	1 unclassified Borrow pit pool	Aerial Herbicide
A36079	94O-034-03	Kiwigana	S2	1 'S2' creek adjacent	Aerial Herbicide
A55377	94O-065-002	D'easum	S4	1 'S4' creek	Aerial Herbicide

Target Met		
Yes ✓	No	Pending

Discussion

All streams, wetlands, and lakes in and adjacent to harvested areas are classified during operational plan development. Riparian management objectives are described within the Site Plan in accordance with the riparian reserve and management zone requirements. This measure reports the inspections completed after harvesting, road construction and silviculture activities where transgressions into the Riparian Reserve Zone (RRZ) have occurred.

Canfor encountered 4 S1 streams, 9 S2 and 28 S3 streams within harvested blocks during the harvesting season, as well on roads used to access harvest blocks. Stream crossings over S2 and S3 streams were used for non harvesting activities in the Kledo operating area. Stream crossing structures include temporary and permanent bridges.

No infractions to any Riparian Reserve Zones of S1 to S3 streams occurred during the reporting period, no incidents were recorded in the ITS system. The target has been met 100% for Canfor blocks.

BCTS has following to report on this measure:

BC Timber Sales did not have any Riparian Reserve Zones (RRZ's) in any harvesting blocks, but did have one S3 crossing. S3 streams do have a RRZ, however, the S3 stream crossing was on an existing seismic line so no impact to the existing RRZ area occurred. The only silviculture activity that could impact an RRZ is herbicide application, but because there are significant pesticide free zones associated with an RRZ and because BCTS did not have any stream classes greater than an S4, there were no impacts to RRZ's through silviculture activities.

Table 12 summarizes the blocks, activities and stream classes for the 2005/2006 reporting window. BCTS has met the target of 100% compliance with Riparian Reserve Zone standards.

1-2.1 e) - Shrub Areas

Measure

Shrub areas across the CFLB

Statement

The purpose of this measure is to maintain one of the many habitat elements that contribute to maintain the full range of biological diversity across the landscape. Many species, especially vertebrates, respond positively to shrub abundance, which on the other hand are influenced by forestry practices.

Target

Shrubs: Sustain current baseline shrub habitat % in the THLB (0.5%) while tracking the trend in the NHLB (using updated inventory information)

Data

Table 13: Shrub areas across the CFLB

	CFLB		THLB		NHLB	
	Ha	%	Ha	%	ha	%
TSA total	5,741,212	100	1,432,269	25	4,308,943	75
Stands less than 20 yrs – 2004 analysis	275,852	100	48,381	17.5	227,471	82.5
TSA total	5,567,804	100	2,638,476	42	3,229,328	58
Stands less than 20 years old March 31/2006 status	92,674	100	31,653	34.2	61,021	65.8

Target Met		
Yes	No	Pending ✓

Discussion

The target of this measure is to maintain current baseline shrub habitat. The baseline is tracked though forest cover updates. Stands, younger than 20 years are assumed to present shrub presence and are used as a surrogate until better methods become available. Currently, there is no information locally available as to what adequate levels of shrub habitat should be. A project to determine which species utilize shrubs in the DFA, as well recommending shrub retention percentages will be completed prior to April 2007.

Canfor and BCTS can impact the amount of shrub habitat in the THLB, for example, through creating openings, or preserving shrubs in riparian areas. Shrub presence in the NHLB, however, is not controlled by the participants and is assumed to be created by natural disturbances and natural succession of vegetation. The intent of the target itself is that at least the current baseline amount of shrub habitat is retained.

The 2004 baseline information provided in Table 13 shows that approx. 4.8% of the CFLB is younger than 20 years old or is expected to have a high predominance of shrub cover. The target is to sustain the shrub cover with a variance of 0.5%. The amount of shrubs in the THLB will be directly related to the amount of area harvested, and the amount of shrubs in the NHLB is directly related to natural disturbances.

Table 13 indicates also that the shrub cover for 2005 reporting period is only 1.66% of the Crown Forest Land Base (areas younger than 20 years old or is expected to have a high predominance of shrub cover). The analysis for the reporting year is based on a 2006 dataset provided by Canfor.

The difference in baseline data in Table 13 is caused by the following: The baseline data used for the first version of the SFM Plan was completed using 2003 vintage TSR3 datasets, which were compiled by Forest Ecosystem Solutions Ltd. (FESL). Since the implementation of GENUS, Canfor uses the Woodlands Information Management team (WIM) to provide data and reports for internal use. Canfor's dataset is much newer and is based on 2006 data provided by the ILMB. From the time that the TSR3 was prepared there has been 199 map sheets updated with new VRI replacing the old Forest Cover in 2005. Differences in the total areas within the TSA for CFLB, THLB and NHLB for 2004 and 2006 data are obvious in Table 13. Canfor will continue to use reports/analysis

prepared using the 2006 dataset and it is logical to update the baseline data in the SFM Plan, with the new acquired information provided by WIM, as this is the future dataset being used. The 2004 dataset is no longer applicable. The 2006 data included in Table 13 represents the updated baseline and a target. Revision of the target should be considered accordingly. The fact, that the target was not met is not related to management practices and therefore, the status of the target has been indicated as "pending".

1-2.1 f) - Hardwood Areas

Measure

Hardwood areas across the CFLB

Statement

This sub-measure is to report on the status of maintaining habitat elements to contribute to biological diversity. Hardwoods (also referred to as deciduous species) are able to provide plentiful resources to vertebrates, especially birds, who depend on insect fauna and/or cavity nesting and other values.

Target

Hardwood areas: Sustain 43% (5%) of the stands as pure or hardwood leading in the THLB while tracking the trend in the NHLB (using updated inventory information)

DataTable 14: Hardwood areas across the CFLB April 1/05 to March 31/06

March 31, 2006 status **Reporting Year 1**	**CFLB**		**THLB**		**NHLB**	
	Ha	%	Ha	%	ha	%
TSA total	5,567,804	100	1,125,596	25	4,442,207	75
Pure Hardwoods baseline	1,075,173	19.3	300,172	26.7	775,002	17.4
Hardwood-leading mixed baseline	438,598	7.9	123,152	10.9	315,446	7.1
Hardwoods total baseline	1,513,771	**27.2**	423,324	**37.6**	1,090,448	**24.5**
Pure Conifers	3,513,918	63.1	605,983	53.8	2,907,935	65.5
Conifer Leading mixed	510,458	9.2	89,889	8.0	420,569	9.5
Conifer total baseline	4,024,376	**72.3**	695,872	**61.8**	3,328,504	**75**

Table 15: Hardwood areas across the CFLB Baseline information SFMP Dec. 2004

December 2004 **Baseline** status	CFLB		THLB		NHLB	
	Ha	%	Ha	%	ha	%
TSA total	5,741,212	100	1,432,269	25	4,308,943	75
Pure Hardwoods baseline	459,525	8	205,115	14	254,410	6
Hardwood-leading mixed baseline	1,099,892	19	412,892	29	687,000	16
Hardwoods total baseline	1,559,417	**27**	618,007	**43.0**	941,410	**22**
Pure Conifers	3,345,042	58	578,879	40	2,766,162	64
Conifer Leading mixed	836,754	15	235,383	16	601,371	14
Conifer total baseline	4,181,796	**73**	814,262	**57**	3,367,533	**78**

Target Met		
Yes ✓	No	Pending

Discussion

The target was set to ensure that at least the current baseline (2004) is retained. In conjunction with measure 1-2.1e (Shrubs), there is no local information available at this time as to what level of hardwood habitat should be maintained. It is assumed that deciduous areas will come back to deciduous, unless an aggressive program of deciduous control is deliberately instituted, which has never been contemplated (SFMP P 47). The current regeneration practice is that pure deciduous or deciduous leading mixed wood areas will be regenerated back to deciduous areas. Hardwood areas will be monitored through forest cover updates. Hardwoods are defined as pure hardwoods, which are stands containing deciduous volume greater or equal to 80%, and hardwood leading stands, which are stands exceeding or equal to 50% deciduous volume. The same rule applies to pure conifer and conifer leading mixed-wood stands.

The 2004 baseline information shown in Table 15 shows that 43% of the THLB contains hardwood cover, which includes pure hardwoods and hardwood-leading mixed woods. Compared to the status as of March 2006 (Table 14) the hardwood percentage within the THLB utilized the 2006 data set is 37.6%. The differences are due to changes in the datasets, as indicated in the previous measure 1-2.1e for shrubs.

Table 14 shows that over the entire Crown Forest Land Base (CFLB) the hardwoods areas were maintained at 27%. The new data set provided by ILMB, shows the hardwood percentage of 37.6 % in the THLB lower than the target (and baseline data) of 43%. The percentage of total area of hardwoods in the NHLB, however, is at 24.5% slightly higher compared to the 2004 baseline, which is 22%.
Overall, the total areas over the CFLB are quite close and only vary by approximately 3%. The THLB variance, however, is greater, due to differences in the datasets between the SFM baseline info, which is based on the TSR3 dataset and the newly updated information provided by ILMB. The immature and logged areas have not been included in the THLB, but could be considered as in the future they will be available for logging again.

In spite of the dataset differences, the target can be considered met, as hardwoods presence is still contained within the allowable variance of 5%.

1-2.1 g) - Patch Size Distribution

Measure

Interim - Patch size distribution for stands <20 years old for CFLB by BEC Zone and Natural Disturbance Type

Statement

Patch size distribution is a means of maintaining landscape level connectivity and is linked to the importance of maintaining the temporal and spatial distribution of cutblocks and natural openings.

Target

Patch size distribution: Land Use Planning Guide targets (variance as defined in LUPG)

Data

Table 16 : Patch Size Categories for Alluvial and Non-Alluvial

PATCH LEGEND		
Category	**Alluvial**	**Non-Alluvial**
Small	< 20 ha	< 40 ha
Medium	20 - 40 ha	40 - 250 ha
Large	40 - 80 ha	250 - 1000 ha
Very Large	> 80 ha	> 1000 ha

Table 17: Status of achieving patch size targets in the Fort Nelson DFA

	Small						Medium						Large and Very Large						Total patch ha	
	Current Patch		Target		FDP/FSP Patch		Current		Target		FDP/FSP Patch		Current Patch		Target		FDP/FSP Patch			
Landscape Unit	ha	%	Target	Target met	ha	Future %	ha	%	Target	met	ha	Future %	ha	%	Target	met	ha	Future %	Current	Future
Akue	76	31.0	10-20%	No	233	2.8	168	69.0	10-20%	No	3,985	47.9	0	0.0	60-80%	Yes	4,106	49.3	**244**	**8,324**
Big Beaver	181	11.1	10-20%	Yes	143	10.8	1,455	88.9	10-20%	No	1,181	89.2	0	0.0	60-80%	Yes	0.0	0.0	**1,636**	**1,324**
Capot Blanc	312	6.6	10-20%	No	466	7.9	1,698	36.0	10-20%	Yes	3,944	66.9	2,704	57.4	60-80%	Yes	1,483	25.2	**4,713**	**5,893**
Catkin	0	0.0	10-20%	N/A	89	1.1	0	0.0	10-20%	N/A	212	2.5	0	0.0	60-80%	N/A	8,070	96.4	**0**	**8,371**
Crow	96	5.4	10-20%	No	178	2.6	51	2.9	10-20%	No	4,176	60.1	1,618	91.7	60-80%	No	2,599	37.4	**1,765**	**6,953**
D Easum	13	14.4	10-20%	Yes	129	7.5	76	85.6	10-20%	No	1,299	75.2	0	0.0	60-80%	Yes	299	17.3	**88**	**1,727**
Dilly	0	0.0	10-20%	N/A	28	12.4	0	0.0	10-20%	N/A	195	87.6	0	0.0	60-80%	N/A	0.0	0.0	**0**	**223**
Dunedin	0	0.0	10-20%	N/A	0	0.0	0	0.0	10-20%	N/A	46	2.8	0	0.0	60-80%	N/A	1,587	97.2	**0**	**1,633**
Elleh	20	3.2	10-20%	No	842	11.2	314	50.1	10-20%	No	4,605	61.3	293	46.7	60-80%	No	2,060	27.4	**628**	**7,506**
Eskai	60	3.0	10-20%	No	857	12.4	1,427	71.3	10-20%	No	2,975	43.1	514	25.7	60-80%	No	3,078	44.5	**2,000**	**6,910**
Etane	196	7.6	10-20%	No	291	4.6	1,673	65.1	10-20%	No	1,925	30.1	702	27.3	60-80%	No	4,178	65.3	**2,571**	**6,394**
Ft. Nel. River A	18	100.0	30-50%	No	115	10.9	0	0.0	30-50%	No	95	9.0	0	0.0	10-30%	No	845	80.2	**18**	**1,054**
Ft. Nelson River B.	93	10.9	30-50%	No	297	25.6	122	14.4	30-50%	No	299	25.8	635	74.6	10-30%	No	566	48.7	**851**	**1,162**
Hay River	0	0.0	30-50%	N/A	21	9.3	0	0.0	30-50%	N/A	30	13.2	0	0.0	10-30 %	N/A	174.0	77.5	**0**	**225**
Hoffard	313	40.2	10-20%	No	399	35.2	199	25.5	10-20%	No	734	64.8	266	34.2	60-80%	No	0.0	0.0	**778**	**1,133**
Holden	0	0.0	10-20%	N/A	0	0.0	0	0.0	10-20%	N/A	319	70.0	0	0.0	60-80%	N/A	136.0	40.0	**0**	**455**
Irene _E	110	3.1	10-20%	No	224	4.2	2,098	59.3	10-20%	No	2,912	55.0	1,333	37.6	60-80%	No	2,185.0	41.3	**3,541**	**5,294**
Irene_W	76	3.3	10-20%	No	115	0.9	1,096	48.4	10-20%	No	2,641	21.3	1,093	48.3	60-80%	No	9,656.0	77.8	**2,265**	**12,411**
Jacknife	21	100.0	10-20%	No	68	5.0	0	0.0	10-20%	No	813	60.2	0	0.0	60-80%	n/a	470.0	34.8	**21**	**1,351**
Kiwigana	183	5.2	10-20%	No	733	6.6	2,286	64.3	10-20%	No	5,696	51.2	1,085	30.5	60-80%	No	4,693.0	42.2	**3,553**	**11,121**
Kledo	215	8.8	10-20%	No	568	5.0	1,161	47.8	10-20%	No	4,267	37.7	1,054	43.4	60-80%	No	6,471.0	57.2	**2,430**	**11,306**
Klowee	68	10.7	10-20%	Yes	78	2.9	570	89.3	10-20%	No	1,111	42.1	0	0.0	60-80%	No	1,450.0	54.9	**638**	**2,639**
Klua	29	3.7	10-20%	No	83	12.0	752	96.3	10-20%	No	613	88.0	0	0.0	60-80%	No	0.0	0.0	**781**	**696**
Kwokullie	0	0.0	10-20%	No	0	0.0	60	100.0	10-20%	No	60	100.0	0	0.0	60-80%	No	0.0	0.0	**60**	**60**
Kyklo	187	3.0	10-20%	No	489	14.8	1,981	32.1	10-20%	No	2,504	76.0	3,994	64.8	60-80%	Yes	302.0	9.2	**6,162**	**3,296**

La Biche	273	2.7	10-20%	No	300	3.5	4,534	44.7	10-20%	No	3,963	45.7	5,326	52.6	60-80%	No	4,413.0	50.9	**10,133**	**8,675**
Laird Riv A	0	0.0	30-50%	N/A	30	3.2	0	0.0	30-50%	N/A	56	5.9	0	0.0	10-30%	N/A	866.0	90.9	**0**	**953**
Liard Riv B	0	0.0	30-50%	No	0	0.0	0	0.0	30-50%	No	0	0.0	60	100.0	10-30%	No	1,007.0	100.0	**60**	**180**
Liard Riv C	42	0.5	30-50%	No	205	2.2	198	2.5	30-50%	No	197	2.1	7,525	97.0	10-30%	No	9,045.0	95.8	**7,765**	**9,446**
Muskwa River B	51	7.2	30-50%	No	109	13.7	162	22.8	30-50%	No	343	43.3	497	70.0	10-30%	No	341.0	43.0	**710**	**793**
Patry	743	16.3	10-20%	Yes	717	8.0	2,171	47.5	10-20%	No	2,658	29.6	1,656	36.2	60-80%	No	5,593.0	62.4	**4,571**	**8,968**
Pouce	436	8.2	10-20%	No	969	11.4	2,601	49.0	10-20%	No	3,839	45.0	2,271	42.8	60-80%	No	3,730.0	43.7	**5,308**	**8,538**
Prophet River	94	7.4	30-50%	No	36	11.4	56	4.4	30-50%	No	116	36.4	1,120	88.2	10-30%	No	166.0	52.2	**1,270**	**319**
Sahtaneh	176	11.0	10-20%	Yes	274	10.3	873	54.4	10-20%	No	1,230	46.2	556	34.6	60-80%	No	1,156.0	43.5	**1,606**	**2,660**
Sandy	2	0.1	10-20%	No	90	2.4	583	26.1	10-20%	No	1,213	31.8	1,652	73.9	60-80%	Yes	2,517.0	65.9	**2,237**	**3,821**
Shekilie	64	16.8	10-20%	Yes	64	16.8	315	83.2	10-20%	No	315	83.2	0	0.0	60-80%	No	0.0	0.0	**379**	**379**
Smith	0	0.0	10-20%	N/A	30	3.4	0	0.0	10-20%	n/a	858	96.6	0	0.0	60-80%	n/a	0.0	0.0	**0**	**888**
Snake	187	10.8	10-20%	Yes	660	11.1	642	37.1	10-20%	No	2,962	49.7	905	52.2	60-80%	No	2,332.0	39.2	**1,734**	**5,955**
Stanolind	506	6.7	10-20%	No	729	8.8	2,789	36.9	10-20%	No	4,353	52.5	4,272	56.5	60-80%	No	3,213.0	38.7	**7,566**	**8,294**
Timberwolf	0	0.0	10-20%	N/A	164	7.5	0	0.0	10-20%	n/a	2,011	92.5	0	0.0	60-80%	n/a	0.0	0.0	**0**	**2,175**

Target Met		
Yes	No ✓	Pending

Discussion

Patches are defined as groups of cutblocks that have been harvested within the past 20 years. Beyond 20 years there is sufficient regeneration to classify the areas as forested Land. A cutblock is grouped into a Patch when it is within 200 m of it. The future or FDP/FSP state of patches is an estimate including all planned or approved cutblocks looking 8 years beyond.

The report shows the desired patch size target, for small, medium, large and very large patch sizes, within the respective landscape unit.

The landscape units that had no proposed harvesting activities were not included in the report. Landscape units that did not meet the target within the patch size category have been identified with red and green font. Red font indicates that the targets have been over achieved and green font indicates that the targets have been underachieved within the small-medium-large patch size category. A strategy is defined in Canfor's Forest Stewardship Plan to ensure that a trend towards meeting the patch size targets is achieved. Where the target or trend toward the target has not been achieved, a rationale as to why the target is not or cannot be met, and/or a strategy indicating how the target can be achieved is to be provided to the appropriate government agency, once the FSP is approved.

At first glance at Table 17, it is obvious that most targets have not been met for small, medium and large/very large patch size. The reason is partially due to a delay in implementing strategies to meet the targets in the Landscape Unit Planning Guide (LUPG) at the time when the guidelines were published (March 1999). Considering, that patches are defined as blocks younger than 20 years, which would include blocks harvested in 1986, there has been a delay in 'catching up' with the targets provided in the guideline. It also has to be noted, that patches created by natural disturbances, such as fire, insects, disease etc. are included in the analysis. Reasoning for not meeting the target could very well be the contribution of natural disturbances. It should be noted, that it was common in the past (pre Forest Practices Code) to harvest along river corridors. That shows in Table 17, as the alluvial landscape units, small and medium patch sizes are generally underachieved, but large patch sizes are overachieved.

The trend overall is obvious, which is that the majority of creating small and large patches has been under achieved, while the development of medium patch sizes has been over achieved.

It can be seen, however, that future blocks that are proposed for harvesting overall go towards the trend to meeting the target. In isolated cases, where the trend goes away from meeting the target, a strategy needs to be considered to reverse the trend.

In summary, for all seven sub-measures of measure 1-2.1, the current and future practice will be to continue to harvest while monitoring the availability of wildlife habitat to ensure the minimum threshold limits are maintained.

1-3.1 - Vertebrate Species

Measure

Report recommending vertebrate species for monitoring is developed

Statement

This measure addresses the identification and evaluation of appropriate vertebrate 'indicator species' on which monitoring should focus. This measure has been developed to ensure that a locally relevant set of vertebrate species is established for the DFA.

Target

1 (0)

Data

A report recommending vertebrate species for monitoring exists?
Yes

Target Met		
Yes ✓	No	Pending

Discussion

A report recommending vertebrate species was completed in March 2004 by Isabelle Houde. The report titled 'Wildlife-Habitat Relationships and Species of Vertebrates at Risk in Operation Areas of Slocan's Divisions' includes a list of recommended vertebrate species appropriate for monitoring within the DFA. The report has been peer reviewed and recommendations were made regarding the

appropriate 'indicator species' on which monitoring should focus on. Candidates for monitoring should be practical to monitor, sensitive to forest practices, and able to provide information that can guide forest management (Bunnell et al. 2003). Peer reviewers recommended Woodpeckers and songbirds as a monitoring species. Commencement of the Monitoring program is expected to start in spring 2006. The target for this measure has been met by both, Canfor and BCTS respectively.

1-3.2 - Vertebrate Species Populations

Measure

Recommended vertebrate species populations remain productive relative to baseline

Statement

This measure ensures that a commitment is made to monitoring the populations of those indicator species selected under Measure 1-3.1.

Target

Monitoring Plan and baseline information TBD - July, 2007

Data

Target Met		
Yes	No	Pending ✓

Discussion

This measure builds on the previous measure. This measure ensures that a monitoring plan for indicator species is implemented and baseline information is collected. As indicated in measure 1-3.1, a monitoring plan will be developed for songbirds and woodpeckers and when implemented, baseline data will be collected. Once baseline data on the distribution and estimated numbers of each species within the DFA is available, overall trends in species populations can be monitored through time. Canfor and BCTS cannot report on the target at this time.

1-3.3 - Management Strategies

Measure

Develop Management Strategies for identified local Forest-Dwelling Species at Risk as identified in Schedule One of SARA

Statement

This measure ensures that a management strategy is developed for each Species at Risk identified within the Fort Nelson DFA in order to sustain populations within an acceptable range as influenced by forest management activities.

Target

1 (0) strategy per species. One strategy per species at risk will be in place and peer reviewed on or before December, 2005.

Data

1 strategy exists per species?
Yes

Target Met				
Yes	✓	No		Pending

Discussion

'Management Guidelines for Species and Plant Communities at Risk in the Fort Nelson Forest District' have been developed by Alpha Wildlife Research & Management Ltd. in December 2005.

The main objectives of the management guidelines were to:

- Develop a list of species and plant communities at risk current to October, 2005;
- Present clear guidelines for managing species and plant communities at risk;
- Conduct a gap analysis and determine the impact of current state of knowledge on
  management strategies; and

- Identify habitat elements that may play an important role in the management of species at risk, as well as biodiversity not-at-risk.

The proposed management strategies have been peer-reviewed by MOE and Canfor's Wildlife and Biodiversity Manager. Recommendations have been made accordingly.

An overall management strategy to dovetail with Canfor's operational plans and activities will be developed and implemented in 2006. It is currently identified as a knowledge gap that management strategies for SAR as identified in Schedule One of SARA still need to be identified not later than December 2006.

A field guide to species and plant communities at risk in Fort Nelson Forest District is currently being developed in partnership with MOE and BCTS (by Alpha Wildlife Research & Management Ltd). This field guide will assist field crews and Canfor staff to identify species and communities at risk and avoid destroying critical sites.

1-3.4 - Listed Species

Measure

Percentage of Schedule One Species at Risk management strategies that are followed

Statement

This measure ensures commitment to the development and implementation of management strategies for Schedule One Species at Risk within the Fort Nelson DFA.

Target

100% (0)

Data

Target Met		
Yes	No ✓	Pending

Discussion

By following the recommended management strategies of Schedule One Species at Risk, management can contribute to the long-term persistence of these species and their required habitats across the land base (SFM Plan p 62).

The target has not been met to date, as management strategies are so far only proposed in the FSP (approval pending) for one species at risk. However, Canfor has developed management strategies for the remaining Schedule One Species at Risk in the Fort Nelson area. These management strategies will be summarized in a Species Conservation framework to be developed in 2007.

The following are Schedule One Species at Risk for the Fort Nelson area:

- Boreal caribou, which are threatened.
- Northern Caribou, Wood Bison, Wolverine, Grizzly bear, and Western Toad which are all Special Concern.

A Wildlife notice under section 7 of the Forest Planning and Practices Regulation has been given by the government for only the Boreal Caribou to be addressed in the FSP as a species at risk. Notices have not been received to date for the remaining Schedule One Species at Risk.

At this time, management strategies have only been proposed in Canfor's FSP for Boreal Caribou. BC Timber Sales has no strategies in place as the FSP is not yet submitted or approved. It is expected that BCTS's FSP will be approved by December 2006 and the SFMP annual report for that period will report management strategies.

Canfor and BCTS are in the process of determining implementation strategies for the management strategies that have been developed for Schedule One Species at Risk in the Fort Nelson area.

1-4.1 - Protected Areas

Measure

List showing percentage of total land base of government designated protected areas

Statement

This measure examines the number and area of all existing parks, reserves and protected areas within the Fort Nelson DFA.

Target

1 (0)

Data

Table 18: Parks and Protected Areas in the Fort Nelson DFA

Parks and Protected Areas	Total Area (ha)	Area within DFA (ha)
Andy Bailey Provincial Park Located 28 km southeast of Fort Nelson at kilometre 426 of the Alaska Highway; 16 km gravel access off east side of Alaska Highway onto Andy Bailey Road.	196	196
Dall River Old Growth Provincial Park This remote park is located adjacent to Denetiah Park, along the Dall River downstream from Dall Lake. It is approximately 300 km west of Fort Nelson. There are no roads; access to the area is by air. Most visitors to the area are members of guided hunting and/or fishing trips.	644	644
Denetiah Provincial Park Denetiah Park lies primarily west of the Rocky Mountain Trench and approximately 160 km upstream of Fort Ware along the Kechika River. There are no designated roads entering the area. The park is a remote wilderness area and access is only by boat, and air or foot and horse along the Davie Trail from Lower Post. River access	97,908	13,324

Parks and Protected Areas	Total Area (ha)	Area within DFA (ha)
usually occurs at Skook's Landing, near the community of Fireside, and involves a 250 km boat trip. Most visitors to the area are members of guided hunting and/or fishing trips.		
Dune Za Keyih Provincial Park and Protected Area Dune Za Keyih is located in British Columbia's Rocky Mountain Trench between Denetiah Provincial Park to the northwest and Kwadacha Wilderness Provincial Park to the southeast. The park encompasses portions of the 250 kilometer Kechika River. It also includes two of its major tributaries: the Frog River, flowing from the Cassiar Mountains on the west side, and the Gataga River, merging from the northern Rockies to the east. Access to the area is best accomplished via floatplane or helicopter. Jet boats can navigate up-river - however, jet boats are not allowed past log jam rapids on the Gataga River.	347,789	63
Fort Nelson River Ecological Reserve W bank of Fort Nelson River, 20 km NE of Fort Nelson	121	121
Goguka Creek Protected Area Goguka Creek Protected Area is located in the Jackfish Creek/Prophet River area alongside the Alaska Highway at km 441, (mile post 274). The closest communities are Fort Nelson and Prophet River.	435	435
Grayling River Hotsprings Ecological Reserve 67 km NE of Muncho Lake	1,421	1,421
Hay River Protected Area Hay River Protected Area is located 15 km from the Alberta border.	2,324	2,324
Hornline Creek Provincial Park Located near the Kechika River, about 130 km south of Lower Post and about 30 km north of Denetiah Park. Access is by river boat and foot. The Kechika River is the main access route to the park. Access to the Kechika River primarily occurs at Skooks Landing, near the community of Fireside, and involves a 250 km boat trip. The historic Davie Trail, which travels from Fort Ware to Lower Post, follows a portion of the Kechika River adjacent to the Rocky Mountain Trench.	298	298
Jackpine Remnant Provincial Park This provincial park protects one of the few remaining old growth	148	148

Parks and Protected Areas	Total Area (ha)	Area within DFA (ha)
Jackpine stands in the Fort Nelson area (Patry M/L)		
Kledo Creek Provincial Park Information for this park will be added as it becomes available.	6	6
Klua Lakes Protected Area Klua Lakes Protected Area is located east of the Prophet River and east of Mile 240 of the Alaska Highway. There are no designated roads; roads are designed for winter use only. Access is via trails leading up Adsett Creek and via a northern trail from the Alaska Highway. Snowmobile access is sometimes possible due to creek and beaver dam crossings or via float plane.	28,040	28,040
Kotcho Lake Ecological Reserve 100 km ENE of Fort Nelson	64	31
Kotcho Lake Village Provincial Park The park is located approximately 100 km east of Fort Nelson. There are no roads to the park. Access is by boat or air. The Helmet Road provides motorized access to within three km of the park. Access is via the Helmet Oilfield Road 10 km south of Fort Nelson, then approximately 150 km to the lake.	34	34
Kwadacha Wilderness Provincial Park Approximately 160 km southwest of Fort Nelson. Standard access by aircraft or horse, but no road access.	114,444	38
Liard River Corridor Provincial Park and Protected Area The Liard River Corridor Park is located along the most northerly progression of the Northern Rocky Mountains in northeastern British Columbia. It is adjacent to one of the most significant hotsprings in Canada, the 1082 hectare Liard River Hot Springs Provincial Park, located on the Alaska Highway, 317 km northwest of Fort Nelson. The Liard River Corridor encompasses the Liard River valley and uplands to the height of land as far east as the Scatter River. Access to the park is by ATV, foot, horse or boat. One motorized route provides access to the north side of the Liard River Corridor Park. On the south side of the Liard River, an old BC Hydro road crosses the Trout River and continues to the Grand Canyon of the Liard. This road provides horseback and foot access, but can be hazardous at the Trout River crossing. River boat access is via the Liard River.	88,989	81,202
Liard River Hotsprings Provincial Park Located at kilometer 765 of the Alaska Highway, approximately 60	1,082	1,082

Parks and Protected Areas	Total Area (ha)	Area within DFA (ha)
km north of Muncho Lake Provincial Park.		
Maxhamish Lake Provincial Park and Protected Area 125 km north of Fort Nelson, 12 km off the Liard Hwy (77). There is no road access and the closest community is Fort Nelson.	27,516	27,516
Muncho Lake Provincial Park At KM 681 of the Alaska Hwy	86,079	86,079
Northern Rocky Mountains Provincial Park The Northern Rocky Mountains is located approximately 90 km southwest of Fort Nelson. The Alaska Highway (#97) runs along a portion of the northern park. Access is by riverboat, horse, aircraft and foot.	665,709	665,709
Parker Lake Ecological Reserve S side of Parker Lake, 10 km W of Fort Nelson	259	259
Portage Brule Rapids Ecological Reserve 110 km SE of Watson Lake	724	724
Portage Brule Rapids Protected Area Information on this protected area will be added as it becomes available.	428	428
Prophet River Hot Springs Provincial Park Prophet River Hot Springs Provincial Park is located in the upper reaches of the Prophet River some 60 km west of the Alaska Highway and about 250 km northwest of Fort St. John. The area is not accessible by road, but there is a horse/hiking trail up the Prophet River and from Redfern-Keily Provincial Park.	185	185
Prophet River Wayside Located at kilometre 350 of the Alaska Highway (#97), approximately 125 km south of Fort Nelson.	113	113
Redfern – Keily Provincial Park Redfern-Keily is located in the Muskwa-Kechika Management Area, 80 km west of the Alaska Highway, approximately 250 km northwest of Fort St. John. It includes Redfern, Fairy and Trimble Lakes and the alpine basins and icefields of the Besa River and Keily Creek watersheds.	80,771	65
Scatter River Old Growth Provincial Park The Scatter River Old Growth Provincial Park is located along the most northerly progression of the Liard River Corridor in	1,178	1,178

Parks and Protected Areas	Total Area (ha)	Area within DFA (ha)
northeastern British Columbia. It is adjacent to one of the most significant hotsprings in Canada, the 1082 hectare Liard River Hotsprings Provincial Park, located on the Alaska Highway, 317 km northwest of Fort Nelson. Access to the park is by ATV, foot, horse or boat. One motorized route provides access to the north side of the Liard River Corridor Park. River boat access is via the Liard River.		
Smith River Falls- Fort Halkett Provincial Park Smith Falls/Fort Halkett Park is located at the confluence of Smith River and Liard River, near Kilometer 820 of the Alaska Highway and about 30 km west of Liard Hot Springs Park. A viewpoint to observe the Smith River falls can be reached by vehicle. The largest community nearby is Fort Nelson, approximately 350 km southeast. The road is very narrow and may not be suitable for larger vehicles; passing oncoming traffic can be extremely difficult.	254	244
Smith River Ecological Reserve W side of Smith River, 115 km ESE of Lower Post	1,326	1,289
Stone Mountain Provincial Park Located at kilometre 595 of the Alaska Highway, roughly 140 kilometres west of Fort Nelson.	25,690	25,690
Tetsa River Regional Park Located one kilometre off the Alaska Highway at Kilometre 555, roughly 100 km west of Fort Nelson.	115	115
Thinahtea North Protected Area Thinahtea Protected Area is located in the north east corner of the province near the confluence of Thinahtea creek and the Petitot River, 170 km northeast of Fort Nelson. There are no designated roads near to the protected area.	3,674	3,674
Thinahtea South Protected Area Thinahtea Protected Area is located in the north east corner of the province near the confluence of Thinahtea creek and the Petitot River, 170 km northeast of Fort Nelson. There are no designated roads near to the protected area.	16,705	16,709
Toad River Hotsprings Toad River Hot Springs Provincial Park is located along the Toad River within the Muskwa – Kechika Management Area, about 160 km west of Fort Nelson and 25 km east of Muncho Lake Provincial Park. The hot springs are situated on the left bank of the Toad River about 1 km upstream of its confluence with the Racing River. Access is via a 2 km gravel road north from the Alaska Highway and 8 km of trail, or via river boat, or helicopter. Currently, use is limited by access but there is some regular recreational use.	423	423
TOTAL:	**1,595,092**	**959,807**

Target Met

Yes ✓	No	Pending

Discussion

Table 18 lists all the areas of existing parks, ecological reserves and protected areas within the DFA. The list contributes to baseline information used to assess progress towards biological richness targets.

The total TSA area (based on TSR III) is 9,868,067 ha; therefore, the total percentage of land base of government designated protected areas in the TSA is 9.7 %

The SFM Plan provides 2004 baseline information (table 26, p 64 SFMP), showing the area for Parks and Protected Areas located within the DFA. Those areas have been updated in March 2006, based on information posted on the BC Parks website (http://www.env.gov.bc.ca/bcparks/) and are listed in Table 18.

Compared to the 2004 baseline information the total percentage of land base of government designated protected areas in the TSA has changed from 10.6% to 9.7%. The area identified shows the entire park/reserve area, as well as only the area that is located within the DFA. Changes are due to updates on areas based on the BC Parks website.

1-4.2 - Operations in Parks, Reserves and Protected Areas

Measure

Hectares of Forestry Related Harvesting or Road Construction within Class A parks, ecological reserves and LRMP designated protected areas

Statement

Canfor has never operated in Class A parks, ecological reserves or LRMP designated protected areas in the DFA.

Target

Zero hectares of forestry related harvesting or road construction within Class A parks, ecological reserves or LRMP designated protected areas

Data

Figure 1 Parks and Protected Areas in the Fort Nelson DFA for measure 9-1.1 and 9-1.2 shows that no harvesting or road construction occurred for Canfor and BCTS activities in parks or protected areas.

Target Met		
Yes ✓	No	Pending

Discussion

Canfor and BC Timber Sales had no harvesting and no forestry road related construction within Class A parks, ecological reserves or LRMP designated protected areas. The map attached shows Canfor and BCTS blocks relative to the parks and protected areas.

The target has been met as there has been zero harvesting within Class A parks, ecological reserves and LRMP designated protected areas for both, Canfor and BCTS.

1-4.3 - Special Sites - Biological Significance

Measure

Once identified and documented, percentage of sites of special biological significance managed for as part of the Forest Stewardship Planning process

Statement

This measure ensures that biologically important sites are documented and appropriately managed for under the FSP.

Target

100% (0) Canfor staff will document current sites, including rare plant types into one document starting April 2006 (as per knowledge gap Jan. 12th/06). SOPs for addressing identified sites will be developed by April 2007 (as per knowledge gap Jan. 12th/06).

Data

Target Met		
Yes	No	Pending ✓

Discussion

The intent of this measure is to ensure that biologically important sites, including rare plant types, are documented and appropriately managed for under the FSP. Canfor's proposed FSP does currently not identify a strategy how to address biological important sites. BC Timber Sales does not have an approved FSP for the reporting period addressed in this SFMP annual report, therefore, BCTS cannot report on this measure at this time. A procedure is currently not in place that provides direction to staff and contractors on how to document and deal with identified sites. The lack of the procedure has been identified as a knowledge gap and development and implementation of a 'Standard Operating Procedure' (SOP) is scheduled for April 2007. Currently, a list of potential significant sites does not exist and the knowledge gap calls for April 2006 as a start date to document current sites, including rare plant communities. There is also a need to provide a definition for 'special biological significance'. Rewording of the measure should be considered in the future to reflect that the FSP does not address strategies how to deal with special biological significant sites.

1-4.4 - Management Activities Consistent - Muskwa-Kechika

Measure

The percentage of forest management activities consistent with legal objectives for Muskwa-Kechika management area

Statement

This measure ensures compliance with the stated objectives with which forest management practices must be compliant.

Target

100% (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

The intent of this measure is to ensure compliance of forest management practices with the objectives outlined for the Muskwa-Kechika Special Management Area. No harvesting occurred by Canfor and BC Timber Sales in the

Muskwa-Kechika management area to date and within the reporting period, as shown on the overlay map Figure 1 Parks and Protected Areas in the Fort Nelson DFA (measure 9-1.1 and 9-1.2). Canfor's Forest Stewardship Plan (FSP) has not proposed any Forest Development Units (FDUs) in the Muskwa-Kechika management area. The FDU/FSP content map shows that the Muskwa-Kechika management area is entirely outside of proposed FDUs. Canfor and BCTS met the target as no harvesting activities occurred in or adjacent the Muskwa-Kechika management area. Consequently, forest management activities are consistent with legal objectives for Muskwa-Kechika management area.

1-4.5 - Management Activities Consistent - Legal Objectives

Measure

Percentage of forest management activities consistent with legal objectives and general wildlife measures of approved Wildlife Habitat Areas and Ungulate Winter Range.

Statement

This measure ensures compliance of forest management practices with the objectives and measures outlined for Wildlife Habitat Areas and Ungulate Winter Range under the Identified Wildlife Management Strategy and the Forest and Range Practices Act. It applies specifically to identified wildlife species, which can include Species at Risk and Regionally Important Wildlife.

Target

100% (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

This measure ensures compliance of forest management practices with the objectives and measures outlined for Wildlife Habitat Areas (WHA) and Ungulate Winter Range (UWR) under the Identified Wildlife Management Strategy (IWMS) and the Forest and Range Practices Act (FRPA). There are currently no approved UWR or WHA areas in the Fort Nelson TSA. Canfor's FSP (pending approval)

proposes results for management of wildlife habitat for winter survival of Boreal Caribou and Rocky Mountain Elk. All operations within Canfor were consistent with the results proposed in the FSP.

BCTS has following to report on this measure: Currently, BC Timber Sales does not have an approved FSP to evaluate this measure, but as well, UWR and WHA have not yet been identified in Fort Nelson.

1-5.1 - Stream Crossings - Compliance

Measure

The percentage of Canfor/BCTS constructed stream crossings that are compliant with legal requirements.

Statement

This measure ensures that stream crossings within the DFA comply with the requirements outlined in legislation (i.e. FPC, FRPA, Fisheries Act, etc.).

Target

100% (0%)

Data

Table 19: Canfor in Block Stream Crossings

Block	# Log/snowfills	# Inspected	# Problems Found
5831	5	5	0
5827	7	7	0
5048	3	3	0
31	6	6	0
31A	3	3	0
2603	15	15	0
2614	7	7	0
P3317	0	0	0
P5913	0	0	0
P5914	0	0	0
P5915	0	0	0
P5917	0	0	0

P1673	0	0	0
P895	2	2	0
2904	10	10	0
2095	0	0	0
2096	0	0	0
P104	1	1	0
P128	12	12	0
2512	23	23	0
2602	9	9	0
2598	7	7	0
Total #	110	110	0

Table 20: Stream Crossing along Roads

Road	# Log/snowfills	# Temp Bridges	# Inspected	# Problems Found
Tsoo M/L	38	2	40	0
5049 rd	5	0	5	0
130 rd	6	0	6	0
5829 rd	1	0	1	0
3324 rd	4	1	5	0
3346	4	1	5	0
2095	1	1	2	0
2096	5	1	6	0
P104	2	0	2	0
2596 Rd	10	0	10	0
P6937A	9	0	9	0
Total #	**85**	**6**	**91**	**0**

Three steel pipes were not removed from 3346 RD.

Table 21: BCTS Stream crossings

TSL Number	Location	Stream Class	Type of crossing	# of Inspections
A78138	Raspberry	S6	300mm steel pipe	4
A66622	Stanolind	S6	Log fill	10
		S6	2 log/snow fills	10
A66629	Liard	S4	1 ice crossing	8
		S4	no crossings	8
		S6	no crossings	8
A36093	Goguka	S4	snow fill	5
A58699	Kiwigana	S4 (4 creeks)	Snow fills	7
		S3	ice bridge	7

Target Met

Yes ✓	No	Pending

Discussion

Monitoring the compliance with stream crossings is important to guarantee that faults are quickly identified and corrected before degradation to aquatic habitat, quality or quantity occurs. This measure ensures that the stream crossings within the DFA comply with the requirements outlined in legislation (i.e. FRPA, Fisheries Act, etc.) (SFMP P69).

Canfor's constructed stream crossings were 100% compliant with legal requirements, based on interim inspection reports. Out of 201 stream crossings, 97 % of those were snow or log fills, and only 3 % were actual temporary bridges. The stream crossing count includes both, crossings occurring within cut blocks, and crossings occurring along roads, accessing those cutblocks, as shown in Table 19 and Table 20.
Harvesting takes place in the Fort Nelson DFA predominantly on frozen ground during the winter season, consequently minimizing the potential negative impact to stream bank stability and sedimentation. Canfor uses a stream crossing matrix which identifies the structure that is acceptable based on the stream classification (i.e. snowfill, logfill, temporary bridge, ice bridge, refer to Appendix 3: Stream crossing matrix).
The current procedure is that Forestry Supervisors conduct interim block/road inspections as harvesting progresses. In most cases inspections are completed some time after installation of stream crossings. Most blocks have several interim inspections done, and always one prior to deactivation. All stream crossings, however, have final inspections done. Verification of the proper removal of stream crossings can only be done under snow free conditions. All crossings and final harvesting inspections are completed mid-May and considered 100% completed at that stage. Due to inspection procedure, only interim inspection reports can be considered for compliance reporting on this measure. It should be considered to off-set reporting for stream crossings in the future to capture the full perspective of compliance within the reporting period.

BCTS has following to report on this measure:

BC Timber Sales constructed all stream crossings in compliance with the legal requirements (approved FDP). No incidents were found in the Incident Tracking System that reported non compliance with this measure.

Table 21 summarizes the BCTS stream class and crossing structure utilized. All crossings have been assessed snow free and no issues were noted. BC Timber Sales has met the target of 100% as all stream crossings were compliant with legal requirements.

1-5.2 - Stream Crossings - Surveyed WQCR

Measure

The percentage of Canfor/BCTS constructed surveyed stream crossings identified with a high WQCR rating on forestry roads within the DFA for which participants are responsible (*WQCR - water quality concern rating)

Statement

The WQCR is a measure, which indicates the potential of a stream crossing to deliver sedimentation into the stream. A high index indicates a high potential for the crossings to add sediment to the adjacent stream whereas a low index indicates that the crossings are being well managed to reduce the possibility of sediment entering the stream from the crossing. The WQCR can then be used to identify individual or groups of crossings that may be having a negative impact on water quality.

Target

Process to be developed and implemented by June, 2006

Data

Target Met		
Yes ✓	No	Pending

Discussion

The purpose of this measure is to maintain habitat of aquatic species. Stream crossings have been identified as a primary source of sedimentation into streams.

Beaudry & Associates has developed a Stream Crossing Quality Index (SCQI) and tested in the Fort Nelson DFA during the 2005 field season.
The assessments completed concentrated on mainlines only. The SCQI assessment looks at the parameters that have erosion potential, for example slope, soil texture, ditch slope, erosion control covers. The SCQI is a hazard assessment, which concentrates on parameters that can be controlled through the licensees and are linked to best management practices. The survey concentrated on mainlines only, and winter roads were excluded due to limited access. It is expected that winter roads will have lower scores.

The SCQI surveys were completed between September 12th and 21st, 2005 on the Steamboat, Kledo, and Luyben Mainlines. The Patry Mainline and Pipeline road were designated as potential survey areas, but due to time constraints not included at that time.

A total of 184 crossings were surveyed to date.
The review of the Fort Nelson SCQI survey in fall 2005 showed that the hazard level of 21% of roads was high, and 36% of roads was very high. The results are indicative of the difficult road building condition in the northeast. It was mentioned that 80 to 90% of all stream crossings over the landscape are small streams and that the potential in forest management to effect small streams is higher than larger streams.

The target for this measure is identified as a knowledge gap at this time, which indicates that the participants need to come to terms if the SCQI survey procedure will be accepted and implemented. Should the procedure be adopted, then training of staff and implementation of the procedure can be expected after the 06/07 logging season. Currently, June 2007 has been identified as a due date for implementation of this procedure.

Beaudry & Associates will be continuing with SCQI assessment during the 2006 field season. The sampling will include winter roads to some degree in 2006 and combined with the existing samples completed for the mainline roads in 2005. Combined samples will then be reassessed, before reaching an agreement if the process should be implemented in the DFA, and a target agreed to.

It is expected that Fort Nelson will have a rating system for the next reporting cycle.

1-5.3 - Stream Crossings - Installed

Measure

The percentage of Canfor/BCTS constructed stream crossings planned and installed to design / standard.

Statement

This measure ensures that stream crossings within the DFA are designed and built according to the standards outlined in the current legislation. Monitoring the adherence of stream crossing construction to these standards ensure that crossings, particularly those posing a high risk to water quality, are built using the most current knowledge and technology.

Target

100% (-10%)

Data

Target Met		
Yes ✓	No	Pending

Discussion

This measure is to ensure that stream crossing construction adheres to the standards outlined in the Forest and Range Practices Act and that crossings, particularly those posing a high risk to water quality, are built using the most current knowledge and technology.

Canfor's installed stream crossings were 100% compliant with legal requirements, based on interim inspection reports. Out of 201 stream crossings, 97 % of those were snow or log fills, and only 3 % were actual temporary bridges. The stream crossing count includes both, crossings occurring within cut blocks, and crossings occurring along roads, accessing those cutblocks. Table 19 and Table 20 summarize in measure 1-5.1 all of Canfor's stream crossings established during the reporting period.

BCTS has following to report on this measure:

BC Timber Sales installed all stream crossings for this reporting period to the standards outlined in the current regulations. All stream crossings BC Timber

Sales installed were temporary crossings and included snow fills, log fills and small ice bridges.

BC Timber Sales has met the target of 100% as all stream crossings were constructed/installed to standard.

Table 21, under measure 1-5.1, itemizes BCTS's stream crossings.

1-5.4 - Stream Crossings - Inspections

Measure

The percentage of Canfor/BCTS constructed stream crossing inspections and resulting mitigation measures completed according to schedule.

Statement

This measure is directly related to measure 1-5.3 and is meant to ensure that any stream crossings found to be not installed to design standards will be rehabilitated or removed within a specified time.

Target

100% (-10%)

Data

Target Met		
Yes ✓	No	Pending

Discussion

During the 2005 reporting year, 201 stream crossings were inspected and no mitigation measures scheduled, resulting in 100 % compliance, as there were no findings.

This measure is directly related to measure 1-5.1 and 1-5.3 and is meant to ensure that any stream crossings that are not installed to design standards are rehabilitated or removed within a specific time.

Interim inspections have shown that no problems occurred during installation and removal of stream crossings. Final harvest inspections and road inspections will be conducted in snow free conditions by mid-May. Only at that time it can be confirmed with certainty that no negative impact occurred to streams. The number of Canfor's inspections completed is listed in Table 19 and Table 20 of measure 1-5.1.

Should steps become necessary to schedule mitigation measures, it should be noted that Canfor developed a 'Stream Rehabilitation Standard Operating Procedure' in April 2006 to ensure that road activities related to bridge installation, maintenance and removal around water courses do not degrade the quality and quantity of the water in or adjacent to the activities in order to maintain fish habitat. The SOP will be refined over time to provide a detailed step by step procedure on mitigation measures.

Currently in progress is the development of a bridge inspection checklist, which will provide a tracking tool for future reporting requirements. Not addressed to date is the need of refining, scheduling and reporting inspection requirements for all other crossings other than bridges.

BCTS has following to report on this measure:

The number of inspections completed by BC Timber Sales on stream crossings is reported in the Table 21 under measure 1-5.1. Inspections did not find any issues of crossings improperly installed.

BC Timber Sales has met the target of 100% for this measure as inspections found all stream crossings completed according to schedule.

1-5.5 - Stream Crossings - Removed

Measure

The percentage of Canfor/BCTS constructed temporary stream crossings that are removed to standards

Statement

This measure ensures that temporary stream crossings within the DFA are removed in compliance with the requirements outlined in the current legislation.

These requirements include timing of removal as well as the procedure for removal.

Target

100% (-10%)

Data

Target Met		
Yes ✓	No	Pending

Discussion

This measure reports constructed stream crossings removed to standards.

Removal of temporary constructed stream crossings follows the standards identified in the deactivation plan. The procedure at Canfor is that stream crossings are usually pulled or removed as soon as harvesting units are completed. The majority of temporary stream crossings are snow-fills, log-fills or culverts with earth fills. Temporary bridges are common as well.

Special care is taken that all materials placed into the stream are removed and that no logs, branches, roots, or loose soils remain that could block stream flow. Stream banks and stream beds are returned as closely to their pre-harvest conditions as reasonably possible.

Final inspections on deactivated roads and removed stream crossings are done under snow free conditions mid-May annually, just slightly outside the reporting period. Due to the timing of final inspections this measure cannot be reported on for this reporting period. Interim inspections on all crossings are done at time of deactivation. Based on all interim inspections, Canfor met the target and removed 100% of all stream crossings reported in Table 19 and Table 20 in accordance to standards.

Final inspections are not completed until the stream channel is visible and free of snow. Therefore, findings pertaining to final inspections are not included in the report for this measure.

BCTS has following to report on this measure:

For this reporting period, BC Timber Sales removed all stream crossings reported in Table 21 found with Measure 1-5.1 to standards.

All stream crossings were temporary in nature and are removed immediately once harvesting is complete. BC Timber Sales inspections assess the removal of crossings shortly after the time of removal and again during snow free conditions (May). These snow free inspections were completed May 1, 2006 and no issues were noted at that time.

BC Timber Sales has met the target of 100% with this measure.

1-6.1 - Conifer Seeds

Measure

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

Statement

Cones and seed obtained from wild forest stands must be collected in accordance with the MoF's seedlot registration policies and standards to ensure genetic diversity of seedlings used for reforestation in BC.

Target

100% (0)

Data

Target Met		
Yes ✓	No	Pending

Table 22: 2005-06 Seedlots planted by BCTS

Seedlot	Species	Quantity	Stock	Target %	Actual %
35075	Sx	46000	PSB412A	100	100
35075	Sx	48000	PSB412A	100	100
40111	Pl	31000	PCT412A	100	100

Discussion

The Chief Forester's Standards for Seed Use are in place to ensure that the seed collected and subsequent planted forests are appropriate for local conditions and that they contain sufficient genetic diversity to withstand natural disturbance events (SFM Plan p 74).

The measure states that the target is based on amount of seed collected in compliance compared to the number of seedlings planted in compliance.

Canfor collected all conifer seed as per the seed collection standard at the time of the collection.

During the 2005 planting season, a total of approximately 4, 744 000 seedling were planted by Canfor. Of these seedlings, 31,050 trees were planted erroneously outside the transfer limits, in one opening. The planting activity with the trees in question was halted immediately upon the identification of the error. Another 52,920 stems were planted in an area, with the knowledge that the trees were outside the transfer limits. Conversations were held with the Ministry of Forests regarding a request for variance for the planting of these seedlings. However, it was felt that the planting would be within the Chief Foresters Standards for Seed Use. The Chief Foresters Standards for Seed Use allows for up to 5% of the seedlings planted in a year to be outside the seed transfer guidelines. The 5% variance is not reflected in the target of the SFM Plan, which allows for no variance. The numbers of seedlings that are involved in this incident are meeting the Chief Foresters Guidelines, considering the variance of 5%.

In total, 1.7 % of the trees were planted outside the target of 100% identified in the SFM Plan.

In summary, Canfor met 100% of the target for seedling collection requirements and 98.3 % of the planting requirements. Realistically, the variance of 5% that allows for seedlings being planted outside the seed transfer guidelines and are granted by the Chief Forester, should be considered and be reflected in the target. Overall, and considering the 5% variance, the target of 100% has been met.

BCTS has following to report on this measure:

Table 22 reports seedlots planted and ordered within the 2005/2006 reporting period. No seed was collected by BC Timber Sales within this reporting period,

but all seedlings planted were planted with seedlots in compliance with the regulation.
As a result, BCTS has met the target of 100%.

1-6.2 - Aspen Regeneration - Natural Regeneration

Measure

The percentage of natural regeneration of aspen

Statement

This measure is meant to ensure that, where regeneration of aspen is prescribed, natural regeneration of aspen will be used. This use of natural regeneration contributes to the genetic diversity for those species.

Target

100% (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

No calculations were completed for this measure. Canfor and BCTS use natural regeneration as the only method for regenerating aspen. Planting aspen has not been adopted by either group as an operational method of regenerating aspen.

1-6.3 - Maintaining Genetic Diversity - Species Diversity

Measure

Stewardship Plan consistency with agreed upon representation targets (1-1.2); Number, spatial distribution, characteristics and type of significant habitat features in each habitat type (1-2.1); Recommended vertebrate species populations remain productive relative to baseline (1-3.2)

Statement

As stated previously, maintaining species diversity or productive and well-distributed populations of species (other than trees) is the most effective way to maintain genetic diversity in species. Indicators 1-1, 1-2 and 1-3 have been developed in order to provide management strategies that will accommodate species we have identified in management plans and actively manage for as well as for those that we have not identified and do not actively manage for. See the respective measures (1-1.2, 1-2.1, 1-3.2) reporting sections.

Target

As per targets set under each measure write up

Data

Target Met		
Yes ✓	No	Pending

Discussion

The intent of this measure is to ensure that genetic diversity of species is maintained. An effective way to accomplish that is through maintenance of species diversity and by maintaining the productivity of species, as well promoting well-distributed populations throughout the DFA. This measure refers to additional measures: 1-1.2, 1-2.1, and 1-3.2.

Canfor's proposed Forest Stewardship Plan does not capture all of the individual elements that are assessed in measure 1-1.2, 1-2.1, and 1-3.2. For example, ecosystem representation targets are not set at this time and are not directly addressed in the FSP. As well, implementation of a monitoring program for vertebrate species is in progress as part of a conservation plan, and is not captured as such in the FSP. Management for habitat elements listed in measure 1-2.1 has been addressed in the FSP for the most part.

However, the individual measures are 'building blocks' that provide a strategy on how to maintain biodiversity. In that perspective, the FSP provides strategies on stand level and landscape level biodiversity, the FSP manages for habitat elements, including vertebrates, and balances the distribution of conifers and deciduous over the landscape.

Fort the most part the target has been met, as Canfor's FSP shows consistency with the indicated measures.

In order to report adequately on this measure, it is recommended to revise the wording of the measure in regards to the FSP, or to reflect the target as being consistent with the intent of the measure.

BCTS has following to report on this measure:

Currently, BC Timber Sales does not have a Forest Stewardship Plan. As well, the ecosystem representation targets are not set at this time and implementation of a monitoring program for vertebrate species is in progress.

In order to report adequately on this measure, it is recommended to revise the wording of the measure in regards to the FSP, or to reflect the target as being consistent with the intent of the measure.

2-1.1 - Site Index

Measure

Interim Measure: Site Index by inventory type group for harvested areas

Statement

Site index is an important measure of forest productivity, that is, the capacity of a piece of land to produce timber volume. It is sensitive to changes in ecological variables including soil nutrients, soil moisture, and others. This measure provides a relative comparison of a post-harvest average site index (at free growing) compared to the pre-harvest site index (as represented by inventory estimates) in the THLB.

Target

Average post-harvest site index (at free growing) will not be less than average pre-harvest site index on harvested blocks

Data

Table 23: BCTS blocks showing SI pre and post harvest

TSL	Block	Location	SI Pre Harvest	SI Post

				Harvest
A36090	1	Sierra YoYo	22	15
A36090	2	Sierra YoYo	22	15
A36090	3	Sierra YoYo	22	15
A30517	1	Kiwigana	15	15
A30515	1	Kiwigana	20	15

Table 24Canfor pre and post harvest SI

CP/TSL	BLOCK	SI Pre Harvest	Free Growing Site Index
62084	P176	23	20
62084	P156	20	20
61538	P145	18	20
61538	P174	22	20
61538	P154	20	20
61538	P152	13	20
61538	P153	22	20
56834	P163	24	27
56832	P169	23	20
56832	P147	19	20
56831	P189	20	20
56826	P242	20	20
56826	P261	15	20
56826	P241	22	20
56316	P345	21	20
56315	P247	22	18
56315	P294	20	24
56315	P297	24	24
56314	P223	27	20
56314	P233	16/27	20
55611	P346	23	20
55609	P254	20	20
55609	P256	22	20
54026	P334	18/20	20
54026	P325	21	20
54026	P321	16	20
54024	P271	16/20	20
54024	P281	22	20
54024	P285	20	20
54024	P277	20	20
54023	P292	19	20
54021	P269A	16	20
54021	P268B	20	20
54021	P268A	16	20
54021	P270	16	20
52998	P88	16	20

CP/TSL	BLOCK	SI Pre Harvest	Free Growing Site Index
528	213C	12	15
527	280	15	15
513	51	15	15
418	803A	16	20
418	803B	22	20
418	803C	14	20
418	803D	22	20
407	602B	17	15
407	48	15/20	15
407	209	15	15
401	159B	15	20
401	206B	15	15
315	465	18	15
301	309	19	15
132	1163	15	20
98	421	15	15
77	1101	12	15
76	592	10	15
76	591A	10	15
76	591A	10	15
76	591B	11	15
71	618	14	15
68	282B	20	15
66	462	16	15
66	599	16	15
65	596A	15	15
63	416	13/15	15
62	417	15	15
61	296B	15	15
59	294C	10	15
59	294C	10	15
59	294A	15	15
59	294B	15	15
52	118	15	15
52	120C	15	15
47	610B	19	19
47	611	19	15
47	610A	11	15
47	609	14	15
45	604A	12	15
45	606H	11	15
44	250	20	19
38	192	15	15
37	188	12	15
37	187	19	15

Target Met		
Yes ✓	No	Pending

Discussion

The purpose of this measure is to report on sustainability of the forest ecosystem productivity, specific to key soil resources. Harvesting has the potential to cause continual degradation of site quality over time. The Site Index is commonly used as an indicator of site productivity. The higher the Site Index for a given species in a given region, the higher the productivity or the quality of the site. Site Index is sensitive to changes in ecological variables including soil nutrients, soil moisture, and others.

The target for this measure is that the average post harvest site index (at FG) will not be less than average pre-harvest site index on harvested blocks.

Approx. age of reported blocks is 5 to 20 years old.

Canfor has the same types of issues with the site index estimations as indicated in the BCTS reporting section below. Table 24 shows Canfor blocks for pre and post harvest Site index (SI). One opening (A56314 Block P223) has a significantly different site index comparison. In reviewing the cruise compilation statistics for the opening, it appears that the opening has a site index closer to 20 than the 27 that was listed. The remaining openings have site index estimates that are close to the site index range for the site index conversion method.

BCTS has following to report on this measure:

Site Index is a measure of potential site productivity and can be measured using different methods: BEC method (SIBEC), growth intercept method, site index curve method, and site class conversion method. Each method has a different level of accuracy. The growth intercept is the most accurate, but cannot be completed on very young stands, the BEC method produces SI estimates of moderate accuracy (used on young stands), and the site class conversion method is the most conservative and the most common method used on plantations or post harvest.

Table 23 shows BC Timber Sales blocks for pre and post harvest Site index. Site Index for A36090 and A30515 was determined using the site conversion method. This method is based on Forest Cover Labels (G,M,P,L). These blocks had medium site classes (15-22) so they were classified with a site index of 22 and 20 respectively. Surveys completed in these blocks post-harvest used the site class conversion method, but used the lower end of the scale versus the upper end that was used in initial classifications. The TSL's above have a Medium site class with a range of 15-22 and have essentially not changed, just different ranges were used by different people at different stages of block and stand development. According to the method used to determine site class, these blocks have not changed from a medium, just the number associated with that site class

2-1.2 - Coarse Woody Debris

Measure

Amount of coarse woody debris on harvested areas

Statement

Coarse woody debris consists of snags, fallen logs, wind blown trees and large branches. Beyond providing food and habitat for animals and invertebrates and growing sites for plants, coarse woody debris is a source of nutrients for soil development and structure in streams to maintain channel stability. This measure quantifies the retention of appropriate amounts of CWD on site following harvesting operations as part of the strategy for maintaining soil productivity within the THLB. Within the THLB, CWD is retained in blocks, within wildlife tree patches, riparian areas, and in unsalvaged timber (due to fire & insects). Within the NHLB it is assumed that natural processes will result in the maintenance of appropriate levels of CWD.

Target

Interim Target: Coarse woody debris: Interim -> 4 logs (2m or greater length; 7cm or greater top diameter)/ha after harvesting (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

The Sustainable Forest Management Plan (SFMP) requires Canfor and BCTS to report on the sustainability of forest soils. Coarse Woody Debris (CWD) is a source of nutrients for soil development to indicate if biological components of forest soils are sustained. Coarse Woody Debris (CWD) is also a key habitat element and provides landscape structure, therefore used in measure 1-2.1c to report on habitat type elements and structure important to sustain biological richness. The target and the data collected, as well as the issues around data collection for CWD are the same as in measure 1-2.1c with the same default FRPA target. The target has been met for Canfor as an average of 2.08 m3/ha of Coarse Woody Debris (CWD) has been maintained on all cut blocks harvested during the reporting period. This measure will be re-assessed with the PAG and either re-worded to reflect a more accurate measure or dropped as measure 1-2.1c captures the intent of this measure.

2-2.1 - Forest Converted to Non-Forest Land use

Measure

Area of THLB converted to non-forest land use through forest management activities

Statement

In order to assess the maintenance of the productive capability of the land base, this measure specifically tracks the amount of productive land base loss due to various non-forest uses. Removal of the productive land base occurs as a result of permanent access structures, including roads, landings and gravel pits, as well as converting forested areas to non-forest land use, such as range, seismic lines and other mineral exploration. Conversion of the THLB to non-forest land also has implications for carbon sequestration. A permanent reduction in the forest means that the removal of carbon from the atmosphere and carbon storage will be correspondingly reduced.

Target

1% (+1%)

Data

Table 25 Permanent access on Canfor roads to access blocks being harvested within the reporting period.

Road Name	Length (m)	R/W Width (m)	Area (l x w)/10000=(ha)	6m Road Surface in ha

2463rd	1+941	20	3,88	1,16
Tsoo M/L	13+731	20	27,46	8,24
5049 rd	5+350	15	8,02	3,21
2200 rd	10+820	20	21,46	6,49
5829 rd	1+711	15	2,57	1,03
north dunedin	7+500	20	15,0	4,50
122 rd	6+458	20	12,90	3,87
128 rd	8+115	20	16,20	4,87
128A rd	0+374	15	0,56	0,22
2095 rd	6+937	20	13,87	4,16
2096 rd	1+728	15	5,59	1,03
2614 rd	2+778	15	4,17	1,67
6091 rd	1+613	15	2,42	0,97
6090 rd	5+333	20	10,67	3,20
6086 rd	2+020	15	3,03	1,21
31 rd	2+620	15	3,93	1,57
2603 rd	0+420	15	0,63	0,25
890 rd	3+016	15	4,52	1,81
3320 rd	1+295	15	1,94	0,78
3319 rd	0+866	15	1,30	0,52
1673 rd	2+500	20	5,00	1,50
5915 rd	2+153	15	3,23	1,29
6940 rd	0+721	15	1,08	0,43
1831 rd	2+400	20	4,80	1,44
1803 rd	0+615	15	0,92	0,37
109 rd	0+550	15	0,83	0,33
2219rd	6+411	20	12,82	3,85
2226rd	4+936	15	7,40	2,96
895rd	0+319	15	0,48	0,19
			TOTAL: 196.7 ha	**TOTAL: 63.12 ha**

Table 26: Canfor: Summary Permanent Access on Canfor cutblocks (see measure 2-2.2)

CP/FLTC	Block	Geographic Area	Area of Cutblock [ha]	Area of block under permanent access	% of block converted to non forest use
		Totals for 05/06	**4765.8**	**52.2**	**1.1%**

Table 27: BCTS: Areas converted to non forest use (permanent access)

TSL and block number	Geographic Area	Area of cutblock	Area of Permament access (to the block)
A66566	Apache	42.2	0.00
A66643	Capot-blanc	26.6	0.20
A78380	Capot-blanc	12.3	0.00
A36093	Goguka	54.5	0.00
A58699	Kiwigana	215.9	0.00
A66629 blocks 2,3,4	Liard	41	0.00
A66626	Liard	61.4	0.00
A58702	Poplar Hills	27.6	0.00
A66588	Poplar Hills	22.4	0.00
A78136	Raspberry	80.5	0.00
A78137	Raspberry	65.7	0.00
A78138	Raspberry	39.4	0.00
A78147	Raspberry	86.1	0.00
A66582	Raspberry	50.8	1.95
A66583	Raspberry	48.8	0.67
A66622 blocks 1,2,3	Stanolind	75.3	0.96
	Totals for 05/06	950.5	3.78

Target Met		
Yes ✓	No	Pending

Discussion

This measure tracks the amount of productive land base loss due to various non-forest uses. Reduction of the productive land base occurs due to development of permanent access structures, including roads, landings and gravel pits, as well as converting forested areas to non-forest land use. This measure pertains to the 'Timber Harvest Landbase' (THLB) converted to non-forest land use through forest management activities.

Table 25 shows the areas that were converted to non forest land use due to road opening by Canfor. The entire road right-off-way (R/W) is included in the calculation, although the width of the R/W has been estimated. Table 26 shows only a total number for all the conversion of forest land to non forest land due to permanent access within the cutblocks harvested during reporting period. Please refer to measure 2-2.2 for details on individual cutblocks.

Based on the information provided in Table 25 and Table 26, Canfor converted areas to non forest land use with 52.2 ha for areas within cut-blocks and 196.7 ha for areas to access those cut-blocks (roads), with a total of 248.9 ha. The current THLB is 1,432,269 ha. The percentage converted to non forest land within the THLB is 0.0174%. Canfor met the target as the area converted to non forest use is well less than 1%.

BCTS has following to report for this measure:

BC Timber Sales contributes to this measure through permanent access (roads) construction only. The formula below summarizes the area of THLB converted to non-forest land.

AC = Area of THLB converted to non forest land use (3.78 ha) in relation to the total area of THLB (1,432,269 ha) is only 0.00026% for BCTS.

BC Timber Sales contributes to this measure in a very small way as typically Canfor's or Oil and Gas Roads are utilized. BC Timber Sales met the target as the results are well under the target of 1%.

2-2.2 - Road/Landing Construction

Measure

The percentage of cutblock area having roads/landing construction due to forest management activities

Statement

This measure quantifies the amount of productive land base loss due to road and landing construction in order to assess the progress towards the target. As with the previous measure, conversion of the THLB to non-forest land also has implications for carbon sequestration. A permanent reduction in the forest means that the removal of carbon from the atmosphere and carbon storage will be correspondingly reduced. In the DFA, 139, 009 ha of roads, landings and seismic areas are identified through the TSR3 process. Seismic lines are included as part of the road network because the licensees may use them in accessing cutblocks and for log transport. It is unknown how much of the seismic lines are actually used for this purpose but their area in its entirety is included as part of the estimation in roads.

Target

< 6% (+1%)

Data

Table 28: Canfor cutblocks showing the area and percent of perm. access

Road/Landing Construction

CP/FLTC	Block	Geographic Area	Area of Cutblock [ha]	Area of block under permanent access	% of block converted to non forest use
A67177	P5913	Tsimeh	44.5	0.7	1.6%
A67177	P5914	Tsimeh	177.2	3.1	1.7%
A67177	P5915	Tsimeh	33.3	0	0.0%
A67177	P5917	Tsimeh	65.3	0.6	0.9%
A67177	P1673	Tsimeh	132.2	0	0.0%
A69690	P6937	Parker	197.6	12.2	6.2%
A65226	P3320	Raspberry	36.9	0	0.0%
A65226	P3319	Raspberry	20.5	0	0.0%
457	31	Irene	84.5	0	0.0%
457	31A	Irene	67.7	0	0.0%
453	2603	Irene	194.7	0	0.0%
450	2598	Irene	110.3	1.1	1.0%
451	2602	Irene	141	3.5	2.5%

Road/Landing Construction					
CP/FLTC	Block	Geographic Area	Area of Cutblock [ha]	Area of block under permanent access	% of block converted to non forest use
454	2614	Irene	98.7	0.8	0.8%
448	2512	North Dunedin	275.6	0	0.0%
197	2095	Torpid	188.6	0	0.0%
195	2904	Torpid	326.5	0	0.0%
195	2096	Torpid	41.1	0	0.0%
A69684	P128	North Dunedin	145.9	0	0.0%
A65237	P104	Torpid	23.2	0	0.0%
A70453	P895	Raspberry	114.7	0	0.0%
A65230	P3317	Raspberry	441.9	8.8	2.0%
501	843	Capot-Blanc	262.8	3	1.1%
503	844	Capot-Blanc	204.5	5	2.4%
497	848	Capot-Blanc	59.6	0.8	1.3%
A67214	P6096	Capot-Blanc	14.8	0	0.0%
A70422	P6092	Capot-Blanc	215.2	2.6	1.2%
A70422	P6090	Capot-Blanc	10.8	0	0.0%
A70422	P6091	Capot-Blanc	40.7	0	0.0%
A70422	P6087	Capot-Blanc	37.3	0.4	1.1%
A70422	P6086	Capot-Blanc	22.2	0	0.0%
A70422	P6088	Capot-Blanc	23.4	0	0.0%
A62090	P2463	Kiwigana	120.1	0	0.0%
425	2220	Kiwigana	133.5	2.9	2.2%
425	2219	Kiwigana	74.1	1.4	1.9%
A70423	P5842	Tsoo	55.7	1.6	2.9%
A67208	P919	Tsoo	26.2	0.3	1.1%
A67208	P918	Tsoo	9.3	0.2	2.2%
A67208	P917	Tsoo	12.7	0	0.0%
123	5831	Tsoo	49.7	0.1	0.2%
123	5827	Tsoo	59.5	0.6	1.0%
124	5048	Etane	98.5	0	0.0%
357	1831	Steamboat	161.8	0	0.0%
357	1803	Steamboat	30.3	0	0.0%
A74692	P2009	Elleh	81.2	2.5	3.1%
		Totals for 05/06	4765.8	52.2	1.1%

Table 29: BCTS cutblocks showing the area and percent of perm. access

TSL and block number	Geographic Area	Area of cutblock	Area of block under permanent access	% of block converted to non forest use
A66566	Apache	42.2	0	0.0%
A66643	Capot-blanc	26.6	0	0.0%
A78380	Capot-blanc	12.3	0	0.0%
A36093	Goguka	54.5	0	0.0%
A58699	Kiwigana	215.9	0	0.0%
A66629 blocks 2,3,4	Liard	41	0	0.0%
A66626	Liard	61.4	0	0.0%
A58702	Poplar Hills	27.6	0	0.0%
A66588	Poplar Hills	22.4	0	0.0%
A78136	Raspberry	80.5	0	0.0%
A78137	Raspberry	65.7	0	0.0%
A78138	Raspberry	39.4	0	0.0%
A78147	Raspberry	86.1	0	0.0%
A66582	Raspberry	50.8	1.8	3.5%
A66583	Raspberry	48.8	0.4	0.8%
A66622 blocks 1,2,3	Stanolind	75.3	0	0.0%
	Totals for 05/06	950.5	2.2	0.2%

Target Met		
Yes ✓	No	Pending

Discussion

This measure quantifies the amount of productive land base loss due to road and landing construction within cutblocks. The overall objective is to minimize the loss of productive landbase as a result of forestry activities.

The target of cutblock area having roads/landings construction due to forest management activities has been met, as the area of road/landing construction is 1.1%, well below the maximum target of 6% (variance of 1%).

Reviewing the individual cut block areas, it appears that only block P6937 is with 6.2 % slightly exceeding the target. Then again, considering the variance of 1%, the individual cutblock would still be acceptable in meeting the target. The block shape of P6937 is very long and skinny in nature and the fact that 'Pipeline' road runs through the middle of the block results in permanent access being so high.

Overall, out of 4765.8 hectares that were harvested between April1/05 and March 31/06, 52.2 hectares of area have been converted to permanent access. This means a total of 1.1 % of the area harvested is permanent access.

BCTS has following to report for this measure:

BC Timber Sales predominantly builds temporary roads and landings so permanent access occupies only a small percentage of road and landing construction.

Table 29 summarizes the permanent access constructed within BC Timber Sales cutblocks. BC Timber Sales has met the target as permanent access is with 0.2% far less than the maximum target of 6%.

2-2.3 - Long Term Detrimental Soil Disturbance

Measure

The percentage of long term detrimental soil disturbance as a result of forest management activities

Statement

This measure tracks the percentage of long term detrimental soil disturbance at a site (i.e. cutblock) level where long-term detrimental soil disturbance is defined for blocks with compaction or water table issues lasting approximately 10 years post-harvest or post-silviculture activity for each licensee (i.e. Canfor & BCTS).

Target

0% (+2%)

Data

Target Met		
Yes ✓	No	Pending

Discussion

Long term detrimental soil disturbance as a result of forest management practices has not been detected and reported during the reporting period for both, Canfor and BCTS. The target of 0% has therefore been met. BCTS has no records of incidents recorded in the Incident Tracking System and currently has no history of this through BCTS forest management activities. Canfor's FMS Incident Tracking System (ITS) is used to track all incidents related to the environmental aspect of soil productivity. No incidents were reported. Long term soil disturbance is defined for blocks with compaction or water table issues lasting approximately 10 years post harvest or post-silviculture activities. For reporting purposes, only blocks where long term soil disturbances have been detected were considered. Potential negative impact on soil productivity can be caused during harvest and road building activities, site preparation or simply caused by a high water table of the site. As the majority of our harvest activities occur on frozen and flat ground, soil disturbance becomes rarely an issue. A small amount of the volume is harvested during summer time, but predominantly on sandy soils to minimize damage.

2-2.4 - Landslides

Measure

Number of hectares of landslides resulting from forestry practices

Statement

Landslides are mass movements of soil or debris that can result in non-productive areas or reduced productivity for forested sites. Loss of soil productivity due to landslides related to forestry practices will be minimized as part of sustaining the overall productive capability in the THLB.

Target

< 10 cumulative ha in the THLB for slides > 0.5ha in size (0.5ha)

Data

Target Met		
Yes ✓	No	Pending

Discussion

Landslides resulting from forestry practices did not occur during the reporting period, and therefore, the target of less than 10 cumulative hectares in the THLB has been met. Landslides resulting from forest practices are tracked in the FMS Incident Tracking System. Activities, such as harvesting and road building can create conditions that initiate slides, especially when these activities occur on unstable or potentially unstable terrain. Terrain Stability assessments are conducted for areas that have any indication of unstable terrain and harvesting activities are conducted in accordance to the recommendations in the terrain stability assessment reports. Terrain stability assessments have been completed on two Canfor blocks (Block 5827 and P6937A) that were scheduled for harvesting in the 2005/06 harvest season to ensure potential negative impacts to the environment are reduced. Harvesting and road inspections are completed under snow free conditions, usually by mid-May, and verify if soil movement occurred.

2-3.1 - Regeneration Delay

Measure

Regeneration delay period

Statement

Regeneration delay is specified in a prescription and is defined as the time between the start of harvesting and the earliest date by which the prescription requires a minimum number of acceptable, well-spaced trees per hectare to be growing on the cutblock. This measure quantifies the appropriate time for regeneration to establish on DFA blocks harvested by the signatories.

Target

Planted: 2 (1) years. Natural: 4(1) years. Canfor ' Fort Nelson specifies a maximum 4 year regeneration delay period for coniferous and deciduous plantations. For each harvested block, planted areas will be established within 2 years of harvest and naturally regenerated areas will be established within 4 years after harvest.

Data

Table 30 Canfor: average years to regenerate for deciduous and conifer blocks

Op. Area	Licence	Permit	Block	Harvest Date	Stratum	Area	Regen Delay Met Date	Stratum Management Type	Years to Meet Regen Delay
Beaver	A17007	567	585	3/15/1998	A	22.1	June 2005	Coniferous Regen	7.3
Beaver	A17007	567	585	3/15/1998	B	24.1	June 2005	Coniferous Regen	7.3
Beaver	A17007	567	585	3/15/1998	C	2	June 2005	Coniferous Regen	7.3
Beaver	A62087	APR-62087	P4710	2/19/2002	A	29.08	June 2005	Deciduous Regen	3.3
Beaver	A62087	APR-62087	P4816	1/24/2002	A	13.7	June 2005	Deciduous Regen	3.4
Cabin	A17007	115	468	12/28/2003	A	22.4	June 2005	Coniferous Regen	1.4
Cabin	A17007	115	468	12/28/2003	C	1.4	June 2005	Coniferous Regen	1.4
Cabin	A17007	620	4701A	3/14/2002	A	202	May 2005	Coniferous Regen	3.2
Cabin	A17007	620	4701A	3/14/2002	A	202	May 2005	Deciduous Regen	3.2
Cabin	A67220	APR-67220	P2112	1/25/2004	C	2	June 2005	Coniferous Regen	1.4
Cabin	A67220	APR-67220	P2113	1/20/2004	A	6	June 2005	Coniferous Regen	1.4
Cabin	A67220	APR-67220	P2113	1/20/2004	B	27	June 2005	Coniferous Regen	1.4
Cabin	A67220	APR-67220	P2113	1/20/2004	D	0.3	June 2005	Coniferous Regen	1.4
Cabin	A67220	APR-67220	P2113	1/20/2004	E	1.2	June 2005	Coniferous Regen	1.4
Cabin	A67206	APR-67206	P486	1/6/2003	A	24.4	May 2005	Deciduous Regen	2.4
Capot-Blanc	A56839	APR-56839	P4801	2/27/2003	A	20.65	June 2005	Deciduous Regen	2.3
Capot-Blanc	A54028	APR-54028	P4803	3/16/2002	B	1.7	June 2005	Deciduous Regen	3.2
Capot-Blanc	A54028	APR-54028	P4805	3/10/2002	A	5.2	June 2005	Deciduous Regen	3.3
Capot-Blanc	A67214	APR-67214	P6093	3/8/2004	A	60.1	June 2005	Coniferous Regen	1.3
Elleh	A17007	162	2047	3/16/2003	A	13.7	June 2005	Coniferous Regen	2.3
Elleh	A17007	162	2047	3/16/2003	B	38	June 2005	Coniferous Regen	2.3
Elleh	A17007	162	2047	3/16/2003	C	0.7	June 2005	Coniferous Regen	2.3
Elleh	A17007	162	2047	3/16/2003	D	1.5	June 2005	Coniferous Regen	2.3
Elleh	A17007	163	2048	12/12/2001	A	28.8	May 2005	Deciduous Regen	3.4
Elleh	A17007	153	2055	11/22/2001	A	8.1	May 2005	Deciduous Regen	3.5
Elleh	A17007	153	2055	11/22/2001	C	16.4	May 2005	Deciduous Regen	3.5
Elleh	A17007	163	2725	12/7/2001	A	20.8	May 2005	Deciduous Regen	3.5
Elleh	A17007	153	4964	11/17/2001	A	36.2	May 2005	Deciduous Regen	3.5
Elleh	A17007	164	4970	3/19/2003	A	5	June 2005	Coniferous Regen	2.3
Etane	A17007	116	5001	12/30/2003	A	42.2	July 2005	Coniferous Regen	1.5

Op. Area	Licence	Permit	Block	Harvest Date	Stratum	Area	Regen Delay Met Date	Stratum Management Type	Years to Meet Regen Delay
Etane	A17007	116	5001	12/30/2003	B	2	July 2005	Coniferous Regen	1.5
Etane	A17007	116	5382	12/13/2003	A	0.7	July 2005	Coniferous Regen	1.6
Etane	A17007	116	5382	12/13/2003	B	46.8	July 2005	Coniferous Regen	1.6
Irene	A17007	450	2596	3/26/2004	A	91.2	July 2005	Coniferous Regen	1.3
Irene	A17007	450	2596	3/26/2004	B	14.2	July 2005	Coniferous Regen	1.3
Kiwigana	A17007	49	2480	2/15/2004	A	32.2	July 2005	Coniferous Regen	1.4
Kiwigana	A17007	49	2480	2/15/2004	B	97.3	July 2005	Coniferous Regen	1.4
Kiwigana	A17007	49	2480	2/15/2004	C	5	July 2005	Coniferous Regen	1.4
Kiwigana	A17007	49	2482	1/16/2004	A	17.1	July 2005	Coniferous Regen	1.5
Kiwigana	A17007	49	2482	1/16/2004	B	0.6	July 2005	Coniferous Regen	1.5
Kiwigana	A17007	72	2483	3/14/2004	A	21.1	July 2005	Coniferous Regen	1.3
Kiwigana	A17007	72	2483	3/14/2004	B	16.2	July 2005	Coniferous Regen	1.3
Kiwigana	A17007	72	2483	3/14/2004	C	1	July 2005	Coniferous Regen	1.3
Kiwigana	A17007	72	2483	3/14/2004	D	1	July 2005	Coniferous Regen	1.3
Kiwigana	A17007	72	2484	3/5/2004	A	49.7	July 2005	Coniferous Regen	1.4
Kiwigana	A17007	72	2484	3/5/2004	B	8.5	July 2005	Coniferous Regen	1.4
Kiwigana	A17007	72	2484	3/5/2004	C	2	July 2005	Coniferous Regen	1.4
Kiwigana	A17007	72	2484	3/5/2004	D	0.3	July 2005	Coniferous Regen	1.4
Kiwigana	A17007	420	4636	3/6/2002	A	40.3	May 2005	Deciduous Regen	3.2
Kiwigana	A17007	420	4637	12/1/2002	A	22.6	August 2005	Deciduous Regen	2.7
Kiwigana	A17007	160	4642	2/16/2002	A	50.8	July 2005	Coniferous Regen	3.4
Kiwigana	A17007	160	4642	2/16/2002	B	2	July 2005	Coniferous Regen	3.4
Kiwigana	A17007	420	4666	12/29/2001	A	50.5	May 2005	Coniferous Regen	3.4
Kiwigana	A62090	APR-62090	P2468	12/10/2002	1	14.6	August 2005	Deciduous Regen	2.7
Kiwigana	A62090	APR-62090	P2481	1/16/2003	A	73.9	May 2005	Coniferous Regen	2.3
Kiwigana	A62090	APR-62090	P2481	1/16/2003	A	73.9	May 2005	Deciduous Regen	2.3
Kiwigana	A62090	APR-62090	P2490	12/18/2003	B	6.7	July 2005	Coniferous Regen	1.6
Klua	A17007	150	4900A	9/22/2001	A	14.3	August 2005	Deciduous Regen	3.9
Klua	A17007	150	4900C	9/20/2001	A	33.8	May 2005	Deciduous Regen	3.7
Kotcho	A17007	134	1158	2/6/2002	A	18.6	June 2005	Coniferous Regen	3.3
Kotcho	A17007	134	1158	2/6/2002	B	11.5	June 2005	Coniferous Regen	3.3
Kotcho	A17007	134	1158	2/6/2002	C	1	June 2005	Coniferous Regen	3.3
Kotcho	A17007	134	1158	2/6/2002	D	1	June 2005	Coniferous Regen	3.3
Kotcho	A17007	141	1164	2/11/2002	B	18.8	May 2005	Deciduous Regen	3.2
Kotcho	A17007	130	1169	2/21/2002	A	8.7	May 2005	Coniferous Regen	3.2
Kotcho	A17007	130	1169	2/21/2002	A	8.7	May 2005	Deciduous Regen	3.2

Op. Area	Licence	Permit	Block	Harvest Date	Stratum	Area	Regen Delay Met Date	Stratum Management Type	Years to Meet Regen Delay
Kotcho	A17007	130	1169	2/21/2002	B	20.8	June 2005	Coniferous Regen	3.3
Kotcho	A17007	130	1169	2/21/2002	C	8.4	June 2005	Coniferous Regen	3.3
Kotcho	A17007	130	1169	2/21/2002	D	3	June 2005	Coniferous Regen	3.3
Kotcho	A17007	130	1169	2/21/2002	E	3.8	June 2005	Coniferous Regen	3.3
Kotcho	A17007	141	1173	3/8/2002	A	36.6	May 2005	Coniferous Regen	3.2
Kotcho	A17007	141	1173	3/8/2002	C	1.1	June 2005	Coniferous Regen	3.3
Kotcho	A17007	130	1189	3/8/2002	A	20.4	June 2005	Coniferous Regen	3.3
Kotcho	A17007	130	1189	3/8/2002	B	29.5	June 2005	Coniferous Regen	3.3
Kotcho	A17007	130	1189	3/8/2002	C	1	June 2005	Coniferous Regen	3.3
Kotcho	A17007	130	1189	3/8/2002	D	1.5	June 2005	Coniferous Regen	3.3
Kotcho	A17007	134	1198B	2/13/2002	B	11.2	May 2005	Coniferous Regen	3.2
Kotcho	A17007	134	1198B	2/13/2002	B	11.2	May 2005	Deciduous Regen	3.2
Kotcho	A17007	130	37	3/3/2002	A	46.8	May 2005	Deciduous Regen	3.2
Kotcho	A17007	130	37	3/3/2002	B	10.7	June 2005	Coniferous Regen	3.3
Nelson Forks	A17007	585	673	2/28/1999	A	15.5	June 2005	Coniferous Regen	6.3
Nelson Forks	A17007	585	673	2/28/1999	B	34.5	June 2005	Coniferous Regen	6.3
Nelson Forks	A17007	585	673	2/28/1999	C	1.9	June 2005	Coniferous Regen	6.3
Nelson Forks	A17007	592	901E	1/21/2003	A	39.9	May 2005	Coniferous Regen	2.3
Nelson Forks	A17007	592	901G	3/14/2002	A	35.2	May 2005	Coniferous Regen	3.2
North Dunedin	A65233	APR-65233	P132	1/13/2003	A	57.6	May 2005	Coniferous Regen	2.4
North Dunedin	A65233	APR-65233	P132	1/13/2003	A	57.6	May 2005	Deciduous Regen	2.4
North Dunedin	A65233	APR-65233	P132	1/13/2003	B	12	May 2005	Deciduous Regen	2.4
North Dunedin	A65233	APR-65233	P214	2/1/2003	B	32.6	July 2005	Coniferous Regen	2.4
Obole	A56319	APR-56319	P3141	12/14/2002	A	14.9	May 2005	Deciduous Regen	2.4
Obole	A67176	APR-67176	P3142	2/28/2003	1	21.6	May 2005	Deciduous Regen	2.2
Obole	A67176	APR-67176	P3146	2/19/2003	A	23.2	May 2005	Coniferous Regen	2.2
Obole	A67176	APR-67176	P3146	2/19/2003	A	23.2	May 2005	Deciduous Regen	2.2
Patry	A17007	421	5815	3/25/2000	A	50.7	July 2005	Deciduous Regen	5.3
Patry	A17007	421	5815	3/25/2000	B	4.9	July 2005	Coniferous Regen	5.3
Patry	A56831	APR-56831	P167	2/28/1999	B	10.3	July 2005	Coniferous Regen	6.4
Patry	A56831	APR-56831	P167	2/28/1999	D	2.2	July 2005	Coniferous Regen	6.4
Raspberry	A65230	APR-65230	P3318	12/2/2002	A	28.9	May 2005	Deciduous Regen	2.5
Raspberry	A67175	APR-67175	P3326	2/18/2003	A	270.6	May 2005	Deciduous Regen	2.2
Raspberry	A65230	APR-65230	P3332	12/24/2002	B	14.4	June 2005	Coniferous Regen	2.5
Raspberry	A65230	APR-65230	P3333	12/2/2002	A	57.96	May 2005	Deciduous Regen	2.5
Raspberry	A69682	APR-69682	P3346	2/21/2004	B	17.3	June 2005	Coniferous Regen	1.3

Op. Area	Licence	Permit	Block	Harvest Date	Stratum	Area	Regen Delay Met Date	Stratum Management Type	Years to Meet Regen Delay
Raspberry	A61541	APR-61541	P899	12/13/2003	A	30.7	July 2005	Coniferous Regen	1.6
Raspberry	A61541	APR-61541	P909	12/22/2003	B	3.7	July 2005	Coniferous Regen	1.5
Sahtaneh	A17007	119	4579	3/22/2004	B	27.3	July 2005	Coniferous Regen	1.3
Sahtaneh	A17007	119	4579	3/22/2004	C	1.5	July 2005	Coniferous Regen	1.3
Sahtaneh	A17007	128	4590	3/16/2004	B	12	July 2005	Coniferous Regen	1.3
Sahtaneh	A17007	128	4590	3/16/2004	C	0.5	July 2005	Coniferous Regen	1.3
Sahtaneh	A17007	119	4591	2/16/2004	A	34.8	July 2005	Coniferous Regen	1.4
Sahtaneh	A17007	119	4591	2/16/2004	B	0.6	July 2005	Coniferous Regen	1.4
Sahtaneh	A17007	119	4592	3/22/2004	A	21	July 2005	Coniferous Regen	1.3
Sahtaneh	A17007	119	4592	3/22/2004	B	0.9	July 2005	Coniferous Regen	1.3
Sahtaneh	A17007	128	4593	3/4/2004	B	24.1	July 2005	Coniferous Regen	1.4
Sahtaneh	A17007	128	4593	3/4/2004	C	1.4	July 2005	Coniferous Regen	1.4
Sahtaneh	A17007	167	4599	3/4/2004	A	49.7	July 2005	Coniferous Regen	1.4
Sahtaneh	A17007	167	4599	3/4/2004	B	3.8	July 2005	Coniferous Regen	1.4
Sahtaneh	A17007	119	4601	2/6/2004	A	56	July 2005	Coniferous Regen	1.4
Sahtaneh	A17007	119	4601	2/6/2004	B	3	July 2005	Coniferous Regen	1.4
Sandy	A17007	595	3006A	2/12/2004	A	30.3	June 2005	Coniferous Regen	1.3
Sandy	A17007	595	3006A	2/12/2004	B	1.7	June 2005	Coniferous Regen	1.3
Sandy	A17007	595	3008A	3/21/2004	A	307.1	June 2005	Coniferous Regen	1.2
Sandy	A17007	595	3008A	3/21/2004	B	5	June 2005	Coniferous Regen	1.2
Sandy	A17007	599	3009	2/26/2004	A	56.4	June 2005	Coniferous Regen	1.3
Sandy	A17007	599	3009	2/26/2004	C	0.9	June 2005	Coniferous Regen	1.3
Sandy	A17007	595	3013A	2/7/2004	A	60.1	June 2005	Coniferous Regen	1.3
Sandy	A17007	595	3013A	2/7/2004	B	3.2	June 2005	Coniferous Regen	1.3
Sandy	A17007	595	454	3/24/2004	B	20.51	June 2005	Coniferous Regen	1.2
Steamboat	A17007	356	3349	3/14/2004	A	24.3	July 2005	Coniferous Regen	1.3
Steamboat	A17007	355	3362	12/12/2003	A	50.2	June 2005	Coniferous Regen	1.5
Steamboat	A17007	355	3362	12/12/2003	B	2.5	June 2005	Coniferous Regen	1.5
Steamboat	A17007	355	3363	12/13/2003	A	20.6	July 2005	Coniferous Regen	1.6
Steamboat	A17007	355	3363	12/13/2003	B	0.5	July 2005	Coniferous Regen	1.6
Steamboat	A17007	355	3383	12/21/2003	A	15.4	July 2005	Coniferous Regen	1.6
Steamboat	A17007	355	3383	12/21/2003	B	16.9	July 2005	Coniferous Regen	1.6
Torpid	A65237	APR-65237	P106	2/7/2004	B	6	July 2005	Coniferous Regen	1.4
Torpid	A65237	APR-65237	P106	2/7/2004	C	0.5	July 2005	Coniferous Regen	1.4
Torpid	A65237	APR-65237	P107	3/8/2004	B	8.5	July 2005	Coniferous Regen	1.4
Torpid	A65237	APR-65237	P116	2/8/2004	B	0.9	July 2005	Coniferous Regen	1.5

Op. Area	Licence	Permit	Block	Harvest Date	Stratum	Area	Regen Delay Met Date	Stratum Management Type	Years to Meet Regen Delay
Tsimeh	A17007	181	1312	2/20/2004	A	12.1	July 2005	Coniferous Regen	1.4
Tsimeh	A17007	181	1312	2/20/2004	B	1.6	July 2005	Coniferous Regen	1.4
Tsimeh	A17007	172	1313	3/8/2004	A	23.2	July 2005	Coniferous Regen	1.4
Tsimeh	A17007	172	1313	3/8/2004	B	2	July 2005	Coniferous Regen	1.4
Tsimeh	A17007	181	1314	3/26/2004	A	21.4	July 2005	Coniferous Regen	1.3
Tsimeh	A17007	181	1314	3/26/2004	B	0.6	July 2005	Coniferous Regen	1.3
Tsimeh	A17007	181	1315	3/24/2004	A	59	July 2005	Coniferous Regen	1.3
Tsimeh	A17007	181	1315	3/24/2004	B	3	July 2005	Coniferous Regen	1.3
Tsimeh	A17007	172	1317	2/25/2004	A	19.7	July 2005	Coniferous Regen	1.4
Tsimeh	A17007	172	1317	2/25/2004	B	1	July 2005	Coniferous Regen	1.4
Tsimeh	A17007	147	4907	2/3/2003	B	112.7	May 2005	Deciduous Regen	2.3
Tsimeh	A17007	147	4907	2/3/2003	C	43.5	May 2005	Deciduous Regen	2.3
Tsimeh	A17007	145	4960	1/28/2003	B	23.4	July 2005	Coniferous Regen	2.5
Tsimeh	A17007	171	5900	2/29/2004	B	72	July 2005	Coniferous Regen	1.4
Tsimeh	A17007	171	5900	2/29/2004	C	3.5	July 2005	Coniferous Regen	1.4
Tsimeh	A17007	171	5901	3/22/2004	A	50.5	July 2005	Coniferous Regen	1.3
Tsimeh	A17007	171	5901	3/22/2004	C	3	July 2005	Coniferous Regen	1.3
Tsoo	A67208	APR-67208	P920	1/23/2004	B	17.2	July 2005	Coniferous Regen	1.5
Tsoo	A67208	APR-67208	P920	1/23/2004	D	2.2	July 2005	Coniferous Regen	1.5
Zus	A65236	APR-65236	P6035	1/19/2003	A	31.2	June 2005	Deciduous Regen	2.4
Zus	A65236	APR-65236	P6036	1/2/2003	A	40.5	June 2005	Deciduous Regen	2.4
Zus	A65236	APR-65236	P6040	1/9/2003	A	27.6	June 2005	Deciduous Regen	2.4
Overal % of blocks that met regen delay for this time period: 90/3002 = 3.00%								**# blocks in dataset: 3002** **Average Years by Stratum to Regen Met: 2.4** **Coniferous Species Average Years Regen Met: 2.2** **Deciduous Species Average Years Regen Met: 2.9**	

Table 31: BCTS: Average years to regenerate for deciduous and conifer blocks

Operating Area	Licence	Block	Harvest Date	Stratum	Area	Regen Met Date	Stratum Mgt Type	Years to Regen
Tsoo Creek	A66612	3	Mar-03	A	50.6	Jul-05	Deciduous Regen	2.3
Capot Blanc	A59685	3	Mar-03	A	16.6	Jul-05	Deciduous Regen	2.3
Raspberry Creek	A66581	1	Mar-03	A	17.1	Jul-05	Deciduous Regen	2.3
Raspberry Creek	A66581	234	Mar-03	A	19.3	Jul-05	Deciduous Regen	2.3
Raspberry Creek	A66581	5	Mar-03	A	15.9	Jul-05	Deciduous Regen	2.3
Tsoo Creek	A66612	1	Mar-03	A	5.5	Jul-05	Deciduous Regen	2.3
Tsoo Creek	A66612	2	Mar-03	A	13.6	Jul-05	Deciduous Regen	2.3
Tsoo Creek	A66615	1	Jan-03	A	34.2	Jul-05	Deciduous Regen	2.3
Tsoo Creek	A66614	2	Mar-03	A	19.8	Jul-05	Deciduous Regen	2.3
Patry Lake	A66640	1	Mar-03	A	15	Jul-05	Coniferous Regen	2.3
Patry Lake	A66640	1	Mar-03	B	10.1	Jul-05	Deciduous Regen	2.3
Capot Blanc	A59686	1	Feb-03	A	7.1	Jul-05	Deciduous Regen	2.4
Capot Blanc	A59686	2	Feb-03	A	9.2	Jul-05	Deciduous Regen	2.4
Capot Blanc	A59685	2	Mar-03	A	26.8	Jul-05	Deciduous Regen	2.3
Liard River	A61740	1	Mar-02	A	72.2	Jul-05	Coniferous Regen	2.3
							Ave Years by Stratum to Regen Met	2.3
							Ave Years to regen for Deciduous	2.3
							Ave Yeard to regen for Coniferous	2.3

Target Met		
Yes ✓	No	Pending

Discussion

This measure is evaluating the time between the start of harvest and the earliest date by which the harvested area has a minimum number of acceptable, well-spaced trees per hectare.

Canfor's population identified for this measure are those strata associated with standard units with the regen delay milestone reported as being met during the reporting period. The target for planted strata has been set at 2 years, with a 1 year variance. The report identified those areas as conifer management areas, and shows that on average, the regen delay for an opening is 2.2 years.

Some individual openings have a longer regen delay period than the target. In the majority of cases, these openings have had the majority of the opening planted prior to debris pile burning and the second entry to complete planting activities in the areas that were occupied by the debris piles is later than 2 years. Regen Delay is not declared until the entire NSR is reported as planted, therefore

the delayed planting of the burn piles can extend the period of time regen delay is declared.

Deciduous management areas are naturally regenerated, and have a target of meeting regen delay in 4 years, with a 1 year variance. During the 2005 reporting period, the average regen delay for deciduous openings was 3.5 years, which is below the target time period.

Overall, Canfor met the target as indicated in Table 30.

BCTS has following to report for this measure:

BC Timber Sales relies on natural regeneration for deciduous stands and plants conifer trees on conifer leading harvested areas. The Site Plan or Silviculture Prescription states the minimum dates that the plantation must reach regeneration delay, typically 4 years.

The SFM Plan has set a target of 2 years (1 year variance) for planted blocks – conifer, and a 4 year target (1 year variance) for natural regeneration blocks – aspen. Planting is typically done immediately after harvesting. Aspen, or natural regeneration, has a four year target as surveys to assess the regeneration are typically not done until year 2 or 3 in order to give the regeneration time to establish.

Table 31 shows that BC Timber Sales has met the target for deciduous as regeneration for this reporting period was accomplished in 2.3 years. Conifer plantations were established by 2.3 years which is within the target and variance permitted in the SFM Plan. One of the conifer blocks noted in Table 31 (A61740) was actually planted in July 2002, but was not reported until 2005, so the target date of 2 years was actually achieved, but not reported in time.

2-3.2 - Regeneration Standards

Measure

The percent compliance with regeneration standards set in FDP/FSP

Statement

Regeneration standards exist to ensure that appropriate species are reforested on harvested areas to within acceptable numbers. The Ministry of Forests sets out what species are preferred and acceptable for specific biogeoclimatic site

series. Compliance with this measure is an important surrogate for carbon sequestration. Reforesting harvested areas quickly to their full capacities ensures continued removal of carbon from the atmosphere and its storage in growing trees.

Target

100% (0)

Data

Table 32: BCTS blocks compliant with Regeneration standards

TSL	SU	NAR	REGEN_DELAY	Regen Met Y/N
A61297	2	91.80	15-Jan-06	Y
A61297	3	16.50	15-Jan-06	Y
A61297	1	23.30	15-Jan-06	Y
A61297	5	2.20	15-Jan-06	Y
A61297	6	7.60	15-Jan-06	N
A61297	4	0.90	15-Jan-06	Y
A59687	A	33.80	01-Jan-06	Y
A49356	A	19.80	18-Feb-06	Y
A59685	2	4.70	27-Feb-06	Y
A59685	1	18.10	27-Feb-06	Y
A59685	3	0.60	27-Feb-06	Y
A61739	1	251.40	20-Jan-06	Y
A61740	1	72.20	01-Jan-06	Y

Total	542.90
total Yes	535.30
Tot comp	98.60%

Table 33: Canfor blocks compliant with regeneration standards

Canfor compliance with regeneration standards April 1, 2005 to March 31, 2006							
Licence	**CP/TSL**	**Block**	**SU**	**Area**	**Harvest Date**	**Regen Delay Date**	**Regen Met**
A17007							
A17007	353	3366	1	14.70	11/27/2001	11/26/2005	N
A17007	353	3366	1	37.60	11/27/2001	11/26/2005	N
A17007	169	H2	1	16.50	12/29/2001	12/28/2005	Y
A17007	169	H2	4	5.50	12/29/2001	12/28/2005	Y
A17007	169	H2	3	3.50	12/29/2001	12/28/2005	Y
A17007	169	H2	2	9.50	12/29/2001	12/28/2005	Y
A17007	121	883	2	41.00	01/23/2002	01/22/2006	Y
A17007	121	883	1	9.00	01/23/2002	01/22/2006	Y
A17007	85	2382A	2	10.30	12/15/2001	12/14/2005	Y
A17007	85	2382A	1	4.10	12/15/2001	12/14/2005	N
A17007	85	2382A	1	26.90	12/15/2001	12/14/2005	N
A17007	130	37	2	10.70	02/14/2002	02/13/2006	Y
A17007	130	37	1	46.80	02/14/2002	02/13/2006	Y
A17007	107	1020	1	44.50	12/11/2001	12/10/2005	Y
A17007	204	H5	1	2.40	11/06/2001	11/05/2005	Y
A17007	204	H4	1	2.10	11/06/2001	11/05/2005	Y
A17007	204	H6	1	2.50	09/16/2001	09/15/2005	Y
A17007	141	1173	1	36.60	01/28/2002	01/27/2006	Y
A17007	141	1173	2	16.20	01/28/2002	01/27/2006	N
A17007	141	1173	3	1.10	01/28/2002	01/27/2006	Y
A17007	141	1165	1	42.20	01/04/2002	01/03/2006	Y
A17007	142	1159	1	20.10	01/24/2002	01/23/2006	Y
A17007	134	1158	1	1.00	01/19/2002	01/18/2006	Y
A17007	134	1158	1	18.60	01/19/2002	01/18/2006	Y
A17007	134	1158	2	1.00	01/19/2002	01/18/2006	Y
A17007	134	1158	2	11.50	01/19/2002	01/18/2006	Y
A17007	130	1189	1	1.00	01/29/2002	01/28/2006	Y
A17007	130	1189	1	20.40	01/29/2002	01/28/2006	Y
A17007	130	1189	2	1.50	01/29/2002	01/28/2006	Y
A17007	130	1189	2	29.50	01/29/2002	01/28/2006	Y
A17007	130	1169	1	8.70	01/24/2002	01/23/2006	Y
A17007	130	1169	2	3.00	01/24/2002	01/23/2006	Y
A17007	130	1169	2	20.80	01/24/2002	01/23/2006	Y
A17007	142	1198A	1	14.70	01/25/2002	01/24/2006	Y
A17007	130	1169	3	3.80	01/24/2002	01/23/2006	Y
A17007	130	1169	3	8.40	01/24/2002	01/23/2006	Y
A17007	153	2055	2	25.00	10/12/2001	10/11/2005	Y
A17007	153	2055	1	8.10	10/12/2001	10/11/2005	Y
A17007	587	1462	1	60.20	11/15/2001	11/14/2005	Y
A17007	153	2055	3	16.40	10/12/2001	10/11/2005	Y
A17007	420	4636	1	40.30	11/28/2001	11/27/2005	Y
A17007	163	2725	1	20.80	11/01/2001	10/31/2005	Y
A17007	163	2725	2	14.80	11/01/2001	10/31/2005	Y

Canfor compliance with regeneration standards April 1, 2005 to March 31, 2006							
Licence	**CP/TSL**	**Block**	**SU**	**Area**	**Harvest Date**	**Regen Delay Date**	**Regen Met**
A17007	161	4694A	1	33.30	11/30/2001	11/29/2005	Y
A17007	153	4964	1	36.20	08/15/2001	08/14/2005	Y
A17007	113	631C	1	7.70	12/15/2001	12/14/2005	Y
A17007	113	630A	1	15.20	01/13/2002	01/12/2006	
A17007	113	1959	1	14.10	12/11/2001	12/10/2005	Y
A17007	160	4644	1	24.20	12/06/2001	12/05/2005	N
A17007	160	4644	1	66.40	12/06/2001	12/05/2005	N
A17007	113	631B	1	2.40	12/15/2001	12/14/2005	Y
A17007	113	631B	2	18.90	12/15/2001	12/14/2005	Y
A17007	190	907A	2	6.40	12/01/1999	11/29/2005	Y
A17007	134	1180	1	12.60	01/30/2002	01/29/2006	Y
A17007	121	879	1	15.30	02/08/2002	02/07/2006	Y
A17007	160	4642	1	2.00	01/28/2002	01/27/2006	Y
A17007	160	4642	1	50.80	01/28/2002	01/27/2006	Y
A17007	592	901D	1	41.30	01/04/2002	01/03/2006	Y
A17007	592	901E	1	39.90	12/08/2001	12/07/2005	Y
A17007	153	4964	2	9.60	08/15/2001	08/14/2005	Y
A17007	150	4900A	1	14.30	08/10/2001	08/09/2005	Y
A17007	150	4900A	2	5.80	08/10/2001	08/09/2005	Y
A17007	150	4900A	2	23.20	08/10/2001	08/09/2005	Y
A17007	420	4666	1	50.50	11/06/2001	11/05/2005	Y
A17007	162	2036	1	1.30	11/14/2001	11/13/2005	N
A17007	162	2036	1	30.30	11/14/2001	11/13/2005	N
A17007	162	2036	2	19.90	11/14/2001	11/13/2005	Y
A17007	150	4900C	1	33.80	08/09/2001	08/08/2005	Y
A17007	150	4900C	2	16.20	08/09/2001	08/08/2005	Y
A17007	150	4900E	1	44.80	08/30/2001	08/29/2005	Y
A17007	592	901C	1	44.00	12/08/2001	12/07/2005	Y
A17007	592	901G	1	35.20	02/21/2002	02/20/2006	Y
A17007	593	901L	1	37.60	02/13/2002	02/12/2006	Y
A17007	190	907A	1	91.00	12/01/1999	11/29/2005	Y
A17007	592	901F	1	43.00	02/14/2002	02/13/2006	Y
A17007	134	1180	2	36.00	01/30/2002	01/29/2006	Y
A17007	133	1182	1	54.20	12/27/2001	12/26/2005	Y
A17007	163	2048	3	7.90	11/03/2001	11/02/2005	Y
A17007	163	2048	2	22.20	11/03/2001	11/02/2005	Y
A17007	163	2048	1	28.80	11/03/2001	11/02/2005	Y
A17007	421	5815	1	4.90	03/16/2000	03/15/2006	Y
A17007	421	5815	1	50.70	03/16/2000	03/15/2006	Y
A54028							
A54028	APR-54028	P4803	2	1.70	12/27/2001	12/26/2005	Y
A54028	APR-54028	P4805	2	1.70	12/30/2001	12/29/2005	Y
A54028	APR-54028	P4805	1	5.30	12/30/2001	12/29/2005	Y
A54028	APR-54028	P4803	1	15.00	12/27/2001	12/26/2005	Y
A56319							

Canfor compliance with regeneration standards April 1, 2005 to March 31, 2006							
Licence	**CP/TSL**	**Block**	**SU**	**Area**	**Harvest Date**	**Regen Delay Date**	**Regen Met**
A56319	APR-56319	P108	1	145.20	12/11/2001	12/10/2005	N
A56319	APR-56319	P109	1	7.00	01/25/2002	01/24/2006	Y
A56319	APR-56319	P3140	1	4.70	11/27/2001	11/26/2005	N
A56319	APR-56319	P3140	1	25.70	11/27/2001	11/26/2005	N
A56319	APR-56319	P108	1	5.40	12/11/2001	12/10/2005	N
A56319	APR-56319	P110	1	89.60	01/26/2002	01/25/2006	Y
A56840							
A56840	APR-56840	P4912	1	89.40	12/11/2001	12/10/2005	Y
A61535							
A61535	APR-61535	P811	1	56.60	12/01/1999	11/29/2005	N
A61535	APR-61535	P812	1	49.10	12/01/1999	11/29/2005	N
A61535	APR-61535	P812	2	37.30	12/01/1999	11/29/2005	Y
A61535	APR-61535	P811	2	32.90	12/01/1999	11/29/2005	Y
A62088							
A62088	APR-62088	P4911	1	14.20	03/05/2002	03/04/2006	Y
A62092							
A62092	APR-62092	P4913A1	1	3.70	12/17/2001	12/16/2005	N
A62092	APR-62092	P4913A1	1	39.70	12/17/2001	12/16/2005	N
A62093							
A62093	APR-62093	P4914	1	106.40	01/20/2002	01/19/2006	Y
A62094							
A62094	APR-62094	P4913A2	1	38.70	01/04/2002	01/03/2006	Y
A62095							
A62095	APR-62095	P4913A3	1	7.30	01/14/2002	01/13/2006	N
A62095	APR-62095	P4913A3	1	25.70	01/14/2002	01/13/2006	N
A65228							
A65228	APR-65228	P5000	1	30.00	11/22/2001	11/21/2005	Y
A65228	APR-65228	P5000	2	21.30	11/22/2001	11/21/2005	Y
					Total		
			Regen Delay Met	Others	15.20		
				N	584.80		
				Y	2,078.80		
				Grand Total	**2,678.80**		

Target Met		
Yes	No ✓	Pending

Discussion

This measure reports percent compliance with regeneration standards set. To obtain the data for this measure, all blocks with regeneration delay due dates within the reporting period were obtained. This measure is not the same as measure 2-3.1 as that measure is reporting when blocks were declared, not when they were required to be declared.

Table 33 indicates that Canfor is out of variance with the targets set for this measure, with only 78% compliance with regeneration standards. Upon closer review of the compliance list, only 5% of the area is truly not meeting regen delay. A larger area is represented in this report because regen delay is declared as being met based on a standard unit. A standard unit cannot be declared until 100% of that area is stocked- a 1ha area can withhold declaration on a 100 ha area.

The majority of the standards units that have not met regeneration delay at this time are deciduous standard units. Activities have been planned for the majority of these openings to bring them into compliance. Regeneration delay amendments to request extensions to the regeneration delay period have been submitted for the majority of the blocks that have not met regeneration delay.

BCTS has following to report on this measure:

The query found one area within a block that has not met regeneration standards. A61297 has not met Regeneration Delay as 7.6 ha of the block were not planted in 2003 when the remainder of the block was planted. The planting contractor reported this area as planted and this area was likely missed by the implementation contractor checking the work in 2003. A fill plant was conducted in 2004 to address burn piles and a lightning strike that burned a portion of the block. The NSR area was not noticed until BCTS field staff conducted a field check late in the summer of 2005. This has been reported to Compliance and Enforcement. The area is scheduled for planting in the summer of 2006.

This area was missed due to the large size of the block and the large staff turn-over that BCTS encountered in 2004. Three staff left within 4 months and left only two new staff members one of which was new to Fort Nelson.

Table 32 summarizes the findings and reports that BC Timber Sales is 98.6% in compliance with the regeneration standards. The target for this measure is 100% with a variance of zero. Because the circumstances surrounding this occurrence were out of the control of BC Timber Sales staff at the time of the finding, achieving 100% was not possible. It is unlikely that BC Timber Sales will achieve less than 100% in future reports.

2-3.3 - Free Growing

Measure

The percent of area in compliance with free growing measures

Statement

The free growing survey assesses the fulfillment of licensees' obligations to the Crown for reforestation and ensures that the productive capability of the forest land base to grow trees is maintained. As with the previous measure, compliance with this measure is an important surrogate for carbon sequestration. Reforesting harvested areas to their full capacities ensures continued removal of carbon from the atmosphere and its storage in growing trees.

Target

100% (0)

Data

Table 34: Canfor compliance with free growing standards

License	CP	Block	SU	Area	FG Late Years	FG Late Date	Declared Date	Free Growing met
A17007	69	170A	A	1.6	15	11/1/2005	9/14/1999	Yes
A17007	44	240	1	14.4	15	11/1/2005	9/23/1999	Yes
A17007	44	250	A	8.5	15	2/1/2006	8/22/2002	Yes
A22797	304	353	A	16.1	15	1/1/2006	8/22/2002	Yes
A17007	407	603A	1	11	18	12/1/2005	9/20/2002	Yes
A17007	401	164A	1	24.1	17	12/1/2005	11/21/2002	Yes
A17007	44	241	1	5.7	15	12/1/2005	12/12/2002	Yes
A17007	44	243	A	12	15	1/1/2006	12/12/2002	Yes
A17007	44	243	B	3.1	15	1/1/2006	12/12/2002	Yes
A17007	44	244	A	16.6	15	1/1/2006	12/12/2002	Yes
A17007	52	123	1	63.6	15	12/1/2005	8/13/2003	Yes

License	CP	Block	SU	Area	FG Late Years	FG Late Date	Declared Date	Free Growing met
A17007	52	123	2	4.3	15	12/1/2005	8/13/2003	Yes
A17007	527	504A	A	56.5	15	12/1/2005	8/27/2003	Yes
A17007	527	504B	1	39.6	15	12/1/2005	8/27/2003	Yes
A17007	527	504B	2	68.8	15	12/1/2005	8/27/2003	Yes
A22797	304	349	A	20.4	15	1/1/2006	8/29/2003	Yes
A22797	304	312	A	47.7	15	12/1/2005	8/31/2003	Yes
A17007	47	610B	1	15.5	17	1/1/2006	9/29/2003	Yes
A17007	47	610B	2	2.9	17	1/1/2006	9/29/2003	Yes
A17007	47	611	1	14.7	17	1/1/2006	10/1/2003	Yes
A17007	43	231C	1	6.2	18	12/1/2005	10/6/2003	Yes
A17007	43	231C	2	0.6	18	12/1/2005	10/6/2003	Yes
A17007	401	206A	1	15.9	17	12/1/2005	10/30/2003	Yes
A17007	407	601A	1	11.3	18	12/1/2005	10/30/2003	Yes
A17007	407	603B	1	6.1	18	12/1/2005	10/30/2003	Yes
A22797	304	311	1	36.9	15	12/1/2005	5/19/2004	Yes
A22797	304	311	2	2.6	15	12/1/2005	5/19/2004	Yes
A17007	45	604A	1	72.7	18	12/1/2005	8/1/2004	Yes
A17007	44	249	A	62.3	15	1/1/2006	8/14/2004	Yes
A17007	407	48	1	112.6	18	12/1/2005	9/24/2004	Yes
A17007	407	602B	1	4.8	18	12/1/2005	9/24/2004	Yes
A17007	43	232B	1	66	16	11/1/2005	10/4/2004	Yes
A17007	43	232B	2	2.8	16	11/1/2005	10/4/2004	Yes
A17007	132	1163	1	16.8	10	2/1/2006	11/2/2005	Yes
A17007	71	618	A	35.2	15	12/1/2005	11/4/2005	Yes
A17007	513	51	1	51.9	18	1/1/2006	11/10/2005	Yes
A17007	45	606H	2	16.2	17	12/1/2005	11/14/2005	Yes
A17007	47	609	1	21	17	12/1/2005	11/16/2005	Yes
A17007	401	206B	1	6.4	17	12/1/2005	11/28/2005	Yes
A17007	52	120C	1	10.4	15	11/1/2005	11/28/2005	Yes
A17007	47	610A	1	19	17	12/1/2005	11/29/2005	Yes
A17007	52	118	A	16.4	15	12/1/2005	11/29/2005	Yes
A17007	59	294B	1	98.7	15	12/1/2005	12/8/2005	Yes
A17007	59	294A	1	34.4	15	12/1/2005	12/20/2005	Yes
A22797	301	309	A	30.6	15	12/1/2005	12/22/2005	Yes
A17007	513	52	1	60.8	18	1/1/2006	12/29/2005	Yes
A17007	59	294C	1	109.7	15	12/1/2005	12/29/2005	Yes
A17007	59	294C	2	7.3	15	12/1/2005	12/29/2005	Yes
A17007	401	159B	1	13	18	1/1/2006	1/16/2006	Yes
A17007	133	1187	1	24	10	2/1/2006	Amendment submitted	No
A17007	52	119	1	59.3	15	11/1/2005	Amendment submitted	No
A17007	52	120B	1	136.1	15	11/1/2005	Amendment submitted	No
A17007	532	222A	1	41.1	15	1/1/2006	Amendment submitted	No

License	CP	Block	SU	Area	FG Late Years	FG Late Date	Declared Date	Free Growing met
A17007	532	222B	B	41.9	15	1/1/2006	Amendment submitted	No
A17007	58	297B	B	112.2	15	12/1/2005	Amendment submitted	No
A17007	59	294A	2	4.7	15	12/1/2005	Amendment submitted	No
A22797	304	354	1	7.6	15	1/1/2006		No
				1822.6				
			Milestone Met					
				Yes				**1382.70**
				No				**426.90**
				Amendment Submitted				419.30
				Grand Total				1809.60
		Percent of area in compliance with free growing measures						**76.41%**

Target Met		
Yes	No ✓	Pending

Discussion

Meeting Free Growing requirements implies that the licensees fulfilled the obligations to the Crown for reforestation and ensures that the productive capability of the forest land base to grow trees is maintained. Table 34 shows that there is 76.4% compliance with Free Growing requirements for Canfor. The measure was developed using the openings that had the late free growing date between April 1 2005 and March 31 2006. There are a series of blocks that were identified in the report, as not being compliant. With the exception of one block (CP 304 Block 354), these openings have an amendment submitted for a late free growing date extension. By the due date of this annual report, decisions on the amendments had not been finalized. The one opening that is not in compliance is 304- 354, a 7.4 ha opening which was initially managed with the majority of the opening as deciduous management and a portion as conifer management. This opening has a history of different treatments, and is now a combination of mixed species management and deciduous management. We have been monitoring the performance of the stock on the site and it is expected that this site will be declared free growing this year.

BCTS has following to report on this measure:
BC Timber Sales has no Free Growing obligations due within the reporting period (April 1, 2005 to March 31, 2006). Two blocks with Free Growing dates due December 2006 have been declared and reported within this reporting timeframe. The target for this measure is 100% with a variance of 0. This cannot be reported at this time as there are no variables to summarize.

2-4.1 - Treatment Plans for Natural Disturbance Events

Measure

The percent of significant detected natural disturbance damaging events in the THLB which have treatment plans prepared and implemented

Statement

Natural disturbance events include wildfire, wind events and insect outbreaks. This measure is meant to ensure that natural disturbance damaging events are identified and that treatment plans that are developed and implemented along with the government are developed in a timely manner. A significant natural disturbance event is defined as an area greater than 500ha.

Target

100% within first year of detection (0)

Data

Treatment Plan Exists?	Yes

Table 35 Significant natural disturbances listed by Forest Health Factor

Forest Health Factor	Severity	Number of Incidences	Total Affected Area (ha)	Treatment Plans Developed (ha)
IBB	T	11	36, 608	Yes - monitor
IBB	L	7	14, 864	Yes - monitor
IBB	M	1	503	Yes - monitor
IBS	L	1	2, 681	Yes - monitor
IDE	L	8	11, 251	Yes - monitor
IDE	M	2	9, 028	Yes - monitor
IDX	L	25	54, 318	Yes - monitor

IDX	M	3	4, 177	Yes - monitor
IDX	V	4	11, 538	Yes - monitor
NB	S	6	48, 131	Yes - monitor
NR	S	1	1, 420	Yes - monitor

(IBB = Western Balsam Bark Beetle; IBS = Spruce Beetle; IDE = Spruce Budworm; IDX = Large Aspen Tortix; NB = Burn; and NR = Redbelt) and severity class (T = Trace; L = Low; M = Moderate; S = Severe; and V = Very Severe) detailing the number of significant incidences (i.e. incidences >500 ha), the total area affected within the DFA and the total area on which treatment plans have been developed and/or implemented.

Table 36 Significant natural disturbance events as declared in the 2004 MoFR Annual Aerial Overview Survey.

Disturbance_ID	Damaging Agent	Severity	Area Affected (ha)	Location
1	IBB	T	8165	Beaver
2	IBB	T	17581	Beaver
3	IBB	T	642	Beaver
4	IBB	L	3458	Grayling
5	IBB	L	713	Catkin
6	IBB	T	1731	Grayling
7	IBB	L	4966	Catkin/Irene
8	IBB	T	712	Grayling
9	IBB	L	892	Grayling
10	IBB	T	3675	Grayling
11	IBB	T	1037	Grayling
12	IBB	L	713	Pine/Kledo
13	IBB	L	1670	Kledo
14	IBB	M	503	Steamboat
15	IBB	L	2452	Akue
16	IBB	T	860	Akue
17	IBB	T	678	Tenaka
18	IBB	T	696	Tenaka
19	IBB	T	832	Gathto
20	IBS	L	2681	Beaver
21	IDE	L	1835	Irene
22	IDE	M	8520	Irene/Torpid
23	IDE	L	520	Eight Mile
24	IDE	L	1114	Eight Mile
25	IDE	L	4971	Fontas
26	IDE	M	508	Klua
27	IDE	L	607	Tenaka
28	IDE	L	972	Goguka
29	IDE	L	624	Goguka
30	IDE	L	608	Goguka
31	IDX	L	1568	Wildboy
32	IDX	L	1766	Beaver
33	IDX	L	1144	Beaver

34	IDX	M	2083	Sandy
35	IDX	L	685	Beaver
36	IDX	L	544	Beaver

Severity Rating Codes: T = Trace, L = Low,
M = Moderate, S = Severe, V = Very Severe

Disturbance_ID	Damaging Agent	Severity	Area Affected (ha)	Location
37	IDX	L	5174	Beaver
38	IDX	L	791	Beaver
39	IDX	L	776	Beaver
40	IDX	L	741	Beaver
41	IDX	L	1105	Beaver
42	IDX	L	4005	Nelson Forks
43	IDX	L	13758	Catkin
44	IDX	L	4514	Capot-Blanc
45	IDX	L	545	Nelson Forks
46	IDX	L	533	Capot-Blanc
47	IDX	L	653	Patry
48	IDX	V	775	Kotcho
49	IDX	L	4372	Raspberry
50	IDX	L	640	Hay
51	IDX	L	1035	Tsimeh
52	IDX	V	3380	Kotcho
53	IDX	L	2236	Tsimeh
54	IDX	L	755	Tsimeh
55	IDX	L	3971	Tsimeh
56	IDX	L	843	Raspberry
57	IDX	L	1286	Raspberry
58	IDX	M	837	Hay
59	IDX	L	878	Milo
60	IDX	V	4829	Hay
61	IDX	V	2554	Hay
62	IDX	V	2198	Hay
63	IDX	M	1257	Tenaka
64	NR	S	1420	Grayling
69	NB		6720	
70	NB		1050	
71	NB		1516	
72	NB		550	

Table 37: Damaging Agent Codes:

IBB = Western Balsam Bark Beetle, IBS = Spruce Beetle, IDE = Western Spruce Budworm, IDX = Large Aspen Tortix, NR = Redbelt, NB = Burn

Disturbance_ID	Damaging Agent	Severity	Area Affected (ha)	Location
37	IDX	L	5174	Beaver
38	IDX	L	791	Beaver
39	IDX	L	776	Beaver
40	IDX	L	741	Beaver
41	IDX	L	1105	Beaver
42	IDX	L	4005	Nelson Forks
43	IDX	L	13758	Catkin
44	IDX	L	4514	Capot-Blanc
45	IDX	L	545	Nelson Forks
46	IDX	L	533	Capot-Blanc
47	IDX	L	653	Patry
48	IDX	V	775	Kotcho
49	IDX	L	4372	Raspberry
50	IDX	L	640	Hay
51	IDX	L	1035	Tsimeh
52	IDX	V	3380	Kotcho
53	IDX	L	2236	Tsimeh
54	IDX	L	755	Tsimeh
55	IDX	L	3971	Tsimeh
56	IDX	L	843	Raspberry
57	IDX	L	1286	Raspberry
58	IDX	M	837	Hay
59	IDX	L	878	Milo
60	IDX	V	4829	Hay
61	IDX	V	2554	Hay
62	IDX	V	2198	Hay
63	IDX	M	1257	Tenaka
64	NR	S	1420	Grayling
69	NB		6720	
70	NB		1050	
71	NB		1516	
72	NB		550	

Target Met		
Yes ✓	No	Pending

Discussion

The intent of this measure is to ensure that natural disturbance damaging events are identified and that treatment plans are developed in a timely manner.

The Ministry of Forests and Range has assessed natural disturbance in the DFA through annual aerial surveys. Of the identified disturbances, 72 were found to be significant (i.e. >500ha). As this is the baseline year for natural disturbance management, and the vast majority of disturbances were considered to be relatively low severity (refer to Table 35 for a complete list of significant natural disturbances and severity ratings), it was decided that significant disturbances would be monitored for future changes. That is, Canfor will compare annual aerial overview surveys for large changes in disturbance area and/or significant changes in severity. As management strategy formats are defined and management strategies developed (4-6.2), they will be implemented where needed.

Table 35 summarizes the forest health factors by forest health agent and identifies that the treatment plan is to monitor the infestations. The need for monitoring is based on size and severity of infestations, potential impact on timber from the forest health agent.

A tracking system has been developed, using the Ministry of Forests annual aerial survey (Table 36), to identify and prioritize the development of natural disturbance treatment plans. A knowledge gap has been identified determining that an SOP for formalizing the development of treatment plans including roles and responsibilities for Government agencies, Canfor and BCTS is needed. Development of this SOP (Natural Disturbance Identification and Management Best Practices) is in progress and will be completed by September 2006 (as per Knowledge Gap Matrix, January 12, 2006).

The target has been met as Canfor and BCTS have treatment plans in place, which is to monitor the forest health agents listed in Table 35.

2-4.2 - Catastrophic Natural Disturbance Events

Measure

The percent of catastrophic natural disturbance events as a result of forest management practices

Statement

Although natural disturbances may occur on the land base, forest practices should not create conditions or trigger a catastrophic event. Similar to measure 2-2.3, catastrophic is defined as long-term detrimental soil productivity loss lasting approximately 10 years post event.

Target

0% (0)

Data

Total # Events	# Events Resulting from Forest Management Practices	Number
0	0	0

Target Met		
Yes ✓	No	Pending

Discussion

Forest activities have not triggered any catastrophic events during the reporting period. Canfor's and BCTS's Incident Tracking System (ITS) did not show records of catastrophic events, such as landslides, windthrow or long-term detrimental soil disturbances, fires etc.

During the reporting year, 72 significant disturbances have been reported, all of which are bigger than 500 hectares in size. The main causes of natural disturbances were caused by fire and insects. Table 36 shows the individual disturbances, size and location under measure 2-4.1

Consequently, as none of the 72 natural disturbance events were related or caused by forest activities, the target of 0% is met.

A knowledge gap for this measure identified that a tracking system must be implemented to track the percent of catastrophic natural disturbance events resulting from forest management practices. Thus far, the tracking system has not been produced. It is expected to dovetail with the tracking system developed for Measure 2-4.1 and will be implemented by January 2007 (as per Knowledge Gap Matrix, January 12, 2006).

3-1.1 - Carbon Stored in Trees

Measure

Estimated amount of carbon stored in trees in the DFA's CFLB (converted from TSR M3/ha)

Statement

Forest carbon has recently become a key SFM value, especially in view of Canada's international commitment to lower its net carbon outputs to the atmosphere as part of the Kyoto Protocol. Trees and vegetation sequester carbon from the atmosphere through the process of photosynthesis and carbon is stored in several components of forests including tree biomass, plant biomass, coarse woody debris, forest floor litter and soil. It is beneficial for forest managers to have a rough idea of the current and potential future amount of carbon stored by trees as it will prepare licensees for the time when policies on carbon reporting are implemented. Determining carbon amounts in biomass of forests has been undertaken mostly for research purposes.

Target

(TBD - July 2006)

Data

Table 38: Total ecosystem carbon storage for Timber Supply Model and CBM

Model	Scenario	Megatonnes Carbon
Timber Supply Model	Base Case	1,001.2
Carbon Budget Model	Base Case	1,752

Target Met		
Yes ✓	No	Pending

Discussion

Forest carbon has become a key SFM value, especially in view of Canada's commitment to lower net carbon outputs to the atmosphere as part of the Kyoto Protocol. The establishment and maintenance of forests is an important aspect of the terrestrial carbon sink. It benefits forest managers to have an idea of the current and future amount of carbon stored by trees.

Two reports were completed by Forest Ecosystem Solutions Ltd – Ann Wong, March 31, 2006 and presented to the Public Advisory Group on May 4, 2006. The first report is titled "Forecasting Indicators for Sustainable Forest Management: Total Ecosystem Carbon for the Fort Nelson TSA". The second report completed by Forest Ecosystem Solutions Ltd – Ann Wong, March 31, 2006 and presented to Public Advisory Group May 4, 2006 is titled "Development of Carbon Measures and Baseline Information for Sustainable Forest Management for the Fort Nelson Defined Forest Area".

The first report summarizes forest carbon storage using existing forest and stand level modeling that is used for timber supply analysis, certification forecasting support and landscape analysis. Results from this report will be calibrated with those produced through the Carbon Budget Model (CBM) in future work.

The results of the project provide initial estimates of the current forest carbon conditions in the Fort Nelson TSA based on different scenarios. The scenarios chosen may not represent expected future condition, but provide benchmarks of extreme events. The scenarios chosen were: 1) no harvest with natural disturbance and 2) harvest without natural disturbance, and 3) base case. Data required to monitor this measure is in megatonnes (MT). The amount of carbon stored in trees in the first scenario is 443 – 811 MT, for the second scenario carbon stored in trees is 430-530 MT. The base case is 422-493 MT. The results found that current ***total*** ecosystem carbon storage is 1,000 MT and fluctuates between 998 MT and 1,066 MT (base case) over a 250 year forecast period. That is roughly 42% in trees and the remainder in plants, deadwood, litter and soil.

The second report uses the timber supply model, Forest Simulation and Optimization System (FSOS), and a forest carbon model, Carbon budget Model-Canadian Forest Service3 (CBM-CFS3), to estimate total carbon storage and sequestration within the Fort Nelson DFA. The CBM-CFS3 is a landscape-level

forest carbon accounting framework and simulates carbon dynamics above and below ground.

The results of this report found that under the base case, total carbon storage fluctuates between 1,752 MT and 2,005 MT over a 250 year forecast. Carbon stored in trees represents 27% of this value, the remaining 73% is from dead wood, soil, and forest floor litter.

Table 39 in Measure 3-1.2 summarizes the results of tree and non tree carbon based on the first report.

Both reports will help begin to establish a forest carbon storage baseline. Further scenario designs are recommended as well as developing a baseline scenario that is Kyoto compliant. As noted above, both reports used different modeling methods and the results of the first report are being calibrated with the results produced through the Carbon budget model.

As this is the first reporting year, we are only establishing the baseline for this measure for this reporting period.

3-1.2 - Carbon Stored in Non Tree Vegetation

Measure

Estimated carbon in non-tree vegetation (above ground biomass and roots)

Statement

The rationale for the importance of the non-tree vegetation measure to the sustainability of carbon cycles is the same as for trees (3-1.1). This component of the forest carbon pool is likely to consistently act as a carbon sink over the course of a harvest rotation and across the DFA (i.e. not for a specific cutblock) whereas the tree component will act as both a sink and a source, depending on the silvicultural stage of the forest.

Target

Current Condition (TBD and implemented by July, 2006). Targets are likely to be developed with provincial and possibly national input. This is anticipated to occur by July, 2006.

Data

Table 39: TS model

Carbon Pool	Total Mega tones (MT)	% Total
Tree	443.1	44.3
Plant	2.4	0.2
CWD/Snags	21.1	2.1
Litter	161.5	16.1
Soil	373	37.3
Total	1,001	100

Table 40: CBM model

Carbon Pool	Total Mega tones (MT)	% Total
Tree (aboveground)	473	27
Tree (belowground)	112	6
CWD/Snags	265	15
Litter	90	5
Soil	811	46
Total	1,752	100

Target Met		
Yes ✓	No	Pending

Discussion

This measure builds on 3-1.1. Carbon stored in non tree vegetation refers to plants, Coarse Woody Debris, snags, litter and soil.

Table 39 and Table 40 are summaries from the following reports: "Forcasting Indicators for Sustainable Forest Management: Total Ecosystem Carbon for the Fort Nelson TSA", Forest Ecosystem Solutions Ltd., Ann Wong, March 31, 2006 (Table 39) and "Development of Carbon Measures and Baseline Information for Sustainable Forest Management for the Fort Nelson Defined Forest Area", Forest Ecosystem Solutions Ltd., Ann Wong March 31, 2006 (Table 40).

The tables above report the base case and indicate that the non tree vegetation contributes to approximately 56% of stored carbon using the Timber Supply Model and 67% of stored carbon in the Carbon Budget Model.

3-2.1 - Carbon Pool - Forest Products

Measure

Plan to plan based on report and process being developed by Canadian Forest Service

Statement

Harvested wood releases its carbon at rates dependent upon its method of processing and its end-use. Provided the forest is fully regenerated, forest harvesting could result in a net reduction in carbon emissions if the wood that is harvested is used for long-term products such as lumber. This measure evaluates the role that forest products play in the sequestration, cycling, or emission of carbon.

Target

TBD July, 2006 (on or before depending on when CBM is available from CFS) This measure and process of forecasting is to be developed by July, 2006.

Data

Target Met		
Yes ✓	No	Pending

Discussion

The measure is a plan to plan based on a report and process being developed by the Canadian Forest Service. This was based on the Carbon Budget Model which has just recently been released by the Canadian Forest Service. This measure is not addressed in the two reports summarized in Measure 3-1.1.

This measure will be addressed through future projects once the Carbon budget Model will become available. The state of the measure is identified in the knowledge gap matrix.

3-3.1 - Carbon Sequestration

Measure

Interim measures - Many of the measures that Canfor and BCTS are monitoring will contribute to the knowledge of carbon status and processes. Those measures have explicitly not been repeated here. Measures related to carbon sequestration include:

- Hardwoods, shrubs 1-2.1
- Area of THLB converted to non-forest land use through forest management activities 2-2.1
- The percent of cutblock area having road/landing construction 2-2.2
- The percent compliance with regeneration standards 2-3.2
- The percent of area in compliance with free growing measures 2-3.3 Regeneration delay 2-3.1
- Volume of timber (AAC tracked as part of TSR) 4-1.2

Plan to plan based on report and process being developed by Canadian Forest Service. TBD measure directly related to sequestration based on CFS model under development.

Statement

The process that takes carbon from the atmosphere and stores it in forest ecosystems is termed carbon sequestration. The calculation of average net carbon sequestration rates within the timber supply area allows for a long-term evaluation of effects of management activities and/or natural disturbance on the rate at which the forested landscape is sequestering carbon. Average sequestration rates are based on changes in ecosystem carbon storage over time without accounting for carbon removed in harvested biomass. The rationale is that the carbon in harvested materials will be stored in wood products following harvest. An assessment of the sequestration rate provides a measure of the rate and direction of carbon exchange between the forest ecosystem and the atmosphere. Carbon pools, and their changes over time, indicate whether the processes responsible for carbon sequestration are being maintained. A net increase in the carbon pool is a result of increased sequestration. Forest practices directly related to this indicator have to do with ensuring that harvested stands are promptly reforested to maximize the carbon sequestration process.

Target

As per targets set under each measure write-up. April 2006 (on or before depending on when CBM is available from CFS)

Data

Target Met		
Yes ✓	No	Pending

Discussion

Carbon sequestration is the process that takes carbon from the atmosphere and stores it in forest ecosystems. The intent of this measure is that this process of sequestration is sustained. This measure has seven interim measures that are related to carbon sequestration and have been reported on in this SFM Plan report. These measures are 1-2.1 (hardwood and shrubs), 2-2.1, 2-2.2, 2-3.2, 2-3.3, 2-3.1, and 4-1.2. Because all these measures are related to carbon sequestration, they have been selected as interim measures. For the purpose of this report, the intent of the interim measures is to demonstrate that they have met the target (with variance). By achieving the target with variance, there will likely be little net loss to carbon sequestration in the DFA. Refer to the individual measures noted above for Canfor and BC Timber Sales for a summary of the individual targets.

4-1.1 - Timber Harvested

Measure

Total value of the actual timber harvest (amount of harvest related to purchase price of logs based on MPS system)

Statement

Knowing the link between the amount of volume harvested (AAC and private wood purchase) and the value of the products derived from the harvest is be a powerful measure of sustainability. However, internal company data on the net value of the harvest and actual payments from customers is proprietary. The government of BC plans to institute a market pricing system (MPS) that is meant

to provide a market value for trees harvested. The value of the actual harvest annually will be calculated once the MPS system is in place. This measure will be implemented at that time.

Target

Report out number

Data

Table 41 Canfor's Harvest volume

Month	Conifer Volume harvested (m3)	Deciduous Volume harvested (m3)	Total Volume harvested (m3)
Apr-05	0	0	0
May-05	0	0	0
Jun-05	0	0	0
Jul-05	3,719	15,909	19,628
Aug-05	5,276	14,456	19,732
Sep-05	2,332	17,018	19,350
Oct-05	6,985	27,659	34,644
Nov-05	17,685	80,528	98,213
Dec-05	69,323	137,139	206,462
Jan-06	175,913	255,743	431,656
Feb-06	193,478	183,828	377,306
Mar-06	83,932	112,989	196,921
TOTAL	558,643	845,269	1,403,912

Table 42.BCTS conifer stumpage

YEAR	TSL Number	Category	Conifer Volume (m3)	Decid. Volume (m3)	Market Stumpage Price (MPS)	Conifer Upset Stumpage Rate (MPS X .70)	Conifer Bonus Bid	**Total Stumpage Rate (TSR)**
29-Sep-05	A36093	Any	11,357	3,502	$51.44	$36.01	$0.02	**$36.03**
08-Dec-05	A58699	Any	29,946	9,849	$50.31	$35.22	$0.03	**$35.25**

Implementation of the Market Pricing System is expected to occur in fall of 2006

Conifer	54,654
Deciduous	216,921
Total	271,575

Target Met		
Yes ✓	No	Pending

Discussion

The link between the amount of volume harvested and the value of products derived from the harvest is a powerful measure of sustainability (SFMP p. 106). This measure reports the amount of harvest related to the purchase price of logs based on the MPS system. There are no targets associated with this measure as it is a reporting function only.

The Market Pricing System (MPS) is not yet in place yet for the northern British Columbia and the fact is addressed in the knowledge gap matrix.

Based on the fact that the MPS is not in place yet, Canfor is not able to report on the value of product derived from the harvest. At this point, only the volume harvested can be reported as shown in Table 41.

BCTS has following to report for this measure:

BC Timber Sales cannot report on the value of product derived from the harvest, but BC Timber Sales can report on the value that the wood was sold at (BCTS volumes only). MPS has not been implemented in the interior of the province at this time so only BCTS can report on this measure. The province will be launching the new market-based pricing system for the Interior effective July 1, 2006. The next SFM Plan report will include Canfor data as they will also be operating under the MPS system.

Deciduous sales use a Comparative Value Pricing System and for that reason will not be included in this measure as MPS does not apply when determining the cost of deciduous sales.

Table 42 reports conifer stumpage for BCTS as conifer sales use the MPS principles in determining the cost. The last column reports the total stumpage rate (70% MPS plus the bonus bid). This is the provincial method that BCTS uses in determining stumpage rates. Seventy percent of the MPS rate is used with the intent that the bonus bid will recover the remainder of the 30% MPS.

4-1.2 - Timber Supply Certainty

Measure

Timber supply certainty - AAC

Statement

Timber supply certainty is important to the community (workers and local government), the corporation and the province as a whole. It is a component in investment decision making for corporations and their shareholders. It is provides governments the ability to track revenue and to set budgets. Timber Supply Reviews (TSR) are completed every 5 years.

Target

The TSR3 data package for the Fort Nelson TSA was completed and approved by the MoFR in summer/fall 2004 and the final recommendation to the Chief Forester will be completed by 2005. It is anticipated that the final determination by the Chief Forester will be completed by the end of December, 2005.

Data

Target Met		
Yes ✓	No	Pending

Table 43: Fort Nelson TSA annual allowable cut, apportionment and commitments (prior to 03/31/05)

Form of Agreement	Conventional		Deciduous-leading		Total	
	m^3	%	m^3	%	m^3	%
Forest Licence – Replaceable Canadian Forest Products Ltd.	538,973	89.93	134,743	14.97	637,716	44.91
Pulpwood Agreement - Timber Sales Licences Canadian Forest Products Ltd.			610,000	67.78	610,000	40.67
BCTS - Timber Sale Licence/ Licence to Cut	59,427	9.9	144,241	16.03	203,668	13.58
Woodlot Licence	1,600	0.27	400	0.04	2,000	0.13
Forest Service Reserve			10,616	1.18	10,616	0.71
Total:	**600,000**	**100**	**900,000**	**100**	**1,500,000**	**100**

Effective Date: 09/01/2001-03/30/2005. Determination Date: 05/24/2001.

Table 44: Current Fort Nelson TSA annual allowable cut, apportionment and commitments

Form of Agreement	Conventional		Deciduous-leading		Total	
	m^3	%	m^3	%	m^3	%
Forest Licence – Replaceable Canadian Forest Products Ltd.	442,973	73.83	110,743	12.30	553,716	36.91
Pulpwood Agreement - Timber Sales Licences Canadian Forest Products Ltd.			610,000	67.78	610,000	40.67
BCTS - Timber Sale Licence/ Licence to Cut	136,227	22.70	163,441	18.16	299,668	19.98
Woodlot Licence	1,600	0.27	400	0.04	2,000	0.13
Forest Service Reserve			10,616	1.18	10,616	0.71
Small Tenures (woodlot and community forest licences)	19,200	3.20	4,800	0.53	24,000	1.60
Total:	**600,000**	**100**	**900,000**	**100**	**1,500,000**	**100**

Effective Date: 03/31/2005

Discussion

Timber supply certainty is an important value to the community, and contributes to the ability of the forest industry to economically harvest and process the timber.

Following information has been provided through the TSR 3 Socio –economic analysis:

The current allowable annual cut (AAC) in the Fort Nelson TSA was set in September 2001, at 1,500,000 cubic meters per year (600,000 cubic meters from coniferous-leading stands and 900,000 cubic meters from deciduous-leading stands) (Table 44), which is unchanged from 1995. Prior to 1995, the AAC was set at 972,000 cubic metres per year (750,000 cubic metres from coniferous-leading stands and 222,000 cubic metres from deciduous-leading stands). The apportionment of the current AAC has changed on March 31, 2005 with the enactment of the Take-back in the provincial Revitalization Plan (i.e. 20% of the provincial AAC from replaceable forest licences have been re-apportioned to BCTS, First Nations, woodlots and community forest licences). Prior to the take-back, the apportionment of the AAC is shown in Table 43 and the new apportionment of the AAC is shown on Table 44.

Table 44

As part of the current Timber Supply Review (TSR) 3 process, the chief forester will determine a new AAC by September 2006 for the Fort Nelson TSA.

4-1.3 - Regeneration to Target Species

Measure

The percentage of harvested area regenerated to target species composition

Statement

In maintaining the existing condition of the forest landbase, reforestation efforts should be directed at regenerating the harvested areas with tree species that are approved target species (also known as preferred and acceptable species). Target species for specific sites have been recommended by the MoF based on scientific knowledge.

Target

100% (10%)

Data

Table 45: Canfor area regenerated to target species composition

Licence	CP/TSL	Block	SU	SP Stocking Standards	Survey Stratum	Area	Stocking Status
A17007							
A17007	161	4694A	1	Deciduous	1	33.30	IMM
A17007	150	4900E	1	Deciduous	a	44.80	IMM
A17007	153	4964	2	Conifer	B	9.60	IMM
A17007	153	4964	1	Deciduous	A	36.20	IMM
A17007	150	4900C	1	Deciduous	A	33.80	IMM
A17007	150	4900C	2	Conifer	B	16.20	IMM
A17007	204	H4	1	Conifer	A	2.10	IMM
A17007	204	H6	1	Conifer	A	2.50	IMM
A17007	585	673	1	Conifer	B	34.50	IMM
A17007	585	673	1	Conifer	C	1.90	IMM
A17007	585	673	1	Conifer	A	15.50	IMM
A17007	420	4666	1	Deciduous	A	50.50	IMM
A17007	153	2055	2	Conifer	B	25.00	IMM

Licence	CP/TSL	Block	SU	SP Stocking Standards	Survey Stratum	Area	Stocking Status
A17007	153	2055	1	Deciduous	A	8.10	IMM
A17007	153	2055	3	Deciduous	C	16.40	IMM
A17007	421	5815	1	Conifer	A	50.70	IMM
A17007	421	5815	1	Deciduous	A	50.70	IMM
A17007	130	1169	2	Conifer	B	20.80	IMM
A17007	130	1169	3	Conifer	C	8.40	IMM
A17007	134	1158	2	Conifer	D	1.00	IMM
A17007	134	1158	1	Conifer	C	1.00	IMM
A17007	130	1169	3	Conifer	E	3.80	IMM
A17007	130	1169	2	Conifer	D	3.00	IMM
A17007	160	4642	1	Conifer	A	50.80	IMM
A17007	160	4642	1	Conifer	B	2.00	IMM
A17007	421	5815	1	Conifer	B	4.90	IMM
A17007	421	5815	1	Deciduous	B	4.90	IMM
A17007	130	1189	1	Conifer	A	20.40	IMM
A17007	130	1189	2	Conifer	B	29.50	IMM
A17007	113	631C	1	Conifer	1	7.70	IMM
A17007	113	631B	2	Conifer	2	18.90	IMM
A17007	113	631B	1	Conifer	1	2.40	IMM
A17007	113	1959	1	Conifer	1	14.10	IMM
A17007	134	1158	1	Conifer	A	18.60	IMM
A17007	134	1158	2	Conifer	B	11.50	IMM
A17007	163	2048	3	Conifer	C	7.90	IMM
A17007	163	2048	2	Conifer	B	22.20	IMM
A17007	163	2048	1	Deciduous	A	28.80	IMM
A17007	162	2036	1	Deciduous	A	30.30	IMM
A17007	162	2036	2	Conifer	B	19.90	IMM
A17007	133	1182	1	Conifer	1	54.20	IMM
A17007	420	4636	1	Deciduous	A	40.30	IMM
A17007	121	879	1	Conifer	A	15.30	IMM
A17007	121	879	1	Conifer	A	15.30	IMM
A17007	130	37	2	Conifer	B	10.70	IMM
A17007	130	37	1	Deciduous	A	46.80	IMM
A17007	107	1020	1	Conifer	1	44.50	IMM
A17007	353	3366	1	Deciduous	A	37.60	IMM
A17007	85	2382A	2	Conifer	B	10.30	IMM
A17007	85	2382A	1	Deciduous	A	26.90	IMM
A17007	150	4900A	2	Conifer	C	5.80	NSR
A17007	141	1173	2	Deciduous	B	16.20	NSR
A17007	353	3366	1	Deciduous	N	14.70	NSR
A17007	162	2036	1	Deciduous	C	1.30	NSR
A17007	160	4644	1	Deciduous	B	24.20	NSR
A17007	160	4644	1	Deciduous	A	66.40	NSR
A17007	85	2382A	1	Deciduous	N	4.10	NSR
A17007	190	907A	2	Conifer	2	6.40	IMM

Licence	CP/TSL	Block	SU	SP Stocking Standards	Survey Stratum	Area	Stocking Status
A17007	190	907A	1	Conifer	1A	91.00	IMM
A17007	163	2725	1	Deciduous	A	20.80	IMM
A17007	163	2725	2	Conifer	B	14.80	IMM
A17007	204	H5	1	Conifer	A	2.40	IMM
A17007	150	4900A	1	Deciduous	A	14.30	IMM
A17007	150	4900A	2	Conifer	B	23.20	IMM
A17007	141	1173	1	Conifer	D	1.50	IMM
A17007	141	1173	1	Conifer	A	34.90	IMM
A17007	141	1173	3	Conifer	C	1.00	IMM
A17007	130	1189	1	Conifer	C	1.00	IMM
A17007	130	1189	2	Conifer	D	1.50	IMM
A17007	130	1169	1	Deciduous	A	8.70	IMM
A17007	161	4694C	1	Deciduous	1	75.00	IMM
A54028		P4803	1	Conifer	A	15.00	IMM
A54028		P4805	2	Conifer	B	1.70	IMM
A54028		P4805	1	Deciduous	A	5.30	IMM
A54028		P4803	2	Deciduous	B	1.70	IMM
A56319		P110	1	Deciduous	A	89.60	IMM
A56319		P3140	1	Deciduous	N	4.70	NSR
A56319		P108	1	Deciduous	N	5.40	NSR
A56319		P3140	1	Deciduous	A	25.70	IMM
A56319		P108	1	Deciduous	A	145.20	IMM
A56319		P109	1	Deciduous	A	7.00	IMM
A61535		P812	2	Conifer	2	37.30	IMM
A61535		P812	1	Deciduous	1	49.10	IMM
A61535		P811	2	Conifer	2	32.90	IMM
A61535		P811	1	Deciduous	1	56.60	IMM
A62088		P4911	1	Deciduous	A	14.20	IMM
A62092		P4913A1	1	Deciduous	A	39.70	IMM
A62092		P4913A1	1	Deciduous	N	3.70	NSR
A62093		P4914	1	Conifer	A	106.40	IMM
A62094		P4913A2	1	Deciduous	A	38.70	IMM
A62095		P4913A3	1	Deciduous	A	25.70	IMM
A62095		P4913A3	1	Deciduous	N	7.30	NSR
A65228		P5000	2	Conifer	A	21.30	IMM
A65228		P5000	1	Deciduous	B	30.00	IMM
A61541		P893	1	deciduous	A	72.8	IMM
A61541		P893	1	deciduous	N	13.5	NSR
A62087		P4708	1	deciduous	A	145	IMM
A62087		P4708	1	deciduous	N	4.4	NSR
A56839		P4801	1	deciduous	A	20.7	IMM
A62087		P4816	1	deciduous	A	13.7	IMM
A62087		P4816	1	deciduous	N	3.1	NSR
A65236		P6035	1	deciduous	A	31.2	IMM
A65236		P6036	1	deciduous	A	40.5	IMM

Licence	CP/TSL	Block	SU	SP Stocking Standards	Survey Stratum	Area	Stocking Status
A65236		P6040	1	deciduous	A	27.6	IMM
A65230		P3333	1	deciduous	A	58	IMM
A65230		P3333	1	deciduous	N	11.6	NSR
A67175		P3326	1	deciduous	A	270.6	IMM
A67175		P3326	1	deciduous	N	13.7	NSR
A56319		P3141	1	deciduous	A	14.9	IMM
A56319		P3141	1	deciduous	N	10.8	NSR
A62087		P4710	1	deciduous	A	29.1	IMM
A67206		P486	1	deciduous	A	24.4	IMM
A62090		P2481	1	deciduous	A	73.9	IMM
A61541		P897	1	deciduous	A	52.2	IMM
A61541		P897	1	deciduous	N	9.7	NSR
A67176		P3146	1	deciduous	A	23.2	IMM
A67176		P3146	1	deciduous	N	4.8	NSR
A61541		P894	1	deciduous	A	53.5	IMM
A61541		P894	1	deciduous	N	7.9	NSR
A65230		P3318	1	deciduous	A	28.9	IMM
A65230		P3318	1	deciduous	N	7.2	NSR
					Total Area		3326.8
					Total Area	IMM	3086.3
				Area Successfully regenerated			93%

Table 46 BCTS: Area regenerated to target species composition

LICENCE_ID	Block	Target Species	Stocking Status	Stratum Area
A66581	1	Deciduous	IMM Nat	17.07
A66581	234	Deciduous	IMM Nat	19.25
A66581	5	Deciduous	IMM Nat	15.91
A61297	1	Conifer	IMM Art	128.7
A61297	1	Conifer	NSR	7.6
A66612	1	Deciduous	IMM Nat	5.5
A66612	2	Deciduous	IMM Nat	13.55
A66612	3	Deciduous	IMM Nat	57.57
A60729	1	Conifer	IMM Art	14.8
A60730	1	Conifer	IMM Art	5.32
A66615	1	Deciduous	IMM Nat	34.22
A66614	2	Deciduous	IMM Nat	19.76
A66640	1	Deciduous	IMM Nat	15.0
A66640	1	Conifer	NSR	9.6
A59686	1	Deciduous	IMM Nat	7.09
A59686	2	Deciduous	IMM Nat	9.19
A59685	2	Deciduous	IMM Nat	32.39
A59685	3	Deciduous	IMM Nat	17.55
A61740	1	Conifer	IMM Art	74.2
			Total	504.27
			NSR area	17.2
			percent success	97%

Target Met		
Yes ✓	No	Pending

Discussion

This measure evaluates the success in establishing stands in harvested areas as per the approved stocking standards (deciduous or coniferous).

Table 45 shows that 93% of all Canfor blocks with surveys completed between April 1, 2005 and March 31, 2006 met the regeneration standards for density of the target species. A variance of 10% has been agreed to by the PAG for this measure to accommodate natural ingress from non target species and pests. Applying the 10% variance to Canfor's block population, the target for this measure has been met.

BCTS has following to report:

Table 46 reports all surveys completed between April 1, 2005 and March 31, 2006 and reports the stocking status for each block surveyed.

IMM Nat refers to a successfully regenerated aspen stand and IMM Art refers to a successfully regenerated conifer stand. NSR refers to Not Satisfactorily Restocked.

A61297 will be planted to conifer in 2006 as noted in measure 2-3.2. A66640 was a conifer SU that was planted, but has significant aspen regeneration. This SU will be assessed and will likely be converted to aspen if the stocking meets the current deciduous standards.

The target for this measure is 100% with a 10% variance. 97% of BC Timber Sales blocks have met the requirements of this measure, as the total is within the 10% variance.

4-2.1 - Employment in Forestry Sub-sector

Measure

Employment in each forestry sub-sector locally

Statement

The economic health and stability of a community is largely dependent on steady employment for area residents. Canfor provides employment or contract work to a number of people per sub-sector. Knowing the amount of employment in each sub-sector can help analyze the diversity of local employment opportunities for the forest industry in the DFA.

Target

Due to the unique seasonal nature of harvesting and road building in the DFA (i.e. majority of work is in the winter season), targets have not been established yet for this measure. A comparison of the trends between provincial and local employment will allow some analysis in terms of the sustainability of this measure. Canfor will track employment for their staff and estimate employment for sub-sector contractors.

Data

Table 47: Fort Nelson TSA average forest sector employment and employment coefficients, 2004 (TSR3)

Activity	Fort Nelson TSA employment (persons-years)	Provincial employment (person-years)
Harvesting, Hauling and Administration	94	237
Silviculture	15	165
Timber Processing	631	648
Total Direct	740	1,050
Indirect/Induced	298	1,233
Total	**1,038**	**2,283**

Note: The employment estimates are in person-years based on 2004 employment and the 2004 annual harvest of 1.441 million cubic meters.

Table 48:Canfor Employment based on FMS training records

Forestry Activity by Sub-Sector	Number of people employed
Road building/Harvesting	170
Hauling	242
Site Preparation	0
Planting and Chemical brushing	132
Planning	30
Layout/Cruising	25
Total	***580***

Target Met		
Yes ✓	No	Pending

Discussion

The Fort Nelson employment summary has been compiled in the TSR3 socio-economic analysis. The employment supported by the 2004 harvest in the Fort Nelson TSA is shown in Table 47. The TSA employment comprises of residents of the Fort Nelson TSA whose employment is dependent on the forestry sector within the Fort Nelson TSA directly or indirectly and who rely on the Fort Nelson TSA timber supply; and, provincial employment comprises of all forestry sector employment in the province that relies on the Fort Nelson timber supply, including both residents of the Fort Nelson TSA and those who live elsewhere. Employment is divided into direct, indirect and induced components; the sum of the components is the total impact

The forestry sub-sectors reported do not match exactly the sub-sectors outlined in the SFM Plan. For example, the SFM Plan target distinguishes between site preparation and planting activities, whereas the TSR3 data report on Silviculture in general. The TSR3 data do not separate between Planning, layout-cruising and hauling as separate activities. To emphasize the employment in some forest sub-sectors, employment numbers based on training records on Canfor's Forest Management system (FMS), has been included in Table 48. The FMS training records show how many people were directly (Contractors) and indirectly (workers) employed by Canfor. Those records do not provide information on the duration of employment. Employment of all forestry sub-sectors is estimated as an average of 2 months, with the exception of harvesting and hauling as an average of 4 months. The employment numbers provided take Canfor Woodlands staff into account, as they are dedicated to supervise activities that fall in the above sub-sectors.

The Socio- Economic analysis completed for the TSR 3 (Table 47) shows a slightly declining employment trend compared to the baseline data shown in the SFM Plan, which is based on the TSR 2 dataset. Considering, that the TSR 3 data only captures employment during 2004, and is not reflective of the reporting period it has to be pointed out that data in the same format as provided in TSR 2 and 3 won't be available for the 2006/07 reporting year. Availability of a consistent information source that is able to provide current data as outlined by sub-sectors in the SFM Plan on an annual basis is a challenge. Inquiries have been made with Worker's Compensation Board (WCB) to obtain employment numbers by sub-sectors. Unfortunately, the numbers could not be reported by geographic areas. Employment information from Stats Canada could not be provided in the required format and detail for forestry related activities.

It is acknowledged, however, that steady employment cannot be measured based on the FMS training records, as information regarding the length of employment is not available to Canfor. BCTS employment numbers are not included in the summary.

4-2.2 - Income from Forestry Sub-sector

Measure

Income from forestry sub-sector

Statement

This measure is directly related to measure 4-2.1, however it is meant to measure the income levels associated with each forestry sub-sector. It is important to understand the relationship between actual employment numbers and income that people are earning. Comparing the local and provincial trends is an important aspect in determining local sustainability.

Target

Due to the unique nature of harvesting and road building in the DFA, targets were not established at this time for this measure. A comparison of the trends between provincial and local employment will allow some analysis in terms of the sustainability of this measure. This is a process measure and monitoring will consist of reporting out on the measure. Statistics Canada tracks income for Canadian residents.

Data

Table 49: Average direct and indirect/induced incomes and total employment income, 2001 (TSR3)

Sub-Sector	Local average annual income ($ millions) *1	Local total annual income ($ millions) *1	Provincial annual income ($ millions) *2
Harvesting			
Silviculture			
Processing			
Direct	41,977	42.8	49.0
Indirect/Induced	32,117	38.4	43.9
Totals		81.2	92.9

*1: The local average and total income is based on Statistics Canada Census information - customized Data for the Northern Rockies District (NRD). Note that the figures in Table 49 are lower than the ones reported as baseline information in the SFM Plan, which are based on TSR 2 Socio-economic Analysis ($46,030 for direct and $34,075 for indirect/induced), and it may be in part of a small sample size (70 for direct and 45 for indirect/induced for the entire NRD).

*2: The provincial income estimates include TSA employment and income.

Table 50: Canfor Income by Forestry Sub-sectors

Forestry Sub-Sector	Local total annual income ($)
Logging	20,344,938
Hauling	15,560,713

Scaling	486,773
Reforestation	4,477,741
Road Maintenance	3,633,339
Road Construction	1,830,011
Administration	7,196,841
TOTAL	***53,530,356***

Target Met		
Yes ✓	No	Pending

Discussion

The information provided in Table 49 is based on the TSR 3 socio-economic analysis: In 2001, the average annual income for forest sector employees in the Northern Rockies District was approximately $41,977. For indirect or induced employment the average annual income was approximately $32,117. The direct income associated with the forest sector in the Fort Nelson TSA averaged $42.8 million per year and indirect and induced income averaged $ 38.4 million per year.

The information provided in Table 50 is based on Canfor's financial statements, and reflects dollars paid to indicated sub-sectors by Canfor only.
Table 50 shows that people being employed in the logging and hauling sector receive the highest amount of income as a total over all employees. Compared to measure 4-2.1 it is also obvious that most people are employed in the harvesting and hauling sub-sector. The Silviculture (Reforestation) sector requires generally a high amount of man-power to complete planting and chemical brushing activities within a short time frame. Income from the Reforestation sector is significantly smaller compared to the other sectors.

In the past year the Fort Nelson Public Advisory Group (PRISM) discussed several times the difficulty to report employment and income by sub-sector, as the information provided by Stats-Canada or other sources, such as WCB does not address the forestry sub-sectors adequately or not by geographic area. The intent of the sub-sectors is to indicate if some sectors receive significantly more income than others. Comparing local and provincial trends is an important aspect in determining local sustainability (SFMP p.113).
PRISM agreed to at the November 17/05 meeting to report the income as a lump-sum and not by sub-sectors and to change the measure to 'Income from Forestry'.

4-2.3 - Employment and Income Estimates

Measure

Indirect/Induced employment and income estimates

Statement

Indirect/induced employment and income estimates relate to people who are not directly employed by the forest industry but who provide services or supplies to it. Measuring the income and employment generated by Canfor in the Fort Nelson DFA can be used to determine the resilience of the local economy.

Target

Report on findings using TSR multipliers

Data

Table 51: Fort Nelson TSA average indirect/induced forest sector employment and Income (TSR3)

	Employment (person-years)	Average annual income/worker1
Indirect/Induced	298	$32,117

Target Met		
Yes ✓	No	Pending

Discussion

Indirect/Induced employment and income estimates relate to people who are not directly employed by the forest industry but who provide services or supplies to it (SFMP p. 114). Reporting indirect/induced employment and income makes it clearer what the economic impact of the forest industry in the DFA is.

Reporting of the measure for employment estimates is based on 2004 employment and the 2004 annual harvest of 1.441 million cubic meters. Employment estimates are in person-years. The information has been compiled in TSR 3 and is shown in Table 51.

In 2001, for indirect and induced employment the average annual income was approximately $32,117. The source for average income is Stats. Canada. - 2001Census; Customized Data for the Northern Rockies District.

The average annual income reported is lower than the baseline information reported in the SFMP (page 112-113), which is based on the TSR 2 Socio-economic Analysis. This may be in part of a small sample size (45 for indirect/induced for the entire Northern Regional District). Also, the annual harvest in 2001 was 1.311 million cubic meters, compared to an annual harvest of 1.441 million cubic meters.

4-2.4 - Dollars Spent

Measure

The percentage of dollars spent locally on each forestry sub-sector in proportion to total expenditures

Statement

This measure is important to test the economic diversity, resilience and sustainability of the DFA's economy. This measure looks at the amount of money spent by Canfor locally on each of the above listed forestry sub-sectors (excluding staff costs). The total dollars spent and dollars spent locally for each forestry sub-sector will be monitored and reported. Addresses of the contractors will be monitored as well as per the above definition for 'local'.

Target

Road building/Harvesting: 75% (5%). Hauling: 70% (5%). Silviculture: 5% (5%). Planning/Layout/Cruising: 5% (5%).

Data

Table 52 Canfor Dollars spent *locally* on each Forestry Sub-sector in percentage of total expenditures

Sub-Sectors defined in the SFMP	Percentage	Target (Variance)	Target met [yes/no]
Road building/Harvesting	80 %	75% (5%)	Yes
Hauling	51%	70% (5%)	No
Silviculture	25%	5% (5%)	Yes
Planning/Layout/Cruising	37%	5% (5%)	Yes

Table 53: BCTS Dollars spent on Forestry sub-sectors

Silviculture	58%
Planning	29%
Road building	100%

Target Met		
Yes	No ✓	Pending

Discussion

This measure looks at the percent of money spent by Canfor/BCTS ***locally*** on each of the listed sub sectors. Although harvesting, road building and hauling activities are done over approximately a 100 day period in winter time, this measure is important to test the economic sustainability of the forest industry (SFMP p. 117). Local is defined as businesses that have a mailing address or known established businesses located in the DFA.

Targets have been set by Sub sector as defined in the SFM Plan for Road building/Harvesting – Hauling – Silviculture and Planning/Layout/Cruising.

Within the road building and harvesting sub-sector 10 contractors were employed by Canfor, and two of those did not reside in the Fort Nelson DFA. The target for hauling has not been met, as out of 142 quota trucks, only 73 were registered locally, which accounts to 51%.
All five contractors that entered into silviculture contracts were not local. However, dollars were spent on local helicopter companies, air services and boat services. All ten contractors that completed work for the Planning department were not local. Layout contractors and Cruising contractors also reside outside the DFA. However, Canfor spent 37% of dollars on local vendors, such as air services and local helicopter companies to complete planning/layout and cruising activities.

Although, targets for the majority of sub-sectors have been met, the target has a whole has not been met by Canfor.

BCTS has following to report on this measure:

BC Timber Sales cannot report on harvesting or hauling as those costs are born by the licensees who purchase the Timber Sales Licenses (TSL's). A licensee bids on a sale and pays the advertised stumpage rate as well as bonus bid. The licensee's bonus bid is typically set on what the licensees harvesting and hauling costs will be. BC Timber Sales does not receive that information.

The summary in Table 53 shows the percentages spent locally on road building, silviculture, and planning. Silviculture and planning reflect contract costs only

and do not reflect dollars spent locally on such things as hotel costs or helicopter time. These dollars spent locally are built into the contract bid, but a proportion of dollars that we pay to the contractor goes to local businesses. Where these costs could be broken out they were, but for such contracts as planting and surveys, these costs were built into the contract bid price. You could safely assume that 5-10% of the total contract value went to local business.

The targets for this measure have been met for the sub-sectors that BC Timber Sales has data for.

4-2.5 - Purchase Wood

Measure

Opportunity sustained by Canfor to purchase private wood

Statement

Members of the PRISM identified purchasing wood as an important economic measure for the DFA. The capacity of both, the OSB plant and sawmill is greater than the current allowable volume under license with the government.

Target

Opportunity exists

Data

Table 54: Canfor purchased volume compared to quota volume

	Quota			Purchase			
	Conifer [m3]	Deciduous [m3]		Conifer [m3]	Deciduous [m3]		Total per month [m3]
Apr-05	0	0		0	0		0
May-05	0	0		0	0		0
Jun-05	0	0		0	0		0
Jul-06	2481	10841		1238	5068		19628
Aug-06	2997	9811		2279	4645		19732
Sep-06	1048	8199		1284	8819		19350
Oct-06	1636	7300		5349	20359		34644
Nov-06	7520	40137		10165	40391		98213
Dec-06	61080	104022		8243	33117		206462
Jan-06	163012	213542		12901	42201		431656
Feb-06	180063	168944		13416	37073		399496
Mar-06	88024	66758		39471	17173		211426
	507861	629554		94346	208846	Total per RP*	**1440607**
		1,137,415			***303,192***		
	Total Quota [m3]	1137415		Total Purchase [m3]	303,192		
	Total Quota [%]	**79**		**Total Purchase [%]**	**21**		
	55% of Quota wood is deciduous			**69% of Purchase wood is deciduous**			
	45% of Quota is conifers			**31% of Purchase wood is conifers**			
Total Conifer in RP				**Total Deciduous in RP**			
	Conifer Quota m3	507861			Deciduous Quota m3	629554	
	Conifer Purchase m3	94346			Deciduous Purchase m3	208846	
		602207		***Reporting Period**		**838400**	

Table 55 Canfor Opportunities to purchase wood by source

Source	Opportunities	Conifer	Deciduous
BCTS	14	70,549	171,989
Oil and Gas	39	17,952	15,727
Private	36	9433	17861
Fort St. John	1	11,269	0
Woodlots	0		
Refusal	2		

Note: The wood purchased from Fort St. John is not included in Table 54

Target Met		
Yes ✓	No	Pending

Discussion

Table 55 shows Canfor's opportunities to purchase wood and volume purchased by source category. In total there were 90 opportunities for Canfor to purchase wood within the reporting period. The most opportunities to purchase wood were provided by the Oil and Gas sector (39 opportunities), followed by the Private Sector (36 opportunities). BCTS provided the least amount of opportunities (14), but delivered the highest amount of volume. The Oil and Gas sector delivered the second highest volume, followed by private wood. There were no opportunities to purchase wood from woodlot owners; there are currently only two woodlots present in the DFA. Canfor declined two opportunities to purchase wood based on high costs associated with remote distances (potential opportunities in Watson lake area and 100 miles north of Watson Lake). Wood was also purchased from the Fort St. John mill.

Table 54 shows the quantity of wood provided through Wood Purchase compared to quota wood. A total of 1,440,607 m3 has been provided to the mills during the reporting period. Purchase wood provided 21 % of the total delivered volume. The deciduous component was with 69% of the total purchase wood significant higher than the remaining conifer component.

Based on the opportunities that existed and were drawn upon, the target has been met.

4-3.1 - Fees Paid

Measure

Fees paid by industry to municipal governments

Statement

The fees paid by the forest industry, including stumpage, local and provincial taxes and other rents, are an important component of both local and provincial economies.

Target

100% of fees due will be paid annually (0%)

Data

Total stumpage/timber rent paid by Canfor during April 1/05 to March 31/06
$5,357,306

Target Met		
Yes ✓	No	Pending

Discussion

The total stumpage/timber rent paid by Canfor during the period from April/05 to March/06 is $5,357,306. Local and provincial taxes don't apply as Woodlands does not pay Federal or Provincial taxes because Canfor's net income is zero.

The target has been met, as 100% of fees due were paid annually to municipal governments and paid on time.

4-3.2 - Personal Income Taxes Paid

Measure

Personal income taxes - forest industry relative to total

Statement

This measure relates to the contribution that forest workers and other workers in the area pay to Federal and Provincial governments. The trend of the forest industry personal income taxes relative to the total will help determine trends in sustainability.

Target

There is no target set for this measure - Canfor will report out on this measure. The current status is being compiled at present. The Fort Nelson Economic Development Officer is working with Statistics Canada to summarize the total and forestry related income taxes.

Data

Total income tax paid by Canfor for 2003
$1,489,571.99

Target Met		
Yes ✓	No	Pending

Discussion

This measure tracks the contribution by the industry to the governments of Canada and BC. The income tax paid for 2003 for Tackama and Polarboard salaried employees is $1,489,571.99. Information from Stats Canada on personal income taxes is not available. Stats Canada does not provide information on income taxes.

4-4.1 - Opportunities for First Nations

Measure

Number of documented opportunities (by forestry sub-sector) for local First Nations to enter into contracts with Canfor and BCTS

Statement

The intent of this measure is to assess the ability of First Nations to access forestry related economic opportunities. This measure reports the number of documented opportunities for local First Nations to enter into contracts with BC Timber Sales and Canfor.

Target

Report out number of opportunities and/or volume available

Data

Table 56 Canfor First Nations opportunities to enter into contracts

Activity	# of opportunities for First Nations to enter into contracts with Canfor	# of Contracts entered by First Nations
Road building and maintenance	4	4
Harvesting	0	0
Hauling	1	1
Silviculture	0	0
Planning	0	0
Layout	0	0
Cruising	0	0
Purchase Wood	1	1
Other	1	0

Table 57 BCTS opportunities for First Nations to enter into contracts

TSL and block number or Contract	Geographic Area	Opportunity #	Volume (m3)
A66566	Apache	1	8534
A66643	Capot-blanc	2	8174
A78380	Capot-blanc	3	4593
A36093	Goguka	4	14859
A58699	Kiwigana	5	39795
A66629 blocks 2,3,4	Liard	6	18329
A66626	Liard	7	18850
A58702	Poplar Hills	8	5459
A66588	Poplar Hills	9	8862
A78136	Raspberry	10	24162
A78137	Raspberry	11	20125
A78138	Raspberry	12	11213
A78147	Raspberry	13	27001
A66582	Raspberry	14	17931
A66583	Raspberry	15	15181
A66622 blocks 1,2,3	Stanolind	16	35347
Implementation contract	Ft. Nelson District	17	0
	Totals	17	278415

Target Met		
Yes ✓	No	Pending

Discussion

In the past year seven opportunities were provided to First Nations to enter into contracts with Canfor. Six out of seven opportunities were taken and resulted in entering contracts with Canfor. The majority of opportunities occurred in the road building and maintenance sub-sector.

BCTS has following to report for this measure:

BC Timber Sales has publicly tendered contract opportunities as well as Timber Sale License (TSL) opportunities. All TSL's are publicly tendered which resulted in 278,415 m^3 available for First Nations to bid on.

There were a total of 17 opportunities to First Nations to enter into Timber Sale Licenses (TSL's - 16) or contracts (1).

There was only one contract publicly tendered this year as the bulk of contracts were tendered 1-2 years ago and are three year renewable contracts. There were at least ten contracts that were tendered publicly, but 2-3 years ago so they cannot be counted towards this reporting population.

4-5.1 - Delivered Logs Costs

Measure

Competitiveness of delivered log costs as established under Market Pricing System (MPS), compared to prices for adjacent TSA's.

Statement

The delivered log cost is one measure of how competitive the forest industry is in relation to other TSA's. The province has recommended that a market pricing system (MPS) be implemented, which will establish the cost of logs for a DFA.

Target

Targets will be established once the MPS is in place (2005), reportable numbers are available and has been analyzed for utility. Targets will be based strictly on the average sale price for logs under the BCTS MPS.

Data

Table 58 Stumpage rate for Fort Nelson and Fort St. John conifer sales

YEAR	TSL Number	Category	Conifer Volume (m3)	Decid. Volume (m3)	Market Stumpage Price (MSP)	Upset Stumpage Rate (MSP X .70)	Conifer Bonus Bid	**Total Stumpage Rate (TSR)**	Deciduous upset stumpage rate	Decid. Bonus bid.
FORT ST. JOHN FIELD TEAM										
27-Oct-05	A78049	Any	38,336	0	$40.51	$28.36	$0.06	**$28.42**	$0.50	
27-Oct-05	A78050	Any	83,036	0	$40.69	$28.48		$28.48	$0.50	NO BID
12-Oct-05	A70094	Any	39,757	6,900	$46.61	$32.63	$5.30	**$37.93**	$0.50	
20-Sep-05	A63450	Any	7,111	777	$26.50	$18.55	$0.25	**$18.80**	$0.50	
21-Sep-05	A63405	Any	18,119	1,370	$47.14	$33.00	$4.13	**$37.13**	$0.50	
12-Oct-05	A63424	Any	47,142	2,772	$43.64	$30.55	$7.01	**$37.56**	$0.50	
11-Oct-05	A63439	Any	7,326	6,816	$40.29	$28.20	$8.38	**$36.58**	$0.50	
FORT NELSON FIELD TEAM										
29-Sep-05	A36093	Any	11,357	3,502	$51.44	$36.01	$0.02	**$36.03**		
08-Dec-05	A58699	Any	29,946	9,849	$50.31	$35.22	$0.03	**$35.25**		
18-Aug-05	A78524	Any	10,876	1,427	$45.31	$31.72		$31.72	$0.50	NO BID

Target Met		
Yes	No	Pending ✓

Discussion

This measure reports the competitiveness of delivered log costs as established under Market Pricing System (MPS) and compares this to adjacent TSA's.

Canfor is still awaiting the Governments MPS system. It is estimated to be in place by fall 2006. The fact, that the MPS is not yet implemented is acknowledged in the knowledge gap matrix. The target is pending.

BCTS has following to report:

Table 58 reports the stumpage rate for Fort Nelson and Fort St John conifer sales. The sales are sold at 70% MPS with the intent of receiving the remaining 30% in the form of the bonus bid. Table 58 reports stumpage rates only. MPS will be implemented for the next reporting period.

4-5.2 - Competitive Primary Milling Facility

Measure

A competitive primary milling facility is sustained

Statement

Minimum of 1 (0)

Target

The existence of a forest industry primary processing facility can have a stabilizing affect on the economy of a DFA. The economic sustainability of many parts of BC, including Fort Nelson depends in part on a competitive primary processing facility.

Data

Target Met		
Yes ✓	No	Pending

Discussion

A primary processing facility attracts other businesses and provides revenue to all level of government (SFMP p. 123).

Canfor manufactures Oriented Strand Board (Polar Board™) at the Polarboard OSB mill, as well produces plywood at Tackama operations. The veneer/plywood mill processes coniferous and deciduous species while the OSB plan processes primarily deciduous species. As of August 2005, the Tackama sawmill has been shut down. There were no job losses as sawmill staff were transferred to the plywood mill and filled vacancies. The OSB mill had the capacity to consume 890,000 m3 of fiber and the Tackama mill to consume 503,000 m3 of fiber. The three mills employed about 680 people in 2004, up from 540 people in 1998.

Non Canfor operated milling facilities in Fort Nelson are 'Trans North Timber' and 'Four River Hardwoods'. Based on the TSR3 socio-economic analysis 'Trans North Timber' employs 11 full-time employees (including one First Nations) and produces rough cut lumber. The mill has been in operations for 30 years. They process approximately 15,000 cubic meters annually, of which 70% are from spruce and 30% from cottonwood and aspen. However, 'Trans North Timber' has the capacity to process 100,000 cubic meters and cite high BCTS bid prices and the lack of a forest licence as obstacles. 'Four Rivers Hardwoods' produces rough lumber from aspen and spruce species. The volume harvested and the number of people employed has varied over the past few years but currently, employs two persons and are targeting 15,000 board feet. The information has been provided by the 'Trans North Timber' operations and office manager on October 13, 2005 as stated in the TSR3 analysis report.

A minimum of 1 competitive primary milling facility is sustained, and the target has therefore been met.

4-6.1 - Assessment of Damaging Events or Agents

Measure

Assessments of damaging events or agents (current status; risk potential)

Statement

Insect and disease disturbances have the potential to cause significant economic, social and ecological impacts. Assessments of the status and risk posed by events or agents must be conducted ahead of an actual event occurring in order to develop and implement mitigating strategies.

Target

1 assessment per damaging event or agent (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

The Ministry of Forests and Range conducts annual aerial overview surveys for forest health in the DFA. Using the assessments (i.e. forest health factor and severity—current status) from the annual survey (most current survey at this time is 2004), risk potential was assessed. It was determined that none of the 72 significant natural disturbances in the DFA (refer to Table 36 for a list of 2004 significant natural disturbances) were at greater than endemic levels; therefore, had a low – moderate risk potential. This may change if future monitoring and assessment yields significant changes in either size or severity of disturbances. For instance, if an infestation doubles in size or increases in severity from moderate to high, a treatment plan will be developed.

A tracking system has been developed, using the MoFR annual aerial survey, to identify and prioritize the development of natural disturbance treatment plans. A knowledge gap has been identified determining that development of a tracking system to assess risk potential is needed. This is in the process of being added to the tracking system developed for Measure 2-4.1 and will be completed by September 2006 (as per Knowledge Gap Matrix, January 12, 2006).

4-6.2 - Management Strategies for Damaging Events or Agents

Measure

Management strategies in place to reduce the impact of damaging events or agents (including plans, suppression, salvage)

Statement

Once assessments of potentially damaging natural disturbance events or agents are in place, this measure ensures that management strategies are put in place to deal with any events or agents.

Target

1 (0) strategy exists per damaging event or agent

Data

Target Met		
Yes	No	Pending ✓

Discussion

This measure ensures that management strategies are put in place to deal with any damaging events or damaging agents. A Natural Disturbance Reporting Form has been developed and includes a section on management strategies for individual disturbances. Knowledge gaps were identified regarding definition of management strategy format and development of management strategies according to that format. Definition and development of management strategies are currently underway and will be included as part of the Natural Disturbance Identification and Management Best Practices' to be completed by December 2006 (as per Knowledge Gap Matrix, January 12, 2006).

5-1.1 - Potential for Marketed Non-Timber Benefits

Measure

List of existing and documented potential for marketed non-timber benefits

Statement

The measures of this indicator will highlight trends in the marketed non-timber economic benefits from local forests and assist in developing strategies for sustaining these benefits over time, within the limitations of Canfor's current forest management activities. The list for this measure will establish a baseline that Canfor will use when developing management strategies under FSPs. These management strategies will ensure that Canfor does not degrade current or potential marketed non-timber benefits.

Target

1 (0) list exists TBD July, 2006

Data

A list of existing and documented potential for marketed non-timber benefits exists?
No

Target Met		
Yes	No	Pending ✓

Discussion

Canfor's and BCTS's goal is to not degrade the current and future potential for marketed non-timber forest products (NTFP) as a result of forest management activities. In order to achieve that goal, it is imperative to know what NTFP are and where they are located. It should be noted that the basic intent of this measure is also discussed in measure 8-3.3, which ensures that procedures are established to maintain NTFP's.

Currently identified as a knowledge gap, is the completion of a project to define a list of existing and potential for marketed NTFPs. The timeline to address the knowledge gap is scheduled for December 2006.

A Preliminary Report titled "Non-timber Forest Products Indicator Development for the Fort Nelson Defined Forest Area", March 2006, prepared by the Centre for Non-Timber Resources, Royal Roads University has been completed. This report determines the initial baseline data availability for both known and potential NTFP's in the DFA. This report has developed a preliminary list of NTFP species and a preliminary traditional use species list based on a literature review. The report provides recommendations that can be used to start listing and tracking existing and potential marketed NTFPs. Results of this report have not yet been reviewed and discussed with the Public Advisory Group.

Currently a Standard Operating Procedure (SOP) entitled "Identification of Non-Timber Forest Products" exists and provides guidance to Canfor and BCTS on how to document a list of NTFP's and work with NTFP harvesters in the DFA. No NTFP's have been made known to Canfor or BCTS by First Nations for this reporting period.

The target for this measure has currently not being met and is pending on the review of the NTFP report, implementation and training of staff on the NTFP SOP. Recommendations provided in the NTFP report most likely will result in further future projects to gather more explicit local baseline information.

5-1.2 - Number of Jobs in NTF Sector

Measure

Number of jobs/non timber forest resource sector

Statement

Understanding the economic impacts of potential trade-offs across forest resource users is an important aspect of economic sustainability. In any trade-off discussion, it should be recognized that some marketed non-timber resource businesses may also have a strong social component.

Target

1 (0) report of baseline information exists TBD July, 2006. Once a comprehensive list of the marketed non-timber benefits is available, the SFM Plan can begin tracking the number of jobs created. Data for the current condition of this measure will be collated in a report of baseline information that will be available July, 2006. Following the completion of the report, this measure will be updated.

Data

Report of baseline information exists?
No

Target Met		
Yes	No	Pending ✓

Discussion

Understanding the economic impacts of potential trade-offs across forest resource users is an important aspect of economic sustainability. This measure implies that a comprehensive list of the marketed Non-Timber Forest Products (NTFP) is available, and therefore is pending until the list of NTFP is developed, as outlined in the previous measure. Consequently, this measure has been identified as a knowledge gap with a due date for June 2007. The effectiveness of this measure has been commented on in the knowledge gap matrix, as the attempt to quantify this measure seemed very ambitious, although it is important to assess sustainability of non-timber economic values. It was suggested to look at the effectiveness of this measure annually and to find ways to improve data collection and reporting. Particular attention should be paid to make this measure more effective in guiding forest practices. The target is one report that provides baseline information. The target has not been met due to the reasons above.

5-1.3 - Income from Jobs in NTF Sector

Measure

Income/non timber forest resource sector

Statement

This measure is directly related to 5-1.2 and is meant to measure one aspect of the economic benefit derived from businesses that work with marketed non-timber resources.

Target

1 report of baseline information exists TBD July, 2006. Data for the current condition of this measure will be collated in a report of baseline information that

will be available July, 2006. Following the completion of the report, this measure will be updated.

Data

Report of baseline information exists?
No

Target Met		
Yes	No	Pending ✓

Discussion

This measure is directly linked to measure 5-1.2 and is meant to measure one aspect of the economic benefit derived from businesses that work with marketed NTFP (SFM Plan p. 131). Without la list, location and tracking procedure for NTFP's in the DFA, it cannot be reported at this time what the actual income from the non-timber forest resource sector is. The lack of information to report on this measure is noted in the knowledge gap matrix with a due date of June 2007. This measure will be dealt with in conjunction with measure 5-1.1 and 5-1.2. The target is one report that provides baseline information. The target has not been met and is pending due to the reasons mentioned above.

6-1.1 - Employment by Sector - Local Economy

Measure

Employment supported by each sector of the local economy (actual and percentage of total employment)

Statement

Although the forest industry cannot directly control the diversity of the economy for the community in which it operates, understanding the impact of that diversity is an important component of SFM. As an important economic player Canfor can potentially influence local policies that would encourage economic diversity in the community.

Target

This measure is a simple annual report of the labour force in the Fort Nelson area. The information is determined by Census Canada

Data

Table 59 Labour Force Fort Nelson 2001

	1996 Employment (person)	2001 Employment (person)	Percentage of total employment for 2001	% Change in Employment
Forestry	1,132	768	21.9	-47.4
Mining	131	550	15.7	76.2
Fish & Trapping	8	11	0.3	27.3
Tourism	432	474	13.5	8.9
Agriculture & Food	20	39	1.1	48.7
Public Sector	449	641	18.3	30.0
Construction	245	185	5.3	-32.4
Other	186	250	7.1	25.6
Non Basic	593	589	16.8	-0.7
Total	**3,196**	**3,508**	**100**	**8.9**

Target Met		
Yes ✓	No	Pending

Discussion

Understanding the impact that the forest industry has on the diversity of the economy in the community is an important part of SFM. A diverse community will be more resilient to economic downfalls. Although the forest industry has only indirect control of the economic diversity, it can potentially influence local policies that would encourage economic diversity in the community.

This measure has no actual target and basically consists of reporting out a summary of the labour force in Fort Nelson.

Table 59 reflects the labour force profile in the Fort Nelson TSA using the TSR 3 Socio Economic Analysis. The information is based on Stats Canada 2001 census.

From 1996 to 2001, the total labour force in the Fort Nelson TSA grew by 9% to 3,508 from 3,196. The labour force in the basic sector however, grew by 12% in the same period. The basic sector includes the forestry, mining, fisheries, tourism, agriculture, public sector, and construction industries. The non-basic sector relies on the basic sector by selling goods and services to them. Overall, the non-basic sector accounts for 17% of the total labour force.

The highest labour force can be found in the Forestry Sector with nearly 22%, followed by the public sector with 18%, mining (16%), and tourism (13.5%). The remaining sectors, such as agriculture and food, or fish and trapping are minor in nature.

6-1.2 - Income by Sector - Local Economy

Measure

Contribution of income sources from each sector of the local economy (actual and percentage of data)

Statement

This measure is directly related to 6-1.1 and is meant to measure the contribution of income sources as part of the economic benefit derived from each

sector of the local economy. This information can be used to analyze the economic diversity for the DFA.

Target

Report out ' no target . Data regarding total local income has been requested from Statistics Canada. The report will be completed by April, 2005.

Data

Table 60 Income of the labour force

	1996 Income ($millions)	2001 Income ($millions)	% Change Income ($millions)	Average Income ($)
Forestry	31.1	31.7	1.9	41,276
Mining	3.5	18.6	81.2	33,818
Fish & Trapping	0.0	0	N/A	N/A
Tourism	6.2	7.5	17.3	15,823
Agriculture & Food	0.0	0.7	100.0	17,949
Public Sector	10.8	17.4	37.9	27,145
Construction	6.4	6	-6.7	32,432
Other	5.4	7.4	27.0	29,600
Non Basic	12.5	16	21.4	26,995
Transfer Payments	4.9	6.8	27.9	
Other non-employment income	1.1	5	79.2	
Total	**82**	**117.3**	**30.2**	

BC Stats. 1999 and 2004a. Income is based on after-tax total income from direct and indirect income sources. Average income was calculated by total income ($) divided by employment (person) for 2001.

Target Met		
Yes ✓	No	Pending

Discussion

A target has not been set for this measure and it simply consists of reporting out on the status, as the forest industry has no direct control over the economic diversity of the community.

Table 60 reflects the income profile in the Fort Nelson TSA using the TSR 3 Socio Economic Analysis. The information is based on Stats Canada 2001 census. Income from the basic sector is income that flows into the community usually in response to goods and services produced in the community and exported from it. The non-basic income is paid to individuals in the community for goods and services they provide to other individuals in the community or to the basic sector (e.g retail outlets, grocery stores).

In 2001, the basic industries contributed $89.3 million in income to the Fort Nelson TSA, which is a 41% increase from 1996 of $63.4 million. The non-basic sector relies on the basic sector by selling goods and services to them. Overall, the non-basic sector accounts for 14% of the total income earned by the working labour force.

Forestry is also the highest paying sector with workers earning an average of $41,276, followed by mining ($33,818) and construction ($32,432).

7-1.1 - Stakeholder Analysis

Measure

Implementation and annual update of a comprehensive stakeholder analysis of affected and interested parties

Statement

Effective sustainable forest management planning for public land requires appropriate involvement of stakeholders and the general public in the development and implementation of plans. In order for a public process to be effective, a comprehensive list of affected and interested parties must be considered. A Stakeholder Analysis ensures that all the interests in a defined area of forest are considered.

Target

1 (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

Timberline Forestry Consultants Inc. completed the Stakeholder Analysis in March, 2003 as per the Stakeholder Analysis process described in the SFM Plan. This list has been updated as of November 2004 and is located in Canfor's and BCTS office. With the development of the COPI database (Creating Opportunities for Public Interest) the old version of the Stakeholder Analysis has been rolled into the COPI database. The contact database is regularly being updated. Trapline and Guide Outfitter information is updated yearly by their respective government agencies and is forwarded to Canfor and BC Timber Sales.

7-1.2 - Communication / Participation Plan

Measure

Development and implementation of a communication / participation plan, with early input from a range of stakeholder representatives

Statement

An effective public participation process needs to accommodate local circumstances, yet remain structured. Establishing and implementing an agreed upon Terms of Reference (TOR) provides for a fair, effective, open and accountable process to exist. As well, communication / participation with parties outside of a formal public advisory group is required to ensure SFM.

Target

1 (0) TBD

Data

Development and implementation of a communication / participation plan?
No

Target Met		
Yes	No	Pending ✓

Discussion

The intent of the communication plan is to support the Fort Nelson DFA Sustainable Forest Management Plan and facilitate effective communications between all parties and interests, while ensuring the local public becomes more aware of the benefits brought about through the SFM approach. The participation process of the Fort Nelson public advisory group (PRISM) is formulated in the Terms of Reference (ToR), which defines the role of public members and technical advisors. A communication/participation plan that expands beyond the PRISM does currently not exist and is acknowledged in the knowledge gap matrix. In order to fill the knowledge gap a project has been completed March 31/06 with the development of a 'preliminary' Communication Plan prepared by Greenway & Associates Communications Ltd. The communication plan is at this stage in fact 'preliminary', as it still requires thorough consultation and dialogue with many stakeholders and interests. The preliminary communication plan defines what 'effective' means and provides tools and tactics that the participants and PRISM can choose from to customize the Communication plan. With the community of Fort Nelson being granted the title of '2006 Forest Capital of BC', the PRISM also saw the opportunity to consider integrating strategies of the Communication plan used in the 'Fort Nelson's 'Forest Capital' proposal into the final version. Discussion of the recommendations listed in the 'Preliminary Communication Plan' is on the agenda for upcoming PRISM meetings. The next step is to agree on a strategy, then to implement and to initiate additional projects if deemed necessary.

7-1.3 - Effective Public Advisory Group

Measure

The existence of an effective public advisory group

Statement

Building on the earlier two measures under this indicator, this measure highlights the practical advantages to including the public in the planning process. An effective way to receive focused input from the public is to form a public advisory group.

Target

1 (0)

Data

Existence of a Public Advisory Group?
Yes

Target Met		
Yes ✓	No	Pending

Discussion

Inclusion of the public into the planning process, such as accessing local knowledge and increasing public understanding and support for sustainable forest management is an important part of SFM.

Given the extent of regular meetings, which principles follow the Terms of Reference, the target has been met.

The Fort Nelson public advisory group, the PRISM (Public Response for Informed Management), represents many of the interests of the community and continues to meet after achieving registration to the CSA-SFM Standards in February 2005. PRISM continued to provide input on several projects that were completed this year. Within the reporting period (April 1st to March 31st) PRISM met four times (May 19/ Nov 17/ Dec. 15, Jan. 12th) A major focus of 2005 was the PAG restructuring to distinguish between technical advisors and PAG members, and the revision of the knowledge gap matrix. In addition to the regular meetings a Public Forestry Field tour was held on February 17th, to tour Canfor and BCTS's operations and to discuss forest issues. PRISM members were invited to the field tour.

A SFM working group met on March 22/06 to review the status of measures and to compile the information for the PRISM to reduce the complexity of the information.

Currently identified as a knowledge gap, is the need to improve feedback mechanism and a definition of what 'effective' means. With the introduction of a new meeting facilitator a process has been taken forward in asking each individual PRISM member for feedback at the end of the meetings held. This process provided input to a certain degree to the participants regarding the

satisfaction and effectiveness of the meetings. Beyond those efforts a 'Report on Consultation with Public Advisory Group Members' was completed by J. Perry Resource Communications. PAG members were interviewed and recommendations were produced based on those interviews, expecting to increase the PRISM's effectiveness and further improve public participation and support. A 'Preliminary Communication Plan' has been developed March 31, 2006 to provide guidance on how best to achieve 'effective' communications.

7-1.4 - Equitable and Inclusive Deliberation Process

Measure

The conduct of an open public process prior to Government approval of operational plans, or any major amendments.

Statement

As part of the report being developed for measure 7-1.2, recommendations for a conduct of an open public process will be developed for future operational plans, specifically FSPs, and major amendments. In order to be equitable and inclusive, the report will make allowances for different linguistic, cultural, geographic, or informational needs of all interested parties. The measure is meant to ensure that an equitable and inclusive public deliberation process is undertaken prior to making major forest management decisions.

Target

1 (0) Process (TBD)

Data

An open public process conducted?
Yes

Table 61 Opportunities provided by Canfor for public input

	Date	Occasion
1	Nov. 3/05 to Jan. 2/06	60 day Public comment and review period for proposed FSP, where FSP was made available to the public for viewing at Canfor's office. Notification letters that Canfor's FSP was available for public comment and review were also sent to all stakeholders (trappers and guide outfitters) and First Nations that may be affected by the FSP. A FSP contact log

		was made for all communications regarding Canfor's proposed 2005/2006 FSP. Canfor has provided the public with information, but no specific comments have been received from the public.
2	Nov. 24th/05	Open House at the Fort Nelson Woodlands Inn for FSP review
3	Dec. 17th/05	Open House a the Fort Nelson Recreation Center for FSP review and SFM input
4	May 2005	Trade-Fair – Information on the SFM plan and Forest Development Plan, as well as contact information were handed out to the public. No specific comments were received from the public.
5	Mar. 24th/05 to May 23rd/05	60 day Public review and comment period for FDP Amendment # 46: Location of new blocks were made available to the public for viewing at Canfor's office. Notification letters of Canfor's FDP amendment # 46 being available for public comment and review were also sent to all stakeholders (trappers and guide outfitters) and First Nations that may be affected by the FDP amendment. Comments received regarding some of the proposed blocks and roads were dealt with appropriately (eg. a road proposed for permanent access was changed to temporary/winter access only). The notification letters/phonecalls/comments received, etc, are all recorded on a contact log for FDP Amendment #46.

Table 62 Opportunities provided by BCTS for public input

	Date	Occasion
1	August 2/05	Open House for stakeholders (trappers/guides) at the Northern Rockies Regional District for Pest Management Plan review.
2	Sept 28/05 to Oct 5/05	60 day Public comment and review period for proposed major FDP amendment, where the amendment was made available to the public for viewing at BC Timber Sales office (Ministry of Forests and Range). Notification letters pertaining to the amendment were sent to all stakeholders (trappers and guide outfitters) and First Nations that may be affected by the FDP amendment. BCTS has provided the public with information, but no specific comments have been received from the public.
3	January 28/06	Open House at the Northern Rockies Regional District for Pest Management Plan review.

Target Met		
Yes ✓	No	Pending

Discussion

The target is meant to ensure that an equitable and inclusive public deliberation process is undertaken prior to making major forest management decisions.

Currently the PRISM and the processes of the meetings have adequately addressed this measure as it pertains to deciding on the SFM approach for the DFA. Measure 7-1.3 lists the dates when PRISM meetings were held during the reporting period. PRISM meetings are held in an open format following the agreed upon terms of reference. Discussions and decisions are tracked in the meeting summary notes. The meeting notes are distributed during following meetings and approved by PRISM.

The broader public has been invited to comment and provide input into Canfor's proposed Forest Stewardship Plan (FSP), current Forest Development Plan (FDP) and general issues as listed in Table 61. Based on the information provided, Canfor has met the target.

BCTS has following to report on this measure:

The broader public has been invited to comment and provide input into BC Timber Sales current Forest Development Plan (FDP) and draft Pest Management Plan during following occasions listed in Table 62. Based on the actual opportunities that existed for the Public to provide input into Canfor's and BC Timber Sales forest management decisions and the fact that comments received were dealt with appropriately shows that the target can be considered met.

It should be noted that the SFM Plan states that the process is to be determined how to conduct an open public process prior to Government approval of operational plans, or any major amendments. The process should have been developed by December 2005 with input from PRISM and implemented in 2006. The lack of a formal process has not been identified in the knowledge gap matrix and it appears that it got overlooked. Therefore, the process should be formalized and addressed within the next reporting period.

7-1.5 - Open and Transparent Reciprocal Exchange of Social Values / Opinions

Measure

Documentation of open and transparent reciprocal exchange of social values/opinions, their influence on decisions, and participant satisfaction

Statement

In order for interested parties to be able to review and provide comments on various SFM aspects, they need to be able to have access to all relevant information from forest managers. With different levels of interests, understanding and responsibility, members of the public may wish to have access to varying amounts and types of information and forest managers need to accommodate for this variety. In addition to providing access to information, forest managers need to document the occurrence of the exchange of information, as well as how the information from the party was utilized within the management decision. Another important matter to document is the satisfaction of the interested party with the exchange and the result. This measure ensures that a documented process is in place to track the exchange of values/opinions.

Target

1 (0) document outlining process, responses made and summarizing satisfaction

Data

Target Met		
Yes	No	Pending ✓

Discussion

This measure is tied to measure 7-1.4, and ensures that the process set up for that measure, the responses and the participant's satisfaction will be documented. The opportunities for the public to provide input, share information and values, as well comment on operational plans has been provided as shown in the two previous measures 7-1.3 and 7-1.4.

The current process at Canfor is, that opportunities that exist for the PAG to provide input, is tracked via the PRISM meeting summary notes. Notification letters/phone calls/ comments received during public comment and review periods relating to operational plans are recorded on a contact log for the respective amendment. Other notifications, comments during Open Houses etc, public comments and concerns, including First Nations, are recorded in the 'Creating Opportunities for Public Interest' (COPI) database.

Practically, opportunities that exist for public input, and the influence of the input on management decisions is documented within Canfor, except that a formalized process does not exist and that the information is not tracked within one document. Tracking of the third component of this measure, which measures the participant's satisfaction, does currently not exist.

BCTS has following to report on this measure:

All information regarding opportunities that exist for the public advisory group to provide input resides with Canfor. Notification received from letters, phone calls, or comments received during public comment and review periods relating to operational plans are recorded on a contact log for the respective amendment or plan.

Other notification (comments during Open Houses, public comments and concerns, including First Nations) are recorded and kept with the respective file. BC Timber Sales also has a process through the Environmental Management Control document, through our EMS system, on how to address public complaints that may not be associated with specific operational plans.

2.7.2.3 Public Input

The CSO, the BCTS Resource Clerk and the Operations Division Records Clerk will ensure that a defined process is followed for public input. The steps for public input and BCTS response are listed below:

1. When Public Input is taken at front desk or in field the document must be date stamped and the CSO or corresponding staff member has a 2 week response period in which to address the compliant if the public member requests it.
2. The Public input will be directed towards the Certification Standards Officer in the TSO Office
3. The CSO will document the public input if not already completed
4. A copy of the public input hardcopy is then submitted to the records clerk.
5. The Resource clerk will enter the public input or concern into the appropriate GENUS location once operational.
6. The Records Clerk will file the public input or concern into the appropriate ORCS/ARCS file
7. The CSO will create an action item and sent it to the appropriate staff member to ensure follow up.
8. Corrective Action will be completed (if applicable) and the entry closed by the CSO.

Opportunities that exist for public input and the influence of the input on management decisions are documented within BC Timber Sales. A formalized process does not exist and the information is not tracked within one document, rather it is tracked by the specific plan. Tracking of the third component of this measure, which measures the participant's satisfaction, does currently not exist.

The lack of a formalized documentation process for Canfor and BCTS has been identified in the knowledge gap matrix. The strategy to address the gap proposes to develop a questionnaire for use at public events and to track the responses annually. UBC conducted a Public Opinion Survey in February 2006, which indicates satisfaction to a certain extent. However, the results of the survey have not been reviewed yet and will be presented during the June 29th PRISM meeting.

7-1.6 - Endorsed SFM Plan

Measure

Endorsement of the SFM Plan by the PRISM

Statement

Endorsement of the final SFM plan was made on December 2, 2004. This demonstrates acceptance that the public input provided by the PRISM was included and responded to in an appropriate manner.

Target

1

Data

Endorsement of the SFM Plan by PRISM?
Yes

Target Met		
Yes ✓	No	Pending

Discussion

This measure ensures that the Sustainable Forest Management Plan (SFMP) adequately reflects the management of the multiple and sometimes competing, social values that the PRISM has identified as important (SFMP p. 144). The target has been met, as the SFM Plan exists and continues to receive support and approval by the Fort Nelson Public Advisory Group (PRISM). The endorsement of the SFM Plan is verified in the PRISM meeting summary notes. Due to the fact that a fair amount of knowledge gaps still exists, it is essential to have the PRISM actively involved and providing input in refining measures and targets. Revisions to the SFM Plan will be made in 2006 to update on policies, current status and changes to strategies or measures/targets.

7-2.1 - Effective Communication of Information with the Public

Measure

The number of effective communications with the public regarding information on the criteria and indicators during the planning process

Statement

The review of existing indicators and the development and addition of locally relevant indicators of sustainability is an important aspect of the public process. The public advisory group is one component of communicating with the public. Other venues that reach out to the larger community will be developed. Each of these communication opportunities will be tested to ensure they are effective for those participating.

Target

5 (1)

Data

Table 63 Canfor/BCTS communication with the public on criteria and indicators

	Date	Author or Presenter	Paper or Presentation Notes
1	May 19th/05	Ecosystem Representation Analysis (ERA) by Forest Ecosystem Solutions (FESL)	Ecosystem Representation Report in the Fort Nelson TSA, March 2005
2	May 19th/05	Carbon Report by FESL	Forecasting Indicators for SFM Report: Total Ecosystem Carbon for the Fort Nelson DFA

3	Nov. 17th/05	Ecosystem Representation Targets by John Deal, Canfor Manager Wildlife and Biodiversity	Hardcopy of presentation
4	Nov. 17th/05	Effectiveness monitoring for vertebrates and biodiversity planning for the north-east by John Deal, Canfor Manager Wildlife and Biodiversity	Hardcopy of presentation
5	Nov. 17th/05	Stream Crossing Quality Index (SCQI) by Pierre Beaudry	Hardcopy of presentation
6	Feb. 17/06	Public Forestry Field Tour provided by Canfor and BCTS	Presentation and Field guide book

Target Met		
Yes ✓	No	Pending

Discussion

The target of 5 communications annually with a variance of 1 is an interim target and should be revisited, once the reports for measure 7-1.2 and measure 7-1.4 are completed.

The target of 5 communications with the public has been met with a focus of communications with the Public Advisory Group (PAG). A number of meetings where information on key resource indicators were provided, followed by a discussion forum is listed in Table 63.
Currently, the communications with the public pertaining to the Public Advisory Group (PAG) are tracked in the meeting summary notes. Communications to the broader public is currently tracked in the SFM filing system at Canfor.

The lack of a process to document the public's response to communication is currently identified as a knowledge gap. The development of a process is due in September 2006. Effectiveness has not defined in this measure to date.

7-2.2 - Reciprocal Knowledge Exchange

Measure

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

Statement

As part of the development of measure 7-2.1, an approach for measuring whether or not the information provided to the community and stakeholders has resulted in increased knowledge of SFM will have to be developed. An informed public can better deal with potential trade-offs that may arise during the development of the SFM Plan or results of the SFMP Annual Report.

Target

Increase local community knowledge by 2006. The target for this measure is that local community knowledge of SFM will increase by December, 2006. The process for developing an approach to measure this will be developed as part of the reports for measure 7-2.1 and measure 7-1.4. A baseline for the level of current knowledge will first be established using the PRISM process as a start. A questionnaire will be circulated as part of the 2005 FSP process.

Data

Target Met		
Yes	No	Pending ✓

Discussion

In addition to providing information and educating the community and stakeholders in Sustainable Forest Management (SFM), its effectiveness is verified when the community and stakeholders can demonstrate that SFM knowledge has increased.

This measure has several knowledge gaps as shown below. The due dates, by when the knowledge gaps have to be addressed by, are shown in brackets.

The knowledge gaps are as follows:
A project that defines a process how to establish and demonstrate reciprocal knowledge exchange (due August 2007); acceptance of the process by participants and the Fort Nelson Public Advisory Group (due by December 2007); implementation (due by January 2008) and development of a monitoring of the process (due by December 2007).

Another means of providing access to information regarding sustainable forest management is the public website at following address: http://www.sfmportal.com/. Documents that provide information about SFM, as well as relevant presentations held during Public Advisory Group meetings, and

SFM projects funded by the Forest Investment Account (FIA) are posted on the website and accessible to the public.

Canfor and BCTS have representative on the education subgroup of the Forest Capital committee and several events are planned in 2006. Target audience is school aged children as well as broader public.

In March 2006 a preliminary Communication Plan has been developed. The communication plan provided a 'tool and tactics' list which will assist participants and the Public Advisory Group to develop a process and to address some of the knowledge gaps.

A 'Public Opinion Survey' has been conducted in February 2006. The survey addressed the Community of Fort Nelson and contacts were randomly chosen. The survey is part of a UBC research project, and Fort Nelson has been included amongst other divisions. The survey contained questions with a wide range of forest values and functions, as asked questions specific to sustainable forest management. The results for the community of Fort Nelson have been compiled in form of a report (March 31st, 2006), which summarizes the responses received to date from the community of Fort Nelson. The results will be presented to the Fort Nelson Public Advisory Group and the Participants during the upcoming June 29th, 2006 meeting by H. W. Harshaw with UBC.

7-3.1 - Adaptive Management Strategy

Measure

Adaptive Management strategy is developed, documented and acted upon

Statement

Adaptive management (AM) is the process by which a commitment to learning is used to adjust management strategies so as to better cope with change while simultaneously seeking to better understand how management goals can be achieved. An adaptive management approach recognizes change as a constant factor. Therefore it is necessary to understand the root causes of what has, and may be changing.

Target

1 (0) interim target will be monitoring, analysis and reporting as part of this SFM Plan.Full strategy to be developed by April 2007.

Data

Interim: Monitoring, analysis and reporting?
No

Target Met		
Yes	No	Pending ✓

Discussion

This measure is meant to ensure that BCTS and Canfor have in place a mechanism for changing their plans and activities in response to changing social, economic, legislative and ecological conditions. The target is to have such a strategy in place and functioning.

Both, Canfor and BCTS have several mechanisms in place to ensure our plans and activities are responsive to changing conditions:

The first is the SFMP itself. The SFMP was built with input from local stakeholders and the concerned public. It requires BCTS and Canfor to report annually on the measures contained within and to adjust their activities accordingly if they are not meeting the expectations. The second is the Fort Nelson Public Advisory Group named PRISM. This group can add remove or modify the measures contained within the SFMP to ensure they are responsive to changing conditions. The PRISM also serves as a platform for knowledge gaps to be identified and action plans or timelines to be created to address them. The third is the Forest Stewardship Plan (FSP) that both BCTS and Canfor must deliver and adhere to. The final part is that Canfor has it's Forest Management System (FMS) and BCTS has it's Environmental Management System (EMS). Both of these are internal management systems designed to assess forestry practices in the field and are based on continuous improvement.

Those different levels of planning ensure that all activities and plans are responsive to changing social, economic, legislative and ecological conditions.

Albeit all those mechanisms that are in place to integrate adaptive management, there is no formal process in place that ties it all together. The knowledge gap has identified that development and documentation of the adaptive management strategy is required, latest by April 2007.

Due to that fact reporting on the target of this measure is pending upon completion of the knowledge gap in April 2007.

7-3.2 - Monitoring Plan for Indicators

Measure

Monitoring plans for indicators

Statement

As local public advisory groups select indicators and measures of sustainability, credible and cost effective monitoring plans for each are developed.

Target

1 (0) plan for each measure

Data

Target Met		
Yes ✓	No	Pending

Discussion

As local public advisory groups select indicators and measures of sustainability, credible and cost effective monitoring plans for each are developed.
The information collected during the reporting period is used to allow Canfor and BCTS to determine if their management strategies are effectively achieving the targets set out in the SFM Plan. The information is also used for forecasting and modeling and the development of management scenarios.

The SFM Plan articulates for each measure a monitoring and reporting process within the appropriate measures section.

A monitoring program has been developed in August 2005. The document is titled: 'Monitoring SFM values in the Fort Nelson DFA: Development of a Monitoring Program the Fort Nelson SFM Plan'. This plan provides detailed information per measure how to report on the target and in most cases provides a formula, showing the individual components that have to be monitored throughout the year. The monitoring plan, as well as the monitoring and reporting section contained in the SFM Plan under each individual measure, is to

be updated as targets are refined, measures that are currently classified as 'to be determined' are developed, and knowledge gaps closed off.

Based on the existence of the detailed monitoring plan, the target of one monitoring plan for each measure has been met.

7-3.3 - Forecasting Plans for Indicators

Measure

Forecasting plans for indicators

Statement

Forecasting is an explicit statement of the expected future condition, through time, of an indicator or measure and will be used in this SFM Plan to predict forest conditions within the DFA based on a locally defined set of assumptions. Projections will be used to compare measures and sustainability targets over time with use of current and best management practices in order to assess the level of risk for each indicator or measure.

Target

1 (0) summary plan of forecastable measure

Data

Forecasted measures and a forecast result summary table are listed in the SFM Plan table 61 and 62.

Target Met		
Yes ✓	No	Pending

Discussion

Forecasting is a component of the adaptive management process. Forecasting allows the public advisory group and forestry managers to analyze various scenarios based on the future forest conditions.

A forecasting strategy for each measure has been described ranging from no forecasting for some process measures to full modeling for others in the SFM

plan itself (SFMP p. 208). The forecasting process itself is described in the SFM Plan section 6.3.1.

A forecasting report was completed by Forest Ecosystem Solutions Ltd. in November 2004, titled "Scenario Design and Indicator/Measure Forecasting for the Fort Nelson Defined Forest Area". This report provides details on what scenarios were used, what indicators and measures were modeled and reported on in the scenario forecasting, and the conclusions of the forecasting.
The results were presented and discussed during various PRISM meetings. During the November 15th meeting PRISM agreed to identify the 'Base Case scenario" as the preferred management scenario in the DFA. The 'Base Case scenario' is a forecast that reflects closely current forest management by which all other scenarios are compared to. The base case applies the current Annual Allowable Cut (AAC) and excludes the Cassiar area addition. All other assumptions in that forecast are based on the datasets in the Timber Supply Review 3 (TSR 3). PRISM agreed to the strategy to retain the current mix of Landscape Units (LUs) in the near future and to further investigate the feasibility of Natural Disturbance Units (NDUs) based biodiversity at a later stage.
An indicator scenario summary is included in Appendix 4 exists, that summarizes forecastable measures and the implications of all alternative strategies.

The target for this measure has been met as forecasting and probable trends of measures are defined for each individual measure in the SFM Plan itself and an indicator scenario summary table exists.

The summary plan of forecastable measures is to be updated as targets are refined, measures that are currently classified as 'to be determined' are developed, and knowledge gaps closed off. Due to the differences in the datasets used to establish baseline data and to report on specific measures (TSR3 dataset versus the Canfor dataset), it will be necessary to re-forecast those measures again in order to align with the new baseline data. Some examples are the ecological measures, for carbon, shrubs and hardwoods.

7-3.4 - Information Management System

Measure

Information Management system is in place

Statement

A robust information management system is required to input a variety of economic, ecological and social data sources. Analysis may be undertaken

through other software packages, but will be based upon the information stored in Canfor's system.

Target

1 (0)

Data

Information Management system is in place?
Yes

Target Met		
Yes ✓	No	Pending

Discussion

This measure is to ensure that BCTS and Canfor have in place an effective information management system to collect and store all the varied inputs received for forestry activities. The target is to have such a system in place. Both BCTS and Canfor have adopted GENUS as their information management system. Genus is a huge forestry database which stores all ecological data, management activities, spatial data and financial data. GENUS is used to report on many of the measures identified in the SFM Plan. GENUS has been implemented at Canfor since April 2005. This measure and target have been met by the implementation of GENUS.

7-3.5 - Reporting and Analysis

Measure

Reports and analysis of monitoring information - Annual Report

Statement

Analysis of monitoring data will be reported to area resource managers and the public so that changes to the SFM Plan, to practices or to measures can be evaluated.

Target

1 (0) Annual Report

Data

Annual Report?
Yes

Table 64: Measures that contain both, Canfor and BCTS data

1-1.1	3-1.1	4-3.2	7-1.2	9-1.3
1-1.2	3-1.2	4-5.1	7-1.3	9-1.4
1-1.3	3-2tbd	4-5.2	7-1.6	9-2.1
1-2.1e	3-3.1	4-6.1	7.2-1	9-2.2
1-2.2f	4-1-1	4-6.2	7-2.2	9-3.1
1-2.1g	4-1.2	5-1.1	7-3.1	9-3.2
1-3.1	4-2.1	5-1.2	7-3.2	9-3.3
1-3.2	4-2.2	5-1.3	7-3.3	9-4.1
1-3.3	4-2.3	6-1.1	7-3.4	9-4.2
1-4.1	4-2.5	6-1.2	9-1.1	9-4.3
2-4.1	4-3.1	7-1.1	9-1.2	9-4.4

Target Met		
Yes ✓	No	Pending

Discussion

Completed for the one year anniversary of the SFM Plan, this SFMP Annual Report provides the current status of measures based on monitoring results.

This measure pertains to this annual report. Several measures are reported separately by Canfor and BC Timber Sales and several are reported jointly. Where measures are reported jointly, BCTS information has been incorporated into the results. Some measures will have been reported separately where the measure is unique to each participant.

With the completion of this first annual report, the target has been met.

The measures listed in Table 64Table 64: Measures that contain both, Canfor and BCTS data are reported only once and contain both Canfor and BCTS data or they apply to both Canfor and BCTS. All other measures that are not included in Table 64 have been reported separately by Canfor and BCTS.

8-1.1 - Percentage of Resolved Disputes

Measure

The percent of disputes resolved (i.e. accepted by both parties) on legally established treaty or legally established customary use rights established through written documents related to potential conflicts

Statement

The measure ensures that there is documentation (digital or written) to any dispute resolution. The other measures under this indicator deal specifically with how to monitor the effectiveness of this measure. Treaty 8 of 1899 covers much of the DFA and has established hunting, fishing and trapping as treaty rights for the local aboriginal First Nations. The rights are not specific to any area in the DFA. Currently, there is no formal Memorandum of Agreement (MoA) with any of the First Nations in the TSA.

Target

100% (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

This measure tracks the percentage of disputes resolved between BCTS or Canfor on legally established treaty or legally established customary use rights established through written documents related to potential conflicts. The target is to have 100% of all disputes resolved acceptably to both parties. At the time of reporting there are no known disputes involving either Canfor or BCTS. The lack of a process that document current disputes (if any) and how the resolution was dealt with is identified in the knowledge gap matrix. A Standard Operating Procedure to deal with disputes will be developed by June 2006. This measure and target can be considered met as there are no outstanding disputes.

8-1.2 - Dispute Resolution Mechanism

Measure

Appropriate mechanisms established through written documents / memoranda on the methods and procedures to resolve disputes over treaty and customary use rights

Statement

Documentation is important in order to track trends and ensure the target is being met. This measure ensures that a mechanism has been established and that there is documentation associated with procedures to resolve disputes. It is linked explicitly to 8-1.1. This measure ensures that Canfor formally documents any dispute resolution procedures that may arise out of legal treaty and use rights. Presently, there are formal and informal processes set up in which Canfor participates.

Target

1 Process (0)TBD April, 2006 and implemented July 1, 2006

Data

Dispute Resolution Process in place?
No

Target Met		
Yes	No	Pending ✓

Discussion

As stated for 8-1.1, Canfor and BCTS does not currently have a formal documented dispute resolution procedure. When disputes arise, open communication and dialogue between the affected First Nation and Canfor/BCTS is pursued to resolve the dispute, including telephone conversations, emails, facsimile correspondence and face-to-face informal meetings. Although a dispute resolution process exists, it is not formal and it is not documented. A formal process will be researched and developed. This measure is to ensure that both

BCTS and Canfor have documented methods and procedures in place to resolve disputes over treaty and customary use right. The target is for each organization to have a process in place. This measure has been identified in the knowledge gap matrix, and is scheduled to be implemented by June of 2006. The documented strategy to address this is to document current disputes and how resolution was dealt with and to develop a dispute protocol from this. This measure and target have not been met at the time of reporting, as it is still pending.

8-2.1 - Treaty & Use Rights Strategies

Measure

The participation by Canfor and BCTS in implementation of treaty and use rights strategies

Statement

Canfor's participation in implementation of treaty and use rights strategy ensures that forest management strategies are maintaining access to resource attributes important to First Nations. This measure assumes that either First Nations identify treaty and use rights strategies or that they can be predicted and accommodated through planning efforts. Opportunities to participate must be set up by First Nations.

Target

100% (0)

Data

Taking advantage to participate?
No

Target Met		
Yes	No	Pending ✓

Discussion

This measure deals with BCTS and Canfor taking advantage of opportunities to participate in implementation of treaty and use rights strategies. This is done to ensure that forest management activities do not infringe on these rights.

Currently, First Nations have not established participation processes for Canfor. At the corporate level, Canfor is developing a First Nations strategic framework that will provide a context and tools that divisions can use to strengthen relations with First Nations. This measure has been identified in the knowledge gap matrix, and is scheduled to be implemented by June of 2006. The documented strategy to address this is for BCTS and Canfor to each develop a participation protocol to be able to respond in an organized manner when the opportunity presents itself to engage in participation. This measure and target have not been met at the time of reporting.

8-2.2 - Access to Resources for First Nations

Measure

The percentage success in implementing and monitoring management practices related to maintaining and enabling access to identified resources for First Nations through strategies articulated in Forest Stewardship Plans (FSP) and/or Memorandum of Agreement (MoA).

Statement

This measure is intended to make certain that management of forests should provide and improve access to resources for survival and maintenance of traditional values and heritage. It ensures that Canfor is establishing and articulating management strategies that ensure access to identified First Nations resources.

Target

100% (TBD %) set baseline

Data

Target Met		
Yes ✓	No	Pending

Discussion

A variance from this target has not been determined but will be developed with the approval of FSPs and/or MoAs. Currently there are no formal MoA's in place and Canfor is developing a First Nations strategic framework that will provide a

context and tools that divisions can use to strengthen relations with First Nations. Archaeological, historical and traditional use sites, also referred to as 'Cultural Heritage Resources', are often of significant interest to First Nations.

The target of 100% has been achieved by Canfor. This assertion is based on the following:

A Cultural Heritage Resource Standard Operating Procedure (SOP) has been developed in November 2005 to ensure that First Nations Cultural Heritage Resources are identified and protected. The SOP is consistent with the strategies identified in Canfor's FSP.

In summary, the SOP ensures that:

a) Archaeological evaluations are completed prior to the harvest of a cut block where appropriate;
b) Unidentified Features encountered during development activities are dealt with appropriately;
c) That harvesting and road development are consistent with archaeological recommendations; and that
d) Non-archaeological cultural heritage resources brought forward by First Nations will be treated with equal respect as the above;
e) Consistency of SOP with strategy identified in the Forest Stewardship Plan (FSP);
f) Communication and documentation between Canfor and First Nations, to communicate to affected First Nations the general areas of timber harvesting and road construction that are proposed for the following year;
g) Process to measure operational success of identified strategies.

Canfor's FSP includes results and strategies to conserve or protect, where necessary, cultural heritage resources that are the focus of traditional use by an aboriginal people and is of continuing importance to that people, and not regulated under the *Heritage Conservation Act* (Appendix 5) Canfor's Cultural Heritage Resource SOP is reflected in the strategies identified in the FSP. Canfor's Site Plan Development SOP describes how the cultural heritage resource strategy in the FSP is to be implemented. The FSP cultural heritage resource results and strategies are currently being implemented even though the FSP, as of the date of this report, is not yet approved.

An archaeological potential model was obtained by Canfor in 2005 (Millenium project). A mapping layer identifying the general location of cultural heritage resource features has been created. These tools are used to conduct an initial 'risk assessment' and determine if an archaeological impact assessment or site review is required.

Canfor refers all proposed harvest blocks to First Nations for review and comment. Comments respecting the impact of harvesting plans on First Nations cultural heritage resources are requested by Canfor. Comments submitted to Canfor are considered and where necessary, planned development is altered to conserve, mitigate or if necessary, protect the cultural heritage resource.

A management system has been developed to ensure access to identified First Nations cultural heritage resources. The management system can be used to monitor success in implementing strategies to ensure access to identified First Nations cultural heritage resources is maintained. The management consists of:

- A mapping layer to identify the location of the cultural heritage resources. This allows an assessment of any potential impact from proposed blocks/roads. This layer will be updated as information becomes available.
- The database for Creating Opportunities for Public Interest (COPI) is used to track the number of identified cultural heritage resources discussed with First Nations.
- Strategies in the FSP and Cultural heritage resource SOP.

The management system is in place and is being utilized. None of the blocks harvested over the reporting period where identified as limiting access to resources for First Nations.

Currently, no variance has been identified, but needs to be developed as the FSP and/or Memoranda of understandings are being developed and approved.

BCTS has following to report for this measure:

This measure has been identified in the knowledge gap matrix, and is scheduled to be implemented by October of 2006. There are currently no formal MOA's in place and BCTS does not have an approved FSP, although it is nearly complete.

No issues have been identified in this reporting year, which are related to this measure.

This measure and target have not been met for BCTS at the time of reporting.

8-2.3 - Access to Resources for First Nations

Measure

Level of satisfaction with access to forest resources is maintained and/or enhanced relative to baseline status.

Statement

This measure establishes that management practices related to maintaining and enabling access to resources for First Nations will be articulated in Forest Stewardship Plans (FSP) and/or Memorandum of Agreement (MoA). This measure is meant to describe the level of satisfaction First Nations have with the actual access available, relative to existing access that is currently available.

Target

Process TBD by July, 2006 - Trend maintained or increasing

Data

Target Met		
Yes	No	Pending ✓

Discussion

This measure is to ensure that the level of satisfaction with access to resources for first nations is maintained or enhanced relative to the baseline levels. This measure has been identified in the knowledge gap matrix, and is scheduled to be implemented by December of 2007. A FIA project is currently proposed to collect the data for this measure. This measure is closely linked with measure 8-2.2 and will likely not be implemented until 8-2.2 is complete. This measure and target have not been met at the time of reporting.

8-3.1 - Reciprocal Knowledge Exchange with First Nations

Measure

Reciprocal demonstration of knowledge exchange (i.e. local community expresses increased knowledge of SFM and forest managers express increased knowledge of culturally relevant forest uses).

Statement

This measure ensures that there is a process in place that allows for forestry management related information exchange between the First Nations communities in the DFA and Canfor.

Target

Process TBD by July, 2006 Trend increasing

Data

Target Met		
Yes	No	Pending ✓

Discussion

This measure is meant to ensure there is a process in place that allows forestry management information exchange between First Nations communities and Canfor/BCTS. In order to ensure the target is met for this measure (trend increasing), a protocol agreement on exchanging information between First Nations and government must be established. This is noted in the Knowledge Gap with a completion date of December 2007. This measure is also tied to measure 8-2.3. The first component of this protocol has been accomplished through a "Preliminary Communication Plan" completed for Canfor and BCTS. The Communication Plan speaks to methods of creating effective communications and meaningful consultation. This plan is the first step in the process of establishing processes and meaningful targets for this measure and other indicators (i.e. 8-3.2 and 8-3.3). As a protocol agreement has not yet been established, the target cannot be reported on for this reporting period.

8-3.2 - Known First Nations Cultural Issues

Measure

Forest management plans demonstrate consideration and accommodation of known First Nations cultural issues by protecting/or enhancing culturally sensitive areas/features

Statement

This measure contributes to respecting the social, cultural and spiritual needs of local First Nations who have traditionally, and who currently use the forest

resource within the DFA for the maintenance of the traditional aspects of their lifestyle

Target

Trend increasing

Data

Table 65: Known Cultural Heritage Sites in the Fort Nelson DFA

Cultural Heritage Sites – Types	Number of sites	Number of sites contained w/in cut-blocks
Burial Site	4	0
Cabin	74	0
Cabin Ruins	2	0
Camp	4	0
Camp Hunting	6	0
Camp Winter	2	0
Favoured Hunting	2	0
Gathering Area	2	0
Grave	55	4
LEG (unknown)	21	0
Moose Lick	20	0
Numbered Site (no other info)	94	2
Tent Frame	10	0
Total	**296**	**6**

Target Met		
Yes ✓	No	Pending

Discussion

This measure is to ensure that known culturally sensitive areas or features identified and verified by first nations will be provided protection by forest management plans and strategies.

The target for this measure is to demonstrate an increasing trend of defining and developing management strategies that encompass traditional values and uses.

Canfor's FSP provides a mechanism to ensure consideration and accommodation of known First Nations cultural issues/resource features is made.

Canfor's FSP includes results and strategies to conserve or protect, where necessary, cultural heritage resources that are the focus of traditional use by an aboriginal people and is of continuing importance to that people, and not regulated under the *Heritage Conservation Act*. Canfor also developed a SOP for cultural heritage resources, which builds upon the strategies identified in the FSP. Canfor's site plan development SOP describes how the cultural heritage resource strategy in the FSP is to be implemented. The FSP cultural heritage resource results and strategies are currently being implemented even though the FSP, as of the date of this report, is not yet approved. A copy of the FSP results and strategies for cultural heritage is appended (Appendix 5).

An archaeological potential model has been obtained by Canfor in 2005 (Millenium project). A mapping layer identifying the general location of cultural heritage resource features has been created. These tools are used to conduct an initial risk assessment and determine if an archaeological impact assessment or site review is required. Canfor identified 296 cultural heritage sites that are recorded based on general known locations. The types of the cultural heritage sites are shown in Table 65.

Based on the fact that a strategy to deal with First Nations Cultural Heritage Resources has been identified in the FSP, and that a procedure has been developed in SOPs to implement the strategy, it is therefore considered that all cultural heritage resource issues/features made known to Canfor are protected. An increasing trend is obvious and the target can be considered met.

BCTS has following to report on this measure:

Currently this measure is being dealt with by BCTS on a block by block level. In the 2005/2006 reporting year three archaeological impact assessments were completed and 100% of the sites discovered were protected as per the archaeologist's recommendations.

BCTS protected 100% of known culturally sensitive areas within its operating area. The target for this measure has been met by BCTS.

8-3.3 - First Nations Rights and Interests of Non-Timber Forest Products

Measure

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

Statement

This measure ensures that Canfor and BCTS are demonstrating consideration and accommodation of First Nations' rights and interests in known NTFPs. A baseline will be established (August 2005) regarding current process for this measure and the target will be that the trend is increasing over time.

Target

Trend increasing

Data

Target Met		
Yes	No	Pending ✓

Discussion

No NTFP's have been made known to Canfor or BCTS by First Nations for this reporting period. Currently a Standard Operating Procedure (SOP) entitled 'Identification of Non-Timber Forest Products' exists and provides guidance to Canfor and BCTS on how to document a list of NTFP's and work with NTFP harvesters in the DFA. A FIA project has resulted in a Preliminary Report titled 'Non-timber Forest Products Indicator Development for the Fort Nelson Defined Forest Area', March 2006, prepared by the Centre for Non-Timber Resources, Royal Roads University. This report determines the initial baseline data availability for both known and potential NTFP's in the DFA. This report has developed a preliminary list of NTFP species and a preliminary traditional use species list based on a literature review. The report will provide input to further refine the current NTFP's SOP noted above. Results of this report have not yet been reviewed and discussed with the Public Advisory Group. The target for this measure is to show an increasing trend. As this is the first reporting year and a baseline has been established, the target cannot be commented on until the next reporting period.

8-4.1 - Cultural Uses of Local Forest Resources

Measure

The percentage of Canfor/BCTS plans, maps and/or visual simulations show baseline cultural uses of local forest resources, recognizing First Nations' concern for privacy for specific features.

Statement

In order to effectively meet other measures under this Criterion, when plans, maps and/or visual simulations showing baseline cultural uses of local forest resources are made available for use by Canfor, they must make every effort to review them.

Target

100% (0)

Data

Target Met		
Yes	No	Pending ✓

Discussion

Currently, this measure is not documented. Traditional Use Plans are in the process of being developed. As each plan is developed, Canfor will discuss its use with the appropriate First Nations group. This measure reports the percentage of plans, maps, and/or visual simulations showing baseline cultural uses of local forest resources, recognizing First Nations' concern for privacy for specific features. Currently, Traditional Use information is held by each First Nation and has not been shared with BC Timber Sales or Canfor in the form of a map or other media. BCTS or Canfor refer to respective First Nations and request if their plans are impacting any First Nation Traditional Use areas. Where BCTS and Canfor complete Archaeological Impact Assessments (AIA's) and archaeological sites are found, this information is shared with the respective First Nation and is not made public by BCTS or Canfor. Currently there are no maps held by Canfor or BCTS that contain sensitive cultural information as First Nations have not provided this information. Canfor assesses the potential risk to sensitive cultural areas affected by harvesting with the use of the 'Millenium 2000' AIA model, as well through a mapping layer, that identifies the rough location of known existing locations and features in the TSA. Both tools, however, only provide an estimate of location and areas. Exact GPS'ed locations are not available to Canfor and BCTS. This measure will be dealt with in conjunctions with Measure 8-3.1 through the development of a protocol to exchange information with First Nations and developing a process with First Nations for obtaining information

from them. The lacking of procedures has been identified in the Knowledge Gap matrix and is scheduled for completion in December 2007. The requirements for this measure are not complete and the target cannot be reported on.

8-4.2 - Logging Details Accessibility to First Nations

Measure

The percentage of plans, maps and/or visual simulations that outline logging details such as cutting areas, road construction, and include temporal aspects made available for First Nations.

Statement

In order to effectively meet other measures under this Criterion, plans, maps and/or visual simulations showing logging details such as cutting areas and road construction must be made available for use by First Nations. Temporal aspects, such as schedules for road construction and harvesting must be included as part of the plans.

Target

100% (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

This measure speaks to the percentage of plans, maps and/or visual simulations that outline logging details such as cutting areas, road construction, and include temporal aspects made available to First Nations.

Under Forest Development Plans (FDP's) this measure is a legal requirement. Under Forest Stewardship Plans (FSP's) this is not a legal requirement to show block and road detail. Canfor has submitted a FSP for approval and BCTS will be submitting a FSP for approval by September 2006.

All of Canfor's planned harvest activities are identified in the FDP. All blocks protected under FRPA, section 196.1 and 196.2, have been rolled over into the FSP from the FDP. Both plans have been made available to First Nations and adequate consultation was made. Notifications of Canfor's 2005/2006 Winter Logging Plan, which shows the planned blocks for harvest and areas of planned road construction was sent out to the affected First Nations on Oct. 17, 2005. Affected First Nations were the Fort Liard First Nations, Kaska Dena Council (Lower Post) and the Fort Nelson First Nation.) Copies of the notification letters are stored in the First Nation files and in the COPI (Creating Opportunity for Public Involvement) database. Canfor has met the target 100%.

For BC Timber Sales, prior to the Timber Sales Manager (TSM) approving a Timber Sale License (TSL) or Road Permit (RP), the TSM must be satisfied that adequate consultation has occurred. To ensure adequate consultation, BC Timber Sales has committed to meet with affected First Nations prior to issuance of a TSL or RP. First Nations require block and road specific information in order to provide feedback and BCTS has committed to continue to do this similar to the process under FDP's.

Currently BCTS is operating under a FDP and meets the requirements of this measure through the legal requirement and has met the target of 100%. All blocks in the FDP were provided to First Nations and information pertaining to major FDP amendments as noted in measure 7-1.4 has been provided to affected First Nations. By the next reporting period, BCTS will be operating under an approved FSP and can report on this measure based on the commitment noted above.

Guidance in the form of the following documents/memorandum will also be followed by BC Timber Sales:

First Nations Considerations Under FRPA Discussion Paper, October 14, 2005 – BCTS First Nations Relations Working Group

FRPA Administration Bulletin – Forest Stewardship Planning: First Nations Information Sharing Bulletin, June 10, 2005, Aboriginal Affairs Branch

Aboriginal Affairs Roles and Responsibilities of Timber Sales Managers and District Managers - Memorandum, April 2006, Assistant Deputy Ministers BC Timber Sales and Operations Division

8-4.3 - Meaningful First Nations Participation

Measure

Meaningful First Nations participation enabled through culturally appropriate opportunities for inclusive participation.

Statement

This measure was designed to list and report out on all documented opportunities provided to Aboriginal people to be involved in forest management planning processes, and that cultural needs of First Nations are accommodated. In order for participation by First Nations to be meaningful, the opportunities for inclusive participation must consider culturally appropriate methods for discussing issues with First Nations' members.

Target

100% compliance with current legal requirements (0)

Data

Target Met		
Yes	No	Pending ✓

Discussion

The target for this measure is that there will be 100% compliance with legal requirements. As Canfor and BCTS work to evolve their relationships with First Nations under other measures (specifically 8-3.2), this measure will evolve to a more specific method of measuring First Nations participation.

This measure will be accomplished through the creation of a specific SOP (Standard Operating Procedure) – to address First Nations culturally sensitive areas/features. This is addressed through the Knowledge Gap Matrix with a completion date of December 2007. Currently a SOP does exist, titled - Identification of First Nations Cultural Heritage Resources (drafted by Canfor). This SOP contains a Communication and Documentation section that details how First Nations will be engaged and how comments will be documented. BCTS will modify this SOP to fit the nature of their business (government). This SOP will be used in the interim to build upon the specific SOP noted above.

Canfor has met the target for the reporting year, as First Nations have been included in all legally required consultations for FDP amendment procedures and Pest Management Plan consultation.

As the target for this measure is 100% compliance with legal requirements, Canfor and BC Timber Sales met the target as legal requirements were followed as per major FDP amendment procedures and Pest Management Plan consultation.

Canfor: Four events were undertaken, three major FDP amendments and one pertaining to Canfor's Pest Management Plan.

BCTS: Four events were undertaken; three pertained to the Pest Management Plan meetings and one to a major FDP amendment.

8-4.4 - Comprehension of Management Plans

Measure

First Nations can comprehend management plan(s) (e.g. FSPs) and annual SFM reports.

Statement

After plans are made available to the First Nations it is important to ensure the plans and what they represent are understood. Any questions arising must be clearly responded to and comprehension must be tracked through an appropriate method.

Target

Process to be developed by December, 2006 in conjunction with target for measure 8-3.1

Data

Target Met		
Yes	No	Pending ✓

Making plans and tailoring them to cultural needs does not ensure that management plans are understood by First Nations. Questions and clarifications presented by First Nations must be clearly responded and comprehension must be tracked.

Canfor met several times with First Nations to present and discuss Canfor's proposed Forest Stewardship Plan (FSP). Presentations were provided to the Fort Nelson First Nations on Nov 16, 2005; to the Fort Liard First Nations on Dec 12, 2005; to the Kaska Dena First Nations (Lower Post) on Dec 14, 2005 and Jan 10, 2006. Canfor's FSP contact log, the COPI database (Creating Opportunities for Public Involvement) and meeting minutes on First Nation files provide information on the material presented and discussed. In that sense, Canfor made a strong effort to help First Nations to understand the FSP, and ensured that questions were responded to and the effort and discussions were tracked. But, at this time it can not be measured how much First Nations actually comprehended of the material presented.

Asking First Nations if they understood the key aspects of forest management plans presented and to document the responses made is necessary to satisfy this measure for the next reporting period.

This measure does currently not have a target in place. The SFM Plan states that a process is to be developed by December 2006 in conjunction with target for measure 8-3.1. The lack of the process for assessing comprehension is captured in the knowledge gap matrix. Revision of the knowledge gap matrix in January 2006 with the Public Advisory Group extended the timeline for developing this target from December 2006 to December 2007.

9-1.1 - Forests Managed for Recreation Activities

Measure

Areas and percentage of forest managed primarily for one or more compatible recreation activities (by activity) relative to base line status as identified in LRMP, MK Recreation Plan, ROS, Northern Rockies Fort Nelson Hiking & Motorized Trail Guide from Mild to Wild (2003), individual Park Management Strategies; Northern Rockies Recreation Map (2004) (strategy documents)

Statement

This measure deals with sustaining the current of level forested areas (amount and percentage) utilized for outdoor recreation. It captures the recreation activity type thereby giving assurance that a variety of recreation activities will be available for future generations.

Target

No degradation as a result of forest management activities (0)

Data

Table 66: Area and Percentage of Forests Managed for Recreation Activities

Parks and Protected Area	Area (ha)	Maintaining Agency	Activity Type
Northern Rocky Mountains Provincial Park	665,709	BC Parks	wildlife viewing, fishing, boating, hunting, camping, hiking, horseback riding, photography
Stone Mountain Provincial Park	25,179	BC Parks	wildlife viewing, fishing, boating, hunting, camping, hiking, horseback riding, photography
Liard River Corridor Provincial Park	88,989	BC Parks	fishing, hiking, camping, horseback riding, canoeing, river boating, wildlife viewing, hunting, ATV use, photography
Liard River Hot Springs Provincial Park	1,082	BC Parks	camping, picnicking, swimming, biking, hiking, wildlife viewing
Hyland River Provincial Park		BC Parks	no information on BCParks site
Smith River/ Fort Halket Provincial Park	244	BC Parks	picnicking, hiking, boating, fishing, biking, wildlife viewing, hunting
Scatter River Old Growth Provincial Park	1,178	BC Parks	camping, fishing,horseback riding, hunting, ATV
Maxhamish Lake Provincial Park and Protected Area	27,516	BC Parks	camping, swimming, boating, fishing, hunting, ATV, snowmobile
Thinahtea Protected Area	20,379	BC Parks	camping, boating, fishing, wildlife viewing, hunting
Kotcho Lake Village Provincial Park	34	BC Parks	camping, swimming, boating, fishing
Jackpine Remnant Provincial Park	148	BC Parks	camping, hunting
Andy Bailey Provincial Park*	196	BC Parks	camping, picnicking, swimming, boating (non-motorized), fishing, biking, wildlife viewing
Goguka Creek Protected Area	435	BC Parks	hunting
Hay River Protected Area	2,324	BC Parks	camping, fishing,horseback riding
Klua Lakes Protected Area	28,040	BC Parks	camping, boating, fishing,horseback riding, wildlife viewing, hunting, snowmobile
Muncho Lake Provincial Park	86,079	BC Parks	camping, picnicking, hiking, swimming, boating, fishing, biking, wildlife viewing, scuba diving, waterskiing, junting,
Toad River Hot Springs Provincial Park	423	BC Parks	camping, boating, fishing, horseback riding, hunting
Tetsa River Provincial Park*	115	BC Parks	camping, boating, fishing, biking
Homeline Creek Provincial Park	298	BC Parks	camping, hiking, horseback riding, hunting
Prophet River Hot Springs Provincial Park	185	BC Parks	camping, fishing, wildlife viewing, hunting
Prophet River Wayside Provincial Park*	113	BC Parks	camping, biking, wildlife viewing
Denetiah Provincial Park	97,908	BC Parks	camping, hiking, swimming, boating, fishing, horseback riding,

Parks and Protected Area	Area (ha)	Maintaining Agency	Activity Type
			hunting
Dall River Old Growth Provincial Park	644	BC Parks	camping, hiking, boating, fishing, horseback riding, hunting
* cooperatively managed by a community, society or other partner			
Total Area	**1,047,218**		
Percentage of DFA	10.61		
MOF Recreation Sites	**Area (ha)**	**Maintaining Agency**	**Activity Type**
West Lake	82	MOF User maintained	
Muskwa River Boat Launch	151	MOF User maintained	
Tuchodi River		MOF User maintained	No longer in existance
Gathto Creek	108	MOF User maintained	
Beaver Lake	65	MOF User maintained	
Total Area	**406**		
Percentage of DFA	0.0041		
Ecological Reserves	**Area (ha)**	**Maintaining Agency**	**Activity Type**
Grayling River Hot Springs Ecological Reserve	1421	BC Parks	hiking, nature observation, photography
Portage Brule Rapids Ecological Reserve	724	BC Parks	hiking, nature observation, photography
Smith River Ecological Reserve	1326	BC Parks	hiking, nature observation, photography
Fort Nelson River Ecological Reserve	121	BC Parks	hiking, nature observation, photography
Parker Lake Ecological Reserve	259	BC Parks	hiking, nature observation, photography
Kotcho Lake Ecological Reserve	64	BC Parks	hiking, nature observation, photography
Total	**3915**		

Parks and Protected Area	Area (ha)	Maintaining Agency	Activity Type
Percentage of DFA	**0.0397**		
Recreation Trails	**Length (km)**	**Maintaining Agency**	**Activity Type**
Teetering Rock Trail	12	MOF	hiking, viewpoint, camping
Tetsa Bridge #1 Trail	4		hiking, biking,bird watching
MacDonald Creek Trail (Stone Mtn.)	21	BCParks	hiking, horseback riding, camping, fishing, wildlife viewing
Baba Canyon Trail	5		hiking, viewpoint
Wokkpash Trail (Northern Rocky.Stone Mtns)	70	BCParks	hiking, viewpoint
Petersen Canyon	6		hiking, biking
Mineral Licks Trail	0.7	BCParks	hiking, biking, viewpoint, wildlife viewing
Teeter Creek Trail	0.6		hiking, fishing
Smith River Falls Trail	0.7	BCParks	hiking, fishing, viewpoint
Tsimeh Lakes Trail	16	FN Cross Country Ski Club	Cross country skiing, hiking
Fort Nelson Demonstration Forest	13	FN Cross Country Ski Club	cross country skiing, hiking, biking
Dunedin Trail	7.5		hiking, mountain biking, horseback riding
Summit Ridge Trail	2.3		hiking, viewpoint
Summit Peak Trail	5	BCParks	hiking, viewpoint
Flower Springs Trail	6	BCParks	hiking, camping
Summit Tower Trail	6		hiking, mountain biking, viewpoint
Erosion Pillar Trail	0.5	BCParks	hiking, viewpoint
"The Cut" Trail	6		hiking, mountain biking, viewpoint, wildlife viewing
Red Rock Canyon	3		hiking
Old Alaska Highway	2	BCParks	hiking, mountain biking, viewpoint
Stone's Sheep Trail	2.5	BCParks	hiking, wildlife viewing
Boulder Canyon	2.3		hiking
Total length	192.1		
Total Area	38.4	(an average width of 2m is used for area calculation)	
Percentage of DFA	0.0004		

Parks and Protected Area	Area (ha)	Maintaining Agency	Activity Type
Motorized Routes	**Length (km)**	**Maintaining Agency**	**Activity Type**
Wokkpash Corridor	54		ATV, snowmobiling, horseback riding, biking, hiking
Yedhe Trail	36		ATV, snowmobiling, horseback riding, biking, hiking
West Toad Corridor	23		ATV, snowmobiling, horseback riding, biking, hiking
Nonda Creek Corridor	25		ATV, snowmobiling, horseback riding, biking, hiking
Liard River Corridor	56		ATV, snowmobiling, horseback riding, biking, hiking
Mould Creek Tower Road	15		ATV, snowmobiling, horseback riding, biking, hiking
Smith River Road	47	MOF	ATV, snowmobiling, horseback riding, biking, hiking
Total length	256		
Total Area	256	(an average width of 10m is used for area calculation)	
Percentage of DFA	0.0026		
Total Area of Forest Managed for Recreation Activities	**1,051,833**		
Percentage of DFA	**10.6590**		

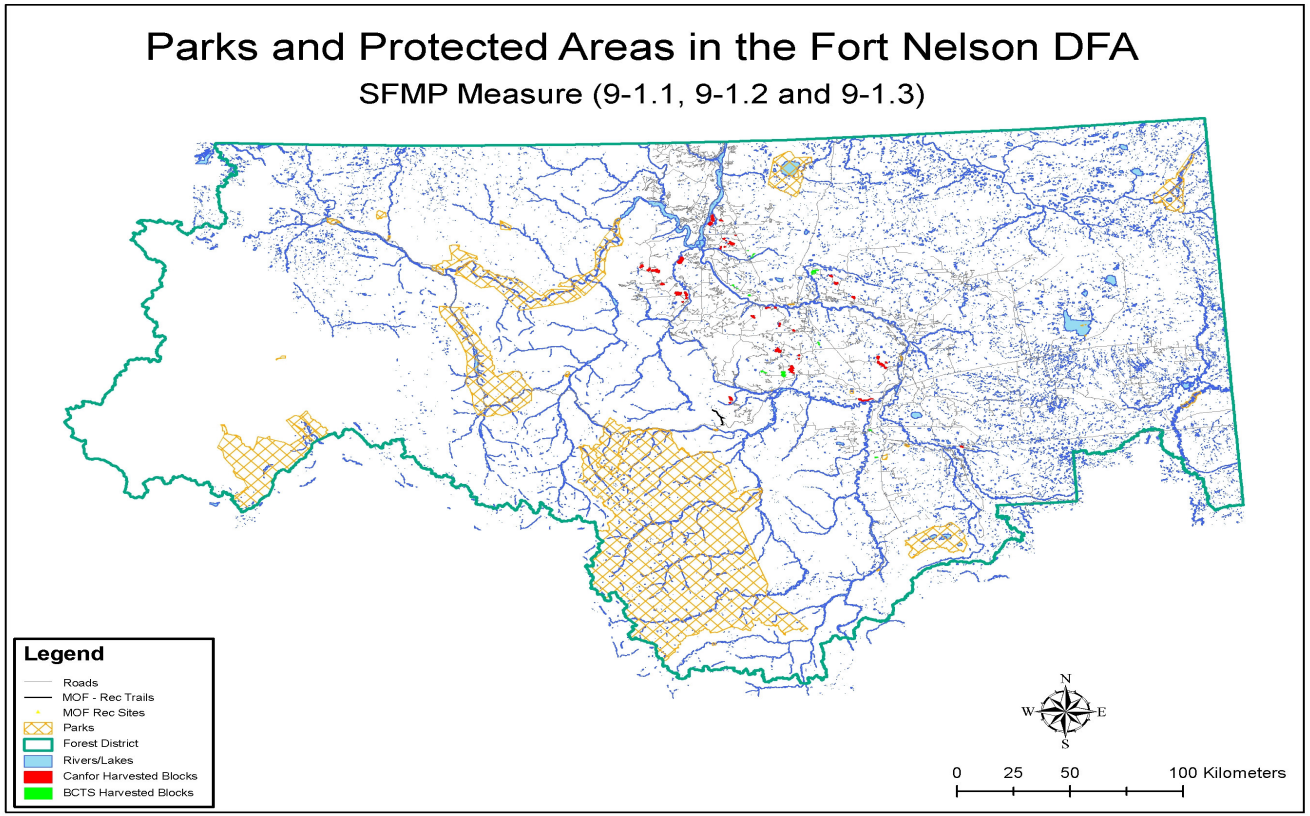

Figure 1 Parks and Protected Areas in the Fort Nelson DFA

Target Met		
Yes ✓	No	Pending

Discussion

This measure deals with sustaining the current level of forested areas (amount and percentage) utilized for outdoor recreation. It is important as it ensures that the land base compatible for outdoor recreation is sustained.

No degradation to forests managed for recreation as a result of forest management activities conducted by Canfor and BCTS occurred during the reporting period. Figure 1 Parks and Protected Areas in the Fort Nelson DFA provides an overview of Canfor and BCTS harvesting blocks and their location in relation to recreational areas. It is apparent that no impact to those sites occurred. Therefore, the target has been met.

All of the data from the original SFMP has been updated at the time of this report. The changes are summarized in the following paragraphs.

Table 66: Area and Percentage of Forests Managed for Recreation Activities, was updated to show the types of activity offered within each site. The total area is also presented in hectares and as a percentage of the DFA. All sites from the original SFMP are included in this table.

The MoFR Recreation Sites section contained in table 64 was updated to show the area encompassed by each site. The total area is presented in hectares and a percentage of the DFA. The Tuchodi recreation site has no area associated with it as it is no longer in existence. All the other sites from the original SFMP are included.

The Ecological Reserves section contained in table 64 was updated to include the types of activity offered within each reserve. The total area is presented in hectares and as a percentage of the DFA. All the reserves from the original SFMP are included.

The Recreation Trails section contained in table 64 was updated to show the lengths of each trail. Total length is presented in kilometers as well as the total area in hectares and area as a percentage of the DFA. The activities offered on each trail have also been added. Two trails have been dropped for m the list. The Stone Mountain Park Trails and Muncho Lake Trails have been dropped from the list because there is no information available on either site. All other trails from the original SFMP are included.

The Recreational motorized routes section contained in table 64 was updated to show the lengths of each corridor. Total length is presented in kilometers as well as the total area in hectares and area as a percentage of the DFA. The activities offered along each route have also been added. All the routes from the original SFMP are included.

Information to update the baseline information in the SFM plan has been obtained from following website: http://www.env.gov.bc.ca/bcparks/.

9-1.2 - Number of Recreation Sites/Facilities

Measure

Number of recreation sites/facilities maintained relative to baseline status

Statement

Recording the number of recreation sites and facilities can help managers determine locally appropriate forest management strategies. The intent of the target is to ensure that there are no loss of existing recreation sites and facilities due to Canfor forest management activities.

Target

No loss as a result of forest management activities (0)

Data

Refer to Table 66: Area and Percentage of Forests Managed for Recreation Activities Area and Percentage of Forests Managed for Recreation Activities

Target Met		
Yes ✓	No	Pending

Discussion

This measure deals with sustaining the current number of recreation sites and facilities is maintained, so that it is available for use to local residents and tourists. This measure uses all of the same tables as Measure 9-1.1, and as such the summary of changes and the tables themselves will not be re-printed here.

The pertinent information is as follows: one Ministry of Forests and Range recreation site was dropped, and two recreational trails were dropped from the original SFMP inventory. The MoFR recreational site no longer exists as a result of being decommissioned. The two trails were removed from the list because there was no available information on them. Three sites were lost from the original SFMP baseline data. Canfor and BCTS did not have any operations in these areas and none of these deletions were due to any forest management practices used by Canfor or BCTS, therefore the target has been met.

9-1.3 - Access Routes, Appropriate For Recreational Use

Measure

Ensure no net negative impact to access routes, appropriate for recreational use level in area, as a result of forest management activities

Statement

This measure is intended to ensure that there is no net negative impact to access routes appropriate for the recreational use level in an area as a result of forest management activities. Negative impacts are considered to be closures of roads used to access areas managed primarily for recreation activities.

Target

No decline from baseline (0)

Data

Table 67: Access Routes. Appropriate for recreational use

	Access Road (km)	Distance (km)	Canfor Road Use	BCTS Road Use	Type of Road	Maintenance Status
Parks and Protected Area						
Northern Rocky Mountains Provincial Park	Alaska Highway	n/a	n/a	n/a		
Stone Mountain Provincial Park	Alaska Highway	n/a	n/a	n/a		
Liard River Corridor Provincial Park	old road to Nordquist Lake and Elk Mtn.	56	n/a	n/a		
Liard River Hot Springs Provincial Park	Alaska Highway	n/a	n/a	n/a		
Hyland River Provincial Park	no info. from BCParks	n/a	n/a	n/a		
Smith River/ Fort Halket Provincial Park	gravel road	2.4	n/a	n/a		
Scatter River Old Growth Provincial Park	Alaska Highway, Liard River Corridor Park	n/a	n/a	n/a		
Maxhamish Lake Provincial Park and Protected Area	no road access	0	n/a	n/a		
Thinahtea Protected Area	no road access	0	n/a	n/a		
Kotcho Lake Village Provincial Park	Helmut road (within 3 km of park)	150	5	10	all weather	joint venture
Jackpine Remnant Provincial Park	no info. from BCParks	0	n/a	n/a		
Andy Bailey Provincial Park*	gravel road	16	6	n/a	all weather	Prov. of BC
Goguka Creek Protected Area	Alaska Highway	n/a	n/a	n/a		
Hay River Protected Area	no road access	0	n/a	n/a		
Klua Lakes Protected Area	no road access (winter road use only)	0	n/a	n/a		
Muncho Lake Provincial Park	Alaska Highway	n/a	n/a	n/a		
Toad River Hot Springs Provincial Park	gravel road, trail	10	n/a	n/a		
Tetsa River Provincial Park*	gravel road	1	n/a	n/a		
Homeline Creek Provincial Park	no road access	0	n/a	n/a		
Prophet River Hot Springs Provincial Park	no road access	0	n/a	n/a		
Prophet River Wayside Provincial Park*	Alaska Highway	n/a	n/a	n/a		

	Access Road (km)	Distance (km)	Canfor Road Use	BCTS Road Use	Type of Road	Maintenance Status
Parks and Protected Area						
Denetiah Provincial Park	no road access	0	n/a	n/a		
Dall River Old Growth Provincial Park	no road access	0	n/a	n/a		
* cooperatively managed by a community, society or other partner						
MOF Recreation Sites						
West Lake	Smith River Road	47	n/a	n/a		
Muskwa River Boat Launch						
Tuchodi River						
Gathto Creek						
Beaver Lake						
Ecological Reserves						
Grayling River Hot Springs Ecological Reserve	no road access	0	n/a	n/a		
Portage Brule Rapids Ecological Reserve	no road access	0	n/a	n/a		
Smith River Ecological Reserve	no road access	0	n/a	n/a		
Fort Nelson River Ecological Reserve	no road access	0	n/a	n/a		
Parker Lake Ecological Reserve	Parker Lake Road	1.5	n/a	n/a		
Kotcho Lake Ecological Reserve	no road access	0	n/a	n/a		
Recreation Trails						
Teetering Rock Trail	Alaska Highway	n/a	n/a	n/a		
Tetsa Bridge #1 Trail	Alaska Highway	n/a	n/a	n/a		
MacDonald Creek Trail (Stone Mtn.)	Alaska Highway	n/a	n/a	n/a		
Baba Canyon Trail	Alaska Highway	n/a	n/a	n/a		
Wokkpash Trail (Northern Rocky.Stone Mtns)	Churchill Mine Road	3	n/a	n/a		
Petersen Canyon	Alaska Highway	n/a	n/a	n/a		
Mineral Licks Trail	Alaska Highway	n/a	n/a	n/a		

	Access Road (km)	Distance (km)	Canfor Road Use	BCTS Road Use	Type of Road	Maintenance Status
Parks and Protected Area						
Teeter Creek Trail	Alaska Highway	n/a	n/a	n/a		
Smith River Falls Trail	gravel road	2.4	n/a	n/a		
Tsimeh Lakes Trail	McConachie Road	14	n/a	n/a		
Fort Nelson Demonstration Forest	within town	0	n/a	n/a		
Dunedin Trail	Alaska Highway	n/a	n/a	n/a		
Summit Ridge Trail	Alaska Highway	n/a	n/a	n/a		
Summit Peak Trail	Alaska Highway	n/a	n/a	n/a		
Flower Springs Trail	Alaska Highway	n/a	n/a	n/a		
Summit Tower Trail	Alaska Highway	n/a	n/a	n/a		
Erosion Pillar Trail	Alaska Highway	n/a	n/a	n/a		
"The Cut" Trail	Alaska Highway	n/a	n/a	n/a		
Red Rock Canyon	Alaska Highway	n/a	n/a	n/a		
Old Alaska Highway	Alaska Highway	n/a	n/a	n/a		
Stone's Sheep Trail	Alaska Highway	n/a	n/a	n/a		
Boulder Canyon	Alaska Highway	n/a	n/a	n/a		
Motorized Routes						
Wokkpash Corridor	Alaska Highway	n/a	n/a	n/a		
Yedhe Trail	Alaska Highway	n/a	n/a	n/a		
West Toad Corridor	Alaska Highway	n/a	n/a	n/a		
Nonda Creek Corridor	Alaska Highway	n/a	n/a	n/a		
Liard River Corridor	Alaska Highway	n/a	n/a	n/a		
Mould Creek Tower Road	Alaska Highway	n/a	n/a	n/a		
Smith River Road	Alaska Highway	n/a	n/a	n/a		

Target Met		
Yes ✓	No	Pending

Discussion

This measure is intended to insure that there are no negative impacts resulting from forest management activities to access routes leading to recreational areas. That means maintaining the appropriate accessibility of recreational sites. Canfor and BCTS used two roads accessing or in close proximity (within 3 km of a park) to recreational sites within the reporting period. Canfor used 5 kilometers of the Helmut road and BCTS used 10 kilometers. Canfor also used 6 km of the gravel road accessing Andy Bailey Provincial Park. Table 67 shows the access inventory for the Fort Nelson DFA. The overview map shows the location of the harvested areas in relation to the access routes leading to recreational areas. Based on the information provided in Figure 1 Parks and Protected Areas in the Fort Nelson DFA and Table 67, the use of the access roads by Canfor and BCTS had no negative impact on access to recreational sites or facilities, therefore the target has been met.

9-1.4 - Recreation Opportunities Maintained

Measure

Balance of primitive, semi-primitive, & developed recreation opportunities (and associated quality of experience) as defined in identified strategy documents is maintained, relative to baseline status (by area).

Statement

This measure quantifies and assures that all types of recreation opportunities are available within the DFA. The PRISM has determined that providing for a balance of these opportunities will allow for a balance of associated quality of experience. Given that ROS classification allows for changes over time due to changes in forested and roaded situations, this measure is closely aligned and reliant on the previous three measures within this indicator.

Target

No decline from baseline (0)

Data

Target Met		
Yes ✓	No	Pending

Discussion

This measure deals with maintaining the full range of recreational opportunities at the current baseline levels. These levels are area based and established by the Recreational Opportunity Spectrum (ROS), which identifies the different classes of recreation, and divides up the land base accordingly. The target is that the current levels are maintained. At the time of Reporting, the ROS for the Fort Nelson DFA is not yet complete. The Ministry of Forests and Range still needs to compile the total area for 'Developed Recreation' to finish establishing the Baseline case. The target for this measure is not applicable at the time of reporting due to gaps in the data which are beyond the control of Canfor or BCTS.

9-2.1 - Compliance with Visual Quality Objectives

Measure

The percentage that forest management complies with existing Visual Quality Objectives (VQO's) established by the BC Ministry of Forests for the area

Statement

Visual quality is the extent to which the aesthetic or scenic value of a landscape is maintained or altered compared to the pre-existing or natural condition. While resource development drives the economy of the Fort Nelson DFA, the importance of maintaining the aesthetic values of the landscape as stated during the LRMP process is recognized. This measure requires that future management activities follow the VQO's set for those areas. The protection and maintenance of visual quality in specific areas is an important aspect to sustainable forest management as this measure contributes to the overall landscape condition and social acceptance of industrial forestry.

Target

100% (0)

Data

Table 68 Canfor blocks and areas with VQO's:

CP/TSL	Block	Area	Area in VQO
357	1803	30.3	0.3
A69690	P6937A	197.6	12.6
503	844	204.5	21.7
501	843	262.8	0.2
123	5827	59.9	3.3
123	5831	49.7	8.1
A69684	P128	145.9	3.2
448	2512	275.6	63.9

Target Met		
Yes ✓	No	Pending

Discussion

This measure addresses maintaining the scenic values inherent in the DFA through visual quality management. Some of the important areas identified for visual quality management are the major rivers, the Alaska Highway corridor and the more popular backcountry recreational areas. Management for visual quality is linked to the economic diversity (6-1), recreation opportunities (9-1) and unique or significant places (9-3) of the DFA.

Over all blocks, only a portion of the blocks listed in Table 68 had established or recommended VQO's. A Visual Impact Assessment was completed on all of these blocks prior to harvest, which resulted in strategies being recommended to ensure compliance with the VQO. Only P6937A had established VQO's, as it is located along the Alaska Highway corridor.

Canfor's proposed Forest Stewardship Plan (FSP) identifies results and strategies to protect visual sensitive areas. The FSP now includes, that all existing scenic areas with recommended visual quality classes are continued under FRPA as visual quality objectives. The significant change that will occur with approval of the new management plan is that all scenic areas with recommended Visual Quality Objectives will be rolled over into established VQO's.

To date, Canfor has not been notified by the MOFR of any non-compliance issues regarding Visual Quality Objectives.

BC Timber Sales has following to report on this measure:

The only two blocks in VQO's were blocks 78147 and 78137. Both blocks were only partially within a VQO. The VQO for these blocks is 'Modification' and the VQO was not exceeded for that Visual Sensitivity Unit (VSU #0188). Block 78137 had approximately 6 hectares in the VQO polygon and block 78147 had approximately 12 hectares in the polygon.

Currently identified as a knowledge gap is the fact that the scenario forecasting, which uses datasets for TSR 3 revealed that 91% of VQO areas are not in violation of visual quality objectives. To date, little is known about the remaining 9% that exceed the maximum disturbance limits. The strategy to address the knowledge gap is to revise the SFM Plan and to ascertain the disturbance type for the 9% of VQO areas not in compliance. There is a need to clarify with Forest Ecosystem Solutions Ltd. why 9% are not compliant and to show if natural disturbances or old logging prior to requirements of meeting VQO's are the cause.

9-2.2 - Compliance with LRMP Comment Concerning Visuals

Measure

Conformance with LRMP comments re: Visuals in river corridors and Muskwa River corridor use

Statement

In addition to the VQO's set by the Government, the LRMP process provided comments with regard to visuals. This measure ensures that the SFM Plan builds on the desires of visuals values established during this process. This measure requires that future management activities incorporate these comments for the identified areas, thereby ensuring those values can be enjoyed by future generations.

Target

100% (0)

Data

Target Met

Yes ✓	No	Pending

Discussion

This measure reviews conformance with LRMP comments regarding visuals in river corridors and the Muskwa River corridor. This measure essentially overlaps measure 9-2.1 (known and recommended VQO's). Measure 9-2.1 reports the areas harvested within VQO areas.

During the LRMP process it was recommended that visual quality concerns be considered when planning forest management activities in the major river corridors in the Fort Nelson TSA as these corridors are used by various users for recreational purposes. The LRMP states that visual quality will be managed through existing legislation and regulation, including the Visual Quality Objective management system of the Ministry of Forests and Range. Currently, the established VQO's are the Alaska Hwy Corridor and the Klua Lakes protected area. There have been 63 scenic areas set when FRPA came into force, but the Ministry of Forests and Range, Fort Nelson, could not determine if any of these scenic areas were river corridor areas. Currently, there are no existing VQO's in river corridor areas.

Because of the lack of established VQO's in river corridor areas and because the LRMP does not explicitly state visual quality concerns relating to river corridor areas, reporting on this measure cannot be achieved based on the measures current wording. When Canfor or BCTS propose harvesting in a river corridor area, buffers are established to screen the block from the river.

9-3.1 - Identification - Unique or Significant Places & Features & Protected Areas

Measure

Identify and track existing unique or significant places and features and protected areas

Statement

There are provincial guidelines in place to protect these sites, once identified. This measure is to ensure that sites and features are identified and tracked.

Target

100% (0) will be identified and tracked

Data

Table 69:2004 Baseline information of existing unique or significant places and features Table 57 SFMP

Baseline information 2004
Wokpash Hoodoos
Francois
Nelson Forks trading post
Kotcho Lake village site
Fossil Creek Liard River confluence
Parks, recreation sites, trails and eco reserves mentioned in 9-1.1
Skooks landing
Sleeping Chief Mountain
Davie trail
High trail
Simpson trail
Contact creek
Wooden oil derrick on Liard River
Steamboat lookout
Allen's lookout

Target Met		
Yes	No	Pending ✓

Discussion

Identification and tracking of *existing* unique or significant places and features and protected areas is imperative to ensure any potential damage caused by forestry activities to those sites is prevented.

A protocol defining what significant places and features are, where to store, and how to track the data, is currently not in place. The lack of the procedure has been identified as a knowledge gap. The development and implementation start date for the protocol has been scheduled for June 2007, while tracking of significant sites and features is ongoing.

The knowledge gap will be addressed by creating a separate mapping layer, which will show the shape file and the location of significant places and features. The layer will also include areas identified in measure 9-1.1, which tracks the parks, recreation sites, trails and eco reserves. Various significant features and sites are already contained within parks and are double accounted for.

Baseline data of *existing* unique or significant places and features are contained in Table 69.

9-3.2 - Track - Newly Discovered Unique or Significant Places and Features and Protected Areas

Measure

Track newly discovered unique or significant places and features and protected areas

Statement

There are provincial guidelines in place to protect such sites, once identified. This measure is to ensure that newly discovered sites and features are identified and tracked on a list as they are discovered.

Target

100% (0) of identified or newly discovered will be tracked

Data

Target Met		
Yes	No	Pending ✓

Discussion

Identification and tracking of *newly discovered* unique or significant places and features and protected areas, complements previous measure 9-3.1 to ensure that any potential damage caused by forestry activities to those sites is prevented.

Similar to previous measure 9-3.1, a protocol defining how to track newly discovered unique and significant places and features, where to store, and how to track the data, is currently not in place. The lack of the procedure has been identified as a knowledge gap. The development and implementation start date for the protocol has been scheduled for June 2007, while tracking of newly discovered unique and significant places and features is ongoing. The procedures to address both measures (measure 9-3.1 and 9-3.2) will be addressed in the same protocol.

For the reporting period no additional significant places have been recorded compared to the 2004 baseline data.

The knowledge gap will be addressed by creating a separate mapping layer, which will show the shape file and the location of new significant places and features. The layer will also build on areas identified in measure 9-1.1, which tracks the parks, recreation sites, trails and eco reserves.

9-3.3 - Degree of Protection Described

Measure

All existing and newly discovered unique or significant places and features and protected areas will have documented description of their degree of protection

Statement

Describing and documenting the degree of protection for existing and newly discovered unique or significant places and features is necessary in order to provide and develop adequate protection strategies in the event that forest activities are planned adjacent to the resources identified.

Target

100% (0)

Please setup the prompts for this indicator.

Data

Table 70: Degree of Protection: Unique or Significant Places and Features and Protected Areas

Unique or significant Area or Feature	Degree of Protection
Wokpash Hoodoos	Within provincial park, no harvest activity within park area
Francois	No formal protection*
Nelson Forks trading post site	No formal protection*
Old Fort Nelson trading post	No formal protection*
Kotcho Lake village site	Within provincial park, no harvest activity within park area
Fossil Creek Liard River confluence	Within provincial park, no harvest activity within park area
Parks, recreation sites, trails and eco reserves mentioned in 9-1.1	Provincial park status, MOF recreation site status, no harvest activity within park, recreation site or eco reserve area

Unique or significant Area or Feature	Degree of Protection
Skooks landing	No formal protection*
Sleeping Chief Mountain	In Muskwa Kechika Management Area, no harvest activity until LU objectives established
Davie trail	Passes in and out of provincial parks, no harvest activity within park area
High trail	Passes in and out of provincial parks, no harvest activity within park area
Simpson trail	No formal protection*
Contact creek	No formal protection*
Wooden oil derrick on Liard river	Within provincial park, no harvest activity within park area
Steamboat lookout	No formal protection*
Allen's lookout	No formal protection*
Goguka Ck Protected Area	No harvest activity within protected area
Hay River Protected Area	No harvest activity within protected area
Klua Lakes Protected Area	No harvest activity within protected area
Thinahtea Protected Area	No harvest activity within protected area

Target Met		
Yes	No	Pending ✓

Discussion

This measure pulls together the information provided in the previous two measures (9-3.1 and 9-3.2) and ensures that by following protection strategies, impact to those sites caused by forest activities will be prevented.

Table 70 provides the baseline information, showing the existing unique or significant areas/features and the degree of protection.

No harvesting activities were conducted adjacent to the identified unique or significant places/features and protected areas identified in measure 9-3.1. Should any harvesting related activities be conducted adjacent to identified sites, individual site plans would describe the special management practice that would ensure protection of the site.

Currently, there is no tracking system in place to track the degree of protection afforded all existing and newly discovered unique or significant places/features and protected areas. The lack of the tracking system has been identified in the knowledge gap and is scheduled to be developed and implemented starting June 2007.

The knowledge gap will be addressed by creating a separate mapping layer, which will identify the location of existing and new significant places and features as well the degree of protection will be attached as an attribute to that layer.

9-4.1 - Safety Incidences

Measure

Number of safety incidences occurring in the bush related to forest management strategies (i.e. not related to machinery or human error) decline relative to baseline

	Incidents	# Related to Forest Mgt. Strategies
2005 (April 1/05 to March 31/06)	48	0
2004	49	0
2003	68	0

Statement

This measure is meant to evaluate the impact of forest management strategies in relation to safety incidences, particularly for worker.

Target

Declining trend relative to baseline if any or 0

Data

Table 71 Number of Canfor's Accidents/Incidents

Target Met		
Yes ✓	No	Pending

Discussion

This measure is intended to promote forest management strategies that result in safe conditions for workers and communities (SFMP p 194). Quality of life in form of safety and health is an important component of SFM. Forest management strategies can have an impact on the occurrence on safety incidents, and this measure will evaluate the effectiveness of theses management strategies on safety.

Canfor's accident/incident investigation summary for the reporting period shows that the overall number of accidents/incidents declined slightly compared to the number of incidents that occurred in 2004. The incidents that occurred during the reporting period were not related to Forest Management Strategies. The target has therefore been met.

BCTS has following o report on this measure:

BCTS is currently not able to report on worker and community safety in indicator 9-4 due to following reasons:

At this time, BC Timber Sales does not obtain safety data on licensees or contractors. Licensees are independent of BC Timber Sales and operate as independent license holders. Licensees are required to complete an Emergency Response Plan (ERP) prior to harvesting any BCTS blocks, but are not required to report safety incidents to BCTS. Contractors are required to be in good standing with WCB and are also required to complete an ERP, but again, do not report safety incidents to BCTS.

Through the BC Forest Safety Council (BCFSC), BCTS will be taking a different approach to safety in all our operations. On January 16, 2006, the Ministry of Forests and Range announced the "Safe Companies" initiative that BCTS will participate in. All companies that operate for BCTS will be required to be a SAFE company under BCFSC certification. This will be implemented no later than early 2007. The BC Timber Sales website contains more information on this initiative. The next SFM Plan report will expand on this new safety initiative. Measures 9-4.1 to 9-4.4 may require re-wording to incorporate this new provincial safety initiative.

9-4.2 - Observance of Recognized Safety Standards

Measure

The percentage of observance of recognized safety standards in forest engineering and operations.

Statement

This measure was developed to track conformance of observance or implementation of recognized safety standards.

Target

100% (0) By April, 2006, the Silviculture Coordinator will revise the SFM Plan to reflect the current condition of conformance with the measure.

Data

Target Met		
Yes	No ✓	Pending

Discussion

The intent of this measure is to track the conformance to the implementation or observance of safety policies and standards. Within the reporting period 48 Incidents were observed, which relate to forest activities. Currently, Canfor has no procedure in place to assess and track the number of deviations from Standard practices and safety standards. Incident Investigation summaries provide an overall list and incidents are discussed and recommendations put forward during safety committee meetings. An analysis of incidents and tracking of deviations from incidents will occur once the Safety Management System, that is currently being developed, is in place. BCTS is unable to report on this measure. Measure 9-4.1 provides a rationale and an update on the current status.

9-4.3 - Written Safety Policies - Implemented & Effective

Measure

Written safety policies in place, are being implemented and are effective

Statement

Written policies ensure workers have proper training and guidance prior to commencing work. SOPs and safety policies have interviews/checks at some stage to confirm effectiveness.

Target

100% (0) compliance

Data

Table 72 Canfor's current and Valid Safety Policies

Safety Policy	Policy Number	Signed
Accident & Incident Investigation and Reporting Policy	1	7-Sep-05
Alcohol and Substance Abuse Policy	2	7-Sep-05
All Terrain Vehicles (ATV'S) Safety Policy	3	7-Sep-05
Bear Safety	4	7-Sep-05
Camps- Emergency Transportation	5	7-Sep-05
Camps- Requirements for First Aid	6	7-Sep-05
Chainsaw Safety Policy	7	7-Sep-05
Check- In Procedures- Camp Attendants	8	7-Sep-05
Check-In Procedures - Fly In Camps	9	7-Sep-05
Check-In Procedures for Workers	10	7-Sep-05
Cold Weather Policy	11	7-Sep-05
Emergency Evacuation Plan for Poco Komi Camp and Area	12	7-Sep-05
Emergency Policy and Procedure	13	7-Sep-05
Emergency Response Plan- Camps	14	7-Sep-05
Exposure Control Plan - Bloodborne Pathogens for First Aid Attendants – Camps	15	7-Sep-05
Field Equipment Requirements- Winter and Summer	16	7-Sep-05
Firearms Safety Policy	17	7-Sep-05
Fire Marshall and Deputy Procedures	18	17-Oct-05
Helicopter Policy	19	08-Nov-05
Harassment in the Workplace; personal and sexual	20	31-Oct-05
Heat Exposure Policy	21	31-Oct-05
Hydrogen Sulphide (H2S)	22	7-Sep-05
New Equipment Policy	23	7-Sep-05
Personal Protective Equipment Policy	24	7-Sep-05

Safety Policy	Policy Number	Signed
Radio Controlled Areas Procedure and Policy	25	7-Sep-05
Smoking Policy – Field	26	7-Sep-05
Smoking Policy- Polarboard	27	7-Sep-05
Training Certification	28	7-Sep-05
Vehicle Operation and Standards Policy	29	7-Sep-05
WCB CLAIMS MANAGEMENT	30	31-Oct-05
Woodlands Safety Policy Statement	31	7-Sep-05
Workplace Inspection and Monitoring Guidelines	32	7-Sep-05

Target Met		
Yes ✓	No	Pending

Discussion

Canfor Fort Nelson Woodlands Safety Policies and Procedures are in place and were last revised and updated in fall of 2005. Some policies were removed, others were combined and some simply needed updating. Each policy has been reviewed in the past by the safety committee a minimum of once every two years and revised as necessary and approved by the Woodlands Manager. All of the 32 up to date Safety Policies are posted on Canfor Fort Nelson Woodlands network at following location: \\FNELSONPROD1\Common\Data\wl\COMMON\SAFETY\Safety Policies 2005. If an incident occurs the cause of the incident is determined and recommendations are put forward.

All of those policies were evaluated as being effective, as a review of incidents during safety committee meetings showed that safety procedures were in place and followed.

The safety committee meets on a monthly basis and is represented by each interest group within the Woodlands office (i.e. Managers, Forestry, Operations, Planning and Administration). The Safety Committee reviews and discusses all safety issues and how they relate to current Safety policies. The Safety Committee makes recommendations for improvements and drives Safety in general within Canfor Fort Nelson's operations.

Safety Policies are reviewed with staff during monthly group meetings and an attendance list is kept. Audits are completed on a regular basis to ensure staff is

compliant with field related procedures. Contractor safety meeting minutes are kept in the Woodlands office to ensure diligence of the contractor in administrating their own safety procedures.

Currently, Fort Nelson Woodlands focus is the implementation of a Safety Management System (SMS). The Safety Management System is expected to be implemented by fall of 2006. With the SMS a more detailed procedure is being developed to track, review and assess occurring incidents and measure effectiveness of safety policies. The evaluation of the effectiveness of Policies and analysis of incidents that occurred will contribute to the improvement of the existing system. Contractors will be required in the future to achieve COR certification in order to meet Canfor's safety standards.

BCTS is unable to report on this measure. Measure 9-4.1 provides a rationale and an update on the current status.

9-4.4 - Safety Occurrence Summary

Measure

Safety occurrence summary exists

Statement

This measure provides a synopsis of safety activity so that unsafe situations can quickly be addressed and corrected.

Target

1 (0) summary

Data

Report completed on	Report located at
4/30/2006	L:/Data/wl/common/Action list for accident investigations

Target Met		
Yes ✓	No	Pending

Discussion

Canfor's Accident/Incident Investigation summary database is updated on an ongoing basis. In the past year 48 safety related incidents were recorded. As each incident is recorded an action plan is developed and a person assigned to complete the action within a certain due date. Progress towards completion of action items are tracked in the action plan summary. Overall, most incidents occur during the harvesting season. A significant amount of incidents are related to trucking and vehicle use on icy roads and not following proper road procedures. With the implementation of Canfor's new Safety Management System (SMS) by November 2006 (target date) a safety incident tracking system will be developed. One of the many items the Safety Management System will focus on is hazard assessment and control, training and orientation, inspections, incidents investigation, records and statistics and program review. With the new system, incidents will be reviewed and analyzed and recommendations put forward to ensure continual improvement of the existing system. BCTS is unable to report on this measure. Measure 9-4.1 provides rationale and an update on the current status.

Appendix 1: Seral Stage report

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSmw2 Coniferous	42530	84.9	7580	15.1	22675	45.3	23.0	Yes	462	0.9	11.0	No	11	No	50110
		BWBSmw2 Deciduous	5906	25.0	17726	75.0	18194	77.0	23.0	Yes	12786	54.1	13.0	Yes	13	Yes	23632
		BWBSwk3 Coniferous	233	97.9	5	2.1	59	24.8	23.0	Yes	10	4.2	11.0	No	11	No	238
		BWBSwk3 Deciduous	16	100.0	0	0.0	5	31.3	23.0	Yes	0	0.0	13.0	No	13	No	16
		BWBSmw2 Coniferous	74192	94.2	4609	5.8	24733	31.4	23.0	Yes	1092	1.4	11.0	No	11	No	78801
		BWBSmw2 Deciduous	15532	64.6	8518	35.4	8858	36.8	23.0	Yes	3787	15.7	13.0	Yes	13	Yes	24051
		BWBSwk3 Coniferous	1316	97.4	35	2.6	316	23.4	23.0	Yes	7	0.5	11.0	No	11	No	1351
		BWBSwk3 Deciduous	265	97.8	6	2.2	7	2.6	23.0	No	4	1.5	13.0	No	13	No	271
		BWBSdk1 Coniferous	10337	71.5	4125	28.5	10786	74.6	23.0	Yes	6941	48.0	11.0	Yes	11	Yes	14461
		BWBSdk1 Deciduous	3773	93.7	255	6.3	1335	33.2	23.0	Yes	1259	31.3	13.0	Yes	13	Yes	4027
		BWBSdk2 Coniferous	79	100.0	0	0.0	79	100.0	23.0	Yes	0	0.0	11.0	No	11	No	79

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSdk2 Deciduous	58	100.0	0	0.0	0	0.0	23.0	No	0	0.0	13.0	No	13	No	58
		SWBmk	91479	91.7	8325	8.3	22489	22.5	0.0	Yes	89	0.1	9.0	No	9	No	99804
		SWBmks	23185	99.3	159	0.7	356	1.5	0.0	Yes	0	0.0	9.0	No	9	No	23345
		BWBSmw2 Coniferous	48537	96.0	2036	4.0	4974	9.8	11.0	No	1470	2.9	11.0	No	3.7	No	50573
		BWBSmw2 Deciduous	14477	91.6	1331	8.4	3041	19.2	13.0	Yes	1345	8.5	13.0	No	4.3	Yes	15807
		BWBSwk3 Coniferous	2581	97.9	55	2.1	153	5.8	11.0	No	0	0.0	11.0	No	3.7	No	2636
		BWBSwk3 Deciduous	517	97.5	13	2.5	49	9.2	13.0	No	0	0.0	13.0	No	4.3	No	530
		SWBmk	10041	100.0	6	0.1	1244	12.4	0.0	Yes	0	0.0	9.0	No	3	No	10046
		SWBmks	356	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	3	No	356
		BWBSmw2 Coniferous	50368	92.2	4241	7.8	16329	29.9	23.0	Yes	2758	5.1	11.0	No	11	No	54609
		BWBSmw2 Deciduous	14251	52.8	12733	47.2	15378	57.0	23.0	Yes	12869	47.7	13.0	Yes	13	Yes	26984
		BWBSmw2 Coniferous	22636	63.5	13004	36.5	29371	82.4	23.0	Yes	10033	28.2	11.0	Yes	11	Yes	35640
		BWBSmw2 Deciduous	2948	19.3	12310	80.7	13785	90.3	23.0	Yes	13287	87.1	13.0	Yes	13	Yes	15258
		BWBSdk1	43	37.4	72	62.6	91	79.1	23.0	Yes	76	66.1	11.0	Yes	11	Yes	115

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Coniferous BWBSdk1 Deciduous	2905	97.6	70	2.4	72	2.4	23.0	No	72	2.4	13.0	No	13	No	2975
		BWBSdk2 Coniferous	1722	62.9	1015	37.1	1652	60.4	23.0	Yes	1292	47.2	11.0	Yes	11	Yes	2736
		BWBSdk2 Deciduous	11202	100.0	0	0.0	60	0.5	23.0	No	60	0.5	13.0	No	13	No	11202
		SWBmk	45956	92.2	3903	7.8	7586	15.2	0.0	Yes	0	0.0	9.0	No	9	No	49860
		SWBmks	584	100.0	0	0.0	33	5.7	0.0	Yes	0	0.0	9.0	No	9	No	584
		BWBSdk2 Coniferous	51884	80.9	12276	19.1	19222	30.0	11.0	Yes	12960	20.2	11.0	Yes	3.7	Yes	64159
		BWBSdk2 Deciduous	1831	99.9	1	0.1	861	47.0	13.0	Yes	262	14.3	13.0	Yes	4.3	Yes	1832
		SWBmk	3328	73.3	1214	26.7	1571	34.6	0.0	Yes	0	0.0	9.0	No	3	No	4542
		BWBSmw2 Coniferous	2432	98.9	27	1.1	1398	56.9	23.0	Yes	401	16.3	11.0	Yes	11	Yes	2459
		BWBSmw2 Deciduous	4979	98.9	54	1.1	2255	44.8	23.0	Yes	1869	37.1	13.0	Yes	13	Yes	5033
		SWBmk	64618	100.0	3	0.0	14015	21.7	0.0	Yes	870	1.3	9.0	No	9	No	64621
		SWBmks	19632	100.0	0	0.0	21	0.1	0.0	Yes	0	0.0	9.0	No	9	No	19632
		BWBSmw2 Coniferous	33544	53.9	28709	46.1	25202	40.5	23.0	Yes	18379	29.5	11.0	Yes	11	Yes	62253
		BWBSmw2 Deciduous	6642	30.0	15501	70.0	21157	95.5	23.0	Yes	21085	95.2	13.0	Yes	13	Yes	22143

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSwk3 Coniferous	4223	91.7	380	8.3	723	15.7	23.0	No	487	10.6	11.0	No	11	No	4603
		SWBmk	1347	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	1347
		BWBSmw2 Coniferous	20127	72.4	7687	27.6	11164	40.1	23.0	Yes	5595	20.1	11.0	Yes	11	Yes	27815
		BWBSmw2 Deciduous	8209	67.8	3896	32.2	10859	89.7	23.0	Yes	9291	76.8	13.0	Yes	13	Yes	12105
		SWBmk	15345	90.8	1556	9.2	2002	11.8	0.0	Yes	0	0.0	9.0	No	9	No	16900
		SWBmks	168	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	168
		BWBSmw2 Coniferous	87925	90.8	8960	9.2	16398	16.9	11.0	Yes	7824	8.1	11.0	No	3.7	Yes	96885
		BWBSmw2 Deciduous	30619	81.6	6904	18.4	8656	23.1	13.0	Yes	7095	18.9	13.0	Yes	4.3	Yes	37523
		BWBSmw2 Coniferous	68058	92.1	5844	7.9	6635	9.0	11.0	No	3655	4.9	11.0	No	3.7	Yes	73903
		BWBSmw2 Deciduous	7812	83.5	1548	16.5	3115	33.3	13.0	Yes	2034	21.7	13.0	Yes	4.3	Yes	9360
		BWBSmw2 Coniferous	61598	77.3	18130	22.7	25684	32.2	34.0	No	8431	10.6	16.0	No	16	No	79728
		BWBSmw2 Deciduous	13891	75.8	4431	24.2	10857	59.3	34.0	Yes	8480	46.3	19.0	Yes	19	Yes	18322
		BWBSwk3 Coniferous	4453	92.7	348	7.2	1243	25.9	34.0	No	310	6.5	16.0	No	16	No	4802

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSwk3 Deciduous	740	99.9	2	0.3	107	14.4	34.0	No	10	1.3	19.0	No	19	No	741
		SWBmk	3576	85.4	613	14.6	656	15.7	0.0	Yes	0	0.0	13.0	No	13	No	4189
		SWBmks	62	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	13.0	No	13	No	62
		BWBSmw2 Coniferous	3935	80.0	982	20.0	1638	33.3	11.0	Yes	1210	24.6	11.0	Yes	3.7	Yes	4916
		BWBSmw2 Deciduous	5418	99.2	44	0.8	1234	22.6	13.0	Yes	529	9.7	13.0	No	4.3	Yes	5462
		SWBmk	66736	92.3	5565	7.7	8792	12.2	0.0	Yes	0	0.0	9.0	No	3	No	72301
		SWBmks	5856	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	3	No	5856
		BWBSmw2 Coniferous	85020	97.5	2214	2.5	11843	13.6	11.0	Yes	689	0.8	11.0	No	3.7	No	87233
		BWBSmw2 Deciduous	27384	78.9	7343	21.1	7995	23.0	13.0	Yes	4449	12.8	13.0	No	4.3	Yes	34727
		BWBSmw2 Coniferous	125809	96.4	4747	3.6	32176	24.6	11.0	Yes	2900	2.2	11.0	No	3.7	No	130555
		BWBSmw2 Deciduous	21766	67.4	10521	32.6	13761	42.6	13.0	Yes	7082	21.9	13.0	Yes	4.3	Yes	32287
		BWBSmw2 Coniferous	18939	64.4	10451	35.6	20467	69.6	23.0	Yes	827	2.8	11.0	No	11	No	29390
		BWBSmw2 Deciduous	3855	21.7	13905	78.3	15229	85.8	23.0	Yes	10464	58.9	13.0	Yes	13	Yes	17759
		BWBSwk3	305	86.6	47	13.4	239	67.9	23.0	Yes	0	0.0	11.0	No	11	No	352

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Coniferous															
		BWBSwk3 Deciduous	1	100.0	0	0.0	0	0.0	23.0	No	0	0.0	13.0	No	13	No	1
		BWBSmw2 Coniferous	83679	86.9	12601	13.1	22385	23.3	23.0	Yes	9423	9.8	11.0	No	11	No	96279
		BWBSmw2 Deciduous	21703	86.4	3412	13.6	7007	27.9	23.0	Yes	4341	17.3	13.0	Yes	13	Yes	25116
		SWBmk	49455	99.6	184	0.4	12426	25.0	0.0	Yes	0	0.0	9.0	No	9	No	49638
		SWBmks	1519	100.0	0	0.0	13	0.9	0.0	Yes	0	0.0	9.0	No	9	No	1519
		BWBSdk2 Coniferous	17157	95.2	858	4.8	934	5.2	11.0	No	542	3.0	11.0	No	3.7	No	18015
		BWBSdk2 Deciduous	5	100.0	0	0.0	0	0.0	13.0	No	0	0.0	13.0	No	4.3	No	5
		SWBmk	36253	91.4	3398	8.6	5223	13.2	0.0	Yes	0	0.0	9.0	No	3	No	39651
		SWBmks	3778	99.9	2	0.1	62	1.6	0.0	Yes	0	0.0	9.0	No	3	No	3780
		BWBSmw2 Coniferous	6419	81.7	1440	18.3	4016	51.1	11.0	Yes	397	5.1	11.0	No	3.7	Yes	7859
		BWBSmw2 Deciduous	11718	74.7	3971	25.3	6135	39.1	13.0	Yes	3849	24.5	13.0	Yes	4.3	Yes	15689
		BWBSmw2 Coniferous	12414	80.6	2989	19.4	7458	48.4	11.0	Yes	1076	7.0	11.0	No	3.7	Yes	15403
		BWBSmw2 Deciduous	10931	48.0	11822	52.0	13108	57.6	13.0	Yes	6756	29.7	13.0	Yes	4.3	Yes	22753

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSmw2 Coniferous	14189	85.9	2326	14.1	4386	26.6	23.0	Yes	816	4.9	11.0	No	11	No	16515
		BWBSmw2 Deciduous	5572	82.1	1214	17.9	1624	23.9	23.0	Yes	853	12.6	13.0	No	13	No	6786
		BWBSwk3 Coniferous	454	100.0	0	0.0	2	0.4	23.0	No	0	0.0	11.0	No	11	No	454
		BWBSwk3 Deciduous	193	100.0	0	0.0	0	0.0	23.0	No	0	0.0	13.0	No	13	No	193
		SWBmk	7443	98.6	103	1.4	204	2.7	0.0	Yes	0	0.0	9.0	No	9	No	7546
		BWBSmw2 Coniferous	1142	100.0	0	0.0	161	14.1	11.0	Yes	76	6.7	11.0	No	3.7	Yes	1142
		BWBSmw2 Deciduous	335	100.0	0	0.0	142	42.4	13.0	Yes	100	29.9	13.0	Yes	4.3	Yes	335
		SWBmk	40391	100.0	0	0.0	4414	10.9	0.0	Yes	79	0.2	9.0	No	3	No	40391
		SWBmks	13617	100.0	0	0.0	46	0.3	0.0	Yes	0	0.0	9.0	No	3	No	13617
		BWBSdk2 Coniferous	24287	73.6	8706	26.4	10794	32.7	23.0	Yes	8541	25.9	11.0	Yes	11	Yes	32994
		BWBSdk2 Deciduous	6969	94.7	389	5.3	3053	41.5	23.0	Yes	2208	30.0	13.0	Yes	13	Yes	7358
		SWBmk	855	88.1	115	11.9	146	15.1	0.0	Yes	0	0.0	9.0	No	9	No	970
		BWBSdk2 Coniferous	1733	99.9	2	0.1	1606	92.6	11.0	Yes	1591	91.7	11.0	Yes	3.7	Yes	1735
		BWBSdk2	801	100.0	0	0.0	602	75.2	13.0	Yes	602	75.2	13.0	Yes	4.3	Yes	801

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Deciduous															
		BWBSmw2 Coniferous	12127	48.2	13032	51.8	17594	69.9	11.0	Yes	5357	21.3	11.0	Yes	3.7	Yes	25159
		BWBSmw2 Deciduous	15257	57.5	11293	42.5	19158	72.2	13.0	Yes	18565	69.9	13.0	Yes	4.3	Yes	26550
		BWBSwk3 Coniferous	6860	78.1	1923	21.9	4090	46.6	11.0	Yes	653	7.4	11.0	No	3.7	Yes	8784
		BWBSwk3 Deciduous	1001	92.5	81	7.5	601	55.5	13.0	Yes	409	37.8	13.0	Yes	4.3	Yes	1082
		SWBmk	7650	98.0	156	2.0	227	2.9	0.0	Yes	0	0.0	9.0	No	3	No	7806
		BWBSmw2 Coniferous	18609	74.7	6300	25.3	9981	40.1	11.0	Yes	3918	15.7	11.0	Yes	3.7	Yes	24909
		BWBSmw2 Deciduous	1541	61.3	973	38.7	2176	86.5	13.0	Yes	2176	86.5	13.0	Yes	4.3	Yes	2515
		BWBSwk3 Coniferous	19746	81.3	4532	18.7	8153	33.6	11.0	Yes	2553	10.5	11.0	No	3.7	Yes	24278
		BWBSwk3 Deciduous	1087	96.8	36	3.2	764	68.0	13.0	Yes	764	68.0	13.0	Yes	4.3	Yes	1123
		SWBmk	88350	90.7	9009	9.3	16238	16.7	0.0	Yes	0	0.0	9.0	No	3	No	97359
		SWBmks	6717	99.5	34	0.5	197	2.9	0.0	Yes	0	0.0	9.0	No	3	No	6751
		BWBSdk2 Coniferous	1766	42.7	2367	57.3	3773	91.3	23.0	Yes	2989	72.3	11.0	Yes	11	Yes	4133
		BWBSdk2 Deciduous	28	100.0	0	0.0	28	100.0	23.0	Yes	28	100.0	13.0	Yes	13	Yes	28
		SWBmk	39205	69.1	17534	30.9	29983	52.8	0.0	Yes	0	0.0	9.0	No	9	No	56739

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		SWBmks	12804	98.9	146	1.1	873	6.7	0.0	Yes	0	0.0	9.0	No	9	No	12950
		BWBSmw2 Coniferous	1809	52.1	1662	47.9	3180	91.6	23.0	Yes	2890	83.3	11.0	Yes	11	Yes	3471
		BWBSmw2 Deciduous	2343	81.7	526	18.3	870	30.3	23.0	Yes	606	21.1	13.0	Yes	13	Yes	2869
		BWBSmw2 Coniferous	2889	79.6	742	20.4	1057	29.1	23.0	Yes	831	22.9	11.0	Yes	11	Yes	3630
		BWBSmw2 Deciduous	811	100.0	0	0.0	57	7.0	23.0	No	57	7.0	13.0	No	13	No	811
		SWBmk	33889	72.7	12719	27.3	16183	34.7	0.0	Yes	1903	4.1	9.0	No	9	No	46608
		SWBmks	15667	99.0	159	1.0	175	1.1	0.0	Yes	74	0.5	9.0	No	9	No	15826
		BWBSmw2 Coniferous	104643	99.4	616	0.6	13750	13.1	23.0	No	219	0.2	11.0	No	11	No	105259
		BWBSmw2 Deciduous	34389	96.0	1449	4.0	1562	4.4	23.0	No	632	1.8	13.0	No	13	No	35838
		BWBSmw2 Coniferous	57483	89.1	7024	10.9	22901	35.5	11.0	Yes	2115	3.3	11.0	No	3.7	No	64507
		BWBSmw2 Deciduous	24577	77.1	7297	22.9	7776	24.4	13.0	Yes	4128	13.0	13.0	No	4.3	Yes	31875
		BWBSwk3 Coniferous	15473	94.6	885	5.4	4764	29.1	11.0	Yes	1028	6.3	11.0	No	3.7	Yes	16358
		BWBSwk3 Deciduous	2062	97.0	63	3.0	93	4.4	13.0	No	45	2.1	13.0	No	4.3	No	2125

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		SWBmk	29097	94.4	1742	5.6	8196	26.6	0.0	Yes	16	0.1	9.0	No	3	No	30839
		BWBSmw2 Coniferous	66012	87.4	9552	12.6	3354	4.4	11.0	No	1369	1.8	11.0	No	3.7	No	75564
		BWBSmw2 Deciduous	31225	98.2	588	1.8	3939	12.4	13.0	No	1210	3.8	13.0	No	4.3	No	31813
		BWBSmw2 Coniferous	33580	86.6	5197	13.4	28643	73.9	23.0	Yes	3581	9.2	11.0	No	11	No	38777
		BWBSmw2 Deciduous	2400	19.4	9966	80.6	10902	88.2	23.0	Yes	5118	41.4	13.0	Yes	13	Yes	12366
		BWBSmw2 Coniferous	58946	75.3	19372	24.7	47938	61.2	34.0	Yes	3930	5.0	16.0	No	16	No	78317
		BWBSmw2 Deciduous	8202	25.5	23992	74.5	28630	88.9	34.0	Yes	17773	55.2	19.0	Yes	19	Yes	32194
		BWBSwk3 Coniferous	602	89.1	74	10.9	338	50.0	34.0	Yes	5	0.7	16.0	No	16	No	676
		BWBSwk3 Deciduous	37	100.0	0	0.0	6	16.2	34.0	No	3	8.1	19.0	No	19	No	37
		BWBSmw2 Coniferous	25034	94.1	1583	5.9	5119	19.2	11.0	Yes	480	1.8	11.0	No	3.7	No	26617
		BWBSmw2 Deciduous	7495	80.6	1799	19.4	2182	23.5	13.0	Yes	796	8.6	13.0	No	4.3	Yes	9294
		BWBSmw2	79406	91.2	7697	8.8	11357	13.0	11.0	Yes	852	1.0	11.0	No	3.7	No	87103

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Coniferous BWBSmw2 Deciduous	16435	93.7	1097	6.3	10596	60.4	13.0	Yes	2949	16.8	13.0	Yes	4.3	Yes	17532
		BWBSdk1 Coniferous	11613	68.9	5248	31.1	12600	74.7	34.0	Yes	10092	59.9	16.0	Yes	16	Yes	16862
		BWBSdk1 Deciduous	10881	93.0	815	7.0	4626	39.5	34.0	Yes	4592	39.3	19.0	Yes	19	Yes	11697
		BWBSdk2 Coniferous	42597	54.5	35583	45.5	59296	75.8	34.0	Yes	29105	37.2	16.0	Yes	16	Yes	78180
		BWBSdk2 Deciduous	27665	90.5	2916	9.5	13519	44.2	34.0	Yes	13100	42.8	19.0	Yes	19	Yes	30581
		SWBmk	1206	41.2	1718	58.8	2125	72.7	0.0	Yes	0	0.0	13.0	No	13	No	2924
		BWBSdk2 Coniferous	10811	56.3	8392	43.7	11440	59.6	23.0	Yes	2376	12.4	11.0	Yes	11	Yes	19204
		BWBSdk2 Deciduous	2021	88.8	256	11.2	1275	56.0	23.0	Yes	1275	56.0	13.0	Yes	13	Yes	2277
		SWBmk	801	84.7	145	15.3	273	28.9	0.0	Yes	0	0.0	9.0	No	9	No	946
		BWBSmw2 Coniferous	148155	96.3	5680	3.7	41927	27.3	23.0	Yes	25061	16.3	11.0	Yes	11	Yes	153835
		BWBSmw2 Deciduous	51569	62.9	30412	37.1	31867	38.9	23.0	Yes	15494	18.9	13.0	Yes	13	Yes	81981
		BWBSmw2 Coniferous	88758	90.3	9543	9.7	63369	64.5	23.0	Yes	3290	3.3	11.0	No	11	No	98301

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSmw2 Deciduous	12261	37.0	20872	63.0	24822	74.9	23.0	Yes	11664	35.2	13.0	Yes	13	Yes	33133
		BWBSwk3 Coniferous	18584	96.7	638	3.3	10241	53.3	23.0	Yes	1470	7.6	11.0	No	11	No	19222
		BWBSwk3 Deciduous	1765	96.4	65	3.5	321	17.5	23.0	No	168	9.2	13.0	No	13	No	1831
		BWBSmw2 Coniferous	33411	95.4	1619	4.6	11387	32.5	23.0	Yes	492	1.4	11.0	No	11	No	35030
		BWBSmw2 Deciduous	10455	48.4	11146	51.6	11610	53.7	23.0	Yes	8978	41.6	13.0	Yes	13	Yes	21601
		BWBSmw2 Coniferous	45170	94.0	2895	6.0	19058	39.7	23.0	Yes	1116	2.3	11.0	No	11	No	48065
		BWBSmw2 Deciduous	17924	77.5	5212	22.5	8705	37.6	23.0	Yes	2626	11.4	13.0	No	13	No	23136
		BWBSwk3 Coniferous	4530	91.3	432	8.7	2055	41.4	23.0	Yes	108	2.2	11.0	No	11	No	4962
		BWBSwk3 Deciduous	283	91.0	28	9.0	104	33.4	23.0	Yes	37	11.9	13.0	No	13	No	311
		BWBSmw2 Coniferous	86654	97.2	2493	2.8	6501	7.3	23.0	No	1974	2.2	11.0	No	11	No	89147
		BWBSmw2 Deciduous	3486	86.9	528	13.2	899	22.4	23.0	No	318	7.9	13.0	No	13	No	4013
		BWBSmw2	126618	84.4	23484	15.6	27810	18.5	11.0	Yes	13370	8.9	11.0	No	3.7	Yes	150103

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Coniferous															
		BWBSmw2 Deciduous	91802	92.2	7746	7.8	20814	20.9	13.0	Yes	9267	9.3	13.0	No	4.3	Yes	99549
		BWBSmw2 Coniferous	29130	62.6	17392	37.4	16853	36.2	23.0	Yes	14511	31.2	11.0	Yes	11	Yes	46522
		BWBSmw2 Deciduous	16950	63.3	9821	36.7	14371	53.7	23.0	Yes	10936	40.9	13.0	Yes	13	Yes	26771
		BWBSdk2 Coniferous	25835	92.4	2135	7.6	2166	7.7	23.0	No	1602	5.7	11.0	No	11	No	27969
		BWBSdk2 Deciduous	5458	91.6	503	8.4	983	16.5	23.0	No	983	16.5	13.0	Yes	13	Yes	5961
		SWBmk	18798	87.8	2616	12.2	2781	13.0	0.0	Yes	0	0.0	9.0	No	9	No	21414
		SWBmks	257	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	257
		BWBSdk2 Coniferous	83677	79.3	21841	20.7	27689	26.2	23.0	Yes	18739	17.8	11.0	Yes	11	Yes	105519
		BWBSdk2 Deciduous	16910	87.9	2334	12.1	4641	24.1	23.0	Yes	4639	24.1	13.0	Yes	13	Yes	19244
		SWBmk	3069	93.1	229	6.9	281	8.5	0.0	Yes	0	0.0	9.0	No	9	No	3298
		BWBSmw2 Coniferous	11402	79.3	2969	20.7	9295	64.7	23.0	Yes	3372	23.5	11.0	Yes	11	Yes	14371
		BWBSmw2 Deciduous	17629	75.5	5726	24.5	18921	81.0	23.0	Yes	11757	50.3	13.0	Yes	13	Yes	23354
		BWBSwk3	15	100.0	0	0.0	2	13.3	23.0	No	2	13.3	11.0	Yes	11	Yes	15

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Coniferous															
		BWBSwk3 Deciduous	2	100.0	0	0.0	0	0.0	23.0	No	0	0.0	13.0	No	13	No	2
		SWBmk	3	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	3
		BWBSmw2 Coniferous	22197	52.6	20001	47.4	28953	68.6	34.0	Yes	21364	50.6	16.0	Yes	16	Yes	42198
		BWBSmw2 Deciduous	16182	50.2	16031	49.8	24769	76.9	34.0	Yes	20757	64.4	19.0	Yes	19	Yes	32213
		BWBSmw2 Coniferous	1621	88.7	206	11.3	532	29.1	23.0	Yes	321	17.6	11.0	Yes	11	Yes	1828
		BWBSmw2 Deciduous	1474	100.0	0	0.0	1281	86.9	23.0	Yes	566	38.4	13.0	Yes	13	Yes	1474
		SWBmk	34237	97.6	828	2.4	4948	14.1	0.0	Yes	0	0.0	9.0	No	9	No	35065
		SWBmks	8229	100.0	0	0.0	7	0.1	0.0	Yes	0	0.0	9.0	No	9	No	8229
		BWBSdk1 Coniferous	11190	61.2	7085	38.8	10896	59.6	23.0	Yes	7970	43.6	11.0	Yes	11	Yes	18276
		BWBSdk1 Deciduous	6356	99.1	55	0.9	2342	36.5	23.0	Yes	1353	21.1	13.0	Yes	13	Yes	6411
		BWBSdk2 Coniferous	2881	58.8	2016	41.2	3792	77.5	23.0	Yes	1281	26.2	11.0	Yes	11	Yes	4896
		BWBSdk2 Deciduous	1063	100.0	0	0.0	902	84.9	23.0	Yes	902	84.9	13.0	Yes	13	Yes	1063
		SWBmk	72701	84.8	12985	15.2	19081	22.3	0.0	Yes	149	0.2	9.0	No	9	No	85686
		SWBmks	22769	99.5	118	0.5	199	0.9	0.0	Yes	0	0.0	9.0	No	9	No	22887

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSdk1 Coniferous	516	66.2	264	33.8	546	70.0	23.0	Yes	391	50.1	11.0	Yes	11	Yes	780
		BWBSdk1 Deciduous	3531	87.3	511	12.6	1461	36.1	23.0	Yes	1228	30.4	13.0	Yes	13	Yes	4043
		SWBmk	20416	92.4	1682	7.6	5306	24.0	0.0	Yes	3	0.0	9.0	No	9	No	22099
		SWBmks	3311	98.3	56	1.7	609	18.1	0.0	Yes	0	0.0	9.0	No	9	No	3367
		BWBSmw2 Coniferous	48370	92.5	3916	7.5	9466	18.1	23.0	No	1437	2.7	11.0	No	11	No	52285
		BWBSmw2 Deciduous	16529	83.9	3162	16.1	3948	20.0	23.0	No	909	4.6	13.0	No	13	No	19691
		BWBSwk2 Coniferous	115	100.0	0	0.0	0	0.0	23.0	No	0	0.0	11.0	No	11	No	115
		BWBSwk2 Deciduous	39	100.0	0	0.0	0	0.0	23.0	No	0	0.0	13.0	No	13	No	39
		BWBSwk3 Coniferous	1486	96.2	58	3.8	358	23.2	23.0	Yes	32	2.1	11.0	No	11	No	1544
		BWBSwk3 Deciduous	354	85.3	61	14.7	176	42.4	23.0	Yes	25	6.0	13.0	No	13	No	415
		SWBmk	3843	99.7	11	0.3	63	1.6	0.0	Yes	0	0.0	9.0	No	9	No	3854
		SWBmks	179	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	179
		SWBmk	27905	80.5	6742	19.5	6519	18.8	0.0	Yes	25	0.1	9.0	No	9	No	34647
		SWBmks	9656	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	9656
		BWBSdk2	18594	91.2	1802	8.8	3978	19.5	11.0	Yes	3430	16.8	11.0	Yes	3.7	Yes	20396

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Coniferous															
		BWBSdk2 Deciduous	11140	97.2	317	2.8	1213	10.6	13.0	No	1213	10.6	13.0	No	4.3	Yes	11457
		BWBSwk3 Coniferous	134	100.0	0	0.0	0	0.0	11.0	No	0	0.0	11.0	No	3.7	No	134
		BWBSwk3 Deciduous	5	100.0	0	0.0	0	0.0	13.0	No	0	0.0	13.0	No	4.3	No	5
		SWBmk	12099	90.0	1348	10.0	1244	9.3	0.0	Yes	0	0.0	9.0	No	3	No	13447
		SWBmks	307	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	3	No	307
		BWBSdk2 Coniferous	7815	92.9	595	7.1	753	9.0	11.0	No	676	8.0	11.0	No	3.7	Yes	8410
		BWBSdk2 Deciduous	1628	99.1	14	0.9	14	0.9	13.0	No	14	0.9	13.0	No	4.3	No	1642
		SWBmk	62128	97.6	1503	2.4	10475	16.5	0.0	Yes	0	0.0	9.0	No	3	No	63631
		SWBmks	14117	99.8	23	0.2	119	0.8	0.0	Yes	0	0.0	9.0	No	3	No	14140
		BWBSmw2 Coniferous	9872	74.3	3406	25.7	6617	49.8	11.0	Yes	2775	20.9	11.0	Yes	3.7	Yes	13278
		BWBSmw2 Deciduous	4517	81.9	995	18.1	1637	29.7	13.0	Yes	989	17.9	13.0	Yes	4.3	Yes	5512
		SWBmk	3140	97.7	75	2.3	676	21.0	0.0	Yes	81	2.5	9.0	No	3	No	3215
		BWBSmw2 Coniferous	15446	90.6	1596	9.4	8405	49.3	11.0	Yes	523	3.1	11.0	No	3.7	No	17042
		BWBSmw2 Deciduous	7805	61.2	4954	38.8	6076	47.6	13.0	Yes	4258	33.4	13.0	Yes	4.3	Yes	12759

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSdk2 Coniferous	5523	45.2	6698	54.8	9990	81.7	23.0	Yes	5691	46.6	11.0	Yes	11	Yes	12221
		BWBSdk2 Deciduous	224	98.2	4	1.8	228	100.0	23.0	Yes	116	50.9	13.0	Yes	13	Yes	228
		SWBmk	80725	84.2	15134	15.8	37382	39.0	0.0	Yes	0	0.0	9.0	No	9	No	95859
		SWBmks	20407	98.5	306	1.5	1119	5.4	0.0	Yes	0	0.0	9.0	No	9	No	20713
		BWBSmw2 Coniferous	68183	95.0	3624	5.0	5082	7.1	23.0	No	1843	2.6	11.0	No	11	No	71807
		BWBSmw2 Deciduous	27292	92.4	2229	7.6	5299	17.9	23.0	No	3654	12.4	13.0	No	13	No	29522
		BWBSmw2 Coniferous	325	100.0	0	0.0	317	97.5	23.0	Yes	22	6.8	11.0	No	11	No	325
		BWBSmw2 Deciduous	26	100.0	0	0.0	0	0.0	23.0	No	0	0.0	13.0	No	13	No	26
		SWBmk	45071	96.1	1847	3.9	3933	8.4	0.0	Yes	79	0.2	9.0	No	9	No	46918
		SWBmks	13773	100.0	0	0.0	6	0.0	0.0	Yes	0	0.0	9.0	No	9	No	13773
		BWBSmw2 Coniferous	50441	94.3	3046	5.7	15971	29.9	23.0	Yes	2627	4.9	11.0	No	11	No	53487
		BWBSmw2 Deciduous	16986	52.9	15123	47.1	15384	47.9	23.0	Yes	7226	22.5	13.0	Yes	13	Yes	32108
		BWBSmw2 Coniferous	2660	64.8	1443	35.2	2484	60.5	23.0	Yes	1050	25.6	11.0	Yes	11	Yes	4103

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSmw2 Deciduous	9671	95.2	488	4.8	1080	10.6	23.0	No	522	5.1	13.0	No	13	No	10159
		BWBSmw2 Coniferous	71222	96.0	2975	4.0	19555	26.4	11.0	Yes	667	0.9	11.0	No	3.7	No	74197
		BWBSmw2 Deciduous	25210	49.4	25793	50.6	31824	62.4	13.0	Yes	18843	36.9	13.0	Yes	4.3	Yes	51003
		BWBSwk3 Coniferous	163	66.5	82	33.5	169	69.0	11.0	Yes	0	0.0	11.0	No	3.7	No	245
		BWBSwk3 Deciduous	32	100.0	0	0.0	8	25.0	13.0	Yes	0	0.0	13.0	No	4.3	No	32
		BWBSmw2 Coniferous	9633	86.4	1512	13.6	4379	39.3	11.0	Yes	273	2.4	11.0	No	3.7	No	11144
		BWBSmw2 Deciduous	12939	68.1	6071	31.9	7296	38.4	13.0	Yes	4557	24.0	13.0	Yes	4.3	Yes	19010
		BWBSdk2 Coniferous	47634	85.0	8423	15.0	12555	22.4	11.0	Yes	11791	21.0	11.0	Yes	3.7	Yes	56057
		BWBSdk2 Deciduous	10694	97.3	292	2.7	1140	10.4	13.0	No	668	6.1	13.0	No	4.3	Yes	10986
		SWBmk	20890	91.8	1878	8.2	6136	27.0	0.0	Yes	0	0.0	9.0	No	3	No	22768
		SWBmk	29900	97.2	869	2.8	5817	18.9	0.0	Yes	1856	6.0	9.0	No	3	Yes	30769
		SWBmks	14614	99.8	28	0.2	60	0.4	0.0	Yes	29	0.2	9.0	No	3	No	14642
		BWBSmw2	8582	57.3	6396	42.7	7072	47.2	11.0	Yes	6196	41.4	11.0	Yes	3.7	Yes	14978

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Coniferous															
		BWBSmw2 Deciduous	1603	71.1	650	28.8	2139	94.9	13.0	Yes	1584	70.3	13.0	Yes	4.3	Yes	2254
		SWBmk	46040	84.8	8276	15.2	12283	22.6	0.0	Yes	0	0.0	9.0	No	3	No	54316
		SWBmks	6151	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	3	No	6151
		BWBSmw2 Coniferous	43	21.9	153	78.1	154	78.6	23.0	Yes	56	28.6	11.0	Yes	11	Yes	196
		BWBSwk3 Coniferous	3072	47.0	3460	53.0	3926	60.1	23.0	Yes	2096	32.1	11.0	Yes	11	Yes	6532
		SWBmk	27121	85.5	4609	14.5	7037	22.2	0.0	Yes	0	0.0	9.0	No	9	No	31730
		SWBmks	1599	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	1599
		BWBSmw2 Coniferous	2196	80.3	540	19.7	869	31.8	11.0	Yes	547	20.0	11.0	Yes	3.7	Yes	2736
		BWBSmw2 Deciduous	285	100.0	0	0.0	7	2.5	13.0	No	7	2.5	13.0	No	4.3	No	285
		SWBmk	29174	81.4	6677	18.6	9102	25.4	0.0	Yes	124	0.3	9.0	No	3	No	35850
		SWBmks	13749	98.8	168	1.2	171	1.2	0.0	Yes	3	0.0	9.0	No	3	No	13916
		BWBSmw2 Coniferous	350049	98.4	5739	1.6	49875	14.0	11.0	Yes	13582	3.8	11.0	No	3.7	Yes	355788
		BWBSmw2 Deciduous	59258	89.6	6845	10.4	9382	14.2	13.0	Yes	2958	4.5	13.0	No	4.3	Yes	66104
		BWBSmw2 Coniferous	69098	90.5	7263	9.5	7712	10.1	23.0	No	4440	5.8	11.0	No	11	No	76361

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSmw2 Deciduous	15267	78.9	4092	21.1	6635	34.3	23.0	Yes	4526	23.4	13.0	Yes	13	Yes	19360
		BWBSmw2 Coniferous	27532	81.5	6262	18.5	9224	27.3	23.0	Yes	6462	19.1	11.0	Yes	11	Yes	33794
		BWBSmw2 Deciduous	2328	96.7	79	3.3	2393	99.4	23.0	Yes	2360	98.0	13.0	Yes	13	Yes	2407
		BWBSwk3 Coniferous	30108	93.9	1970	6.1	4252	13.3	23.0	No	2124	6.6	11.0	No	11	No	32078
		BWBSwk3 Deciduous	354	96.7	12	3.3	359	98.1	23.0	Yes	359	98.1	13.0	Yes	13	Yes	366
		SWBmk	39639	99.5	195	0.5	791	2.0	0.0	Yes	0	0.0	9.0	No	9	No	39834
		SWBmks	2636	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	2636
		BWBSdk1 Coniferous	9349	64.5	5135	35.5	10971	75.7	11.0	Yes	6331	43.7	11.0	Yes	3.7	Yes	14484
		BWBSdk1 Deciduous	903	100.0	0	0.0	730	80.8	13.0	Yes	662	73.3	13.0	Yes	4.3	Yes	903
		SWBmk	57393	91.4	5405	8.6	13416	21.4	0.0	Yes	0	0.0	9.0	No	3	No	62798
		SWBmks	26995	100.0	8	0.0	118	0.4	0.0	Yes	0	0.0	9.0	No	3	No	27003
		BWBSmw2 Coniferous	100696	79.0	26733	21.0	31322	24.6	11.0	Yes	13838	10.9	11.0	No	3.7	Yes	127429
		BWBSmw2 Deciduous	57913	93.5	4004	6.5	24045	38.8	13.0	Yes	14200	22.9	13.0	Yes	4.3	Yes	61917
		BWBSdk2	99864	70.7	41380	29.3	46603	33.0	23.0	Yes	18684	13.2	11.0	Yes	11	Yes	141243

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		Coniferous															
		BWBSdk2 Deciduous	1583	77.6	456	22.4	832	40.8	23.0	Yes	706	34.6	13.0	Yes	13	Yes	2040
		BWBSwk3 Coniferous	299	29.3	721	70.8	971	95.3	23.0	Yes	272	26.7	11.0	Yes	11	Yes	1019
		SWBmk	29212	78.3	8099	21.7	13033	34.9	0.0	Yes	0	0.0	9.0	No	9	No	37312
		BWBSmw2 Coniferous	77521	95.9	3354	4.1	14195	17.6	23.0	No	2516	3.1	11.0	No	11	No	80875
		BWBSmw2 Deciduous	21350	70.6	8899	29.4	16635	55.0	23.0	Yes	8914	29.5	13.0	Yes	13	Yes	30249
		BWBSmw2 Coniferous	74440	95.9	3219	4.1	18512	23.8	11.0	Yes	1358	1.7	11.0	No	3.7	No	77659
		BWBSmw2 Deciduous	23744	56.2	18498	43.8	20889	49.5	13.0	Yes	13689	32.4	13.0	Yes	4.3	Yes	42242
		BWBSwk3 Coniferous	128	63.7	74	36.8	195	97.0	11.0	Yes	0	0.0	11.0	No	3.7	No	201
		BWBSwk3 Deciduous	8	88.9	2	22.2	3	33.3	13.0	Yes	0	0.0	13.0	No	4.3	No	9
		BWBSdk2 Coniferous	24619	79.4	6381	20.6	11742	37.9	11.0	Yes	8987	29.0	11.0	Yes	3.7	Yes	31000
		BWBSdk2 Deciduous	12500	99.1	119	0.9	3060	24.3	13.0	Yes	2851	22.6	13.0	Yes	4.3	Yes	12618
		BWBSmw2 Coniferous	1622	68.2	756	31.8	137	5.8	11.0	No	0	0.0	11.0	No	3.7	No	2378

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current		Target	Target	Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		BWBSmw2 Deciduous	608	100.0	0	0.0	608	100.0	13.0	Yes	608	100.0	13.0	Yes	4.3	Yes	608
		SWBmk	44871	87.5	6395	12.5	8589	16.8	0.0	Yes	0	0.0	9.0	No	3	No	51266
		SWBmks	3953	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	3	No	3953
		BWBSmw2 Coniferous	3862	91.1	376	8.9	1264	29.8	23.0	Yes	470	11.1	11.0	Yes	11	Yes	4238
		BWBSmw2 Deciduous	2959	98.8	37	1.2	1940	64.8	23.0	Yes	589	19.7	13.0	Yes	13	Yes	2996
		SWBmk	37884	88.2	5060	11.8	6943	16.2	0.0	Yes	11	0.0	9.0	No	9	No	42945
		SWBmks	6527	100.0	0	0.0	0	0.0	0.0	Yes	0	0.0	9.0	No	9	No	6528
		BWBSmw2 Coniferous	83	100.0	0	0.0	15	18.1	11.0	Yes	15	18.1	11.0	Yes	3.7	Yes	83
		SWBmk	42783	98.6	613	1.4	4883	11.3	0.0	Yes	1	0.0	9.0	No	3	No	43396
		SWBmks	13640	100.0	0	0.0	97	0.7	0.0	Yes	0	0.0	9.0	No	3	No	13640
		BWBSmw2 Coniferous	34702	79.0	9238	21.0	12000	27.3	23.0	Yes	4193	9.5	11.0	No	11	No	43940
		BWBSmw2 Deciduous	22330	61.5	13995	38.5	18124	49.9	23.0	Yes	4657	12.8	13.0	No	13	No	36324
		BWBSmw2 Coniferous	1615	100.0	0	0.0	843	52.2	11.0	Yes	840	52.0	11.0	Yes	3.7	Yes	1615
		BWBSmw2 Deciduous	2735	100.0	0	0.0	47	1.7	13.0	No	47	1.7	13.0	No	4.3	No	2735
		SWBmk	89372	100.0	0	0.0	13144	14.7	0.0	Yes	1147	1.3	9.0	No	3	No	89372

Landscape Unit	BEO	BioGeo Unit	NHLB vs THLB Comparison				Mature + Old				Old						Total (Ha)
			NHLB		THLB		Current	Target	Target		Current		Target	Target	Drawn Down Target	Drawn Down Target	
			(Ha)	%	(Ha)	%	(Ha)	%	%	Met	(Ha)	%	%	Met	%	Met	
		SWBmks	23357	100.0	0	0.0	379	1.6	0.0	Yes	0	0.0	9.0	No	3	No	23357
		BWBSdk2 Coniferous	49721	72.5	18868	27.5	35594	51.9	11.0	Yes	15348	22.4	11.0	Yes	3.7	Yes	68589
		BWBSdk2 Deciduous	800	89.0	99	11.0	762	84.8	13.0	Yes	290	32.3	13.0	Yes	4.3	Yes	899
		SWBmk	25177	64.3	13985	35.7	14555	37.2	0.0	Yes	0	0.0	9.0	No	3	No	39162
		SWBmks	462	99.8	2	0.4	16	3.5	0.0	Yes	0	0.0	9.0	No	3	No	463
			76160		**32954**		**50927**				**15638**						**109113**
		Total	**13144224**		**2423588**		**2274033**				**863507**						**15567808**

	Mature + Old Summary			Old Summary			Drawn Down Old Summary		
	Count of Target Met	Count of BEO/BEC	% Target Met	Count of Target Met	Count of BEO/BEC	% Target Met	Count of Target Met	Count of BEO/BEC	% Target Met
BWBS dk 1	22	24	91.67%	22	24	91.67%	22	24	91.67%
BWBS dk 2	56	76	73.68%	56	76	73.68%	62	76	81.58%
BWBS mw 2	210	252	83.33%	130	252	51.59%	160	252	63.49%
BWBS wk 2	0	4	0.00%	0	4	0.00%	0	4	0.00%
BWBS wk 3	44	78	56.41%	12	78	15.38%	18	78	23.08%
SWB mk	94	94	100.00%	0	94	0.00%	2	94	2.13%
SWB mks	68	68	100.00%	0	68	0.00%	0	68	0.00%

Appendix 2 Detailed Patch Size Analysis

Landscape Unit	Small				Medium				Large				Very Large				Total	
	Current	%	FDP	%	Current	%	FDP	%	Current	%	FDP	%	Current	%	FDP	%	Current	FDP
Akue	76	31.1	233	2.8	168	68.9	3985	47.9	0	0.0	4106	49.3	0	0.0	0	0.0	**244**	**8324**
Big_Beaver	181	11.1	143	10.8	1455	88.9	1181	89.2	0	0.0	0	0.0	0	0.0	0	0.0	**1636**	**1324**
Boreal	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Bunch	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Capot_Blanc	312	6.6	466	7.9	1698	36.0	3944	66.9	1637	34.7	1483	25.2	1067	22.6	0	0.0	**4714**	**5893**
Catkin	0	0.0	89	1.1	0	0.0	212	2.5	0	0.0	7062	84.4	0	0.0	1008	12.0	**0**	**8371**
Chee	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Coal	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Crehan	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Crow	96	5.4	178	2.6	51	2.9	4176	60.1	416	23.6	966	13.9	1202	68.1	1633	23.5	**1765**	**6953**
Crusty	0	0.0	0	0.0	0	0.0	328	100.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**328**
D_Easum	13	14.6	129	7.5	76	85.4	1299	75.2	0	0.0	299	17.3	0	0.0	0	0.0	**89**	**1727**
Dilly	0	0.0	28	12.6	0	0.0	195	87.4	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**223**
Dunedin	0	0.0	0	0.0	0	0.0	46	2.8	0	0.0	762	46.7	0	0.0	825	50.5	**0**	**1633**
Eight_Mile	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Elleh	20	3.2	842	11.2	314	50.1	4605	61.3	293	46.7	2060	27.4	0	0.0	0	0.0	**627**	**7507**
Eskai	60	3.0	857	12.4	1427	71.3	2975	43.1	514	25.7	938	13.6	0	0.0	2140	31.0	**2001**	**6910**
Etane	196	7.6	291	4.6	1673	65.1	1925	30.1	702	27.3	2836	44.4	0	0.0	1342	21.0	**2571**	**6394**
Falk	0	0.0	0	0.0	0	0.0	60	100.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**60**
Forcier	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Fort_Nelson_River_A	18	100.0	115	10.9	0	0.0	95	9.0	0	0.0	632	59.9	0	0.0	213	20.2	**18**	**1055**
Fort_Nelson_River_B	93	10.9	297	25.6	122	14.4	299	25.7	286	33.6	303	26.1	349	41.1	263	22.6	**850**	**1162**
Gammer	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Gathto	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Gemini	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Graybank	0	0.0	37	13.9	0	0.0	229	86.1	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**266**
Grayling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**

Gundahoo	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Hay_River	0	0.0	21	9.3	0	0.0	30	13.3	0	0.0	174	77.3	0	0.0	0	0.0	**0**	**225**
Hewer	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Hoffard	313	40.2	399	35.2	199	25.6	734	64.8	266	34.2	0	0.0	0	0.0	0	0.0	**778**	**1133**
Holden	0	0.0	0	0.0	0	0.0	319	70.1	0	0.0	136	29.9	0	0.0	0	0.0	**0**	**455**
Hossitl	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Irene_E	110	3.1	224	4.2	2098	59.2	2912	55.0	252	7.1	958	18.1	1081	30.5	1200	22.7	**3541**	**5294**
Irene_W	76	3.4	115	0.9	1096	48.4	2641	21.3	1093	48.3	7286	58.7	0	0.0	2370	19.1	**2265**	**12412**
Jackknife	21	100.0	68	5.0	0	0.0	813	60.2	0	0.0	470	34.8	0	0.0	0	0.0	**21**	**1351**
July_Lake	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Kechika_River	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Kitza	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Kiwigana	183	5.1	733	6.6	2286	64.3	5696	51.2	0	0.0	3459	31.1	1085	30.5	1234	11.1	**3554**	**11122**
Kledo	215	8.8	568	5.0	1161	47.8	4267	37.7	1054	43.4	5125	45.3	0	0.0	1346	11.9	**2430**	**11306**
Klowee	68	10.7	78	3.0	570	89.3	1111	42.1	0	0.0	1450	54.9	0	0.0	0	0.0	**638**	**2639**
Klua	29	3.7	83	11.9	752	96.3	613	88.1	0	0.0	0	0.0	0	0.0	0	0.0	**781**	**696**
Kwokullie	0	0.0	0	0.0	60	100.0	60	100.0	0	0.0	0	0.0	0	0.0	0	0.0	**60**	**60**
Kyklo	187	3.0	489	14.8	1981	32.1	2504	76.0	0	0.0	302	9.2	3994	64.8	0	0.0	**6162**	**3295**
La_Biche	273	2.7	300	3.5	4534	44.7	3963	45.7	2871	28.3	3170	36.5	2455	24.2	1243	14.3	**10133**	**8676**
Liard_Hot_Springs	0	0.0	33	12.1	0	0.0	239	87.9	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**272**
Liard_River_A	0	0.0	30	3.2	0	0.0	56	5.9	0	0.0	480	50.4	0	0.0	386	40.5	**0**	**952**
Liard_River_B	0	0.0	0	0.0	0	0.0	0	0.0	60	100.0	60	33.3	0	0.0	120	66.7	**60**	**180**
Liard_River_C	42	0.5	205	2.2	198	2.5	197	2.1	857	11.0	827	8.8	6668	85.9	8218	87.0	**7765**	**9447**
MacDonald	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Major_Hart	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Matulka	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Minaker	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Moose	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Moule	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Muncho	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Muskwa_River_A	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**

Muskwa_River_B	51	7.2	109	13.7	162	22.8	343	43.3	0	0.0	201	25.3	497	70.0	140	17.7	**710**	**793**
Netson	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Ootta	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Otelsas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Patry	743	16.3	717	8.0	2171	47.5	2658	29.6	327	7.2	1960	21.9	1329	29.1	3633	40.5	**4570**	**8968**
Petitot_River	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Pouce	436	8.2	969	11.3	2601	49.0	3839	45.0	1870	35.2	3422	40.1	401	7.6	308	3.6	**5308**	**8538**
Prophet_River	94	7.4	36	11.3	56	4.4	116	36.5	252	19.8	166	52.2	868	68.3	0	0.0	**1270**	**318**
Rabbit	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Racing	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Ram	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Redpott	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Richards	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Sahtaneh	176	11.0	274	10.3	873	54.4	1230	46.2	556	34.6	1156	43.5	0	0.0	0	0.0	**1605**	**2660**
Sandy	2	0.1	90	2.4	583	26.1	1213	31.8	1652	73.8	2517	65.9	0	0.0	0	0.0	**2237**	**3820**
Scatter	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Sharktooth	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Shekilie	64	16.9	64	16.9	315	83.1	315	83.1	0	0.0	0	0.0	0	0.0	0	0.0	**379**	**379**
Smith	0	0.0	30	3.4	0	0.0	858	96.6	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**888**
Snake	187	10.8	660	11.1	642	37.0	2962	49.7	905	52.2	2332	39.2	0	0.0	0	0.0	**1734**	**5954**
Stanolind	506	6.7	729	8.8	2789	36.9	4353	52.5	2270	30.0	1883	22.7	2002	26.5	1330	16.0	**7567**	**8295**
Sulpher	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Tentsi	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Tetsa	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Timberwolf	0	0.0	164	7.5	0	0.0	2011	92.5	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**2175**
Tuchodi	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
Vents	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	**0**	**0**
	4841		10893		32111		71607		18133		58981		22998		28952		**78083**	**170433**

PRINT GRAPH

Appendix 3: Stream crossing matrix

Harvesting Additional Instruction Sept. 15/05 version:

In-Block Road Deactivation for Winter

When completed, road deactivation must restore to pre-harvest conditions all surface water drainage in the block. With your supervisor, review the Road Deactivation and Piling Plan before commencing operations.
First, roll road strippings back onto the bladed road surface, turnarounds or landings prior to the piling of logging debris. Install water bars if the slope is greater than 4% (prevents erosion). Finally, push all logging debris onto the road surface unless other wise stated in the Deactivation & Piling Plan.

Stream Crossing Techniques for Winter

Stream crossing structures for roads constructed in the winter are addressed in the table below. The silviculture prescription or site plan will state the riparian classification and method of crossing.

Riparian Class	S3	S4	S5 no fish	S6 no fish
Stream Width	1.5 – 5 m	< 1.5 m	> 3 m	<3 m
Temporary Bridge	Yes	Yes	Yes	Yes
Ice Bridge	Maybe[1]	No	N/A	N/A
Snowfill (if stream flowing, a culvert is required)	No	Yes	Yes	Yes
Snowfill (if no stream flowing, logs may be used)[2]	No	Yes	Yes	Yes
Snowfall (if no stream flowing)	No	Yes	Yes	Yes
Temporary Culvert with earth fill	No	No	Maybe[1]	Yes

Building a Snowfill / Logfill

[1] Site specific approval is required (not a first option)
[2] Logs are permitted if the stream will freeze off completely prior to start of hauling.

Ensure that you are at the correct location and using the prescribed method in the RP, SP or site plan.
Ensure that the creek is dry or frozen to the bottom. If ice is present, dig a hole with a crow bar or ice auger until the creek bottom is reached.
Push clean snow into the channel, avoid making cuts that would deposit soil into the crossing. In addition, avoid making ruts in the crossing. Do not blade across feature, lift blade 5m prior to creek.

Compact the snow by driving across it a few times. Let stand for one day before using crossing.

If there is a significant depression, then a crossing structure must be built. Place logs **8 - 10 m** in length (avoid aspen if possible) into the stream bed. Longer logs require more effort during deactivation and cause more damage to the stream banks. Special care and attention is required
to ensure that the material placed into the stream bed will not cause damage to stream bank and its rooting systems.

Do not deposit soil and debris below the high water mark of the stream. Ensure that the removal of any material does not destabilize the stream bank.

Stream Crossing Deactivation for Winter

With your supervisor, review the Road Deactivation and Piling Plan before commencing operations.
Remove accumulations of branches, tops or soil from the riparian management zones during harvesting and hauling operations.

Using an excavator with a thumb attachment, remove the culvert or logs placed into the stream bed. *A crawler tractor is not acceptable for deactivation of stream crossings.*

Special care and attention is required to ensure that all materials placed into the stream are removed and that no logs, branches, roots, or loose soils remain that could block stream flow.
Special care and attention is required to ensure that the stream banks and stream bed are returned as closely to their pre-harvest conditions as reasonably possible.
Culverts will be returned to the contractor's facility for reuse or disposal. Logs will be placed in the debris piles for burning.

Install waterbars on either side of the stream crossing if the slope is greater than 4%.

Appendix 4: Summary Plan of forecastable measures

Forecasted Measures (table 62 in the SFM Plan)

Type	#	Measures	Included in Scenarios	General Report	Detailed Report	Modeled Target
Ecological	1-1.3	An interim measure was developed – percent area by old seral stage defined by Landscape Unit/BEC variant	yes	BEC variant for the entire DFA by NHLB/THLB	Table of LU/BEC variant by CFLB	yes min. % old seral by LU/BEC variant (LUPG and NSOGO)
Ecological	1-2.1	Number, spatial distribution, characteristics, rank and type of significant habitat features and species in each habitat type in the THLB and NHLB				
	1-2.1a	Riparian areas	yes	Static reduction		**no**
	1-2.1b	Shrub areas	yes	% of DFA in shrub habitat (< 20 years) in NHLB/THLB		**no**
	1-2.1c	Hardwoods (and other cover type)	yes	area of DFA in cover type		**no**
	1-2.1d	Seral stages		% of BEC variant for the entire DFA by CFLB	LU/BEC variant by CFLB	yes – only for old and mature + old in NDT3 Int/High BEOs based on LUPG and NSOGO **no** – for early
	1-2.1e	Patch size	yes	% patch size NDT for entire DFA	% patch size by NDT/LU	**no – only report on current condition**
Ecological	1-4.1	List and percentage of government designated protected areas	yes	Static area reduction		**no**
Ecological	2-1.1	Site index by inventory type group for harvested areas	yes	Area weighted average SI for last 5 years harvest		**no**
Ecological	2-2.1	Area of forest converted to non-forest land use	yes	Static area reduction		**no**
Ecological	2-2.2	Percent of forested area having road/landing construction	yes	Static area reduction		**no**
Economic	4-1.3	Timber supply certainty – AAC	yes	Harvest level chart		yes – ≥ current AAC
Economic	4-2.3	Indirect/Induced employment and income estimates	yes	Employment and income based on harvest level		yes - ≥ current employment and income
Social	9-2.1	Forest Management compliance with existing Visual Quality Objectives (VQOs) established by the BC Ministry of Forests for the area	yes		% disturbance within each VQO polygon in DFA	yes – based on max. allowable % disturbance

Interpretation of this summary must consider that in some cases, numerous results were generated for some measures due to the large (85) numbers of landscape units. These results were reviewed with the PRISM. Fort Nelson Forecasting report contains the presentation made to the PRISM and goes into more detail for each of the measures modelled. As well, this report contains a comparison of each of the scenarios and the quantitative or qualitative impact on each measure.

A summary of the differences between scenarios as compared to the CSA base case (current condition) is provided in the table below.

Forecast Results Summary Table (table 63 in the SFM Plan)

Type	#	Measures	No Constraints	No Harvest	Potential Uplift	NDU Biodiversity	Preserve VQO
Ecological	1-1.3	Percent area by old seral stage defined by Landscape Unit/BEC variant	-59%	5%	-41%	-25%	not reported
Ecological	1-2.1a	Riparian areas	No change	No change	No change	No change	No change
	1-2.1b	Shrub areas (base case 10%)	13%	7%	12%	11%	not reported
	1-2.1c	Hardwoods (and other cover type)	No change	No change	No change	No change	No change
	1-2.1d	Seral stages	-47%	16%	-32%	-21%	not reported
	1-2.1e	Patch size	Only current condition	Only current condition	Only current condition	Only current condition	Only current condition
	1-4.1	List and percentage of government designated protected areas	No change	No change	No change	No change	No change
Ecological	2-1.1	Site index by inventory type group for harvested areas	Only current condition	Only current condition	Only current condition	Only current condition	Only current condition
Ecological	2-2.1	Area of forest converted to non-forest land use	No change	No change	No change	No change	No change
Ecological	2-2.2	Percent of forested area having road/landing construction	No change (although potentially -)	No change	No change (although potentially -)	No change	No change
		Timber supply certainty – AAC (CSA Base Case)					
		Short term	186%	-100%	126%	66%	106%
Ecological	4-1.3	Long term	126%	-100%	93%	26%	80%
		Timber supply certainty – AAC (Potential Uplift)			n/a		
		Short term	26%	-100%		-26%	-9%
Ecological	4-1.3	Long term	17%	-100%		-34%	-7%
		Annual TSA Employment	+ 2324 py	- 1245 py	+ 1577 py	+ 830 py	+ 1245 py
		Annual Employment Income	+$192.7 MM	-$103.3 MM	+$130.8 MM	+$68.8 MM	+$103.2 MM
		Annual Provincial Revenue	+ $73.3 MM	- $39.3 MM	+ $73.3 MM	+ $26.2 MM	+ $39.3MM
Economic	4-2.3						
Economic	9-2.1	Forest Management compliance with existing Visual Quality Objectives (VQOs) established by the BC Ministry of Forests for the area	-32%	11%	-13%	-7%	11%

Appendix 5: Results and Strategies for cultural heritage resources in Canfor's proposd FSP

Objectives Set By Government for Cultural Heritage Resources

In relation to the objective set by government for cultural heritage resources set out in section 10 of the FPPR, paragraphs 5.9.2, 5.9.3, 5.9.4, 5.9.5, and 5.9.6 details the results and strategies that apply to each FDU.

On an annual basis, the holder's of this FSP will make reasonable efforts to communicate affected First Nations the general areas of timber harvesting and road construction, if any, that are proposed for the year.

Archaeological Evaluation

Prior to harvest of a cutblock or construction of a road, an archaeological evaluation will be conducted within areas:

a) That contain previously identified archaeological resources;
b) That are identified as having "high potential" within an established archaeological predictive map or model for the area, or;
c) Where site-specific information regarding archaeological resources is brought forward or made available to Canfor by First Nations.

Unidentified Features Encountered During Development Activities

If a previously unidentified cultural heritage resource feature is encountered during harvesting or road construction, operations will cease to the extent necessary to protect the feature, until an archeological evaluation can be carried out.

Harvesting and Road Development Consistent with Archaeological Recommendations

Harvesting and road construction activities will be consistent with the recommendations given in an archaeological evaluation conducted under section 5.9.3.

Non-archaeological Cultural Heritage Resources

Where site specific cultural heritage resource information is brought forth by an aboriginal people or community regarding a traditional use or site that is of continuing importance in the location of a proposed cutting permit, licence to cut or road permit, the holder of this FSP will:

a) Record the location of the cultural heritage resource;
b) Evaluate the direct impact of the planned development on the cultural heritage resource or traditional site;
c) Where necessary, alter planned development in order to conserve, mitigate, or if necessary protect, the cultural heritage resource at that location, considering:
    i) The relative value or importance of the cultural heritage resource to a traditional use or site by an aboriginal people or community;
    ii) The relative abundance or scarcity of the cultural heritage resource;
    iii) The historical extent of the traditional use of the cultural heritage resource; and
    iv) The impact on the FSP holders' government granted timber harvesting rights in conserving or protecting the cultural heritage resource.
d) Communicate the results of a – c back to the individual or group that provided the information.

These results and strategies are applicable to: all FDU's within this FSP.