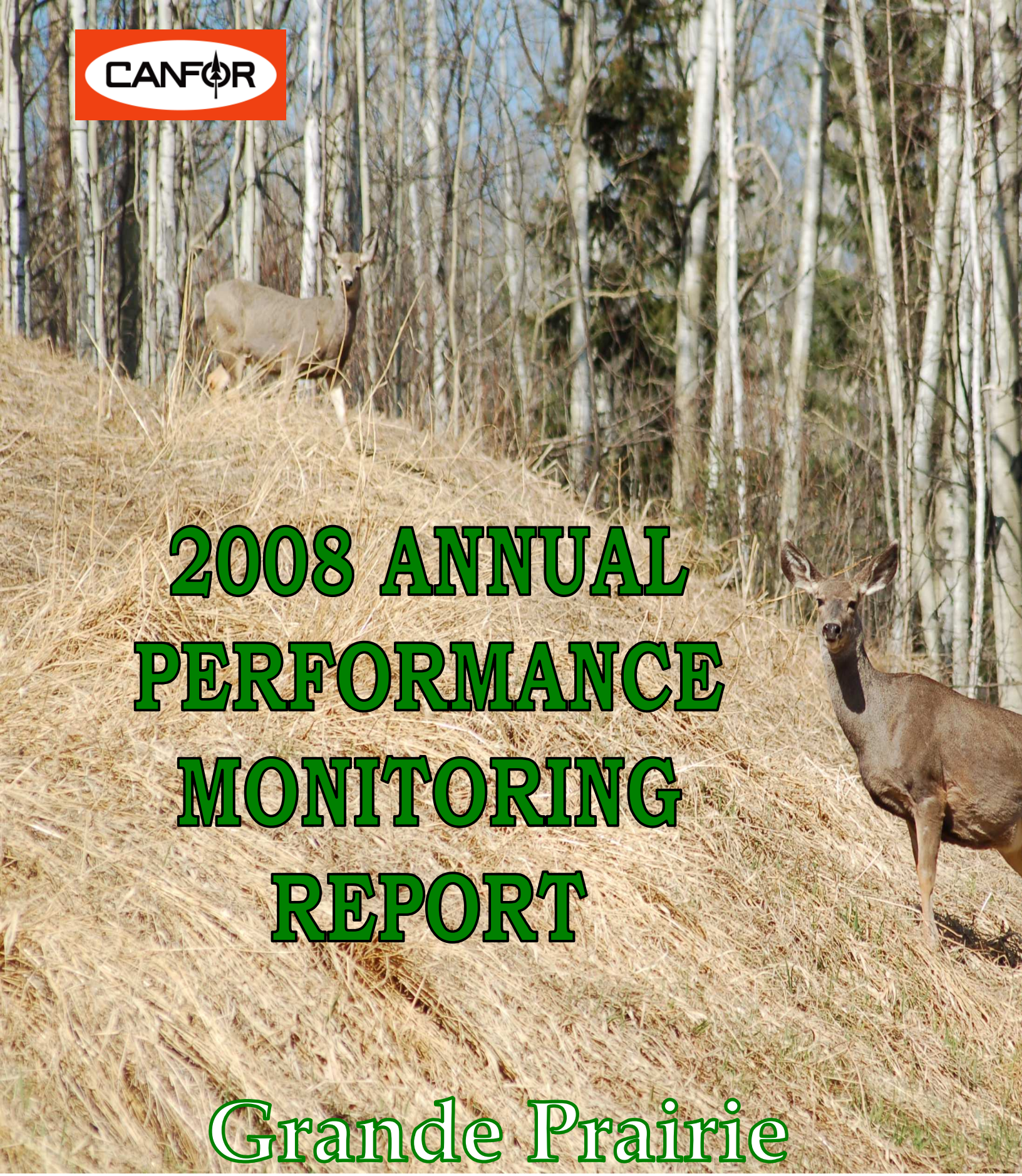

2008 ANNUAL PERFORMANCE MONITORING REPORT

Grande Prairie

February 28, 2009

Reporting Period:
January 1st, 2008 - December 31st, 2008

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February 28, 2009

REPORTING PERIOD: January 1st, 2008 – December 31st, 2008

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Executive Summary

The *2008 Annual Performance Monitoring Report* has been prepared in accordance with the Canadian Standard Association CAN/CSA-Z809-02 standard (CSA, 2002). The report summarizes the progress and performance that Canfor Grande Prairie Division has achieved in meeting and maintaining the Sustainable Forest Management (SFM) requirements.

The *2005 Sustainable Forest Management Plan* (SFMP) for the Canfor Grande Prairie Defined Forest Area is a compilation of Canadian Standard Association (CSA) standard requirements, corporate commitments and local level values, objectives, indicators and targets. Canfor Grande Prairie's Forest Management Advisory Committee (FMAC) assisted Canfor in identifying the local level values, objectives, indicators and targets that are contained within the SFMP and in this report.

As a means of strengthening Canfor's commitment to SFM, the 2001 SFMP was incorporated in the Detailed Forest Management Plan (DFMP) that is required under the terms of Forest Management Agreement 9900037 (Province of Alberta Order in Council 198/99) (Canfor, 1999). The DFMP was reviewed and endorsed by the FMAC, then submitted to, and approved by, Alberta Sustainable Resource Development (ASRD) on November 3rd, 2003. In October 2006, the 2005 SFMP was incorporated into the 2003 DFMP and submitted to ASRD with a request that the government approve the replacement of the 2001 SFMP with the 2005 SFMP. To date, formal approval has not been received; however, it has been acknowledged by ASRD representatives that the targets contained in the 2005 SFMP are now being monitored by Canfor.

2008 was a financially difficult year for the Canadian forest industry due to many factors including record low lumber prices, dramatically decreasing North American housing starts, and a Canadian tax on lumber exports to the United States imposed under the Canada/US Softwood Lumber Agreement. Canfor Grande Prairie responded to these difficult times by voluntarily curtailing sawmill and planer operations for periods of the year and by imposing stringent cost-cutting measures in both the woodlands and manufacturing operations.

Mountain pine beetle (MPB) continued to be a great concern for Canfor in 2008. During late summer, 2006 an infestation of mountain pine beetle (*Dendroctonus ponderosae*) occurred within a significant portion of the Forest Management Agreement (FMA) area. The 2006 infestation attracted the immediate attention of the Alberta government, the forest industry and the general public. ASRD responded to the threat by developing a *Mountain Pine Beetle Action Plan for Alberta* (ASRD, 2007a). The plan includes a number of mitigation strategies, including a strategy to decrease the risk of MPB spread by reducing the volume of lodgepole pine on the landscape, particularly those stands that are most susceptible to mountain pine beetle infestation. In response to the ASRD's action plan, Canfor commenced development of a Healthy Pine Strategy amendment to its approved 2003 Detailed Forest Management Plan (Canfor, 2003). The Alberta government's Interpretive Bulletin: *Planning Mountain Pine Beetle Response Operations* ver. 2.6 (ASRD, 2006a) provided the direction for development of the amendment. The Healthy Pine Strategy amendment will be submitted to ASRD for approval prior to May 1, 2009.

Public concern also continued in 2008 regarding the management of caribou and caribou habitat within the Little Smoky and A La Peche caribou herd ranges, approximately fifteen percent of which extend into the Canfor FMA area. On September 15, 2008 Canfor Grande Prairie extended its February 11th, 2005 commitment to defer timber harvesting and road building activities in the caribou area until April 30th, 2009. The primary intent of the most recent extension of the timber harvesting deferral was to provide sufficient time for the Alberta government to respond to recommendations prepared by the Alberta Caribou Committee for the management of the west central Alberta caribou herds. Canfor continues to be actively engaged in the caribou recovery plan process through its membership in the Foothills Landscape Management Forum, formerly known as the Caribou Landscape Management Association.

Canfor Grande Prairie maintained overall conformance to the SFM requirements of the CAN/CSA Z809-02 standard, the ISO 14001:2004 standard and Canfor corporate environmental commitments in 2008.

Progress toward achievement of individual SFM targets is described fully within this *2008 Annual Performance Monitoring Report*. The following is a summary of performance:

Classification	2006	2007	2008
Number of targets met	36	38	37
Number of targets not met	12	12	11
Number of targets not due for reporting	9	10	7
Number of targets for which assessment postponed	0	0	5
Total number of CSA Z809-02 targets	**60**	**60**	**60**

2008 results indicate there has been slight improvement made with respect to the number of targets not met. For targets not met, explanations have been provided regarding the contributing factors, and corrective actions to address identified deficiencies or weaknesses have been included in the text. A new category has been added to the 2008 report called 'assessment postponed' which is intended to represent targets that will undergo significant change because of external events or activities. For example, changes to Canfor's spatial harvest sequence that have occurred due to implementation of the Healthy Pine Strategy will necessitate the revision of several targets and therefore reporting on progress toward their achievement is no longer indicative of the division's management performance.

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1. Introduction & Overview

1.1. Certification

Certification of sustainable forestry practices is an essential element for Canadian Forest Products Ltd. (Canfor) to meet public expectations and maintain product market share. Canfor Grande Prairie Division has sought and achieved certification under a variety of respected standards including International Organization for Standardization (ISO) 14001, CAN/CSA Z809-02 and Programme for the Endorsement of Forest Certification (PEFC) Chain of Custody.

As a preparatory step, Canfor corporately developed an Environmental Management System (EMS) to the ISO 14001 standard. The company's EMS provided the platform on which the Sustainable Forest Management System (SFMS) was built, and it was subsequently certified under the CSA SFM standard. Canfor eventually amalgamated the EMS and SFMS in the Canfor Forest Management System, under which it has operated since 2006.

1.2. The CSA Sustainable Forest Management System Standard

In 1996, six criteria were developed by the Canadian Council of Forest Ministers (CCFM) to address sustainable forest management. The criteria address the key aspects of forest management. The criteria are identified below:

Criterion 1: Conservation of Biological Diversity;
Criterion 2: Maintenance and Enhancement of Forest Ecosystem Condition and Productivity;
Criterion 3: Conservation of Soil and Water Resources;
Criterion 4: Forest Ecosystem Contributions to Global Ecological Cycles;
Criterion 5: Multiple Benefits to Society; and
Criterion 6: Accepting Society's Responsibility for Sustainable Development.

The CSA process led to the development of a set of critical elements for each of the criteria. Under the CSA standard, adoption of the CCFM criteria and elements as a framework for value identification provides vital links between local sustainable forest management and national and provincial-scale forest policy, as well as a strong measure of consistency in identification of local forest values across Canada. This standard, which utilizes a continual improvement approach, requires public participation, practical demonstration of sustainable forest management practices, and management commitment. Through a process of public participation, the CSA performance framework attains local relevance to the critical elements in the form of locally determined values[1], objectives[2], indicators[3] and targets[4]. Canfor's public advisory group, the FMAC, assisted Canfor in the development of its SFMP by identifying quantifiable local level values, objectives, indicators and targets applicable to sustainable forest management.

1.3. Sustainable Forest Management Policy

Senior Canfor management has endorsed the corporate *Environment Policy* and *Canfor's Forestry Principles* that apply to all of the Canfor forestry operations, including Grande Prairie.

[1] Values: an FMA area characteristic, component or quality considered by an interested party to be important in relation to a CSA SFM element or other locally identified element;
[2] Objectives: a broad statement describing a desired future state or condition for a value;
[3] Indicators: a variable that measures or describes the state or condition of a value; and
[4] Targets: a specified statement describing a desired future state or condition of an indicator. Targets should be clearly defined, time limited, and quantified if possible.

1.4. The Defined Forest Area

The CSA standard states that organizations "*shall designate a clearly defined forest area to which the standard applies*." The Defined Forest Area (DFA) for Canfor Grande Prairie is the FMA area indicated in Figure 1 below. The operational units have been identified as well for reference when mentioned throughout the report.

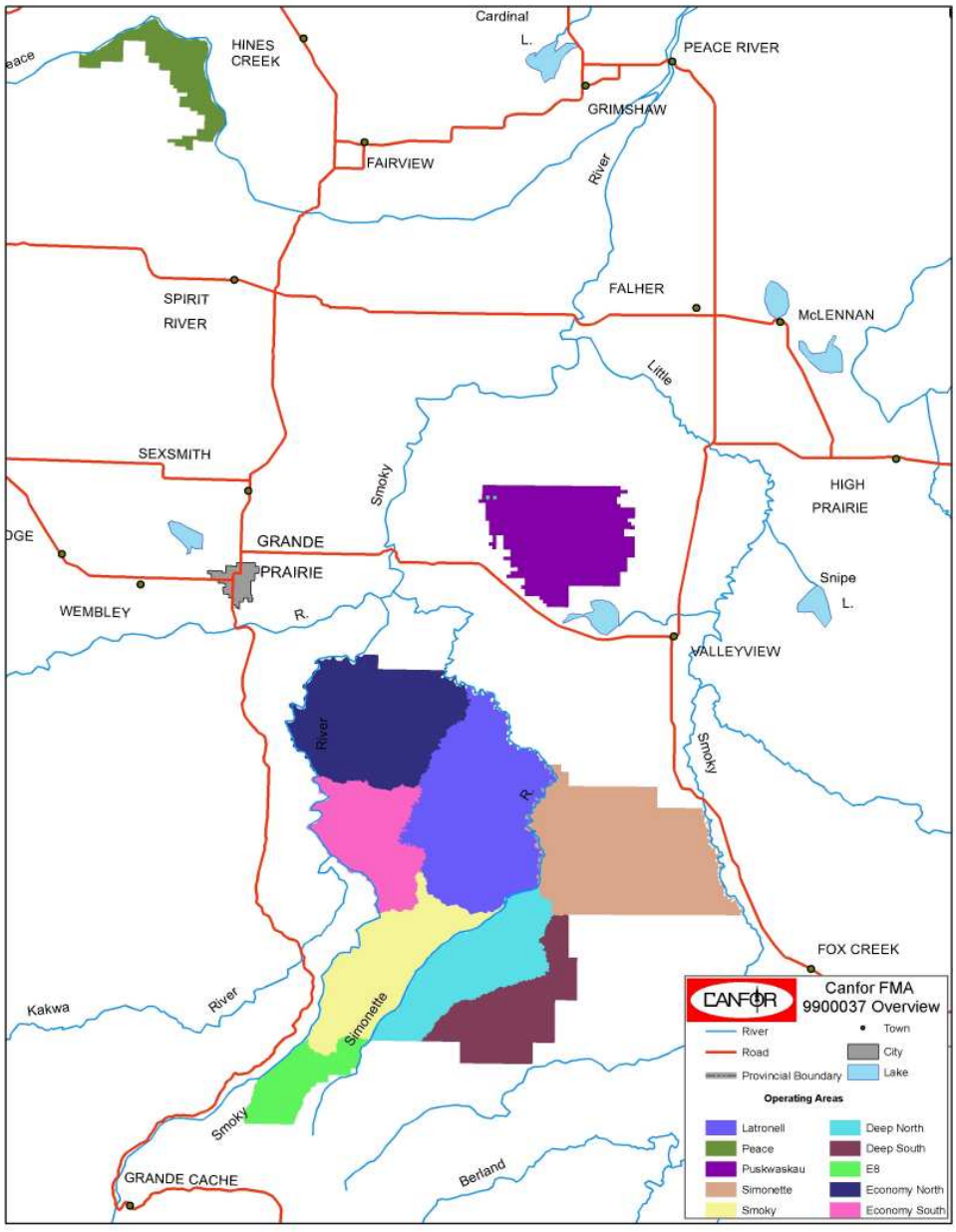


Figure 1. Defined Forest Area (DFA)

1.5. Landbase & Resource Information

Total Landbase: 649,160 ha
Productive Landbase (Coniferous and Deciduous): 474,193 ha
Coniferous AAC: 640,000 m^3/yr
Deciduous AAC: 453,712 m^3/yr

1.6. Annual Report

Canfor prepares an Annual Performance Monitoring Report to illustrate its progress in meeting commitments identified in the SFMP in accordance with the CAN/CSA Z809-02 standard (CSA, 2002). This report contains information regarding the achievement and maintenance of SFM requirements in general (Section 2) and also indicates the status of each of the 60 targets (Sections 3-9). Five classifications are used for reporting performance toward achievement of each target:

1. Completed;
2. Meets;
3. Does not meet;
4. Not a scheduled reporting time; or
5. Assessment postponed.

2. Progress in Meeting and Maintaining SFM Requirements

In 2005, the Canfor FMAC developed quantifiable local level values, objectives, indicators and targets of sustainable forest management, as defined in the Canadian Standards Association CAN/CSA Z809-02 standard. These were then used to develop the 2005 SFMP. The SFMP was audited by an independent third party (KPMG Performance Registrar) and approved on November 7, 2005.

Since approval of the SFMP, Canfor Grande Prairie has maintained overall conformance to the SFM requirements of the CAN/CSA Z809-02 standard and Canfor corporate commitments. Results of internal and external third party audits can be found in Section 9.

Progress toward achievement of individual targets is found in Sections 3 – 8. Target results are reported for Canfor's fiscal year unless it is stated that they are being reported for the ASRD timber year (May 1 to April 30).

Table 1. 2008 Target Summary

Target	Met	Not Met	Not Due for Reporting	Assessment Postponed
(1.1) 1a.1.1 100% of the seral stages will meet the 2009 projections			X	
(1.2) 1a.1.1 To maintain the habitat suitability rating for each ecosection group for the period 1997 - 2017 at the 1997 level				X
(1.2) 1a.2 .1 Annually, zero bull trout watersheds with ≥ 35% equivalent clearcut area (ECA) above the H60 elevation.	X			
(1.2) 1a.3.1 Woodland caribou: no more than 20% of the area in pioneer or young seral condition and at least 20% of the area in old seral condition at key points in time			X (not counted)	
Trumpeter swan: to buffer 100% of identified trumpeter swan lakes with a 200 m no harvest buffer (reported annually)	X			
(1.2) 1a.4.1 100% of the Canfor forestry staff receives training to identify and report rare plants (reported annually)	X			
(1.2) 1a.5.1 Participate in one or more biodiversity monitoring program(s) annually	X			
(1.2) 1a.6.1 100% of the pre-harvest volume per hectare CWD will be retained on harvest areas annually				X
(1.2) 1a.7.1 The actual area in watercourse buffers is a minimum of 100% of the planned (DFMP) area annually	X			
(1.2) 1a.8.1 A minimum of 25% of the area harvested across the FMA area will contain structure retention accumulated annually beginning in 2002		X		
(1.3) 1a.1.1 MPS (ha) for 2009 will not fall below the MPS forecasts			X	
(1.3) 1a.2.1 The MNND for 2009 will not exceed the MNND forecasts			X	
(1.3) 1a.3.1 The AWMSI for 2009 will not fall below the AWMSI forecasts			X	
(1.3) 1a.4.1 100% of the total area by patch size class will meet the 2009 projections			X	
(1.3) 1a.5.1 A maximum of 70% of area is planted with genetically improved stock accumulated annually	X			

Target	Met	Not Met	Not Due for Reporting	Assessment Postponed
(1.3) 1a.6.1 100% of utilized grass seed mix will not contain restricted or noxious weeds as identified in the Weed Control Act annually	X			
(1.3) 1b.1.1 100% of seeds collected and seedlings planted annually will be in accordance with the "Standards for Tree Improvement in Alberta"		X		
(1.4) 1a.1.1 100% of significant wildlife mineral licks will be conserved annually	X			
(1.4) 1a.2.1 100% of identified protected areas and special biologically significant sites will be conserved annually	X			
(2.1).1a.1.1 100% of the identified insect and disease treatments will be scheduled for treatment annually	X			
(2.1).2a.1.1 100% of harvest areas meet the required regeneration standards as confirmed by completion of establishment surveys, measured on a 5-yr. rolling average	X			
(2.1).2a.2.1 100% of harvest areas meet the required regeneration standards as confirmed by completion of performance surveys, measured on a 5 year rolling average			X	
(2.2).1a.1.1 100% of the productive areas, adjacent to proposed harvest area boundaries, impacted by windfall receive a silviculture prescription annually	X			
(2.2).1a.2.1 100% of temporary "in block" roads used for extraction of timber will be reforested within 18 months after the end of the timber year[9] of harvest	X			
(2.2).1a.3.1 100% of tasks outlined in the approved Growth and Yield Monitoring Plan are completed on schedule				X
(3.1) 1a.1.1 Average accumulated post harvest site index will not be less than average pre harvest site index (with reporting commencing in 2008)	X			
(3.1) 2a.1 Zero major slumping events annually caused by road construction	X			
(3.1) 2a.2.1 Zero slumping events annually due to harvesting activities	X			
(3.1) 2a.3.1 Zero significant erosion events related to silviculture, harvesting and road activities annually	X			
(3.1) 2a.4.1 100% of temporary roads will be deactivated within 6 months after usage is complete		X		
(3.1) 2b.1.1 100% of prescriptions created throughout the year conform to Section 9.0.3 of the Operating Ground Rules	X			
(3.1) 2b.2.1 100% of harvest areas do not exceed the soil disturbance prescriptions annually		X		
(3.2) 1a.1.1 Less then 10% of surveyed stream crossings on forestry roads will have a "High" and "Very High" WQCR annually			X	
(3.2) 1a.2.1 100% of crossings receive remedial action as identified in the Road Maintenance Plan annually		X		
(3.2) 1a.3.1 Zero non-compliance incidents related to riparian zone standards annually	X			
(3.2) 2a.1.1 100% of sampled watersheds are in conformance with the annual average water yield increase limit of 15% as indicated in the Operating Ground Rules	X			

Target	Met	Not Met	Not Due for Reporting	Assessment Postponed
(4.1) 1a.1.1 100% of harvest areas are reforested within 18 months after the end of the timber year in which it was harvested	X			
(4.1) 1a.2.1 Reforest 100% of the productive areas >4 ha impacted by fire within 24 months				X
(4.2) 1a.1.1 100% of the harvested area sufficiently restocked by yield group accumulated annually beginning in 2000		X		
(4.2) 1b.1.1 To leave less than 1% conifer and 1% deciduous harvested merchantable wood on site annually				X
(4.2) 1b.2.1 100% of the dispositions where merchantable industrial salvage wood from permanent land withdrawals is utilized on an annual basis		X		
(4.2) 2a.1.1 To have no more than 0.6 lineal km/km2 in open (non-reclaimed) roads over a 5-year period, for each FMA parcel (Peace, Puskwaskau and Main)	X			
(4.2) 2b.1.1 100% of previously withdrawn areas that are suitable candidates for reforestation are restored to productive forestland within 24 months		X		
(5.1) 1a.1.1 Actual extraction rates (m3) are less than or equal to the long-term harvest level (m3) at the end of the 1999-2008 period	X			
(5.1) 2a.1.1 Canfor will maintain a minimum of 5 recreation areas for use by the public annually	X			
(5.1) 2a.2.1 100% of registered trappers directly impacted by harvesting, silviculture and reclamation operations are contacted as specified in the *Trapper Consultation and Notification Program* annually		X		
(5.1) 2a.3.1 100% of outfitters potentially affected by operations within the FMA area will be supplied a 5 year General Development Plan map annually	X			
(5.2) 1a.1.1 Over a rolling 5-year period, a minimum of 75% of dollars paid for contract services will be expended locally	X			
(5.2) 1b.1.1 Maintain 100% of identified social and cultural benefits that occur on the FMA area annually	X			
(5.3) 1a.1.1 Annual economic contributions to local communities will be a minimum of 80% of the 5 year rolling average	X			
(5.3) 1a.2.1 0.5% of the coniferous AAC is made available for local use and for local residents as per Forest Management Agreement (FMA) 9900037 annually	X			
(5.3) 1a.3.1 10,000 m^3 of the coniferous AAC is made available annually for Community Timber Use (CTU) program	X			
(6.1) 1a.1.1 100% conformance to SFMP targets of Element (1.2) Species Diversity and Element (3.2) Water Quality and Quantity annually		X		
(6.2) 1a.1.1 To annually provide a range of opportunities for early and effective consultation with Aboriginal peoples who have indicated interest in activities on the FMA area	X			

Target	Met	Not Met	Not Due for Reporting	Assessment Postponed
(6.2) 1b.1.1 100% conformance to the prescriptions for historical resources prepared by a certified archaeologist annually	X			
(6.2) 1b.2.1 100% of known local historical resources are respected annually	X			
(6.3) 1a.1.1 100%conformance to the FMAC's Terms of Reference (TOR) annually	X			
(6.3) 1a.2.1 To provide a minimum of 4 types of opportunities for public participation annually	X			
(6.3) 1a.3.1 To make initial contact to 100% of public inquires within one month of receipt		X		
(6.4) 1a.1.1 To provide a minimum of 8 different opportunities to enhance knowledge annually	X			
(6.4) 1a.2.1 To be involved in a minimum of 10 active research projects annually	X			
	37	**11**	**7**	**5**

3. Criterion 1: Conservation of Biological Diversity

Conserve biological diversity by maintaining integrity, function and diversity of living organisms and the complexes of which they are part.

Critical Element (1.1): Ecosystem Diversity

Conserve ecosystems diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally occur on the DFA.

Value (1.1) 1: All natural ecosystems are important on the landscape
Objective (1.1) 1a: All current ecosystems are represented on the landscape at natural levels
Indicator (1.1) 1a.1: Area (%) in each seral stage

Target (1.1) 1a.1.1:	**Acceptable variance:**
100% of the seral stages will meet the 2009 projections.	± 20% of the 2009 projections

Status: Not a scheduled reporting time

Maintenance of appropriate seral stage distribution is important for the conservation of biodiversity as it enables continuation of a full range of successional habitats for wildlife and ecosystem types over the long-term (CCFM, 1997). Seral stages are defined by the age of the forest stand, measured at breast height (1.3 meters above ground level) for various yield groups (Table 2).

Seral stage quantification is a surrogate measurement that reflects an important aspect of the biodiversity of the forest. In maintaining biodiversity and the recycling of life sustaining elements, it is important that the impacts of forest management on seral stage distribution be within the natural range of variability. The seral stage indicator offers a means to assess the results of forest management on the age distribution of the forest, species composition and relative amount of wildlife habitat on the landscape.

Progress toward this target is not scheduled to be reported until the completion of the *2009 Annual Performance Monitoring Report*. However, the DFMP Healthy Pine Strategy (HPS) amendment includes seral stage forecasts for the revised spatial harvest sequence that indicate 19 of 20 seral stage groups will be within the acceptable variance at the scheduled reporting time.

Table 2. Seral Stage Distribution for the FMA Area

	Area (ha) in each Seral Stage					
	Pioneer(1)	**Young(2)**	**Mature(3)**	**OverMature(4)**	**Old(5)**	**Total Forested Landbase**
2009 HPS Projected[1]	28,935	90,670	248,171	170,832	49,325	587,932
2009a (SFMP Updated)[2]	30,389	93,105	246,750	170,613	47,076	587,932
Percent Variance	-4.8%	-2.6%	0.6%	0.1%	4.8%	
2009 HPS Projected[1] - Healthy Pine Strategy (HPS) is the projected outcome from the analysis done for						
2009a (SFMP Updated)[2] - This is the projected outcome from the 2005 SFMP document.						

Table 3. Seral Stage Distribution for the Peace Parcel

	Area (ha) in each Seral Stage					
	Pioneer(1)	**Young(2)**	**Mature(3)**	**OverMature(4)**	**Old(5)**	**Total Forested Landbase**
2009 HPS Projected	652	1,929	20,915	1,897	508	25,901
2009a (SFMP Updated)	0	1,927	21,542	1,920	511	25,901
Percent Variance	100.0%	0.1%	-2.9%	-1.2%	-0.6%	

Table 4. Seral Stage Distribution for the Puskwaskau Parcel

	Area (ha) in each Seral Stage					
	Pioneer(1)	Young(2)	Mature(3)	OverMature(4)	Old(5)	Total Forested Landbase
2009 HPS Projected	2,689	12,822	29,673	12,072	5,949	63,205
2009a (SFMP Updated)	2,957	13,185	29,605	11,509	5,949	63,205
Percent Variance	-9.1%	-2.7%	0.2%	4.9%	0.0%	

Table 5. Seral Stage Distribution for the Main Parcel

	Area (ha) in each Seral Stage					
	Pioneer(1)	Young(2)	Mature(3)	OverMature(4)	Old(5)	Total Forested Landbase
2009 HPS Projected	25,595	75,919	197,583	156,863	42,868	498,827
2009a (SFMP Updated)	27,432	77,993	195,603	157,184	40,615	498,827
Percent Variance	-6.7%	-2.7%	1.0%	-0.2%	5.5%	

Critical Element (1.2): Species Diversity

Conserve species diversity by ensuring that habitats for the native species found on the FMA are maintained through time.

Value (1.2) 1: Through time all current habitats are represented.
Objective (1.2) 1a: Current species diversity is maintained on the landscape.
Indicator (1.2) 1a.1: Habitat suitability rating.

Target (1.2) 1a.1.1:	**Acceptable variance:**
To maintain the habitat suitability rating for each ecosection group for the period 1997-2017 at the 1997 level.	To maintain, within ±20%, the proportions (area) of general habitat, critical habitat and landscape metrics that contribute to each wildlife guild habitat suitability rating.

Status: Assessment postponed

Since 2006-2008, Canfor has altered the planned spatial harvest sequence and has been working to complete a Healthy Pine Strategy DFMP amendment. The process includes calculation of annual allowable cut levels and preparation of a corresponding spatial harvest sequence for both coniferous and deciduous species groups. Since the habitat suitability rating target was based on the 2003 spatial harvest sequence, and that sequence was not been followed since 2006, Canfor has postponed the assessment of this target until the new spatial harvest sequence is approved by ASRD. The Healthy Pine Strategy DFMP amendment is scheduled to be submitted to ASRD in early 2009 and progress toward this target will be assessed and reported in a future Annual Performance Monitoring Report.

Indicator (1.2) 1a.2: Number of bull trout watersheds with ≥ 35% Equivalent Clearcut Area (ECA) above the H60[5] elevation.

Target (1.2) 1a.2.1:	**Acceptable variance:**
Annually, zero bull trout watersheds with ≥ 35% equivalent clear-cut area (ECA) above the H60 elevation.	No more than 5 (3%) of the watersheds in the bull trout area to exceed 35% ECA above the H60 elevation

Status: Meets

Bull trout habitat is monitored by calculating the Equivalent Clearcut Area (ECA) in bull trout watersheds above the H60 line. Each year Canfor utilizes the DFMP /Annual Operating Plan validation process to verify whether the ECA within selected watersheds exceeds the target. As indicated in Table 6 the ECA in three watersheds currently exceeds the 35% target. The ECA in Watershed 2057 previously exceeded the target but the harvested areas have now recovered sufficiently to be excluded from the ECA total.

Table 6. Watersheds Above the ECA of 35%

Watershed ID	1999 ECA%	2005 ECA %	2006 ECA %	2007 ECA%	2008 ECA%
2057	48	40	38	38	Recovered
4877	-	-	-	-	38
1775	-	-	-	37	38
670	-	-	-	-	36

Indicator (1.2) 1a.3: Percentage of habitat for endangered[6] or threatened[7] vertebrate species over time.

Target (1.2) 1a.3.1:	**Acceptable variance:**
Woodland Caribou: No more than 20% of the area in pioneer or young seral condition and at least 20% of the area in old seral condition at key points in time. Trumpeter Swan: To buffer 100% of identified trumpeter swan lakes with a 200-metre no harvest buffer (reported annually).	Woodland Caribou: In 2009 pioneer/ young seral condition will be ≤ 18% of the area and for old seral condition will be ≥ 11% of the area. Trumpeter Swan: Zero

Status: Woodland Caribou: **Not a scheduled reporting time**
Trumpeter Swan: **Meets**[8]

Woodland Caribou

This target is reported on at key points in time (2009, 2019, 2049…). The percentage area in pioneer/young and old seral condition will be reported in the *2009 Annual Performance Monitoring Report.*

In July 2008, the *West Central Alberta Caribou Landscape Plan* (WCACLP) was submitted to the Alberta Caribou Committee Governance Board. The WCACLP defines and identifies areas of primary caribou habitat intactness, including a portion of the range of the Little Smoky Caribou herd in the

[5] H60 is the elevation above which 60% of the watersheds lie (the watershed area above the H60 is considered as the source area for the major snowmelt peak flows).
[6] Endangered: Any species facing imminent extirpation or extinction
[7] Threatened: Any species likely to become endangered if limiting factors are not reversed.
[8] *Because this is a 2-component target, for the summary of performance tables and for the reporting of progress toward Target (6.1) 1a.1.1, this target has been reported as met.*

southern portion of Canfor's FMA area. Canfor has made a commitment in its Healthy Pine Strategy DFMP amendment to defer harvesting in the primary intactness area for a period of fifteen years. The effect of the Healthy Pine Strategy on the woodland caribou target has been modelled, and the results indicate that progress toward the pioneer and young seral stage target will be negatively affected whereas the old seral stage target can be achieved within the same time period as forecast in the original DFMP. The models indicate that the Healthy Pine Strategy provides a more favourable outcome with respect to both seral stage targets than the modelled "disaster" scenario in which most of the pine is killed by mountain pine beetle.

In September 2008, Canfor advised the Canadian Parks and Wilderness Society and ASRD of its intention to extend the temporary May 1, 2005 harvest deferral in the caribou range for an additional year, terminating April 30, 2009. This latest extension was made in order to provide government sufficient time to respond to recommendations from the Alberta Caribou Committee regarding management of caribou in west central Alberta. The decision was made with strong reservations because the delay in implementing an aggressive Healthy Pine Strategy in the southern portions of the FMA area increases the risk of an irreversible mountain pine beetle infestation.

Trumpeter Swan

Known trumpeter swan nest sites are protected with a 200-metre no-harvest buffer. Newly discovered water bodies supporting trumpeter swan habitat are confirmed by ASRD and their locations are provided to Canfor for inclusion in the company's spatial data base. The locations of 2008 harvest areas were superimposed onto known buffered water bodies indicating that no incursions occurred.

Indicator (1.2) 1a.4: Percentage of Canfor forestry staff trained to identify rare plants.

Target (1.2) 1a.4.1:	**Acceptable variance:**
100% of Canfor forestry staff receives training to identify and report rare plants (reported annually).	90% of forestry staff receives training to identify and report rare plants.

Status: Meets

All staff members requiring rare plant identification training have received training. A total of four new staff members were trained in 2008 (Table 7). Training prepares individuals to find data regarding the probability of encountering rare plants and to process findings without endangering the plants or their habitats.

Table 7. Staff Trained in Rare Plant Identification and Reporting

	Forestry Employee	Date Trained
Full Time Forestry Employees	Woodlands Manager	16-Dec-05
	Woodlands Superintendent	12-Jun-01
	Strategic Planning Superintendent	12-Jun-01
	Planning Superintendent	16-Dec-05
	Silviculture Forester (new in 2007)	2-May-07
	Forestry Supervisor #1	12-Jun-01
	Forestry Supervisor #2	8-Jun-05
	Forestry Supervisor #3 (temp to permanent in 2008)	16-Dec-05
	Operations Supervisor (Harvesting #1)	16-Dec-05
	Operations Supervisor (Harvesting #2)	20-Jan-06
	Operations Supervisor (Harvesting #3)	16-Dec-05
	Operations Supervisor (Planning)	12-Jun-01
	Operations Supervisor (Log Haul)	16-Dec-05
	Operations Supervisor (Roads)	16-Dec-05
	Operations Supervisor (Silviculture #1)	6-May-08
	Operations Supervisor (Silviculture #2)	6-May-08
	Landuse Coordinator	16-Dec-05
Summer Student	Silviculture Student #1	6-May-08
	Silviculture Student #2	6-May-08
Total Required Forestry Personnel Trained		**100%**

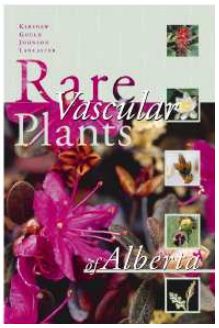


Figure 2. Rare Vascular Plants of Alberta Book

Indicator (1.2) 1a.5: Number of biodiversity monitoring programs in which Canfor actively participates.

Target (1.2) 1a.5.1:	**Acceptable variance:**
Participates in 1 or more biodiversity monitoring program(s) annually.	Zero

Status: Meets

Canfor continues to support one significant biodiversity monitoring program.

Commencing in 1997, Canfor and other partners established the Ecological Management Emulating Natural Disturbance (EMEND) project located near Peace River, Alberta. The EMEND project is a large-scale variable retention harvest experiment designed specifically to answer questions about how retention of green tree residuals affects harvest cost, forest regeneration, patterns of succession, biodiversity, nutrient cycling, ground water characteristics and public perception. EMEND is a long-term project that began in 1998 and is forecast to run for one stand rotation, or approximately 80 to100 years. The project has two primary objectives:

- To determine which forest harvest and regenerative practices best maintain biotic communities, spatial patterns of forest structure and functional ecosystem integrity in comparison with mixed-wood landscapes that have originated through wildfire and other inherent natural disturbances; and

- To employ economic and social analyses to evaluate these practices in terms of economic viability, sustainability and social acceptability. http://www.emend.rr.ualberta.ca/index.asp

In 2008, Canfor committed to extend funding to the EMEND project until the end of 2009. In addition, Canfor is actively pursuing other funding sources as a member of the EMEND Management Committee.

Indicator (1.2) 1a.6: Percentage (volume/ha) of Coarse Woody Debris (CWD) on harvested areas.

Target (1.2) 1a.6.1:	**Acceptable variance:**
100% of the pre-harvest volume per hectare CWD will be retained on harvest areas annually.	>90% of the pre-harvest CWD volume per hectare.

Status: Assessment postponed

Pre-harvest coarse woody debris volumes were determined from operational cruise plot data collected between 1995 and 2000, and compiled by yield group[9]. Post harvest coarse woody debris data was to be collected semi-annually in conjunction with waste and residue surveys. No waste and residue survey was conducted in 2007, and the next scheduled survey was to be conducted during the summer of 2008. Due to the difficult economic circumstances at that time, a management decision was made to not conduct the survey.

Canfor's harvesting methodology did not change during the 2007 timber year therefore it is expected that the results reported for 2006 continue to be representative of the volume of coarse woody debris that is remaining following harvesting for the periods following 2006. It is Canfor's intention to confirm this assumption by collecting data in a series of post harvest surveys in 2010 and applying the data proportionately, by yield group, to determine average coarse woody debris volumes by hectare for areas harvested during the particular year.

Indicator (1.2) 1a.7: Percentage of area (ha) in watercourse buffers.

Target (1.2) 1a.7.1:	**Acceptable variance:**
The actual area in watercourse buffers is a minimum of 100% of the planned (DFMP) area (ha) annually.	Zero

Status: Meets

A total of 37,716 hectares are designated in the DFMP as watercourse buffers. A comparison of the area of planned watercourse buffers reported in the 2008 Annual Operating Plan (AOP) to the area designated (i.e. planned) as DFMP watercourse buffers was completed. Table 8 indicates that during the development of the 2008 AOP an additional 4 percent of the timber harvesting landbase (1,548 ha) was reclassified as watercourse buffers. The primary reason for this reclassification is that the original DFMP watercourse buffer map layer does not identify all streams present on the landbase. In addition, buffers planned in the AOP are often extended to take advantage of existing terrain features so that stable boundaries are established.

Note: It is assumed that the area planned as watercourse buffers in AOPs equals the actual area in watercourse buffers specified in the target.

[9] Yield Group: a group of similar forest types that have similar yield (the volume of wood that can be removed that is equal to growth within the total forest) expectations.

Table 8. DFMP Buffer Area Versus AOP Buffer Area

Year	DFMP Buffer Area (ha)	Additional Area Buffered (deleted) in the AOP (ha)	DFMP buffer area not used (added back to DFMP landbase)(ha)	Net addition of landbase into buffers (ha)	Net Total Area in Buffers (ha)	% of Landbase in Buffers over the DFMP
2006	37716	4,415	2,766	1,649	39,365	4%
2007	37716	4,452	2,813	1,639	39,355	4%
2008	37716	4,492	2,944	1,548	39,264	4%

Indicator (1.2) 1a.8: Percent of the area harvested across the FMA area with structure retention.

Target (1.2) 1a.8.1:	**Acceptable variance:**
A minimum of 25% of the area harvested across the FMA area will contain structure retention accumulated annually beginning in 2002.	Minimum of 20% of the area harvested across the FMA area will contain structure retention accumulated annually.

Status: Does not meet

For the 2007 timber year, an average of 16 percent of the area harvested contains some form of structure retention. Due to the recent intrusion of the mountain pine beetle into the FMA area, the focus for harvesting has been on lodgepole pine. Lodgepole pine tends to grow as an even-aged monoculture species, and lodgepole pine forests generally provide fewer opportunities to preserve structure retention than mixed wood, or spruce dominated forests.

Reflecting upon the Healthy Pine Strategy DFMP amendment and the associated spatial harvest sequence, Canfor believes that the target of 25 percent retention will not be achieved in the short or medium term on an annual basis. In 2009, Canfor will be recommending to FMAC to revise the target from 25 percent to 10 percent with an acceptable variance of 5 percent for the term of the Healthy Pine Strategy (15 years). Canfor will also recommend that monitoring begin in the 2008 timber year and continue through the life of the Healthy Pine Strategy and/or as new information becomes available.

Table 9. Area (ha) and Percentage of Structure Retention Across the FMA area

Timber Year	Total Harvested (ha)	Total Retention (ha)	Total Retention % (accumulated average)
2002	2,956	741	25%
2003	2,858	830	37%
2004	3,684	421	21%
2005 & 2006	4,422	396	17%
2007	2,054	329	17%
Total	**15,975**	**2,717**	**17%**

Critical Element (1.3): Genetic Diversity

Conserve genetic diversity by maintaining the variation of genes within species.

Value (1.3) 1: Respect the natural genetic diversity.
Objective (1.3) 1a: Genetic diversity will be maintained on the landscape.
Indicator (1.3) 1a.1: Mean Patch Size (MPS) (ha).

Target (1.3) 1a.1.1:	**Acceptable variance:**
The MPS (ha) for 2009 will not fall below the MPS forecasts for each reporting unit.	MPS will not fall below 15% of the area of the 2009 MPS forecast for the FMA area and the Peace, Puskwaskau and Main parcels

Status: Not a scheduled reporting time

Mean Patch Size (MPS), together with patch size distribution in various seral stage[10] classes, provides an insight into the level of fragmentation of the forestland. Forest patches are created by natural disturbance (wind, fire, pests etc.) and through harvesting activities. Over an entire rotation, forest management activities can alter the distribution and size of patches by fragmenting the landscape beyond the limits of natural variability. Many of the landscape level bird studies report mean patch size to be an effective indicator of incidence and reproductive output (Edenius and Sjoberg 1997; Roberts and Norment 1999).

This target was not scheduled to be reported until completion of the *2009 Annual Performance Monitoring Report* (APMR). However, the DFMP Healthy Pine Strategy amendment includes a forecast of MPS under the revised spatial harvest sequence. The forecast indicates that MPS for each FMA parcel will be within the acceptable variance in 2009.

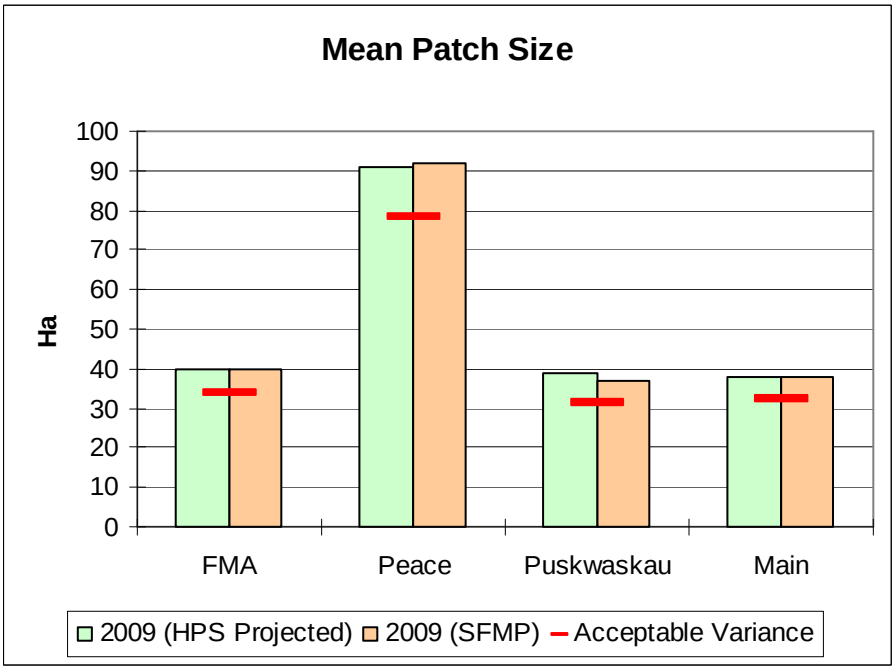


Figure 3. MPS Forecast for each FMA Parcel

[10] Seral stage: The series of plant community conditions that develop during ecological succession from bare ground to the potential plant community capable of existing on a site where stand replacement begins and the secondary successional process starts again.

Indicator (1.3) 1a.2: Mean Nearest Neighbor Distance (MNND) (m).

Target (1.3) 1a.2.1:	**Acceptable variance:**
The MNND for 2009 will not exceed the MNND forecasts.	MNND will not exceed +15% of the 2009 forecast for the FMA area and the Peace, Puskwaskau and Main parcels.

Status: Not a scheduled reporting time

Mean Nearest Neighbor Distance (MNND) describes the proximity of forest patches, thus providing a quantitative measure of connectivity (Schumaker, 1996; With, 1999). Connectivity is a complementary measure of the degree to which forest patches can be considered joined together on the basis of a minimum acceptable separation distance. The connectivity (distance) of habitat patches is extremely important for large animals such as moose and caribou, two of the indicator species on the FMA area.

This target was not scheduled to be reported until completion of the 2009 APMR report. However, the DFMP Healthy Pine Strategy amendment includes a forecast of MNND under the revised spatial harvest sequence. The forecast indicates that MNND for each FMA parcel will be within the acceptable variance in 2009.

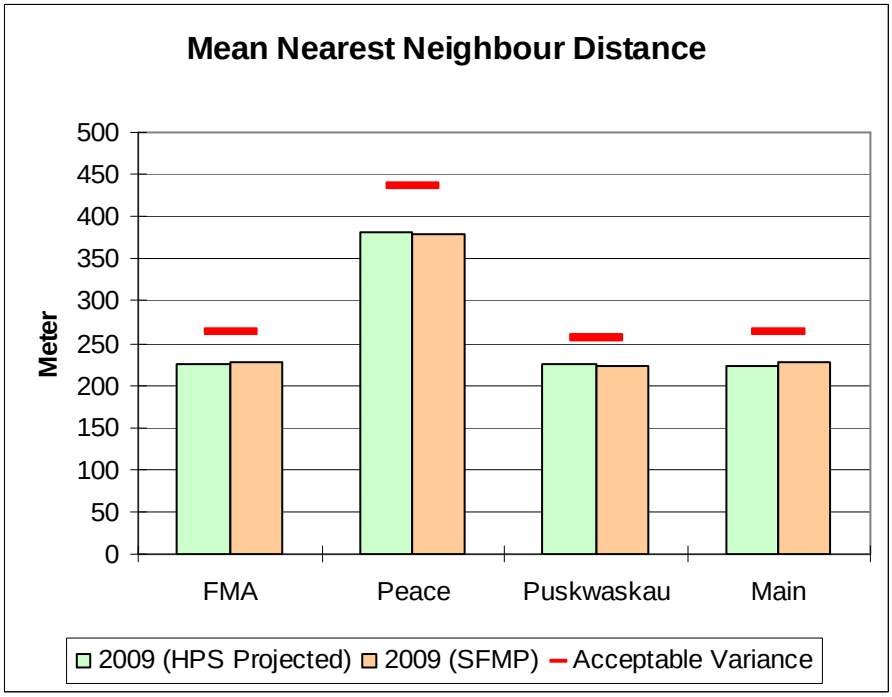


Figure 4. MNND Forecast for each FMA Parcel

Indicator (1.3) 1a.3: Area Weighted Mean Shape Index (AWMSI).

Target (1.3) 1a.3.1:	**Acceptable variance:**
The AWMSI for 2009 will not fall below the AWMSI forecast.	AWMSI will not decrease by –15% of the 2009 forecast for the FMA area and the Peace, Puskwaskau and Main parcels.

Status: Not a scheduled reporting time

Area-Weighted Mean Shape Index (AWMSI) provides a measure of patch shape complexity based on the perimeter-to-area ratio. The complexity of patch shapes in combination with the area of the shapes can influence many ecological processes. Small mammal migration, woody plant colonization and animal foraging strategies are influenced by patch shape. Many ecological effects attributed to the complexity of shape are actually related to "edge effects. In addition, shape influences the operability and economics of forest harvesting. For example, elongated harvest areas require more road construction than compact harvest areas and thus are more costly. Planned harvest areas are generally simple in shape and are usually somewhat rectangular. Where this is the case, the lack of measured complexity can be compensated operationally by retaining single trees or patches near harvest area boundaries and by establishing minor boundary changes in the field to create more edges relative to area.

This target was not scheduled to be reported until completion of the 2009 APMR report. However the DFMP Healthy Pine Strategy amendment includes a forecast of AWMSI under the revised spatial harvest sequence. The forecast indicates that AWMSI for each FMA parcel will be within the acceptable variance in 2009.

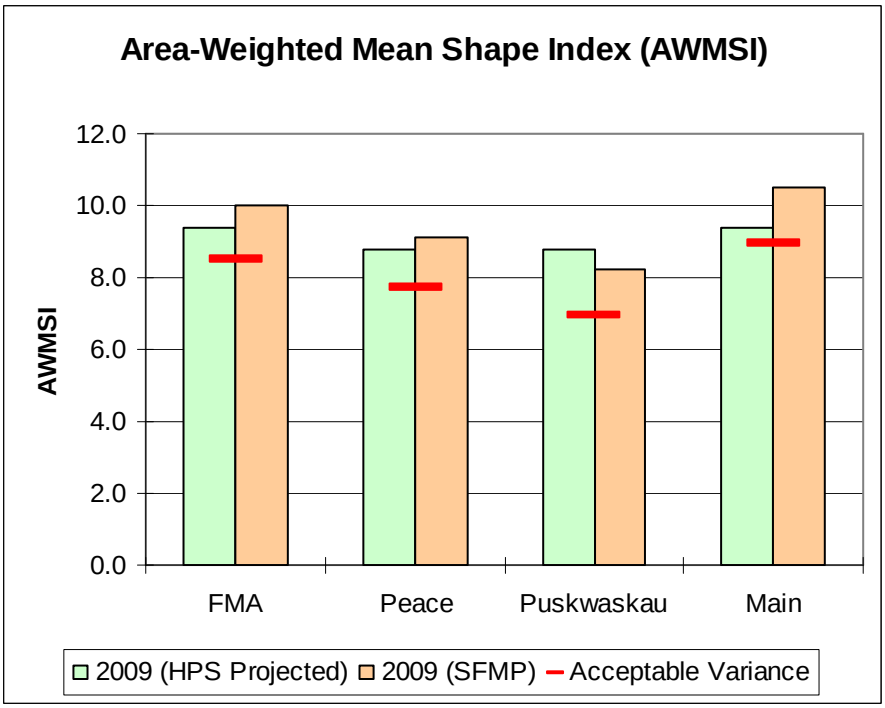


Figure 5. AWMSI Forecast for each FMA Parcel

Indicator (1.3) 1a.4: Percentage of total area by patch size class.

Target (1.3) 1a.4.1:	**Acceptable variance:**
100% of the total area by patch size class will meet the 2009 projections.	±10% of the 2009 forecast.

Status: Not a scheduled reporting time

The distribution of patch sizes will be calculated annually using forest cover updates and reported in the 2009 APMR.

Patch size distributions were derived for the Boreal Forest and Foothills Natural regions based on theoretical fire-return intervals (ORM, 2000). Targets for the Boreal Forest Natural region were derived from measured patch size classes of four 20-year periods of unmanaged forests (Delong and Tanner, 1996); while targets for the Foothills Natural region were based on the distribution of patch sizes in historical pre-suppression air photos of the Foothills Model Forest in Hinton, Alberta (Andison, 1997).

This target was not scheduled to be reported until completion of the 2009 APMR report. However the DFMP Healthy Pine Strategy amendment includes a forecast of total area by patch size class under the revised spatial harvest sequence. The forecast indicates that total area by patch size class for each FMA parcel will be within the acceptable variance in 2009.

Figure 6. FMA Patch Size Forecast

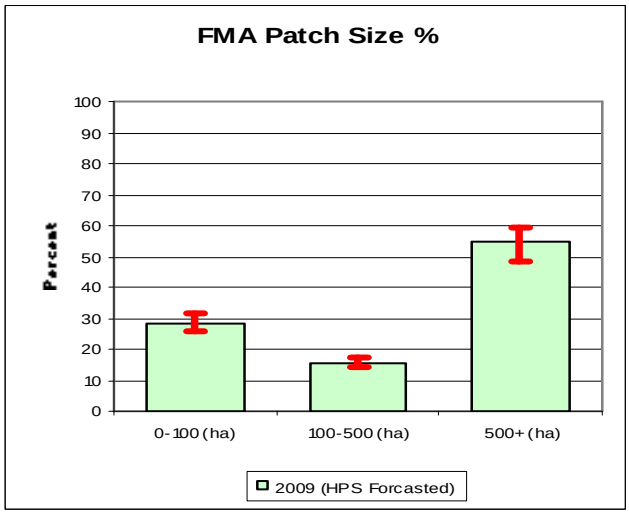
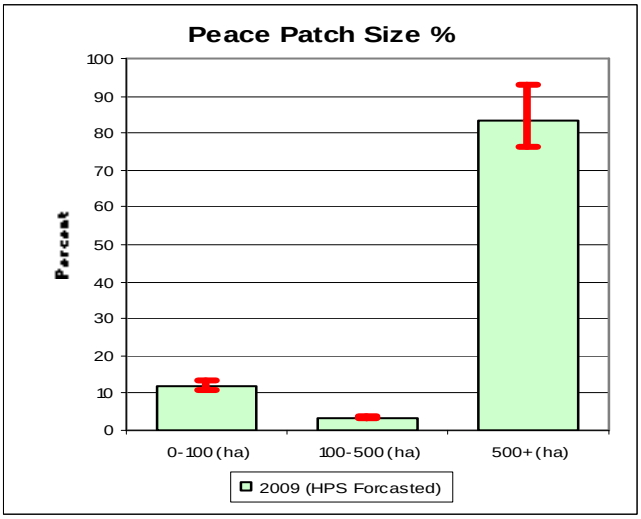


Figure 7. Peace Patch Size Forecast



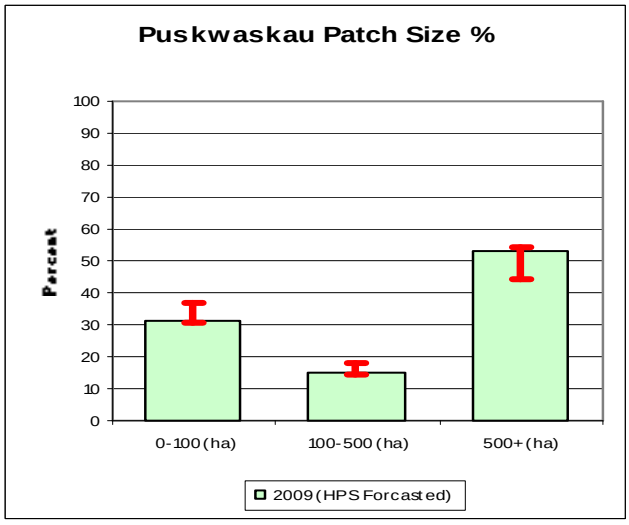


Figure 8. Puskwaskau Patch Size Forecast

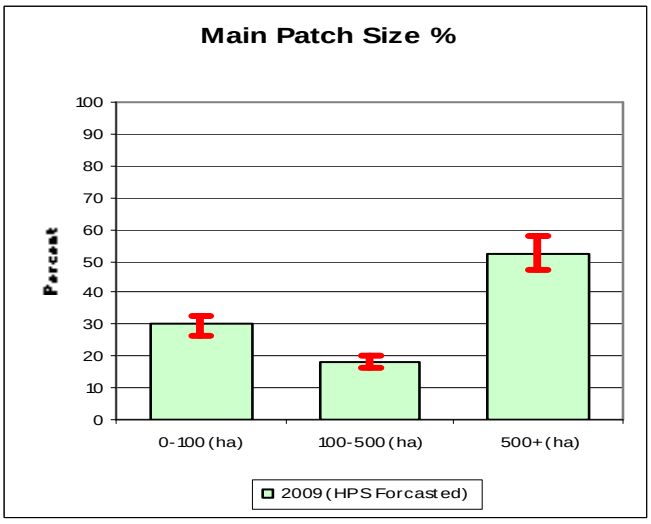


Figure 9. Main Patch Size Forecast

Indicator (1.3) 1a.5: Percentage of area planted with genetically improved stock.

Target (1.3) 1a.5.1:	**Acceptable variance:**
A maximum of 70% of area is planted with genetically improved stock accumulated annually.	Zero.

Status: Meets

Canfor began planting genetically improved lodgepole pine stock on the FMA area in 2002. In 2004, white spruce genetic stock became available and has been planted on the FMA area since that time. In order to maintain sufficient genetic diversity on the FMA, the proportion of genetically improved stock that is planted is controlled. Table 10 indicates that since 2002, the accumulated percent of area planted with genetically improved stock is well below the target.

Table 10. Area Planted with Genetically Improved Stock

Year	Total Area Planted (cumulative) (ha)	Total Area Planted with Genetically Improved Stock (cumulative) (ha)	% Area Planted with Genetically Improved Stock
2002	2541	252	10%
2003	5643	460	8%
2004	8529	1295	15%
2005	11525	2639	23%
2006	14343	4097	29%
2007	17166	5423	32%
2008	19239	6806	35%

Indicator (1.3) 1a.6: Percentage of grass seed mix that contains restricted and noxious weeds.

Target (1.3) 1a.6.1:	**Acceptable variance:**
100% of utilized grass seed mix will not contain restricted or noxious weeds as identified in the Weed Control Act annually.	Zero

Status: Meets

Seed purity is confirmed prior to seeding by reviewing the "Certificate of Seed Analysis" provided by the seed seller. All seed used in reclamation, deactivation, erosion control and new road construction in 2008 was free of restricted or noxious weed seeds.

Objective (1.3) 1b: Conditions that support genetic diversity of species will be maintained.
Indicator (1.3) 1b.1: Percentage of seeds collected and seedlings planted in accordance with the "*Standards for Tree Improvement in Alberta*" (ASRD, 2005).

Target (1.3) 1b1.1:	**Acceptable variance:**
100% of seeds collected and seedlings planted annually will be in accordance with "*Standards for Tree Improvement in Alberta*".	Zero

Status: Does not meet

Seeds collected in 2008 met the Standards for Tree Improvement in Alberta (STIA). Two pine wild seed collections were undertaken in January and February of 2008. Both are registered and are in seed inventory.

Canfor planted 3.28 million seedlings on the FMA area in 2008. Of these, approximately 4,000 seedlings were not planted in accordance with the STIA. This equates to 0.1% of the total seedlings planted. The 4,000 seedlings were planted outside the STIA guidelines on two separate blocks; G292501 and S112528. In both cases a seedlot was planted outside the designated seed zone with no variance requested prior to planting. No variance was requested due to a misinterpretation of the STIA guidelines by the responsible Canfor supervisor which allows for seedlots to be transferred without a variance if the area of deployment is within one kilometer of the seed zone boundary and within 100 meters elevation of the seedlot collection elevation for seedlots collected after 2003. The seedlot in question was collected in 1995. In both instances they were eligible for a seed zone variance as they met the old transfer guidelines.

Critical Element (1.4): Protected Areas & Sites of Special Biological Significance

Respect protected areas identified through government processes. Identify sites of biological significance within the FMA and implement management strategies appropriate to their long-term maintenance.

Value (1.4) 1: Identified protected areas and sites that have special biological significance.
Objective (1.4) 1a: The natural states and processes to maintain protected areas and sites that have special biological significances will be conserved.
Indicator (1.4) 1a.1: Percentage of significant wildlife mineral licks conserved.

Target (1.4) 1a.1.1:	**Acceptable variance:**
100% of significant wildlife mineral licks will be conserved annually.	Zero.

Status: Meets

Canfor FMA 9900037 Operating Ground Rules require 100 meter buffers to be established and not harvested on identified “natural” mineral licks.
In 2008, 2 significant “natural” mineral licks were identified, buffered in the field and mapped to ensure harvesting will not occur within them.

Table 11. Natural Mineral Licks Buffered

Year	Natural Mineral Licks
2003 and previous years	60
2004	16
2005	15
2006	8
2007	4
2008	2
Total	**105**

Indicator (1.4) 1a.2: Percentage of identified protected area and special biological significant sites that are conserved.

Target (1.4) 1a.2.1:	**Acceptable variance:**
100% of identified protected areas and special biological significant sites will be conserved annually.	Zero.

Status: Meets

Spatial analysis of the Dunvegan West Wildlands, parabolic sand dunes, watercourse buffers, wildlife mineral licks, trumpeter swan buffers, and historical resources confirmed that none of the sites were impacted by timber harvesting or other human activities in 2008. (Table 12).

In 2008, 2 wildlife licks were identified and buffered and 5 historical sites were delineated from proposed harvest areas.

Table 12. Protected Areas and Sites of Special Biological Significance

Classification	Identifier	2006 Area (ha)	2007 Area (ha)	2008 Area (ha)	% FMA area
Protected areas	Dunvegan West Wildland Provincial Park	4,471	4,471	4,471	0.7%
Areas of Special Biological Significance	Parabolic sand dunes [2]	6,114	6,114	6,114	0.9%
	Watercourse buffers [3]	39,365	39,355	39,264	6.0%
	Wildlife mineral licks	295	299	300	0.0%
	Trumpeter swan buffers [4]	553	553	553	0.1%
	Historical resources [5]	0	70 sites	75 Sites	NA
	subtotal	46,327	46,321	46,231	7.1%
	Total	**50,798**	**50,792**	**50,702**	**7.8%**

Notes:

1. FMA area is 649,160 ha
2. Parabolic sand dunes - area was incorrectly reported in the SFMP (2006) due to a typo. (6141 vs 6114)
3. Watercourse Buffers are adjusted annually to account for the variability of buffers used and not used from the DFMP - see indicator (1.2) 1a.7.1 for explanation.
4. Swan Buffers were revised in 2006 from those indicated in the SFMP (2005) and adjusted in 2008 due to a misinterpretation of the data (previously reported area included Lake area;in 2008 area adjusted to exclude lake area and include only the AVI buffer area around identified swan lakes.
5. All sites will be mapped and 'protected' as prescribed by a certified archaeologist. To date, less than 1 ha has been prescribed into "buffers" (15m X 100m buffer on one site on an edge of a harvest opening). The majority of 'protection' of identified sites has been via other methods e.g. winter logging.

4. Criterion 2: Maintenance and Enhancement of Forest Ecosystem Condition and Productivity

Conserve forest ecosystem condition and productivity by maintaining the health, vitality, and rates of biological production.

Critical Element (2.1): Forest Ecosystem Resilience

Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions.

Value (2.1) 1: Healthy forest ecosystem.
Objective (2.1) 1a: Factors that lead to forest ecosystem health will be identified and maintained.
Indicator (2.1) 1a.1: Percentage of identified insect and disease areas scheduled for treatment.

Target (2.1) 1a.1.1:	**Acceptable variance:**
100% of the identified insect and disease treatments will be scheduled for treatment annually.	Zero

Status: **Meets**

During late summer, 2006 an infestation of mountain pine beetle (MPB) occurred within a significant portion of the FMA area. The map in Figure 10 indicates the status of MPB attacks as of January 26, 2009. The level of infestation within stands in Canfor's FMA area is still considered low at this time, with one to 2 percent of the stems within infected stands having been successfully inhabited by beetles.

This target was created before MPB became a significant issue in Alberta and the identification of every tree infected with MPB is not achievable. Therefore, Canfor is recommending a change to this target. In the *2008 Annual Performance Monitoring Report* Canfor is reporting the area infested with MPB or as part of the Healthy Pine Strategy that was scheduled for harvest compared to the infested area or Healthy Pine Strategy area that was actually harvested as shown in Table 13.

In response to this situation, Canfor has, with ASRD approval, varied from the approved harvest sequence in the DFMP to harvest stands that have been infested with MPB. For the 2007 timber year and as shown in Table 13 Canfor's priority for harvest were those areas that had some degree of infestation by MPB (see Figure 1 for operating unit locations).

Table 13. Percent Area Harvested that Contained MPB in 2007 Timber Year

	Total Area Harvested (Ha)	MPB Areas Scheduled for Harvest (Ha)	MPB Areas Harvested (Ha)	Results (%)
Deep North	379	273	273	72%
E8	69	0	0	100%
Economy North	330	330	330	100%
Economy South	930	907	907	97%
Peace	219	219	219	100%
Smoky	89	89	89	100%
Total	**2017**	**1819**	**1819**	**90%**

In 2008, Canfor implemented a Forest Resource Improvement Association of Alberta (FRIAA) project that included the following activities:

- An MPB trapping program, using pheromones, in the Grande Prairie Log Yard and Smoky Log Storage Site as well as other areas outside of the FMA area. The objective of the program was to trap MPB as they exited from the logs in the storage areas; and
- An MPB containment program (337 ha), again using pheromones, to attract MPB into areas proposed for harvest during the winter of 2008/09.

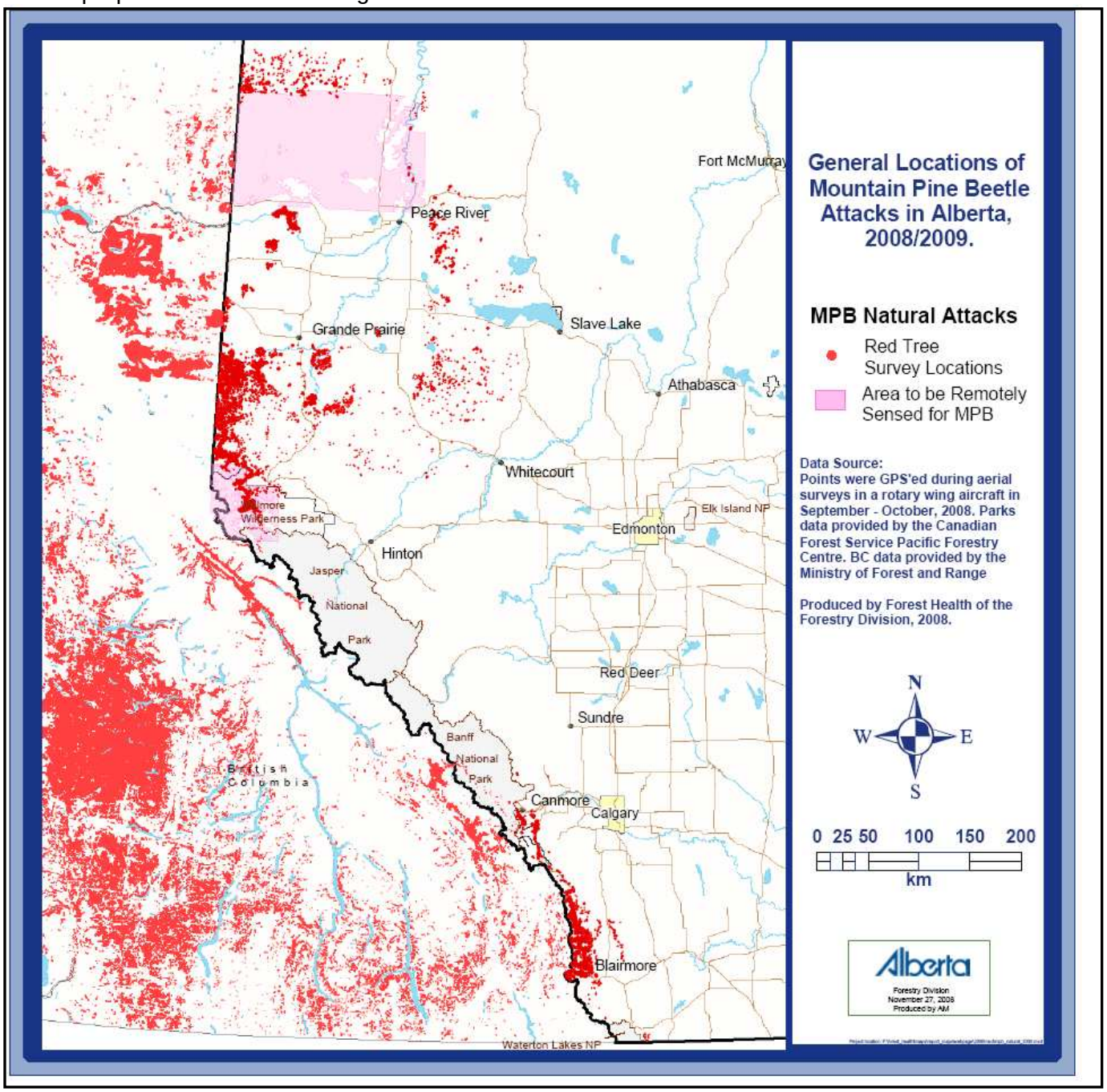


Figure 10. Mountain Pine Beetle Reported Sites

Value (2.1) 2: Ecosystem resilience.
Objective (2.1) 2a: Processes that promote ecosystem resilience will be identified and maintained.
Indicator (2.1) 2a.1: Percentage of harvest areas meeting the regeneration standards as confirmed by the completion of an establishment survey.

Target (2.1) 2a.1.1:	**Acceptable variance:**
100% of harvest areas meet the required regeneration standards as confirmed by completion of establishment surveys, measured on a 5-yr. rolling average.	Minimum of 90% of the harvested areas will meet the regeneration standards on a 5-year rolling average.

Status: Meets

Ninety-three percent of the harvest areas harvested between the 1996 to 2000 timber years met the required 2008 regeneration standards.

Table 14. Establishment Survey Results (1996 to 2000 Timber Years)

Stocking Status	Area of Surveys (Ha)	% SR
NSR[2]	951	
Regeneration Standard Met[3]	11,916	
Total	12,867	**93%**

[1] **Establishment surveys** -for the purpose of this report, data is combined for all establishment surveys completed on the FMA area from the blocks harvested in the 1996-2000 timber years to obtain a five year rolling average (coniferous, mixedwood and deciduous).

[2] **NSR** - not satisfactorily restocked - harvested area surveyed did not meet the requirements of the establishment survey. Only coniferous surveys completed between years 4-8 and deciduous surveys completed between years 3-5 were considered to determine achievment of the target. For example if a conifer block was surveyed as NSR in year 6, was retreated in year 7, and then resurveyed in year 10 as SR, the hectares were still attributed to this NSR category even though the survey is valid at year 10. The purpose of the target is try to achieve SR status on all hectares harvested by year 8 for conifer and year 5 for deciduous.

[3] **Regeneration Standard Met**- The regeneration standard can be met by achieving one of the following status':**SR** - Satisfactorily Restocked - meets all requirements of the establishment survey. **CSR** - Conditionally Satisfactorily Restocked - applies only to deciduous establishment surveys. The survey is deemed CSR if it meets one of three conditions as outlined in Section 2.2.1 Alberta regeneration manual (May 1, 2008). If CSR, a deciduous performance survey is required (see Target (2.1) 2a.2.1). RTD- Retreatment Complete- status that is applied for those openings that are NSR, but have subsequently been re-treated and are awaiting a performance survey. (November 2008-ASRD (October 2008 ARIS Industry Workshop Clarifications))

Indicator (2.1) 2a.2: Percentage of harvest areas meeting the regeneration standards as confirmed by completion of a performance survey.

Target (2.1) 2a.2.1:	**Acceptable variance:**
100% of harvest areas meet the required regeneration standards as confirmed by completion of performance surveys, measured on a 5-year rolling average.	Harvest areas obtaining skid clearance between March1, 1991 and April 30, 2001, for harvest areas passing performance surveys is a minimum of 85%; Harvest areas obtaining skid clearance after April 30, 2001 for harvest areas passing performance surveys is a minimum of 95%.

Status: Not a scheduled reporting time

For this reporting period, results are only available for the first 4 years of the 5 year target (1991 to 1994 timber years). Complete results for the first 5 year period will be available following completion of performance surveys for the 1995 timber year, and will be reported in the *2009 Annual Performance Monitoring Report.*

Current silviculture practices have evolved to address the factors that led to plantation failures in areas harvested in the early 1990's. Observations from the 2008 survey year indicate that overall restocking results are higher than in previous surveys, although a number of roads and debris pile sites in some openings had not been reforested, thereby reducing the percentage of satisfactory restocked area. Today's practices ensure that roads and piles are reforested promptly as per target (2.2) 1a.2.1 which states that "100% of temporary "in block" roads used for extraction of timber will be reforested within 18 months after the end of the timber year of harvest".

Canfor is currently engaged in the development of Alternate Regeneration Standards under the direction of the Alberta government that will provide a direct link between actual regeneration performance and growth and yield projection models used in the determination of annual allowable cut.

Table 15. Performance Survey Results (1991 to 1994 Timber Years)

Stocking Status	Area of Surveys (Ha)	%SR
SR [2]	8,622	
NSR[3]	2394	
Total	11,016	**78%**
[1]**Performance Surveys** -This report is based on a 4-year rolling average, as only 4 years of harvest areas were due for survey (199, 1992, 1993 & 1994 timber years).		
[2] **SR** - Satisfactory restocked - has met all performance survey requirements including Free to Grow (FTG).		
[3] **NSR** - not satisfactorily restocked - harvested area surveyed did not meet the requirements of the performance survey.		

Critical Element (2.2): Forest Ecosystem Productivity

Conserve ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species.

Value (2.2) 1: Sustained forest ecosystem productivity.
Objective (2.2) 1a: Ecosystem conditions that sustain productivity will be identified and maintained.
Indicator (2.2) 1a.1: Percentage of productive areas, adjacent to proposed harvest boundaries, impacted by windfall that receives a silviculture prescription annually.

Target (2.2) 1a.1.1:	**Acceptable variance:**
100% of the productive areas, adjacent to proposed harvest area boundaries, impacted by windfall receive a silviculture prescription annually.	Zero

Status: **Meets**

No significant windfall events were recorded or required silviculture prescriptions in 2008.

Indicator (2.2) 1a.2: Percentage of reforestation of temporary "in block" roads used for extraction of timber.

Target (2.2) 1a.2.1:	**Acceptable variance:**
100% of temporary "in block" roads used for extraction of timber will be reforested within 18 months after the end of the timber year of harvest.	Zero for the percentage of roads reforested. Timing of reforestation is +10 months.

Status: Meets

Canfor's Forest Management Advisory Committee approved a change in the acceptable variance of this target from 6 months to 10 months, which therefore allows for additional spring/summer months during which planting can occur.

For areas harvested during the 2006 timber year, temporary road locations were planted within eighteen months on 97% of the area. One cutblock did not meet the target of 18 months as log inventory was left adjacent to the roads. This inventory was hauled during the following harvesting season (2007 timber year), but debris piling was not completed until the 2008 timber year, thereby delaying the planting activities on the roads. These roads are scheduled to be planted during the 2009 spring planting season, which is still within the 28 month variance period. Canfor has greatly improved its success in meeting this target since 2004 as indicated in Table 16.

Table 16. Percentage of "In-Block" Roads Planted Within 18 Months

Timber Year	# Harvest Areas	Harvest Areas Planted Within 18 Months (%)	Harvest Areas Planted 19-28 Months (%)	Harvest Areas Planted Greater than 28 Months (%)
2004	114	21%	74%	5%
2005	69	55%	44%	1%
2006	32	97%	3%	0%

Indicator (2.2) 1a.3: Percentage of tasks outlined in the approved Growth and Yield Monitoring Plan (GYMP) completed on schedule.

Target (2.2) 1a.3.1:	**Acceptable variance:**
100% of tasks outlined in the approved Growth and Yield Monitoring Plan are completed on schedule.	A variance of + 6 months is acceptable on the implementation of the schedule of tasks outlined in the approved growth and yield monitoring plan.

Status: Assessment Postponed

The purpose of the Growth and Yield Monitoring Plan is to utilize the data derived from field measurements of established plots and other samples to establish future annual allowable cut[11] calculations and validation of present yield[12] predictions and reforestation performance. The growth and yield programs are critical to the development of the next DFMP. A list of growth and yield program is identified in the SFMP.

The following activities occurred in 2008:

- Re-measurement of 23 permanent sample plots;

[11] Annual Allowable Cut: the volume of wood (m^3) that can be harvested in one year from any area of forest under a sustained yield management regime.
[12] Yield: the volume of wood that can be removed that is equal to growth within the total forest.

- Establishment of 8 of 42 planned post harvest regenerated stand plots. Remainder of the program was rescheduled for completion in 2009 due to market conditions.
- Adherence to the requirements of the Standards for Tree Improvement in Alberta (ASRD, 2005) by tagging, numbering and recording all genetically improved trees during installation of new growth and yield monitoring plots;
- Completion of Regenerated Stand Site Productivity Project;
- Active membership in the Foothills Growth and Yield Association, Western Boreal Growth and Yield Association;
- Participation in the establishment of a provincial Growth and Yield Projection System; and
- Participation on Alternative Regeneration Standards in developing a program that links regeneration to Growth and Yield.

5. Criterion 3: Conservation of Soil and Water Resources

Conserve soil and water resources by maintaining their quantity and quality in forest ecosystems.

Critical Element (3.1): Soil Quality and Quantity

Conserve soil resources by maintaining soil quality and quantity.

Value (3.1) 1a: Soil productivity.
Objective (3.1) 1a: Soil productivity will be maintained or enhanced.
Indicator (3.1) 1a.1: Site Index[13]

Target (3.1) 1a.1.1:	**Acceptable variance:**
Average accumulated post harvest site index will not be less than average pre harvest site index (with reporting commencing in 2008).	90% confidence interval on the average difference between pre and post-harvest site indices must include zero or indicate that the post-harvest site indices are significantly greater than the pre-harvest site indices.

Status: Meets

Site index is a common measure of the overall productivity of forested ecosystems (inferred through tree growth). The measurement of tree growth is directly related to the productivity of the site. Consequently, tree growth is a general indication of the overall site productivity (Beckingham *et al*, 1996).

In June 2008, Canfor completed a *Regenerated Stand Productivity In North Central Alberta Report 2 Canadian Forest Products Forest Management Area* in conjunction with Weyerhaeuser and Alberta Newsprint Company that was approved by ASRD on June 24, 2008. After adjustment, the overall average site index change from pre to post harvest indicated a 15% increase in site index. These results indicate that average site index for each of the 3 major FMA species is higher on artificially regenerated sites than on naturally regenerated sites.

Table 17. 2003 DFMP Weighted Average Site Index Assumptions Compared with the Results of this Regenerated Stand Productivity Project.

Species	Natural Subregion	Area (ha)	2003 DFMP Site Index	RSP Project Site Index	Difference (m)	Change (%)
AW	Boreal Mixedwood	17,665	17.7	21	3.6	20%
	Lower Foothills	21,198	17.7	20	2.6	14%
	Upper Foothills	2,318	17.7	20	1.8	10%
PL	Boreal Mixedwood	11,368	16.6	21	4.7	28%
	Lower Foothills	29,470	16.4	19	2.7	16%
	Upper Foothills	35,140	14.9	18	2.9	19%
SW	Boreal Mixedwood	32,321	16.5	18	1.0	6%
	Lower Foothills	34,803	16	18	2.3	14%
	Upper Foothills	9,800	15.1	18	3.3	22%
Total		**194,084**	**16.5**	**19**	**2.4**	**15%**

[13] Site index: A measure of forest site productivity expressed as the average height of the tallest trees in the stand at a defined index age. Common Index ages are 40, 50, 70, 75, and 100 years. This is usually expressed as the predicted height for a specific tree species at a given breast height age.

Value (3.1) 2: Soil quantity
Objective (3.1) 2a: Soil erosion will be minimized.
Indicator (3.1) 2a.1: Number of slumping events caused by road construction.

Target (3.1) 2a.1.1:	**Acceptable variance:**
Zero major slumping events annually caused by road construction.	Zero

Status: Meets

Mass wasting within the FMA area is classified according to the area of soil impacted. The 3 categories are:

- Road grade cut failures ≤ 100 m^2;
- Minor slumps affecting ≤ 2500 m^2; and
- Major slumps affecting >2500 m^2.

Inspections in 2008 indicate there were no major slumps, minor slumps or road grade cut failures caused by road construction. Table 18 lists the slumps / road grade cut failures that have been previously identified and the 2008 inspection summary.

Table 18. Slumps / Road Grade Cut Failures Inspected in 2008

Road	Legal Description	GENUS Station	Date of Original Slump	Size (m^2)	2008 Inspection
Ridge Road (LOC 030770)	TWP 60 RGE 4 W6M	7+659	2004	300	Some additional vegetation establishing, some minor settling continues.
Norris Road (LOC 971399)	TWP 59 RGE 5 W6M	14+444	2000	250	Wet + seeping water to ditchline. Movement limited, continue to monitor.
Norris Road (LOC 971399)	TWP 59 RGE 5 W6M	15+430	2001	200	No major movement noted. Site is wet with old cracks and slumps.
Waskahigan Mainline (LOC 1292)	TWP 64 RGE 1 W6M	0+506	2004 +2005	200	Slow creep continues. No new major cracking. Veg established, no erosion concerns. Remediation pending funding again
Big Mountain One-Way (LOC 1206)	TWP 70 RGE 5 W6M	17+100	1999	200	No further movement noted. Continue to monitor
Bolton Main (LOC 033475)	TWP 59 RGE 4 W6M	0+100 to 1+100	2005	100	2 slumps into hillside require sloping and further monitoring. Additional seeding required, clean ditchline as needed.
Bolton Main (LOC 033475)	TWP 59 RGE 4 W6M	2+000	2005	250	Minor slumping at toe of slope into ditch. Clean ditch as required.

Indicator (3.1) 2a.2: Number of slumping events due to harvesting activities.

Target (3.1) 2a.2.1:	**Acceptable variance:**
Zero slumping events annually due to harvesting activities.	1 slump ≤ 100 m^2 annually.

Status: **Meets**

Aerial and ground surveys conducted in the 2008 timber year indicate that harvesting activities have caused no in-block slumps on steep or sensitive sites.

Indicator (3.1) 2a.3: Number of significant erosion events[14] related to silviculture, harvesting, and road activities.

Target (3.1) 2a.3.1:	**Acceptable variance:**
Zero significant erosion events related to silviculture, harvesting, and road activities annually.	Less than 5 events per year.

Status: **Meets**

Canfor conducts annual inspections on License of Occupation (LOC) roads. Erosion events on these LOC roads are tracked and reported under "Objective (3.2) 1a: Water quality will be conserved". A number of crossings have been identified on the FMA area as having the potential to contribute to a significant erosion event. Refer to Objective (3.2) 1a and associated target for further details.

Other secondary roads, in block and between block roads (S and R roads), as well as harvesting, road construction and silviculture operations are inspected and monitored throughout the year utilizing a risk-based approach in accordance with the procedures set out in Canfor's Forest Management System (risk assessment matrices for blocks/roads/projects). In addition to ground based monitoring and inspections, helicopter overview flights are conducted on blocks and roads to determine the presence of surface erosion or mass wasting and to evaluate the status of debris disposal and reforestation activities.

Minor erosion was noted along an in-block road within S222922, adjacent to a small permanent creek buffer during the 2008 final block clearance aerial assessment. In November of 2008 the road surface was reclaimed and control measures (debris, cross drain ditches, and native grass seed) were installed to reduce the probability of future erosion.

Indicator (3.1) 2a.4: Prompt road deactivation.

Target (3.1) 2a.4.1:	**Acceptable variance:**
100% of temporary roads will be permanently deactivated within 6 months after usage is complete.	Zero.

Status: **Does not meet**

To measure performance toward achievement of this target Canfor reports on the number of harvest units with temporary roads with reclamation completed because Canfor does not track management of each temporary road. A recommendation to change this target will be made to the Forest Management Advisory Committee.

Table 19 indicates the number of harvest units in the 2007 timber year which contained and/or was accessed by temporary roads. Of the 69 harvest units, roads are still required in 9 units, either because log inventory remains to be hauled, or the roads will access additional harvest units. Temporary roads were deactivated in 57 harvest units within 6 months of completion of usage. Temporary roads in the remaining 3 harvest units were not deactivated within the 6 month window due to a failure of communication between Canfor and the contractor. No erosion events or other issues were caused by the delay.

[14] Significant erosion event: erosion events where sediment is transported directly into a watercourse

Table 19. Temporary Roads Deactivation

	Total Harvest Units	# of Harvest Units that required Permanent Deactivation	Harvest Units with Reclamation Completed within 6 months of Last Activity	Harvest Units with Reclamation Not Completed within 6 months of Last Activity
# of Harvest Units Containing Temporary Roads	69	60	57	3
Percent			95%	5%

Objective (3.1) 2b: Soil will be conserved on site.
Indicator (3.1) 2b.1: Percentage of soil disturbance prescriptions that conform to Section 9.0.3 of the *Operating Ground Rules*.

Target (3.1) 2b.1.1:	**Acceptable variance:**
100% of prescriptions created throughout the year conform to Section 9.0.3 of the *Operating Ground Rules*.	Zero

Status: Meets

For the 2007 timber year, prescriptions for 8 planned harvest units exceeded the allowable ground disturbance as outlined in *Canfor FMA 9900037 Operating Ground Rules,* however all 8 units received Final Harvest Plan Approval in the 2007/08 annual operating plan.

Indicator (3.1) 2b.2: Percentage of harvest areas that do not exceed the soil disturbance prescriptions.

Target (3.1) 2b.2.1:	**Acceptable variance:**
100% of harvest areas do not exceed the soil disturbance prescriptions annually.	≥90% of the harvest areas does not exceed the soil disturbance prescriptions.

Status: **Does not meet**

Soil disturbance prescriptions are developed during the planning phase. When harvest areas and roads are located in the field, the area planned for roads within the harvest area is determined and documented in the Final Harvest Plan (FHP). Once harvesting is complete, the actual area disturbed by roads is determined and compared to the FHP prescription.

For the 2007 timber year, 67% of harvest areas did not exceed the soil disturbance prescriptions. Although this does not meet, in perspective the number of cutblocks above the soil disturbance prescriptions equals an area of 4 hectares which is relatively small compared to the total area of 766.4 hectares. The following table shows that of the 23 cutblocks that exceeded, 14 of the cutblocks were less than or equal to 0.3% area disturbance. The overall soil disturbance will be mitigated through implementation of prompt reforestation practices on block roads as indicated in target (2.2) 1a.2 *100% of temporary "in block" roads used for extraction of timber will be reforested within 18 months after the end of the timber year of harvest*."

The reasons for the variance include changes to block area or constructing additional roads to address operational issues. In March of 2009 Canfor will conduct a review of procedures related to the final harvest plan.

Table 20. Soil Disturbance Prescriptions Compared to Actual

		Road Allowance			Road Area		
Block ID	Harvested Area (ha)	Planned (%)	Actual (%)	Variance	Planned (ha)	Actual (ha)	Variance
G010477	151.7	3.1	3.2	0.1	4.7	4.9	0.2
G011092	10.3	3.1	4.5	1.4	0.3	0.5	0.1
G011097	6.5	3.0	3.3	0.3	0.2	0.2	0.0
G302079	10.1	3.8	3.9	0.1	0.4	0.4	0.0
G310110	11.9	3.8	3.9	0.1	0.5	0.5	0.0
G310144	9.2	3.4	3.7	0.3	0.3	0.3	0.0
G310349	11.4	2.3	3.4	1.1	0.3	0.4	0.1
G310376	31.9	3.5	4.1	0.6	1.1	1.3	0.2
G311085	16.4	2.6	3.9	1.3	0.4	0.6	0.2
G333644	8.6	4.7	4.8	0.1	0.4	0.4	0.0
G333658	27.1	5.2	5.5	0.3	1.4	1.5	0.1
G341959	44.1	0.2	0.3	0.1	0.1	0.1	0.0
G343073	38.8	1.5	1.6	0.1	0.6	0.6	0.0
G343537	61.8	2.8	4.2	1.4	1.7	2.6	0.9
R452488	81.9	2.3	2.6	0.3	1.9	2.1	0.2
R452588	32.9	2.0	3.1	1.1	0.7	1.0	0.4
R461956	52.5	2.4	2.7	0.3	1.3	1.4	0.2
S190363	29.1	1.9	3.7	1.8	0.6	1.1	0.5
S190464	32.9	2.0	2.2	0.2	0.7	0.7	0.1
S233370	12.9	3.2	3.3	0.1	0.4	0.4	0.0
S233509	29.2	3.6	5.3	1.7	1.0	1.5	0.5
W701420	27.0	2.5	3.1	0.6	0.7	0.8	0.2
W701521	28.1	3.2	3.3	0.1	0.9	0.9	0.0
Total	**766.4**						**4.0**

Critical Element (3.2): Water Quality and Quantity

Conserve water resources by maintaining water quality and quantity.

Value (3.2) 1: Water Quality.
Objective (3.2) 1a: Water quality will be conserved.
Indicator (3.2) 1a.1: The percentage of surveyed stream crossings identified with “High” and “Very High” WQCR[15] (Water Quality Concern Rating) on forestry roads for which the participants are responsible.

[15] WQCR: Water Quality Concern Rating. The WQCR is a 5-class hazard rating which indicates the level of concern for negative impacts on water quality arising from increased sediment delivery to the stream. The ratings are “none”, “low”, “medium”, “high” and “very high”. The ratings are converted from individual SCQI crossing scores. The WQCR identifies areas where crossing elements have the potential to cause sedimentation and also documents areas where effective erosion and sediment control is practiced (P. Beaudry).

Target (3.2) 1a.1.1:	**Acceptable variance:**
Less than 10% of surveyed stream crossings on forestry roads will have a "High" and "Very High" WQCR annually.	For 2007 <20% in the 'High' or 'Very High' category;

Status: Not a scheduled reporting time

Financial constraints limited the number of crossings remediated in 2008. As a result, there was limited improvement toward meeting the target for the next reporting period in 2009. Several crossings are scheduled for remediation and reassessment in 2009 and, subject to financial constraints, there is a reasonable likelihood of meeting the 2009 target.

The timeline below indicates the WQCR targets that have been established up to 2015 when the overall target is to be achieved:

- 2009 <17.5% in the 'High' or 'Very High' category;
- 2011 <15% in the 'High' or 'Very High' category;
- 2013 <12.5% in the 'High' or 'Very High' category; and
- 2015 <10% in the 'High' or 'Very High' category;

Indicator (3.2) 1a.2: The percentage of crossings that receive the required remedial action.

Target (3.2) 1a.2.1:	**Acceptable variance:**
100% of crossings receive remedial action as identified in the Road Management Plan annually.	Minimum of 90% of crossings receive remedial action.

Status: **Does not meet**

Crossing Maintenance activities include:

- Install, repair, replace, cleaning, add riprap, substructure repairs, and assessment for erosion / sediment control.

Financial constraints limited the number of maintenance activities and remedial actions on crossing that were completed in 2008. These activities have been rescheduled to future years with highest risk projects generally being assigned highest priority. However, completion of the work may be delayed if economic conditions do not improve.

Table 21. Crossing Remedial Actions Planned and Completed in 2008

Maintenance Activity	Number Planned	Number Completed	Percentage Completed	Comment
Crossing Maintenance	61	9	15%	Remainder rescheduled to future year

Indicator (3.2) 1a.3: The number of non-compliance incidents related to riparian zone standards.

Target (3.2) 1a.3.1:	**Acceptable variance:**
Zero non-compliance incidents related to riparian zone standards annually.	Zero

Status: **Meets**

No non-compliance incidents related to riparian zone standards occurred in 2008.

Value (3.2) 2: Water Quantity.
Objective (3.2) 2a: Water quantity will be maintained.
Indicator (3.2) 2a.1: Percentage of sampled watersheds that are in conformance with the average water yield increase limit indicated in *Canfor FMA 9900037 Operating Ground Rules* (ASRD, 2008).

Target (3.2) 2a.1.1:	**Acceptable variance:**
100% of sampled watersheds are in conformance with the annual average water yield increase limit of 15% as indicated in the Operating Ground Rules.	Total forest cover removal within a defined watershed will not cause an increase in annual average water yield of greater than 20% for a minimum of 10 of the highest Equivalent Clearcut Area (ECA) watersheds in the FMA area.

Status: Meets

Water yield percentages have been calculated using planned harvest areas as of October, 2008 for the ten watersheds with the highest ECA percentages. Results shown in Table 22 indicate there were no water yield increases above 15 percent in these watersheds.

Table 22. Average Water Yield Increase (%) for the 10 Highest ECA Watersheds

Sampled Watershed	2008 - 10 Highest ECA(%)	Average Water Yield Increase (%)
3523	40%	5%
4877	38%	1%
1775	38%	2%
670	36%	4%
462	34%	3%
10003	32%	11%
5123	32%	1%
4826	31%	2%
2057	30%	2%
5729	30%	2%

6. Criterion 4: Forest Ecosystem Contributions to Global and Ecological Cycles

Maintain forest conditions and management activities that contribute to the health of global ecological cycles.

Critical Element (4.1): Carbon Uptake and Storage

Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems.

Value (4.1) 1: Local contribution of carbon uptake and storage.
Objective (4.1) 1a: Carbon uptake and storage (i.e. carbon balance) will be maintained.
Indicator (4.1) 1a.1: Percentage of harvested areas reforested.

Target (4.1) 1a.1.1:	**Acceptable variance:**
100% of harvest areas are reforested within 18 months after the end of the timber year in which it was harvested.	+3 months.

Status: Meets

All areas harvested during the 2006 timber year were planted within 18 months of harvest.

Table 23. Harvested Areas Reforested Within 18 Months

Timber Year	# of Harvest Areas	# of Harvest Areas Reforested Within 18 Months	Percentage Reforested Within 18 Months
2002	127	127	100%
2003	126	126	100%
2004	83	76	92%
2005	100	100	100%
2006	32	32	100%

Indicator (4.1) 1a.2: Percentage of productive areas > 4 hectares impacted by fires that are regenerated.

Target (4.1) 1a.2.1:	**Acceptable variance:**
Reforest 100% of the productive areas > 4 hectares impacted by fire within 24 months.	Reforest at least 90% of productive areas > 4 hectares impacted by fire within 24 months.

Status: **Assessment Postponed**

Fire GWF-139-2006, that occurred in 2006 and the majority of the burned area (339 hectares) was planted in 2007. The remaining 78 hectares has potential for natural regeneration to occur and has been planned for assessment in 2009 to determine if enough germinates have established. When the assessment is completed the remaining area may be prescribed to be planted or left for natural regeneration.

During 2008, one fire (GWF-095-2008) greater than 4 hectares occurred on Canfor's FMA. This 55 hectare area will be assessed and a silviculture prescription prepared in the summer of 2009.

Critical Element (4.2): Forest Land Conversion

Protect forestlands from deforestation or conversion to non-forests.

Value (4.2) 1: Sustainable yield of timber.
Objective (4.2) 1a: A natural range of tree species will reforest every hectare that is harvested.
Indicator (4.2) 1a.1: Percentage of the harvested area sufficiently restocked by yield group.

Target (4.2) 1a.1.1:	**Acceptable variance:**
100% of the harvested area sufficiently restocked by yield group accumulated annually beginning in 2000.	+/- 10% of harvested areas (accumulated annually) will be sufficiently restocked by yield group.

Status: **Does not meet**

Canfor made a commitment within the DFMP to compare planned versus actual reforestation by yield group accumulated annually, beginning in 2000. Table 24 represents regeneration data for applicable yield groups for the period 2000 to 2008, inclusive. Of the 9 yield groups listed; yield groups 2,8,9 and 12 are within the acceptable variance of 10 percent, and yield groups 3,11,14, 16 & 17 do not meet the acceptable variance. As compared to last year, yield groups 9 and 12 went from does not meet to meets and yield groups 11 and 16 went from meets to does not meet.

The SBPL/SBSW yield group (14) continues to be challenging as black spruce is typically planted on the lower, wetter sites as a separate unit. Black spruce will grow mixed with pine or spruce, but planting is generally done on a site-specific basis. As more area is harvested and regenerated in each yield group, the variance percentages will decline. Silviculture staff will continue to work on strategies to align yield groups within acceptable variances. The division's emphasis on the harvesting of lodgepole pine dominated stands under the Healthy Pine Strategy will delay implementation of strategies to correct imbalances in yield groups 3, 16 and 17.

Table 24. Balancing Yield Groups within FMA Area

	2 AW	3 AWSW	8 PL	9 PLAW/AWPL	11 PLSW/SWPL	12 SB	14 SBPL or SBSW	16 SW	17 SWAW	TOTAL
Regenerated Yield Group (AVI) Ha	2026	1170	6087	544	1116	1457	1039	5679	2401	**21520**
Treated Regenerated Yield Group Ha	2060	1014	5995	597	1455	1510	394	6433	2062	**21520**
Percent Difference	2%	**-13%**	-2%	10%	**30%**	4%	**-62%**	**13%**	**-14%**	**0%**

Objective (4.2) 1b: The utilization of merchantable wood will be maximized.
Indicator (4.2) 1b.1: Percentage of harvested merchantable wood (conifer and deciduous) left on site.

Target (4.2) 1b.1.1:	**Acceptable variance:**
To leave less than 1% conifer and 1% deciduous harvested merchantable wood on site annually.	Zero

Status: **Assessment postponed**

Although 2008 was a scheduled waste and residue reporting year, due to the existing poor economic conditions, a management decision was made to postpone the surveys until 2010. During the 2007/08 harvesting season, Canfor received approval from ASRD to amend the utilization standard from 15/10

to 15/11 (this refers to a tree that is 15 centimeters in diameter at the stump end and either 10 or 11 centimeters at the top). As a result, there was an increase in the amount of material left in the bush. One of the ASRD conditions regarding the approval of the utilization standard amendment was a requirement for Canfor to complete an arithmetic calculation to determine the volume of wood left in the harvested area as a result of the change in utilization standard. In the 2008 General Development Plan, Canfor identified 14,384 m3 of wood as utilization drain including estimates of volume used for log culverts and trees burned to control the spread of mountain pine beetle.

Indicator (4.2) 1b.2: Percentage of dispositions where merchantable industrial salvage (m^3) is utilized on an annual basis.

Target (4.2) 1b.2.1:	**Acceptable variance:**
100% of the dispositions where merchantable industrial salvage wood from permanent land withdrawals is utilized on an annual basis.	At least 90% of dispositions where merchantable volume is harvested as a result of permanent land withdrawals.

Status: **Does not meet**

Coniferous Salvage Wood

Each request from industrial users for land withdrawal received by Canfor is reviewed and, if approved, a Coniferous Timber Salvage Commitment form is signed for each disposition that is withdrawn. Disposition holders must notify Canfor when salvaged timber is ready to haul. The *Logs Production Module* of Canfor's forestry system and an Access database are used to track a number of salvage components to ensure that all available coniferous salvage wood is hauled to the mill site. 100% of the merchantable coniferous industrial salvage reported to Canfor in 2007 was hauled into the mill site.

Deciduous Salvage Wood

Deciduous salvage wood within Canfor's FMA area has been allocated by Alberta Sustainable Resource Development to Ainsworth Lumber, Grande Prairie and Tolko Industries, High Prairie. At this time, Tolko's High Prairie mill is closed and is not accepting deliveries of deciduous salvage wood. Tolko has authorized Canfor to sign Deciduous Timber Salvage Commitment waivers on its behalf and Canfor does so for all land withdrawals which fall into Tolko's deciduous operating area. In an effort to ensure full utilization of deciduous salvage wood within its FMA area, Canfor advises each industrial operator that Ainsworth Lumber is willing to purchase the salvage located in Tolko's operating area. Although Canfor recommends the deciduous salvage to be utilized by the deciduous operators, Canfor currently does not have a process to track the actual utilization; therefore, the status of this target is that it does not meet.

Table 25. Coniferous Merchantable Industrial Salvage Wood

Year	Disposition Year of Consent					
	2002	2003	2004	2005	2006	2007
# of Dispositions Coniferous Salvage Available	18	73	59	92	101	93
# of Dispositions Coniferous Salvaged	17	68	57	88	101	93
Amount of Coniferous Salvage Wood (m^3)	4,340	11,803	10,764	21,405	17,986	22,110
Percent of # Dispositions where Salvage Available Delivered to Mill	**94%**	**93%**	**97%**	**96%**	**96%**	**96%**

Value (4.2) 2: Forests on the landbase.
Objective (4.2) 2a: Forests will be maintained on the landbase.
Indicator (4.2) 2a.1: Density (lineal km/km^2) of open (non-reclaimed) roads.

Target (4.2) 2a.1.1:	**Acceptable variance:**
To have no more than 0.6 lineal km/km^2 in open (non-reclaimed) roads over a 5-year period, for each FMA parcel (Peace, Puskwaskau, and Main).	Maximum of 0.7 km/ km^2 for the Peace, Puskwaskau and Main parcels.

Status: Meets

There was a reduction of 0.03 km/km^2 of non-reclaimed roads on the FMA area in 2008 and road density in the FMA remained below target levels in all parcels. Collaboration with individual oil and gas companies on future road development is continuing to minimize the amount of new road constructed and increase the rehabilitation of abandoned roads that are not required for future access. An example of this is the development of a Berland Smoky integrated Access Plan by the Foothills Landscape Management Forum whose membership includes both forestry and energy sector members. The Berland Smoky plan identifies existing and future main road corridors and prescribes deactivation and reclamation requirements for all temporary access. This plan was endorsed by ASRD on June 23, 2006, followed by distribution of an information letter on July 11, 2008.

Figure 11. Road Densities within the FMA

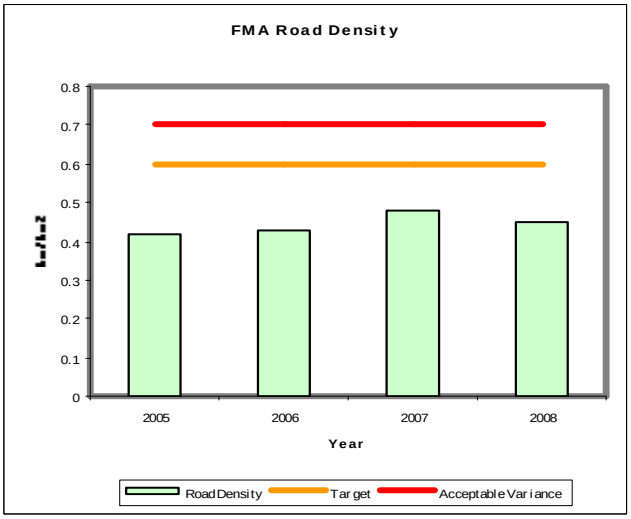


Figure 12. Road Densities within the Main

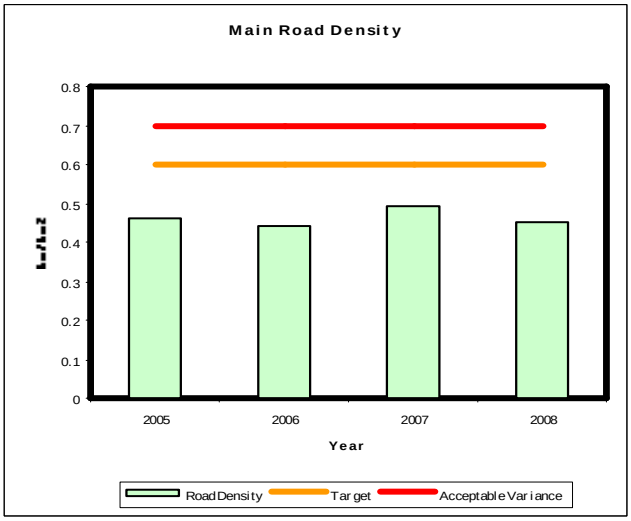


Figure 13. Road Densities within the Peace

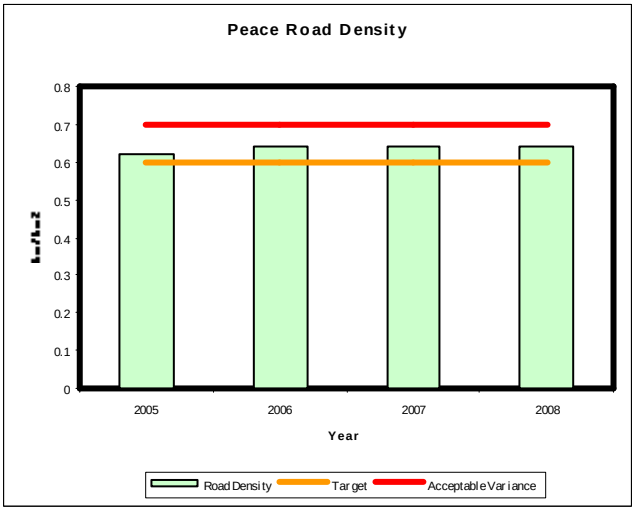
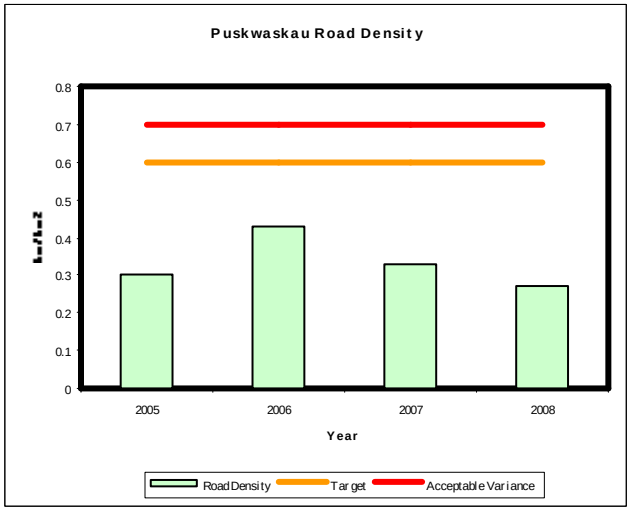


Figure 14. Road Densities within the Puskwaskau



Objective (4.2) 2b: Productive lands will be restored to productive status wherever possible.
Indicator (4.2) 2b.1: Percentage of withdrawn areas restored to productive forestland.

Target (4.2) 2b.1.1:	**Acceptable variance:**
100% of previously withdrawn areas that are suitable candidates for reforestation are restored to productive forestland within 24 months.	No less than 90% of suitable candidates reforested within 24 months of when the site is ready for planting.

Status: Does not meet

Canfor is working with the energy sector to develop procedures for reclaiming sites in preparation for tree planting. One component of the process will include identification of prescribed time frames for notification of Canfor when a site is ready for treatment.

Table 26 indicates withdrawn areas that have been planted since 2004. Nine areas that had been withdrawn in previous years were scheduled to be planted. Of the 9 areas, 4 were assessed and determined suitable. These 4 areas were planted in the summer of 2008. The remaining 5 areas were not in the vicinity of 2008 planting operations and therefore have been scheduled to be assessed for planting in spring/summer 2009.

Table 26. Planting of Previously Withdrawn Areas

Year	# of Withdrawn Suitable Areas Available	# of Withdrawn Areas Planted Within 24 Months	# of Withdrawn Areas Planted After 24 Months	% of Withdrawn Areas Planted Within 24 Months	Total % of Withdrawn Areas Planted
2004	7	0	7	0%	100%
2005	8	2	3	25%	63%
2006	16	11	2	69%	81%
2007	3	0	0	0%	0%
2008	9	2	2	22%	44%

7. Criterion 5: Multiple Benefits to Society

Sustain flows of forest benefits for current and future generations by providing multiple goods and services.

Critical Element (5.1) Timber and Non-Timber Benefits

Manage the forest to produce an acceptable and feasible mix of both timber and non-timber benefits.

Value (5.1) 1: Sustainable yield of timber.
Objective (5.1) 1a: Sustainable harvest levels on the FMA area will be maintained.
Indicator (5.1) 1a.1: Long-term harvest levels vs. actual extraction (m^3).

Target (5.1) 1a.1.1:	**Acceptable variance:**
Actual extraction rates (m^3) are less than or equal to the long-term harvest level (m^3) at the end of the 1999-2008 period.	Zero.

Status: Meets

Tables 27 and 28 indicate the actual coniferous and deciduous timber volumes harvested on the FMA area compared to the approved long-term harvest levels (AAC). Both tables indicate that accumulated harvest levels since 1999 are less than the approved long term harvest rates. The volume of deciduous reported as utilized will increase in future years as, under new procedures mandated by ASRD, unsalvaged deciduous volume located in predominately coniferous harvest areas will now be reported as utilized.

Table 27. Coniferous Harvest Levels

Timber Year	Harvested (m^3)*	Long-Term Harvest Level (m^3)	Variance (m^3)	Variance (%)
1999	555,038	640,000	-84,962	-13%
2000	644,861	640,000	4,861	1%
2001	579,200	640,000	-60,800	-10%
2002	626,525	640,000	-13,475	-2%
2003	658,898	640,000	18,898	3%
2004	465,950	640,000	-174,050	-27%
2005*	817,405	640,000	177,405	28%
2006*	576,022	640,000	-63,978	-10%
2007	601,085	640,000	-38,915	-6%
Total	**5,524,984**	**5,760,000**	**-235,016**	**-4%**

* The harvested volumes for 2005 and 2006 have been reconciled based on a government audit (TPRS). In addition, local LTP volumes harvested required adjustment from 1999 onward. This is reflected in the revised harvested volumes for the entire table.

Table 28. Deciduous Harvest Levels

Timber Year	Harvested (m^3)**	Long-Term Harvest Level (m^3)*	Variance (m^3)	Variance (%)
1999	151,072	226,312	-75,240	-33%
2000	230,148	226,312	3,836	2%
2001	179,797	226,312	-46,515	-21%
2002	159,916	226,312	-66,396	-29%
2003	145,399	226,312	-80,913	-36%
2004	228,629	226,312	2,317	1%
2005*	172,117	226,312	-54,195	-24%
2006*	188,008	453,712	-265,704	-59%
2007	213,017	453,712	-240,695	-53%
Total	**1,668,103**	**2,491,608**	**-823,505**	**-33%**

*** The harvested volumes for 2005 and 2006 were reconciled based on a government audit (TPRS). In addition, local LTP volumes harvested required adjustment from 1999 onward. This is reflected in the revised harvested volumes for the entire table. The 2*

**Although the long term harvest levels for deciduous are approved in the DFMP at 453,712 m^3, the ASRD finalized deciduous allocations are reported to date showing the deciduous long-term harvest level as 226,312 m^3 until 2006/07 Timber Year (2006) when*

Value (5.1) 2: Ongoing non-timber benefits.
Objective (5.1) 2a: Long-term availability of identified non-timber benefits will be maintained.
Indicator (5.1) 2a.1: Number of recreation areas maintained by Canfor.

Target (5.1) 2a.1.1:	**Acceptable variance:**
Canfor will maintain a minimum of 5 recreation areas for use by the public annually.	Zero.

Status: Meets

Canfor maintains recreational areas (Figure 15) in both its Grande Prairie and Hines Creek operations. Canfor Grande Prairie maintains four public recreational areas within the FMA area, and one site outside the FMA area, located approximately 25 kilometers west of Valleyview:

- MacLeod Flats (formerly Smoky Flats);
- Economy Lake;
- Frying Pan Creek;
- Westview; and
- Swan Lake (outside the FMA area).

In 2008, Canfor, Alberta Sustainable Resource Development and Alberta Tourism Parks Recreation and Culture (ATPRC) continued with the agreement signed in July 2007 to cooperatively fund, manage and operate the Swan Lake Recreation Area. This agreement is providing interim management while all three parties and other interested stakeholders work toward protected area status for the lands in the immediate vicinity of Swan Lake. With protected status, ATPRC can create a provincial recreation area for Swan Lake. Upon gaining protected status an updated management plan will be developed by ATPRC to address the new lands and direct any proposed development.

In order to promote public use of its sponsored recreation areas, Canfor Grande Prairie Division has produced a pamphlet entitled *Canfor Public Recreation Areas* that is available through the Grande Prairie Tourism Association, Muskoseepi Park and Canfor's Grande Prairie Administration Office.

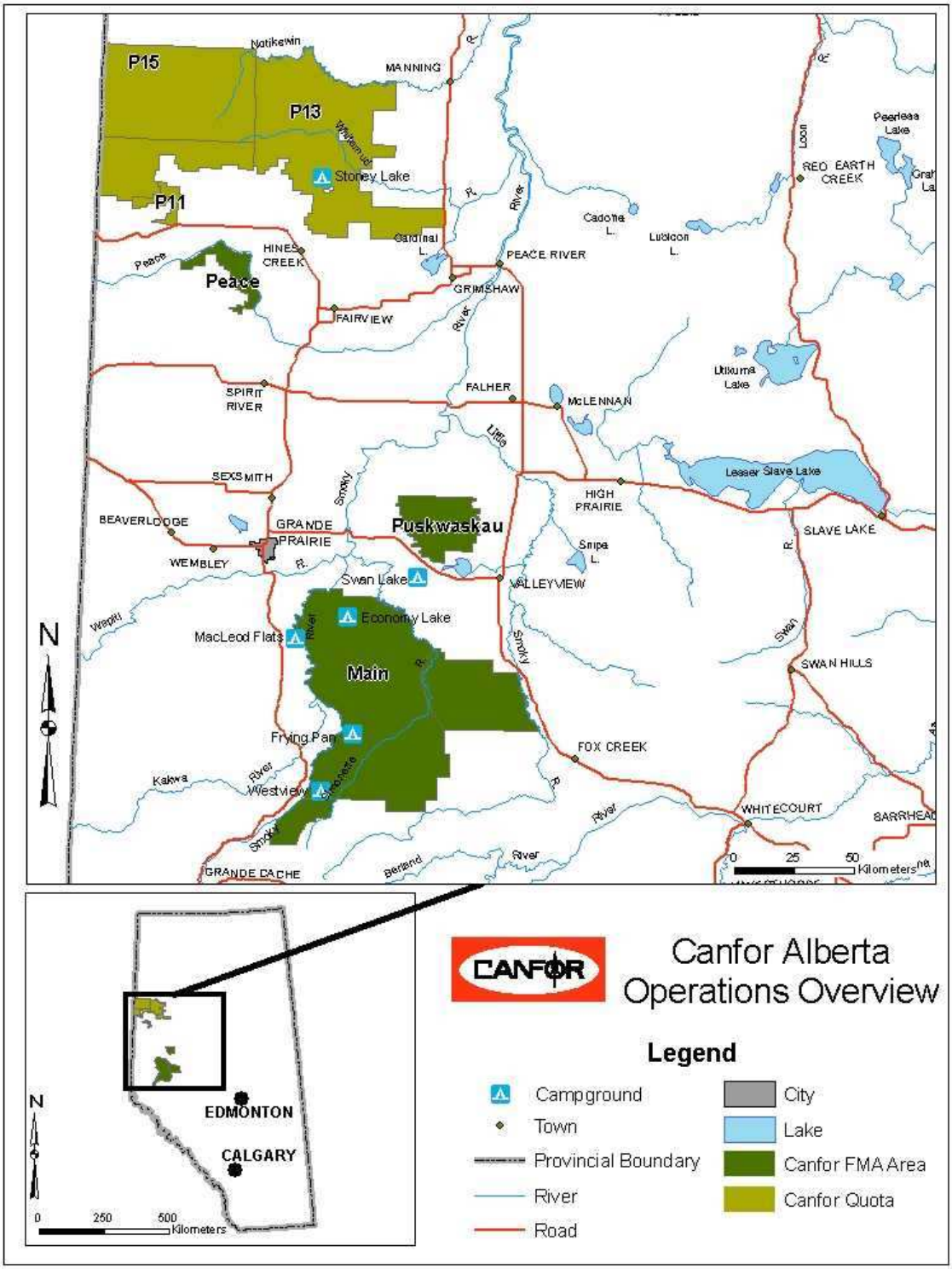


Figure 15. Location of Recreation Areas Managed by Canfor

In 2008 Canfor continued with the third year of financial support for the maintenance and operation of nine recreation areas in the greater Hines Creek/Fairview/Worsley area under agreements with Clear Hills County, Municipal District of Fairview and the Town of Fairview. The recreation areas and their facilities are listed in Table 29 below and a map showing their locations is included in Figure 15.

Table 29. Recreation Areas and Facilities

Authority	Recreation Area	RV Pull Through	Trailer Sites	Campsites	Tenting	Toilets	Cookhouse	Picnic Tables	Playground	Fire Pits	Firewood	Canoe/ Boat	Boat Launch	Fishing	Fish Cleaning Stn.	Swimming	Hiking Trails
Clear Hills County	Ole Lake		Y		Y	Y			Y	Y	Y	Y	Y	Y		Y	
	Many Islands	Y	Y		Y			Y	Y			Y	Y	Y			
	Running Lake		Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
	Carter's Camp		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y
	Clear River		Y	Y	Y	Y	Y	Y	Y	Y	Y			Y			Y
	George Lake	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y
Municipal District of Fairview	Maples Park					Y	Y	Y	Y	Y	Y						Y
	Pratt's Landing		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y
Town of Fairview	Cummings Lake	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y		Y

Indicator (5.1) 2a.2: Percentage of registered trappers contacted that are directly impacted by operations (harvesting, silviculture, and reclamation).

Target (5.1) 2a.2.1:	**Acceptable variance:**
100% of registered trappers directly impacted by harvesting, siliviculture, and reclamation operations are contacted as specified in the *Trappers Consultation and Notification Program* annually.	Zero, provided that Canfor and registered trappers make reasonable provisions that allow effective consultation and/ or notification.

Status: Does not meet

The *Trappers Consultation and Notification Program* (Canfor, 2004) provides direction to Canfor supervisors regarding consultation with aboriginal and non-aboriginal trappers and notification of registered trapline holders.

During the 2007 timber year, 100% of known trappers who were potentially impacted by Canfor activities were consulted during the planning stage. During the 2007 timber year, harvesting, silviculture or reclamation activities occurred within the territories of twelve registered trappers. These trappers were notified either through personal contact or by registered mail. However in one case, less than 30 days notice was provided prior to commencement of harvesting activities. This is an improvement over the previous year in which 3 trappers were not provided adequate notice. No further changes are recommended to the *Canfor's Trappers Consultation and Notification Program* as a result.

Table 30. Harvesting Trapper Notification

Area	# of Trappers Impacted	Trapper Notifications >30 Days	Success Rate
Harvesting	12	11	**92%**
Silviculture	29	29	**100%**

Indicator (5.1) 2a.3: Percentage of outfitters potentially affected by operations within the FMA area are informed of the 5-year harvest sequence.

Target (5.1) 2a.3.1:	**Acceptable variance:**
100% of outfitters potentially affected by operations within the FMA area will be supplied a 5-year General Development Plan map annually.	Zero

Status: Meets

All outfitters with licensed territories within the FMA area were mailed a 5 year General Development Plan map in July of 2008. Canfor did not receive any requests or other feedback from those outfitters contacted.

Critical Element (5.2): Communities and Sustainability

Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and to participate in their use and management.

Value (5.2) 1: A range of benefits to local communities.
Objective (5.2) 1a: Local communities and contractors will have the opportunity to share in benefits such as jobs, contracts and services.
Indicator (5.2) 1a.1: Percentage of dollars paid for local vs. non-local contract services.

Target (5.2) 1a.1.1:	**Acceptable variance:**
Over a rolling 5-year period, a minimum of 75% of dollars paid for contract services will be expended locally.	Zero.

Status: **Meets**

Table 31 indicates the local versus non-local contract service dollars expended by Grande Prairie Division since 2004. During the five year period from 2004 to 2008, 85 percent of the dollars paid by Grande Prairie Division for contract services was expended locally. This represents a one percent increase from the previous five year period.

Table 31. Local Versus Non-local Contract Services Expenditures

Contribution	2002	2003	2004	2005	2006	2007	2008
Local Contract Services ($ millions)	29.0	34.6	36.9	38.1	53.7	31.2	34.4
Non-Local Contract Services ($ millions)	7.2	8.6	8.1	7.3	6.6	5.9	5.9
subtotal	36.2	43.2	45.0	45.4	60.3	37.1	40.2
% Local Contractors (5 year rolling avg.)					**84%**	**84%**	**85%**

Objective (5.2) 1b: The forests will be accessible to the public for social and cultural benefits.
Indicator (5.2) 1b.1: Percentage of identified social and cultural benefits that occur in the FMA area.

Target (5.2) 1b.1.1:	**Acceptable variance:**
Maintain 100% of identified social and cultural benefits that occur on the FMA area annually.	Zero.

Status: **Meets**

On January 18th, 2006 Canfor's Forest Management Advisory Committee reviewed a list of identified social and cultural benefits prepared by Canfor and provided additional information to the company. In 2008, the social and cultural benefits indicated in Table 32 were available and accessible by the public.

Canfor does not restrict public access within the FMA area with the exception of areas where ASRD applies legal restrictions; for example ASRD restricts vehicle traffic on some roads by requiring the installation and maintenance of gates as a means of protecting caribou populations.

Table 32. Social and Cultural Benefits Identified in the FMA Area

Benefit	Availability of Benefit in 2008
Recreational	
Hunting/fishing	X
Camping/picnicking/social gathering	X
ATV'ing/snowmobiling	X
Walking/hiking/jogging/mountain biking/skiing	X
Horseback/trail riding	X
Boating/canoeing/kayaking/rafting	X
Sight seeing/wildlife watching/nature watching	X
Nature photography/painting	X
Berry picking/plant and rock collecting	X
Firewood/poles/other wood collecting	X
Non-recreational	X
Trapping/outfitting/guiding	X
Working	X
Studying/researching	X
Small business timber harvesting	X
Cultural (includes Aboriginal)	
Traditional hunting/fishing/trapping/gathering	X
Traditional plants	X
Spiritual gatherings/activities	X
Teepee poles	X
Percent Available	**100%**

Critical Element (5.3): Fair Distribution of Benefits and Costs

Promote the fair distribution of timber and non-timber benefits and costs.

Value (5.3) 1: Fair distribution of benefits and costs will be ensured across communities.
Objective (5.3) 1a: A fair distribution of benefits and costs will be ensured across all communities and contractors in the local area.
Indicator (5.3) 1a.1: Percentage of economic contributions to local communities.

Target (5.3) 1a.1.1:	**Acceptable variance:**
Annual economic contributions to local communities will be a minimum of 80% of the 5-year rolling average.	Zero

Status: **Meets**

Canfor contributes to the local economy in the form of wages and benefits, property taxes, contract services, purchases of goods and services, and community donations. In 2008, Canfor's contribution to local communities was $55.3 million. Table 35 indicates this represents 90 percent of the 5 year rolling average (2004-2008). The percentage remains unchanged from the previous year, but is less than the amount recorded in years prior to 2007. As in 2007, Grande Prairie Division reduced mill operating and woodlands costs significantly in response to record low lumber prices, the rise (then fall) of the Canadian dollar, dramatically decreasing North American housing starts, and a 15 percent export tax imposed under the US/Canada Softwood Lumber Agreement. In addition, implementation of the Healthy Pine Strategy and, in particular, increased harvesting of lodgepole pine stands, has resulted in reduced harvesting and silviculture costs, most of which is expended locally.

Table 33. Contributions to Local Communities

Contribution (millions $)	2002	2003	2004	2005	2006	2007	2008
Wages and Benefits	13.5	14.6	14.7	15.0	15.8	15.5	14.3
Property Taxes	0.8	0.8	0.9	0.9	0.9	0.9	0.9
Local Contract Services	29	34.6	36.9	38.1	53.7	31.2	34.4
Supplies	4.4	5.5	6	6.4	6.6	6	5.7
Community Donations	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Total	47.8	55.6	58.6	60.5	77.1	53.7	55.3
Local Contribution (5-Year Rolling Average)					59.92	61.1	61.0
% Within the 5-Year Rolling Average						**90%**	**90%**

Indicator (5.3) 1a.2: Percentage of coniferous timber available for local use.

Target (5.3) 1a.2.1:	**Acceptable variance:**
0.5% of the coniferous AAC is made available for local use and for local residents as per FMA 9900037 annually.	Not to exceed the annual allocation of 0.5% of the approved coniferous AAC (640,000 m^3) over a 10-year cut control period (1999–2008), which equates to 3,152 m^3/ year or 31,520 m^3 for the 10 year period.

Status: **Meets**

In accordance with Section 8(2)(d) of the Forest Management Agreement (Canfor, 1999), 0.5% of the AAC (3,152 m^3) is made available for *"local use in construction and maintenance of public works by any local authority, municipality, county, the Crown in the Right of Alberta or Canada and for local residents."* These programs are administered through ASRD and are subject to government regulation.

Canfor and ASRD work cooperatively to identify areas for this program. During the first few years of the cut control period, there was no demand from local loggers through ASRD, therefore relatively little volume was produced. Results for the 2005 to 2007 period have been reconciled with actual deliveries. It should be noted that the year in which the volume was delivered does not necessarily equate to the year that the permit was issued. Due to the nature of the local timber permit system, local loggers report volume harvested when it is sawn and sold. The 2008 value is a proposed volume. ASRD has not confirmed how much of that volume was actually permitted during the year.

To date 0.4% of the coniferous AAC has been utilized.

Table 34. Volume of Permits issued within the FMA Area

Timber Year Issued	Volume (m3)
1999	300
2000	0
2001	80
2002	0
2003	3,892
2004	7,657
2005	2,320
2006	3,989
2007	2,765
2008*	3,000
Total	**24,003**
Average	2,400
% of AAC	0.4
*Estimate	

Indicator (5.3) 1a.3: Volume of coniferous timber made available for local use.

Target (5.3) 1a.3.1:	**Acceptable variance:**
10,000 m^3 of the coniferous AAC is made available annually for Community Timber Use (CTU) program.	Not to exceed the total annual allocation of 10,000 m^3 in any given timber season.

Status: **Meets**

In accordance with Section 8(2)(e) of the FMA (Canfor, 1999), the Minister reserves the right to issue coniferous timber dispositions to provide up to 10,000 m^3 available for a Community Timber Use (CTU) Program. The 2004 harvest season was the first year that ASRD requested that the 10,000 cubic meter volume be made available. The proposed volumes for the CTU Program are included in Canfor's Annual Operating Plan.

Since 2004, the coniferous volumes in Table 35 have been made available, via competitive bid, to any interested party, typically local sawmillers/loggers or forest products companies. Due to quadrant balancing requirements, ASRD will not make CTU volume available for competitive bid in the 2008 timber year. An average of 9,377 m^3 per year has been delivered under the program during the 2004 to 2008 period.

Table 35. Local Use Coniferous Timber Volume Allocation by Timber Year

Operational Unit	2004 (m^3)	2005 (m^3)	2006 (m^3)	2007 (m^3)	2008 proposed (m3)
Economy	8,066				
Latornell		7,496	9,798		
Smoky				12,150	0

8. Criterion 6: Accepting Society's Responsibility for Sustainable Development

Society's responsibility for sustainable forest management requires that fair, effective forest management decisions are made.

Critical Element (6.1): Aboriginal and Treaty Rights

Recognize and respect Aboriginal and treaty rights.

Value (6.1) 1: Understand and respect Aboriginal and treaty rights.
Objective (6.1) 1a: Infringement of Aboriginal and treaty rights will be avoided.
Indicator (6.1) 1a.1: Percent conformance to Sustainable Forest Management elements pertinent to the protection of aboriginal and treaty rights.

Target (6.1) 1a.1.1:	**Acceptable variance:**
100% conformance to SFMP targets of Element (1.2) Species Diversity and Element (3.2) Water Quality and Quantity annually.	80% conformance to the acceptable variances of SFMP targets related to species diversity, and water quality and quantity.

Status: Does not meet

Elements (1.2) and (3.2) include twelve targets related to the management of species diversity, water quality and water quantity. Maintenance and protection of those resources provides defacto protection for aboriginal and treaty rights. Two of the twelve related targets are not at a scheduled reporting time and the assessment of results for two other targets was postponed in 2008. In one case, the decision to postpone the assessment was made because implementation of Canfor's Healthy Pine Strategy caused significant changes to the spatial harvest sequence, therefore necessitating a re-evaluation of the target, and in the other case the postponement was a cost reduction initiative, reflective of the dire economic situation faced by Canfor and the remainder of the forest industry. Six of the eight reported targets (75%) were met in 2008. Following is a summary of results:

- Critical Element (1.2) Species Diversity:
  - Target (1.2) 1a.1.1: Maintenance of habitat suitability rating
    - Results: Assessment postponed
  - Target (1.2) 1a.2.1: Management of Equivalent Clearcut Area (ECA) in bull trout watersheds
    - Results: Meets
  - Target (1.2) 1a.3.1: Management of forest seral condition in caribou habitat area and maintenance of buffers adjacent to trumpeter swan lakes
    - Results: Not a scheduled reporting time for forest seral condition in caribou habitat area and meets regarding buffers adjacent to trumpeter swan habitat. In consideration of the results of projected seral stage condition conducted as part of Canfor's Healthy Pine Strategy, progress toward this target is considered met.
  - Target (1.2) 1a.4.1: Rare plant identification training for Canfor staff
    - Results: Meets
  - Target (1.2) 1a.5.1: Participation in biodiversity monitoring program(s)
    - Results: Meets

- Target (1.2) 1a.6.1: Retention of coarse woody debris
  - Results: Assessment postponed
- Target (1.2) 1a.7.1: Establishment of planned watercourse buffers
  - Meets
- Target (1.2) 1a.8.1: Management of structure retention
  - Results: Does not meet

➢ Critical Element (3.2) Water Quality and Quantity

- Target (3.2) 1a.1.1: Management of Water Quality Concern Rating on stream crossings
  - Results: Not a scheduled reporting time
- Target (3.2) 1a.2.1: Remedial action for stream crossings
  - Results: Does not meet
- Target (3.2) 1a.3.1: Compiance with riparian zones standards
  - Results: Meets
- Target (3.2) 2a.1.1: Conformance to water yield increase limits
  - Results: Meets

Critical Element (6.2): Respect for Aboriginal Forest Values, Knowledge, and Uses

Respect traditional Aboriginal forest values and uses identified through the Aboriginal consultation process.

Value (6.2) 1: Understand and respect treaty and Aboriginal special needs.
Objective (6.2) 1a: Early and effective consultation with Aboriginal peoples will be provided.
Indicator (6.2) 1a.1: Number of opportunities for early and effective consultation with Aboriginal peoples.

Target (6.2) 1a.1.1:	**Acceptable variance:**
To annually provide a range of opportunities for early and effective consultation with Aboriginal peoples who have indicated interest in activities on the FMA area.	Opportunity for meaningful consultation on General Development plans must be provided to members of the Sturgeon Lake Cree Nation, Zone 6 Métis Nation of Alberta and the Aseniwuche Winewak Nation of Canada annually.

Status: Meets

Consultation with Aboriginal communities regarding Canfor's activities on the FMA is carried out in conformance with the recently approved *Alberta First Nations Consultation Guidelines on Land Management and Resource Development* (GOA, 2006*).* Implementation of the guidelines has resulted in identification of the Horse Lake First Nation as having interests within Canfor's FMA operating area. Meanwhile, Canfor maintained contact through its consultation processes with Sturgeon Lake Cree Nation (SLCN) the Aseniwuche Winewak Nation of Canada (AWN) and Zone 6 Métis Nation of Alberta.

Canfor retains a record of all meetings and actions related to First Nations communication in the *Creating Opportunities for Public Involvement* database maintained by Grande Prairie Division staff.

Following is a summary of communication between Canfor and local First Nations during 2008.

Horse Lake First Nation

- In March, a General Development Plan (GDP) information sharing package was sent to Horse Lake First Nation to solicit feedback on Canfor's planned harvesting and silviculture activities. At the band's request, Canfor met personally with a Horse Lake representative to evaluate Canfor's blocks against the band's known cultural and historic sites. Horse Lake provided Canfor with a letter indicating that harvesting and silviculture activities proposed for the 2008/09 timber year were not in conflict with known Horse Lake First Nation cultural or historic sites.
- In October, an amendment to the Annual Operating Plan was sent by Canfor to Horse Lake. Horse Lake responded to Canfor by email shortly thereafter that they had evaluated the newly proposed blocks and no conflicts were noted.

Sturgeon Lake Cree Nation (SLCN)

- Sturgeon Lake Cree Nation received Canfor's March GDP information sharing package and requested a personal meeting with Canfor in April. At the ensuing meeting, Canfor outlined proposed harvesting plans and strategy for the upcoming year with no formal response from SLCN.
- On August 12th Canfor met with the Sturgeon Lake Cree Nation Chief and Council to discuss relationship building and economic opportunities.
- On September 26th a community meeting was held at the band office to provide an opportunity for community members to review Canfor's GDP and discuss concerns about herbicide use on the FMA.
- In October, an amendment to the Annual Operating Plan was sent by Canfor to Sturgeon Lake but no response from the band was received.

Aseniwuche Winewak Nation of Canada (AWN)

- In March Aseniwuche Winewak Nation received the March GDP information sharing package and responded to Canfor that there were no concerns.
- In October, an amendment to the Annual Operating Plan was sent by Canfor to AWN and AWN responded that there were no concerns.
- In November, AWN attended the joint industry open house in Grande Prairie and communicated to the Canfor representative that AWN will not be entering into any new Memoranda of Understanding (MoU) at this time. Canfor had been discussing the terms of a possible MoU with AWN for the past several years but has terminated those discussions following the AWN declaration.

Zone 6 Métis Nation of Alberta and Sturgeon Lake Cree Nation continue to provide a representative on Canfor's Forest Management Advisory Committee.

Objective (6.2) 1b: Special cultural and historic sites will be respected.
Indicator (6.2) 1b.1: Percentage of historic resources that are protected.

Target (6.2) 1b.1.1:	**Acceptable variance:**
100% conformance to the prescription for historical resources prepared by a certified archaeologist annually.	Zero.

Status: **Meets**

In 2008, 5 sites of historical significance were identified through field pre-impact assessments conducted by an independent certified archaeologist. All these sites were delineated from the harvest areas and avoided during operations.

Indicator (6.2) 1b.2: Percentage of known local historical resources that are respected.

Target (6.2) 1b.2.1:	**Acceptable variance:**
100% of known local historical resources are respected annually.	Zero.

Status: Meets

Known local historical resources are identified through use of the *Heritage Potential Model* that received approval from Alberta Community Development in 2002. This model was updated in the fall of 2006, and is currently undergoing further revision. All 2008 planned harvest units were screened against the current model by a certified archaeologist to ensure that no harvest operations were planned within the immediate vicinity of known local historical resources.

Critical Element (6.3): Public Participation

Demonstrate that the public participation process is designed and functioning to the satisfaction of the participants.

Value (6.3) 1: Inclusive public process.
Objective (6.3) 1a: Affected and locally interested parties will be involved in the development of the decision-making process through an open, transparent and accountable process.
Indicator (6.3) 1a.1: Percentage conformance to the Forest Management Advisory Committee's Terms of Reference (FMAC, 2007).

Target (6.3) 1a.1.1:	**Acceptable variance:**
100% conformance to the FMAC's Terms of Reference (TOR) annually.	Zero.

Status: **Meets**

All FMAC activities were conducted in accordance with the terms of reference (TOR) in 2008. The TOR was reviewed and ratified at the November 19th, 2008 FMAC meeting.

Indicator (6.3) 1a.2: Number of opportunities for public participation.

Target (6.3) 1a.2.1:	**Acceptable variance:**
To provide a minimum of 4 types of opportunities for public participation annually.	Zero

Status: **Meets**

Canfor offered the following opportunities for public involvement during 2008:

1. An active public advisory group (FMAC);
2. An open house September 26th at the Sturgeon Lake Cree Nation band office;
3. A public open house for review of Canfor's GDP and Annual Operating Plan (AOP) November 19th in Grande Prairie;
4. Open houses for review of Canfor's Vegetation Management Plan March 18th in Spirit River, April 14th in Valleyview, , and March 20th in Grande Prairie;
5. Annual trapper consultation and notification regarding harvesting and silviculture plans;
6. Annual outfitter notification regarding harvesting and silviculture plans; and

7. Responses to letters and telephone calls to Canfor from the public.

In addition, the Sustainable Forest Management Plan (SFMP), Annual Performance Monitoring Report, 5 year GDP/AOP and DFMP was made available to the public in a variety of locations (at the Canfor Grande Prairie Woodlands office, local libraries, open houses, trade shows, and on www.canfor.com.)

Indicator (6.3) 1a.3: Percentage of public inquiries that receive an initial contact.

Target (6.3) 1a.3.1:	**Acceptable variance:**
To make initial contact to 100% of public inquiries within one month of receipt.	To make initial contact with a minimum of 90% of the public inquiries within one month.

Status: **Does not meet**

Canfor received 3 public inquiries in 2008 (Table 36), and 2 responses were completed within 1 month. However, an inquiry regarding a speeding log truck has not been dealt with due to a failure of communication within Canfor's woodlands department. In the future, Canfor's FMS committee will follow up on all public inquiries to ensure that appropriate responses have been completed within the specified time frame.

Table 36. Response to Public Inquiries

Topic of Public Inquiry	Date of Inquiry	Method of Inquiry	Date of Initial Contact	Initial Contact Within 1 Month
Speeding log truck	30-Jan-08	Telephone	Not done	No
Fuel staining on road	28-Oct-08	In person	28-Oct-08	Yes
Log truck at stop sign	17-Dec-08	Telephone	19-Dec-08	Yes

Critical Element (6.4): Information for Decision-Making

Provide relevant information to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems.

Value (6.4) 1: Current scientific, local, and traditional knowledge.
Objective (6.4) 1a: Forest management decisions will be based on scientific, local, and traditional knowledge.
Indicator (6.4) 1a.1: Number of opportunities to enhance scientific, local, and traditional knowledge.

Target (6.4) 1a.1.1:	**Acceptable variance:**
To provide a minimum of 8 different opportunities to enhance knowledge annually.	Zero.

Status: **Meets**

In 2008, Canfor provided the following opportunities to enhance knowledge:

1. Public access to the *2007 Annual Performance Monitoring Report* was provided at local libraries, on www.canfor.com, and at the Canfor Grande Prairie Woodlands office;
2. Public access to the approved 2006/07, 5 year GDP/AOP was provided at open house(s), at local libraries and at the Canfor Grande Prairie Woodlands office;

3. Public access to the approved DFMP was provided at local libraries, on www.canfor.com and at the Canfor Grande Prairie Woodland office;
4. Financial and technical support for the Grande Prairie and Area Forest Educator was provided by Canfor and other local forestry companies;
   - In the 2007/08 season (July 1st, 2007 to June 30th, 2008) the forest educator spoke to 2,791 students.
5. Support was provided for "Envirothon" for high school students who learn about forestry, soil, water, energy sector activities and wildlife;
6. Sponsorship and volunteering for Alberta Forestry Week "Walk Thru the Forest", at which students learn about various forestry topics;
7. Sponsorship and volunteering for Alberta Forestry Week "Arbor Day" at which grade one students learn about the importance of trees;
8. Sponsorship of open houses (see (6.3) 1a.2.1 for details); and
9. Presentations at FMAC meetings by Jim Stephenson (State of the Forest Industry) and Dwight Weeks (DFMP amendment required due to mountain pine beetle outbreak) with Canfor.

Indicator (6.4) 1a.2: Number of active research projects.

Target (6.4) 1a.2.1:	**Acceptable variance:**
To be involved in a minimum of 10 active research projects annually.	Zero

Status: **Meets**

Research plays an essential role in the successful implementation of sustainable forest management. Research also provides important information used in decision-making regarding the management of forestry operations (i.e. timber harvesting, road construction and maintenance, silviculture, etc.) and forest products manufacturing.

Canfor is involved in research in a variety of ways. Each year, Canfor allocates significant resources to support forest research, forestry education, and projects that enhance the general public's forestry knowledge. The company also maintains representation on several associations, committees and groups that initiate or support research.

Table 37 indicates that in 2008, Canfor Grande Prairie Division participated in eleven research projects. Funding levels indicated are for the duration of the project, up to December 31, 2008. These levels fluctuate as active projects are completed and new projects are initiated.

Table 37. Research Projects, Reports and Organizations

Project Identifier	Project Name	Funding ($)
CANFOR-01-064	Competition Modeling	$625,362
CANFOR-01-066	EMEND Phases 9 - 13	$1,060,500
CANFOR-01-070	Grizzly Bear Health Project	$70,916
CANFOR-01-078	Western Boreal Growth and Yield Association	$241,567
CANFOR-01-080	Foothills Growth & Yield Association	$224,956
CANFOR-01-083	Boreal Forest Research Centre	$53,899
	subtotal	**$1,756,778.10**
Partner Research Projects		
FOOMOD 01-04	Foothills Landscape Management Forum	$76,500
FOOMOD 01-5	Caribou Adaptive Management Plan	$70,900
HWWOOD 091-129	Growth and Yield Projection System	$183,000
MDFP 01-34	White Spruce Physiology	$50,000
OF 02-16	Enhanced Management Lodgepole Pine	$3,600
	subtotal	**$384,000.00**
	Grand Total	**$2,140,778.10**

9. Summary

The status of the 60 targets found throughout this *2008 Annual Performance Monitoring Report* is summarized in Table 38 below.

Table 38. Summary of Performance

Classification	2006	2007	2008
Number of targets met	36	38	37
Number of targets not met	12	12	11
Number of targets not due for reporting	9	10	7
Number of targets for which assessment postponed	0	0	5
Total number of CSA Z809-02 targets	**60**	**60**	**60**

Canfor's performance is assessed annually through internal and external audits. Canfor's independent third party audits are performed by KPMG Performance Registrar Inc, who define audit findings in the following categories:

- Major nonconformities: Are pervasive or critical to the achievement of the SFM Objectives. They must be addressed immediately or certification cannot be achieved/maintained.
- Minor nonconformities: Are isolated incidents that are non-critical to the achievement of SFM Objectives. All nonconformities require the development of a corrective action plan within 30 days of the audit, which must be fully implemented by the operation within 3 months.
- Opportunities for Improvement: Are not nonconformities but are comments on specific areas of the SFM System where improvements can be made.

In 2008, 2 audits of the Grande Prairie Division's forestry systems were conducted:

- February 19 to 21, 2008 - Canfor internal audit of CAN/CSA Z809-02, including PEFC Chain of Custody for the Grande Prairie FMA area and ISO 14001:2004 for Grande Prairie FMA area and Hines Creek quota areas, with the following findings reproted:
  - 4 good practices;
  - 2 minor nonconformities; and
  - 1 opportunity for improvement.

- August 26 to 28, 2008 - Independent third party surveillance audit of CAN/CSA Z809-02, including PEFC Chain of Custody for Grande Prairie FMA area and ISO 14001:2004 for Grande Prairie FMA area and Hines Creek Quota areas, with the following findings reproted:
  - 3 minor nonconformities; and
  - 1 opportunity for improvement.

Note: Audit results include findings related to the ISO14001 standard which may be applicable to the Hines Creek quota areas but may not be related to SFM and/or the Grande Prairie FMA area.

All independent third party audit non-conformance incidents require a corrective action plan to be prepared by Canfor and approved by the registrar. As well, Canfor develops corrective action plans for all non-conformance incidents and opportunities for improvement detected by Canfor during inspections of operations. All incidents and related action plans are recorded in the *Incident Tracking System* database by Canfor woodlands staff.

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