

2017 ANNUAL PERFORMANCE MONITORING REPORT

Alberta

Reporting Period:
May 1, 2017 to April 30, 2018
Aug 1, 2018



ANNUAL PERFORMANCE MONITORING REPORT

Grande Prairie Division
Aug 1, 2018

REPORTING PERIOD: May 1, 2017 –April 30, 2018

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Executive Summary

The *Annual Performance Monitoring Report* has been prepared in accordance with the Canadian Standards Association CAN/CSA-Z809-08 Sustainable Forest Management standard (CSA, 2008). The report summarizes the progress and performance that Canfor's Grande Prairie Division has achieved in meeting and maintaining the Sustainable Forest Management (SFM) requirements.

The *Sustainable Forest Management Plan* (SFMP) for the Canfor Grande Prairie, Defined Forest Area (DFA) conforms to the Canadian Standards Association (CSA) Sustainable Forest Management Standard, which is one of the primary certification systems in Canada. The SFMP includes a set of values, objectives, indicators and targets (VOITs) that address environmental, economic, and social aspects of forest management within the DFA. Development of the VOITs for the SFMP were founded on four guiding documents:

1. The CAN/CSA Z809-08 Standard;
2. Canfor Corporate Indicators prepared under the CAN/CSA Z809-08 Standard;
3. The *Alberta Forest Management Planning Standard, Annex 4 VOITs* (ESRD, 2006); and
4. The Canfor Grande Prairie 2005 VOITs prepared under the CAN/CSA Z809-02 Standard.

Canfor submitted its 2015 Forest Management Plan (FMP) to Alberta Environment and Sustainable Resource Development (AESRD) for approval on May 1, 2015 as required under the terms of Forest Management Agreement 9900037 (Province of Alberta Order in Council 012/2015) (GOA, 2015). As a means of strengthening Canfor's commitment to Sustainable Forest Management (SFM), the SFMP is incorporated into the 2015 FMP as a means to link the values, objectives, indicators, and targets as set forth in the SFMP to the strategic vision and operational strategies set forth in the FMP.

Lumber markets continue to improve reflecting the gradual but steady recovery of the US homebuilding market while still navigating the ongoing uncertainty in the market place with respect to trade. Meanwhile, Canfor is maintaining a concentrated focus diversifying its market base by exploring offshore markets where sales of North American forest products remain strong. Canfor's Grande Prairie facility continues to demonstrate strong operational performance and improvement, a direct reflection of capital investments in green energy, the planer, log yard and sawmill.

Mountain pine beetle (MPB) survival rates in west-central Alberta remain relatively high and beetles continue to be detected. Canfor is continuing its aggressive strategy to mitigate the potential loss of timber supply due to the MPB infestation by focusing forest management efforts on susceptible, infested, and dead pine stands. Capital improvements have resulted in an increase in production and product recovery from smaller sized timber, thereby improving the company's ability to successfully manage the impacts of Mountain Pine Beetle in Alberta. The government continues to support this strategy by approving millions in emergency funding for Mountain Pine Beetle mitigation activities including; detection, sanitation harvesting, stand rehabilitation and research.

As verified by internal and third party audits, Canfor Alberta continues to demonstrate overall conformance to the SFM requirements of the CAN/CSA Z809-08 standard, the ISO 14001:2004 standard and Canfor corporate environmental commitments. Canfor is currently pursuing re-certification under the CSA Z809-16 Standard and has worked with its public advisory group to update the 2012 SFMP to meet the new standard. Upon successful re-certification, subsequent annual reports will report to the new SFMP.

Progress toward achievement of individual SFM targets is described fully within this *Annual Performance Monitoring Report*. Following is a summary of the reporting period performance:

Classification	2017
Number of targets "Meets"	49
Number of targets "Does Not Meet"	2
Number of targets "Pending"	5
Total number of CSA Z809-08 targets	56

Prior period results indicate Canfor Alberta achieved 96% in meeting the targets outlined in the SFMP. 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.

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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 Alberta has sought and achieved certification under a variety of respected standards including International Organization for Standardization (ISO) 14001, CAN/CSA Z809-02 and Program for the Endorsement of Forest Certification (PEFC) Chain of Custody. In 2012, in conjunction with the active forest tenure holders and consultation with the Forest Management Advisory Committee, Canfor developed a *Sustainable Forest Management Plan 2012* (Canfor, 2012) based on the CSA Z809-08 standard. Canfor was audited and received certification to the CSA Z809-08 standard on November 8, 2012.

1.2. The CSA Sustainable Forest Management System Standard

In 1996, six criteria were developed by the Canadian Council of Forest Ministers (CCFM, 1997) to address sustainable forest management. The criteria address the key aspects of forest management.

In 2000, when CSA set out to review and approve the original standard it sought out and incorporated public input once again. From the review, work on the third edition of the CSA Z809-08 began in 2004. Input from existing public advisory groups active in the implementation of this standard as well as Aboriginal representation was included to improve the effectiveness.

As a result, the 6 Criteria have been reviewed and revised:

- Criterion 1: Biological Diversity;*
- Criterion 2: Ecosystem Condition and Productivity;*
- Criterion 3: Soil and Water;*
- Criterion 4: Role in Global Ecological Cycles;*
- Criterion 5: Economic and Social Benefits; and*
- Criterion 6: Society's Responsibility.*

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, provide 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 values¹, objectives², indicators³ and targets⁴ (VOITs). Canfor's Alberta Forest Management Group (FMG) Forest Management Advisory Committee assisted Canfor in the development of the Sustainable Forest Management Plan (SFMP) by identifying quantifiable

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.

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* (June 2016) and *Canfor's Sustainable Forest Management Commitments* (June 2016) that apply to all of Canfor forestry operations.

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 Alberta is the Forest Management Agreement (FMA) area indicated in Figure 1 below. The compartments are defined as Peace, Puskwaskau, and Main.

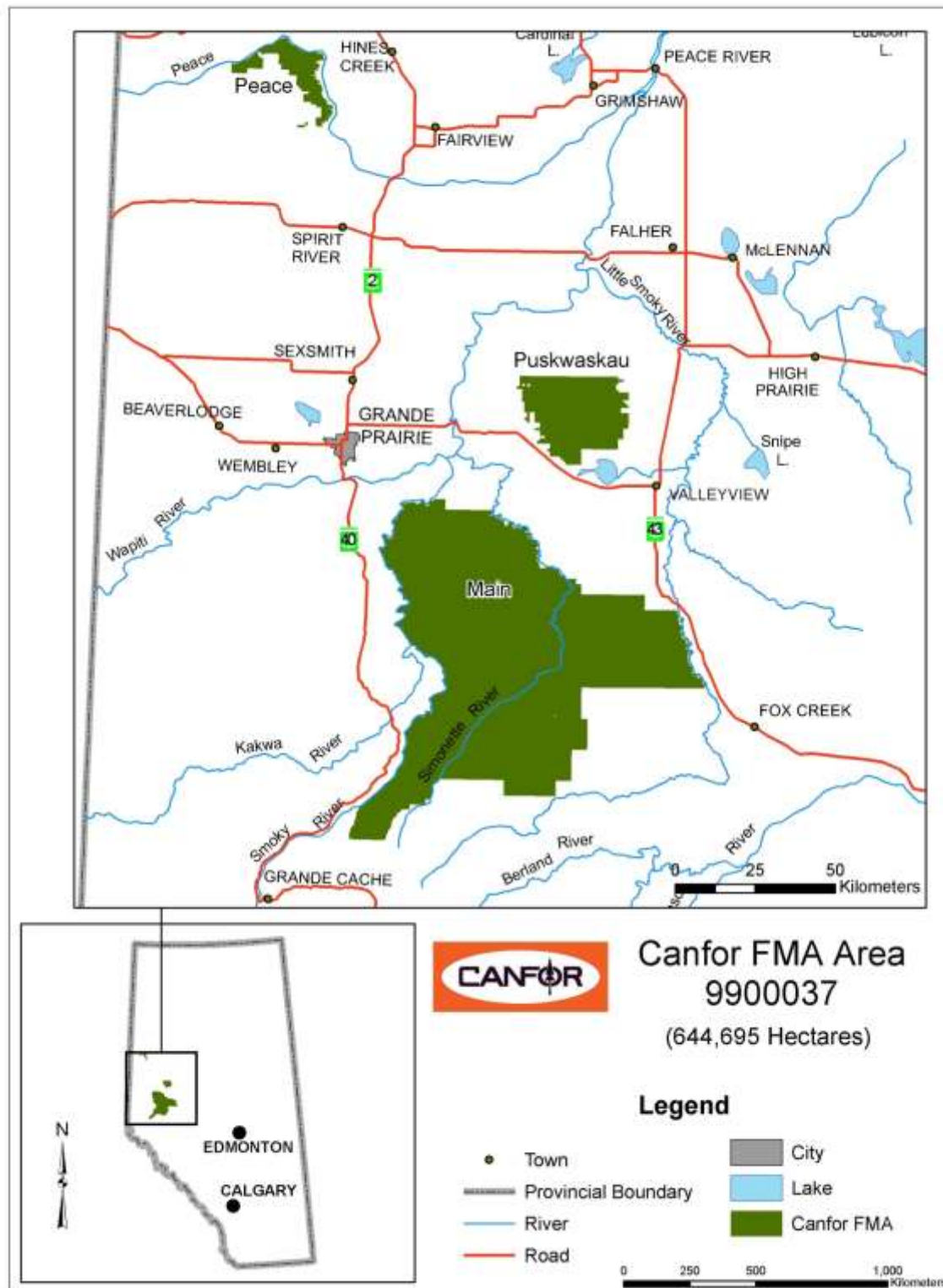


Figure 1. Defined Forest Area (DFA)

1.5. Landbase & Resource Information

Total Landbase: 644,695 hectares (ha)

Productive Landbase (Coniferous and Deciduous): 480,576 ha

Approved (2015) Coniferous AAC: 714,100 m³/yr.

Approved (2009) Deciduous AAC: 452,500 m³/yr.

1.6. Annual Report

The 2017 Annual Performance Monitoring Report (APMR) has been prepared to illustrate Canfor's progress in meeting commitments identified in Canfor Alberta's *Sustainable Forest Management Plan 2012, Revised November 2015* in accordance with the CSA Z809-08 standard (CSA, 2008). 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 56 targets (Sections 3-9). Unless otherwise stated in the report, all of the targets are reported for the period of May 1, 2017 - April 30, 2018 (2017 timber year).

Three classifications are used for reporting performance toward achievement of each target:

1. Meets;
2. Does not meet; and
3. Pending

2. Progress in Meeting and Maintaining SFM Requirements

In 2012, the Canfor Forest Management Advisory Committee (FMAC) developed qualitative and quantitative local level values, objectives, indicators and targets of sustainable forest management, as defined in the Canadian Standards Association CAN/CSA Z809-08 standard. These were then used to develop the 2012 SFMP. The SFMP was audited by an independent third party (KPMG Performance Registrar) and approved on November 8, 2012.

Canfor's 2013 independent third party audit identified some findings in regards to forecasts in the 2012 SFMP. As a result, the SFMP was revised in April 2014 and reviewed with the FMAC to address the audit findings.

Canfor submitted its 2015 Forest Management Plan (FMP) to Alberta Environment and Sustainable Resource Development (AESRD) for approval on May 1, 2015 as required under the terms of Forest Management Agreement 9900037 (Province of Alberta Order in Council 012/2015) (GOA, 2015). As a means of strengthening Canfor's commitment to SFM, the SFMP is incorporated into the FMP as a way to link the values, objectives, indicators, and targets set out in the SFMP to the strategic vision and operational strategies set out in the 2015 FMP. In order to ensure linkage between the two plans, minor amendments were made to the SFMP in November 2015. Canfor's 2015 Forest Management Plan was approved by the Government of Alberta (GoA) on April 18, 2016.

Since approval of the SFMP, Canfor Alberta FMG has maintained overall conformance to the SFM requirements of the CAN/CSA Z809-08 standard and Canfor corporate commitments. Results of internal and external third party audits are included in Section 9.

Progress toward achievement of individual targets is included in Sections 3 through 8. Results of target achievement are summarized in below.

Table 1. 2017 Target Summary

CSA Core Indicator	Indicator Statement	Target	Meets	Does Not Meet	Pending
1.1.1 Ecosystem area by type	1.1.1 Percent of occurrence of identified uncommon (Forested/Woodland) plant communities protected within DFA	1.1.1 100% of identified uncommon (Forested/Woodland) plant communities will be maintained	X		
1.1.2 Forest area by type or species composition	1.1.2 Percent distribution of forest type (treed conifer, treed broad leaf, treed mixed) >20 years old across DFA	1.1.2 Maintain the current baseline percent distribution of forest types (treed conifer, treed broad leaf, treed mixed) >20 years old into the future	X		
1.1.3 Forest area by seral stage or age class	1.1.3a) Area of old interior forest by Natural Region by cover class across the DFA	1.1.3a) 100% of area of old interior forest will be within the 10 year forecast by Natural Region			X
	1.1.3b) Range of patch sizes by subunit and entire DFA	1.1.3b) Patch size distribution will achieve natural patch size distribution levels over the 200 year planning horizon			X
	1.1.3c) Percent of area of pioneer, young, and old forest by Natural Region across the DFA	1.1.3c) 100% of pioneer, young, and old forest by Natural Region will meet the Preferred Forest Management Scenario forecast			X
1.1.4 Degree of within-stand structural retention	1.1.4a) Percent of total annual harvested area retained in openings across the DFA	1.1.4a) On a 5 year rolling average, no less than 4% of the area (ha) harvested will be retained as merchantable un-harvested and dispersed structure retention across the Defined Forest Area	X		
	1.1.4b) Number of non-compliances where forest operations are not consistent with riparian management requirements as identified in operation plans	1.1.4b) Zero non-compliances, specific to the Operating Ground Rules (OGR), with riparian management requirements in forest operations	X		
	1.1.4c) Area of un-salvaged burned forest	1.1.4c) 100% of burned areas that have salvage plans will be implemented in conformance with Alberta Environment and Sustainable Resource Development's directive	X		
	1.1.4d) Area of un-salvaged blowdown	1.1.4d) In areas of significant blowdown (>10ha), a minimum of 25% of the area will be left un-salvaged	X		
1.2.1 Degree of habitat protection for selected focal species, including species at risk	1.2.1a) Trumpeter Swan habitat maintained	1.2.1a) No future winter harvest within 200 meters and no summer harvesting within 800 meters of provincially identified Trumpeter Swan sites	X		
	1.2.1b) Percentage of significant wildlife mineral licks conserved	1.2.1b) 100% of significant wildlife mineral licks will be conserved annually, consistent with Operating Ground Rules	X		
1.2.2 Degree of suitable habitat in the long term for selected focal species, including species at risk	1.2.2a) Sufficient amount of functional woodland caribou habitat over time	1.2.2a) (1): • No timber harvesting will occur in the Conservation zone identified within the Little Smoky/A La Pêche ranges for the period of May 1, 2014-April 30, 2024 • No timber harvesting will occur in the Timber Supply Subunits DS3, DS4 and DS5 within the Little Smoky range for the period May 1, 2014-April 30, 2019 • No timber harvesting will occur in the Timber Supply Subunits DS1, DS2, DS6 and DS7 within the Little Smoky range for the period May 1, 2014-April 30, 2024	X		
		1.2.2a) (2): All future harvested areas, excluding the deciduous broad cover group, in all identified Caribou Management Zones will be reforested to a coniferous standard to reduce alternate prey habitat	X		
		1.2.2a) (3): Canfor Alberta will have zero contribution to open-route density south of the Deep Valley	X		
	1.2.2b) Fish risk ranking for bull trout and Arctic grayling	1.2.2b) 100% of watersheds with a high or very high fish risk ranking and >25% Canfor influence will be assessed using Canfor's Fish Risk Flow Chart and have mitigation strategies scheduled and implemented	X		
	1.2.2c) Amount of barred owl habitat available for breeding pairs	1.2.2c) The amount of the potential Barred Owl habitat for breeding pairs will not be less than 10% of current levels across the DFA	X		
	1.2.2d) Density (lineal km/km ²) of open (License of Occupation and Temporary non-reclaimed) roads	1.2.2d) Density of open roads (lineal km/km ²) not to exceed 0.6 km/km ² for the primary Grizzly Bear Range and Caribou Range and 1.2 km/km ² for the remainder of the Defined Forest Area parcels (Main, Puskwaskau & Peace) and secondary Grizzly Bear Range	X		
1.2.3 Proportion of regeneration comprised of native species	1.2.3 Regeneration consistent with provincial regulations and standards for seed and vegetative material use	1.2.3 100% conformance with the Alberta Forest Genetics Resources Management and Conservation Standards	X		
1.3 No core indicator in Z809-08 for Element 1.3 - waiting for practical indicators to be developed	1.3 Regeneration consistent with provincial regulations and standards for seed and vegetative material use	1.3 100% conformance with the Alberta Forest Genetic Resources Management and Conservation Standards for all seed collection and seedling deployment	X		
1.4.1 Proportion of identified sites with implemented management strategies	1.4.1a) Percent of forest management activities where consultation has occurred for operations near protected park areas	1.4.1a) The Province will be consulted 100% of the time when operations will occur within one kilometer of legally protected park areas	X		
	1.4.1b) Percent of forest management activities consistent with management strategies for sites of biological significance	1.4.1b) 100% of identified biologically significant sites will have implemented management strategies identified in consultation with the Province	X		
1.4.2 Protection of identified sacred and culturally important sites	1.4.2 (6.2.1) % of identified historic sacred and culturally important sites, forest values, traditional knowledge and uses considered in forestry planning processes	1.4.2 (6.2.1) 100% of historic, sacred and culturally important sites, forest values, traditional knowledge and uses known or identified through communication are considered in forestry planning	X		

CSA Core Indicator	Indicator Statement	Target	Meets	Does Not Meet	Pending
2.1.1 Reforestation success	2.1.1a) Prompt reforestation	2.1.1a) 100% of all harvested blocks will be reforested within 2 years	X		
	2.1.1b) Prompt retreatment of failed areas	2.1.1b) All harvested blocks that have not achieved the regeneration targets as per the Regeneration Standards of Alberta establishment survey standards will have remedial treatments completed within 12 months of the survey date	X		
	2.1.1c) Actual regenerated stand yield compared to the yield expectations of the Timber Supply Analysis	2.1.1c) The regenerated stand yield (Mean Annual Increment) for the total of all sampling populations will meet or exceed the regenerated stand yield assumptions of the Timber Supply Analysis in the Regeneration Standards of Alberta performance survey process	X		
	2.1.1d) Noxious weed program implementation	2.1.1d) 100% of noxious weeds identified along Canfor Alberta's dispositions will have treatments scheduled and completed according to the plan	X		
2.2.1 (4.2) Additions and deletions to the forest area	2.2.1 (4.2) Percent of gross forested land base in the DFA converted to non-forest land use through forest management activities.	2.2.1 (4.2) Forest management company activities not to exceed 3% reduction in gross Defined Forest Area over the life of the Forest Management Agreement (May 26, 1964)	X		
2.2.2 Proportion of the calculated long-term sustainable harvest level that is actually harvested	2.2.2 % of volume harvested compared to long term harvest level	2.2.2 Not to exceed 100% of the approved harvest level (Annual Allowable Cut) over 5 years (5 yr. quadrant balance)	X		
3.1.1 Level of soil disturbance	3.1.1a) % of harvested blocks meeting soil disturbance objectives identified in plans and Operating Ground Rules	3.1.1a) 100% of harvested blocks will not exceed 5% soil disturbance without government approval as outlined in Canfor Operating Ground Rules		X	
	3.1.1b) % of soil erosion and slumping incidences with mitigation strategies implemented	3.1.1b) 100% of known significant erosion and slumping events caused by forest operations will have mitigation strategies implemented within one year of identification	X		
3.1.2 Level of downed woody debris	3.1.2 Percentage of harvested area by subunit with coarse woody debris equivalent to pre-harvest conditions	3.1.2 100% of subunits (Peace, Puskwaskau and Main) will meet or exceed coarse woody debris conditions equivalent to the pre-harvest state			X
3.2.1 Proportion of watershed or water management areas with recent stand-replacing disturbance	3.2.1a) Watershed with moderate or high risk level assessments with mitigation strategies implemented	3.2.1a) 100% of watersheds with a moderate or high risk level will have approved mitigation strategies implemented	X		
3.2.1 Proportion of watershed or water management areas with recent stand-replacing disturbance	3.2.1b) Drainage structures with identified water quality concerns that have mitigation strategies implemented	3.2.1b) 100% of medium and high hazard drainage structures will have mitigation strategies implemented according to the road maintenance plan for permanent Canfor Alberta roads	X		
	3.2.1c) Forestry water crossing construction and maintenance work in compliance with Code of Practice for Water Course Crossings or Operating Ground Rules within each subunit	3.2.1c) 100% of forestry water crossing construction and maintenance work in compliance with Code of Practice for Water Course Crossings or Operating Ground Rules	X		
4.1.1 Net carbon uptake	4.1.1 The tons of carbon stored in each of the carbon pools	4.1.1 Achieve 100% of the carbon stored in each of the carbon pools as defined by the Preferred Forest Management Scenario forecast			X
4.2 (2.2.1) Additions and deletions to the forest area	4.2 (2.2.1) Percent of gross forested land base in the DFA converted to non-forest land use through forest management activities	4.2 (2.2.1) Forest Management company activities not to exceed 3% reduction in gross Defined Forest Area over the life of the Forest Management Agreement (May 26, 1964)	X		
5.1.1 Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA	5.1.1a) % of volume harvested compared to long term approved harvest level	5.1.1a) Not to exceed 100% of the approved harvest level (Annual Allowable Cut) over 5 years (5 yr. quadrant balance)	X		
	5.1.1b) Maintenance of recreational areas for non-timber values	5.1.1b) Canfor Alberta will maintain a minimum of 3 recreational areas for use by the public within DFA	X		
5.2.1 Level of investment in initiatives that contribute to community sustainability	5.2.1 a) Investment in local communities	5.2.1a) Over a rolling 5-year period, a minimum of 75% of Canfor Alberta forest operations dollars paid for contract services will be expended locally	X		
	5.2.1 b) Investment in local communities	5.2.1b) Canfor FMG Alberta will provide financial/in-kind support to a minimum of 8 community events or services	X		
5.2.2 Level of investment in training and skills development	5.2.2 Training in environmental and safety procedures in compliance with company training plans	5.2.2 100% of Canfor FMG Alberta employees and contractors have both environmental and safety training	X		
5.2.3 Level of direct and indirect employment	5.2.3 Level of direct and indirect employment	5.2.3 Report annually on trend of Canfor Alberta's level of direct and indirect jobs created from the DFA	X		
5.2.4 Level of Aboriginal participation in the forest economy	5.2.4 Opportunities for Aboriginal communities and contractors to participate in the forest economy.	5.2.4 Maintain evidence that opportunities have been provided	X		
6.1.1 Evidence of a good understanding of the nature of Aboriginal title and rights	6.1.1 Canfor FMG Alberta employees will receive Aboriginal awareness training	6.1.1 100% of Canfor FMG Alberta Forestry Supervisors, Coordinators, Superintendents, and the Operations Manager will receive credible and effective Aboriginal awareness training once every two years		X	
6.1.2 Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans	6.1.2 Members of local Aboriginal communities will be provided ample opportunity to understand Canfor Alberta's forest management plan	6.1.2 Opportunity to communicate key components of the forest management plan have been provided to each affected local Aboriginal group	X		
6.1.3 Level of management and/or protection of areas where culturally important practices and activities (hunting, fishing, gathering) occur	6.1.3 % of forest operations in conformance with operational/site plans developed to address Aboriginal forest values, traditional knowledge and uses	6.1.3 100% of forest operations are conducted in conformance with operational/site plans that have been developed to address Aboriginal forest values, traditional knowledge and uses	X		

CSA Core Indicator	Indicator Statement	Target	Meets	Does Not Meet	Pending
6.2.1 Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values	6.2.1 (1.4.2) % of identified historic, sacred and culturally important sites, forest values, traditional knowledge and uses considered in forestry planning processes	6.2.1 (1.4.2) 100% of historic, sacred and culturally important sites, forest values, traditional knowledge and uses known or identified through communication are considered in forestry planning processes	X		
6.3.1 Evidence that the organization has co-operated with other forest-dependent businesses, forest users, and the local community to strengthen and diversify the local economy	6.3.1 Relationships with other forest businesses and users	6.3.1 Evidence of minimum of 4 relationships with forest products businesses annually within the vicinity of the DFA	X		
6.3.2 Evidence of co-operation with DFA-related workers and their unions to improve and enhance safety standards, procedures, and outcomes in all DFA-related workplaces and affected communities	6.3.2 Implementation and maintenance of a certified safety program	6.3.2 100% of Canfor FMG Alberta and eligible DFA-related contractors will obtain and maintain a Certificate of Recognition (COR) or equivalent	X		
6.3.3 Evidence that a worker safety program has been implemented and is periodically reviewed and improved	6.3.3 Implementation and maintenance of certified safety program	6.3.3 100% of recommendations from Partners in Injury Reduction (PIR) audit will be addressed and action plans developed	X		
6.4.1 Level of participant satisfaction with the public participation process	6.4.1 Public advisory group maintained and satisfaction survey implemented	6.4.1 80% annual satisfaction from surveys in all four targets	X		
6.4.2 Evidence of efforts to promote capacity development and meaningful participation in general	6.4.2 Number of educational opportunities for information/training/capacity building that are delivered to the public advisory group annually	6.4.2 Provide one educational opportunity per FMAC meeting, plus one field tour opportunity per year	X		
6.4.3 Evidence of efforts to promote capacity development and meaningful participation for Aboriginal communities	6.4.3 Number of opportunities for information/training/capacity development that are delivered to the Aboriginal communities annually	6.4.3 Greater than or equal to 1 Aboriginal information/training/capacity development opportunity per year	X		
6.5.1 Number of people reached through educational outreach	6.5.1 The number of educational opportunities provided to the community	6.5.1 A minimum of 5 educational opportunities provided to the community annually	X		
6.5.2 Availability of summary information on issues of concern to the public	6.5.2a) CSA Z809-08 Sustainable Forest Management monitoring report made available to the public annually	6.5.2a) CSA Z809-08 Sustainable Forest Management Plan and Annual Performance Monitoring Report made available to public annually on Canfor's external website	X		
	6.5.2b) Percentage of public inquiries that receive an initial contact	6.5.2b) 100% of all inquiries receive initial contact within 1 month of receipt	X		
			49	2	5

3. Criterion 1: Biological Diversity

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

Element (1.1): Ecosystem Diversity

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

Value: Natural ecosystems on the landscape

Objective: All current ecosystems are represented on the landscape at current levels

CSA Core Indicator 1.1.1: Ecosystem area by type

Indicator Statement 1.1.1: Percent of occurrence of identified uncommon (Forested/Woodland) plant communities protected within DFA

Target 1.1.1:

100% of identified uncommon (Forest/Woodland) plant communities will be maintained

Acceptable variance:

No variance. 100% of identified uncommon (Forest/Woodland) plant communities will be maintained

Status: Meets

Alberta Conservation Information Management System (ACIMS) is a biodiversity data centre that provides accurate accessible biodiversity information necessary for making informed decisions concerning conservation, natural resources and development planning. ACIMS continually updates the database and shape files; as information is obtained it is disseminated to various stakeholders, of which Canfor receives notification of changes.

Canfor's current *Uncommon Forest/Woodland Ecological Community Identification Guide* was compared to most recent ACIMS Community Tracking List. No new Forested/Woodland plant communities were added.

Canfor's harvesting operations for the 2017 timber year were compared to the latest ACIMS *Element Occurrences Non-sensitive 2017* shape file. There was no harvesting within or in the vicinity of any of these identified sites.

Field Operations came across a suspected rare plant "Western Jewelweed" in August of 2017. This was submitted to ACIMS, however has not been listed as an uncommon plant community site within the ACIMS database.

All planning and permitting staff and contractors have received copies of the manual and Uncommon (Forest/Woodland) Plant Community Identification training for the field season. Training was also provided as part of the contractor general pre-work meeting on May 2, 2017.

CSA Core Indicator 1.1.2: Forest area by type or species composition

Indicator Statement 1.1.2: Percent distribution of forest type (treed conifer, treed broad leaf, treed mixed) >20 years old across DFA

Target 1.1.2:

Maintain the current baseline percent distribution of forest types (treed conifer, treed broad leaf, treed mixed) >20 years old into the future

Acceptable variance:

+/- 5% of the baseline percent for all three forest types

Status: Meets

The distribution of forest types have been maintained across the DFA in the 2017 timber year. The percent distribution remained unchanged in comparison to the 2016 timber year.

Table 2. Forest Area by Type

Forest Type	Baseline Target Percent Area by Forest Type >20y Year	2017 Amount of Area (ha) by Forest Type >20 Years	2017 Percent Area by Forest Type >20 Years
Treed Conifer	32%	140,791	33%
Treed Broad Leaf	13%	50,138	12%
Treed Mixed	55%	231,400	55%
Total	100%	422,329	100%

CSA Core Indicator 1.1.3: Forest area by seral stage or age class

Indicator Statement 1.1.3a): Area of old interior forest by Natural Region by cover class across the DFA

Target 1.1.3a):

100% of area of old interior forest will be within the 10 year forecast by Natural Region

Acceptable variance:

Area of old interior forest will not be less than 90% of the 10 year forecast by Natural Region of each cover class

Status: Pending

The numbers shown in Table 3 will be summarized annually as a method to monitor that Canfor is trending towards the 10 year forecasted target.

Table 3 depicts a decrease of Old Interior Forest in the conifer leading stands from the 2016 timber year to the 2017 timber year. As the forest grows in the next five years, and Canfor continues to follow the Preferred Forest Management Scenario, more patches of Old Interior Forest will develop in areas that are not planned to be harvested in the first 10 year period of the Forest Management Plan.

Table 3. Old Interior Forest By Natural Region

Subregion	Cover Class	Old Interior Forest Area (ha)					
		2013 TY	2014 TY	2015 TY	2016TY	2017TY	Year 10
Boreal	C	490	419	427	446	337	458
	CD	146	93	82	93	93	189
	D	120	-	119	1,005	1,006	4
	DC	77	44	47	48	48	96
	Du	-	0	-	-	-	-
Boreal Total		834	556	676	1,592	1,483	747
Foothills	C	5,773	4,732	4,952	4,884	4,629	7,129
	CD	303	302	291	291	247	67
	D	2	2	1	2	1	4
	DC	101	93	189	187	98	56
	Du	-	0	-	-	-	-
Foothills Total		6,178	5,129	5,433	5,363	4,975	7,255
Total		7,012	5,685	6,109	6,955	6,459	8,003

Indicator Statement 1.1.3b): Range of patch sizes by subunit and entire DFA

Target 1.1.3b):

Patch size distribution will achieve natural patch size distribution levels over the 200 year planning horizon

Acceptable variance:

+/-10% of the FMP PFMS 10 year forecast

Status: Pending

Patch size distribution is trending towards the natural patch size distribution 10 year levels forecasted in the FMP PFMS across the DFA. The numbers shown in Table 4 will be summarized annually as a method to monitor that Canfor is trending towards the 10 year forecasted target.

Table 4. Patch Size Distribution Targets

Area	Period	Percent		
		0_100	100_500	500+
DFA	10 yr Forecast Target	30	36	34
	2013 TY	68	28	4
	2014 TY	68	28	4
	2015 TY	58	34	8
	2016TY	55	37	9
	2017TY	53	36	11
Main	10 yr Forecast Target	30	38	32
	2013 TY	80	20	-
	2014 TY	79	21	-
	2015TY	58	34	8
	2016TY	54	37	8
	2017TY	53	37	11
Peace	10 yr Forecast Target	31	15	54
	2013 TY	79	21	-
	2014 TY	86	14	-
	2015 TY	46	24	30
	2016TY	46	23	30
	2017TY	46	23	30
Puskwaskau	10 yr Forecast Target	27	20	53.0
	2013 TY	86	14	-
	2014 TY	85	15	-
	2015 TY	63	37	-
	2016TY	62	38	-
	2017TY	64	36	-

Indicator Statement 1.1.3c): Percent of area of pioneer, young and old forest by Natural Region across the DFA

Target 1.1.3c):

100% of pioneer, young, and old forest by Natural Region will meet the Preferred Forest Management Scenario forecast

Acceptable variance:

+/- 20% of the Preferred Forest Management Scenario 10 year forecast

Status: Pending

The percent of pioneer, young, and old forest is trending towards the 10 year levels forecasted in the FMP PFMS by Natural Region. The numbers shown in Table 5 will be summarized annually as a method to monitor that Canfor is trending towards the 10 year forecasted target.

Table 5. Seral Stage Distribution of the Gross (Forested) Land Base

Natural Region	Year	Percent by Area				
		Pioneer	Young	Mature	O. Mature	Old
Boreal	2014 TY	5%	8%	55%	28%	4%
	2015 TY	5%	8%	51%	30%	7%
	2016TY	5%	8%	46%	32%	9%
	2017TY	5%	8%	46%	32%	9%
	10 Yr Forecast Target	8%	12%	44%	28%	7%
Foothills	2014 TY	10%	18%	32%	30%	11%
	2015 TY	10%	18%	30%	28%	13%
	2016TY	10%	19%	30%	28%	14%
	2017TY	10%	19%	30%	27%	14%
	10 Yr Forecast Target	13%	22%	27%	23%	14%

CSA Core Indicator 1.1.4: Degree of within-stand structural retention

Indicator Statement 1.1.4a): Percent of total annual harvested area retained in openings across the DFA

Target 1.1.4a):

On a 5 year rolling average, no less than 4% of the area (ha) harvested will be retained as merchantable un-harvested and dispersed structure retention across the Defined Forest Area

Acceptable variance:

No less than 3% of the 5 year rolling average harvested area (ha) will be left un-harvested as structural retention

Status: Meets

The total harvested area from May 1, 2014 to April 30, 2017 was 6,844.4 ha; 9.2% of the total harvested area was left as structural merchantable retention. Merchantable Mountain Pine Beetle killed trees that have become uneconomical, and the underutilization of deciduous volume on the DFA resulted in higher retention levels across the DFA.

Table 6. Percent of Merchantable Structural Retention

Year	Total Area Harvested (Ha)	Patch Merchantable Retention (Ha)	Dispersed Merchantable Retention (Ha)	Total Merchantable Retention (Ha)	Percent Merchantable Retention
2014-2015	1,844.0	100.7	86.5	187.2	10.2%
2015-2016	3,165.9	161.7	114.0	275.7	8.7%
2016-2017	1,834.6	128.8	41.3	170.1	9.3%
Total	6,844.4	391.2	241.9	633.0	9.2%

Indicator Statement 1.1.4b): Number of non-compliances where forest operations are not consistent with riparian management requirements as identified in operational plans

Target 1.1.4b):

Zero non-compliances, specific to Operating Ground Rules (OGR), with riparian management requirements in forest operations

Acceptable variance:

Zero non-compliances, specific to Operating Ground Rules, with riparian management requirements in forest operations

Status: Meets

No non-compliances related to riparian management requirements were reported in Canfor's Incident Tracking System (ITS) in the 2017 timber year.

Indicator Statement 1.1.4c): Area of un-salvaged burned forest

Target 1.1.4c):

100% of burned areas that have salvage plans will be implemented in conformance with Alberta Environment and Sustainable Resource Development's Directive

Acceptable variance:

No variance; 100% of burned areas that have salvage plans will be implemented in conformance with ESRD's directive

Status: Meets

There were only a few small fires within the Canfor DFA during the 2017 timber year, minimal merchantable timber was affected.

Table 7. Salvage Plans in Conformance with ESRD's Salvage Plan Directive

# of Burned Area Salvage Plans	# of Salvage Plans in Conformance with ESRD Directive	% Achieving ESRD Salvage Plan Directive
0	0	100%

Indicator Statement 1.1.4d): Area of un-salvaged blowdown

Target 1.1.4d):

In areas of significant blowdown (>10ha), a minimum of 25% of the area will be left un-salvaged

Acceptable variance:

No variance; A minimum of 25% of blowdown areas will be left un-salvaged

Status: Meets

In 2017, no substantial patches of blowdown >10ha were detected or salvaged.

Element (1.2): Species Diversity

Conserve species diversity by ensuring that habitats for the native species found in the FMA are maintained through time, including habitats for known occurrences of species at risk.

Value: Through time all current habitats are represented

Objective: Habitat for focal species is maintained on the landscape

CSA Core Indicator 1.2.1: Degree of habitat protection for selected focal species, including species at risk

Indicator Statement 1.2.1a): Trumpeter Swan habitat maintained

Target 1.2.1a)

No future winter harvest within 200m and no summer harvesting within 800m of provincially identified Trumpeter Swan sites

Acceptable variance:

No variance unless there is an approved ground rule deviation

Status: Meets

There was no winter harvesting within 200m and no summer harvesting within 800m of provincially identified Trumpeter Swan sites in the 2017 timber year.

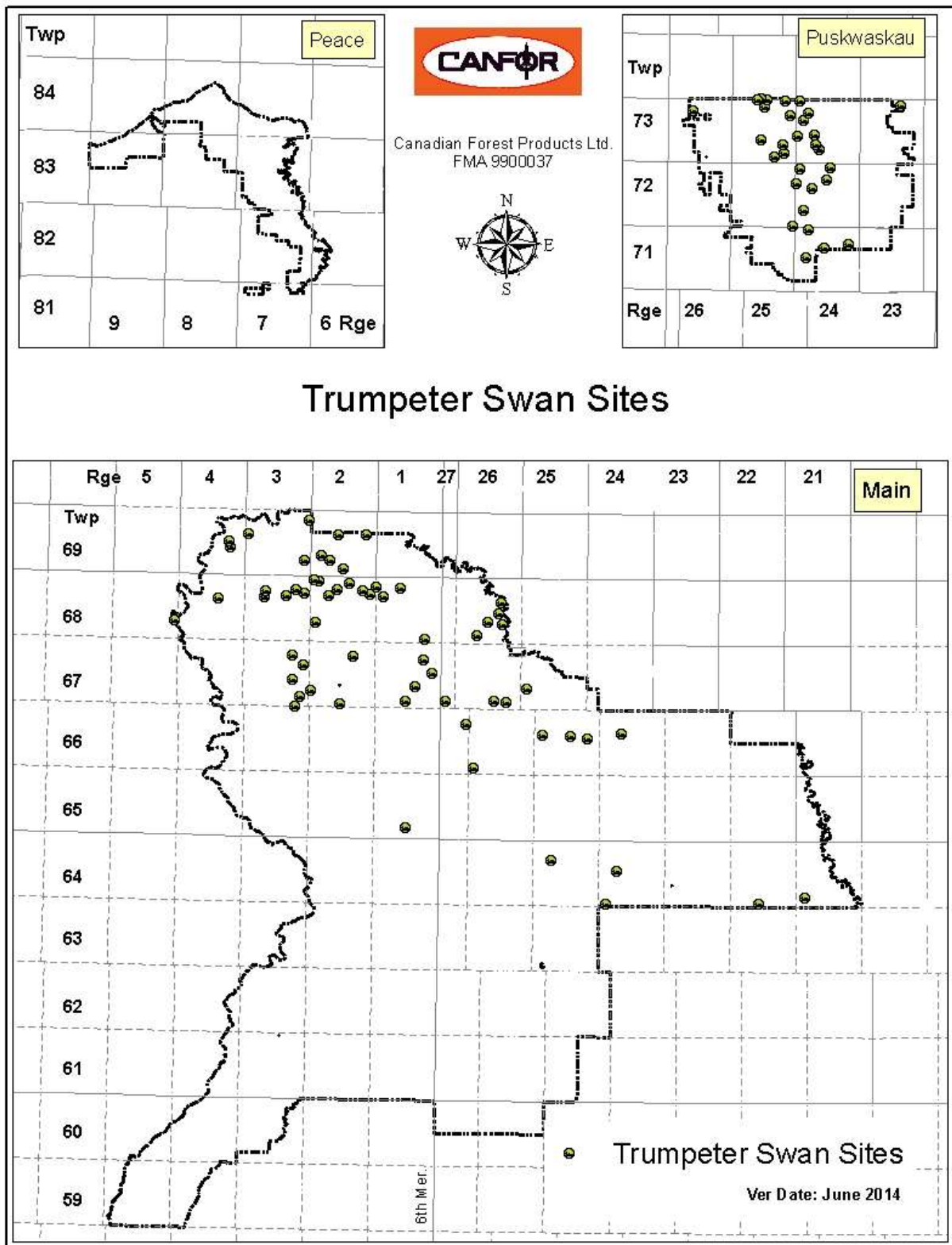


Figure 2. Trumpeter Swan Sites

Indicator Statement 1.2.1b): Percentage of significant wildlife mineral licks conserved
Target 1.2.1b):

100% of significant wildlife mineral licks will be conserved annually, consistent with Operating Ground Rules

Acceptable variance:

No variance unless there is an approved ground rule deviation

Status: Meets

Three significant wildlife mineral licks were identified in 2017. Operational buffers consistent with the Operating Ground Rules were applied to conserve the sites. Another historic lick previously buffered in 1995 was reconfirmed and the buffer was maintained on a new block.

Value: Through time all current habitats are represented

Objective: Current species diversity is maintained on the landscape

CSA Core Indicator 1.2.2: Degree of suitable habitat in the long term for selected focal species, including species at risk

Indicator Statement 1.2.2a): Sufficient amount of functional woodland caribou habitat over time

Target 1.2.2a) (1):

- No timber harvesting will occur in the Conservation zone identified within the Little Smoky/A La Pêche ranges for the period of May 1, 2014-April 30, 2024
- No timber harvesting will occur in the Timber Supply Subunits DS3, DS4 and DS5 within the Little Smoky range for the period May 1, 2014-April 30, 2019
- No timber harvesting will occur in the Timber Supply Subunits DS1, DS2, DS6 and DS7 within the Little Smoky range for the period May 1, 2014-April 30, 2024

Acceptable variance:

None

Status: Meets

There was no timber harvesting within any of the identified caribou deferral areas during the 2017 timber year.

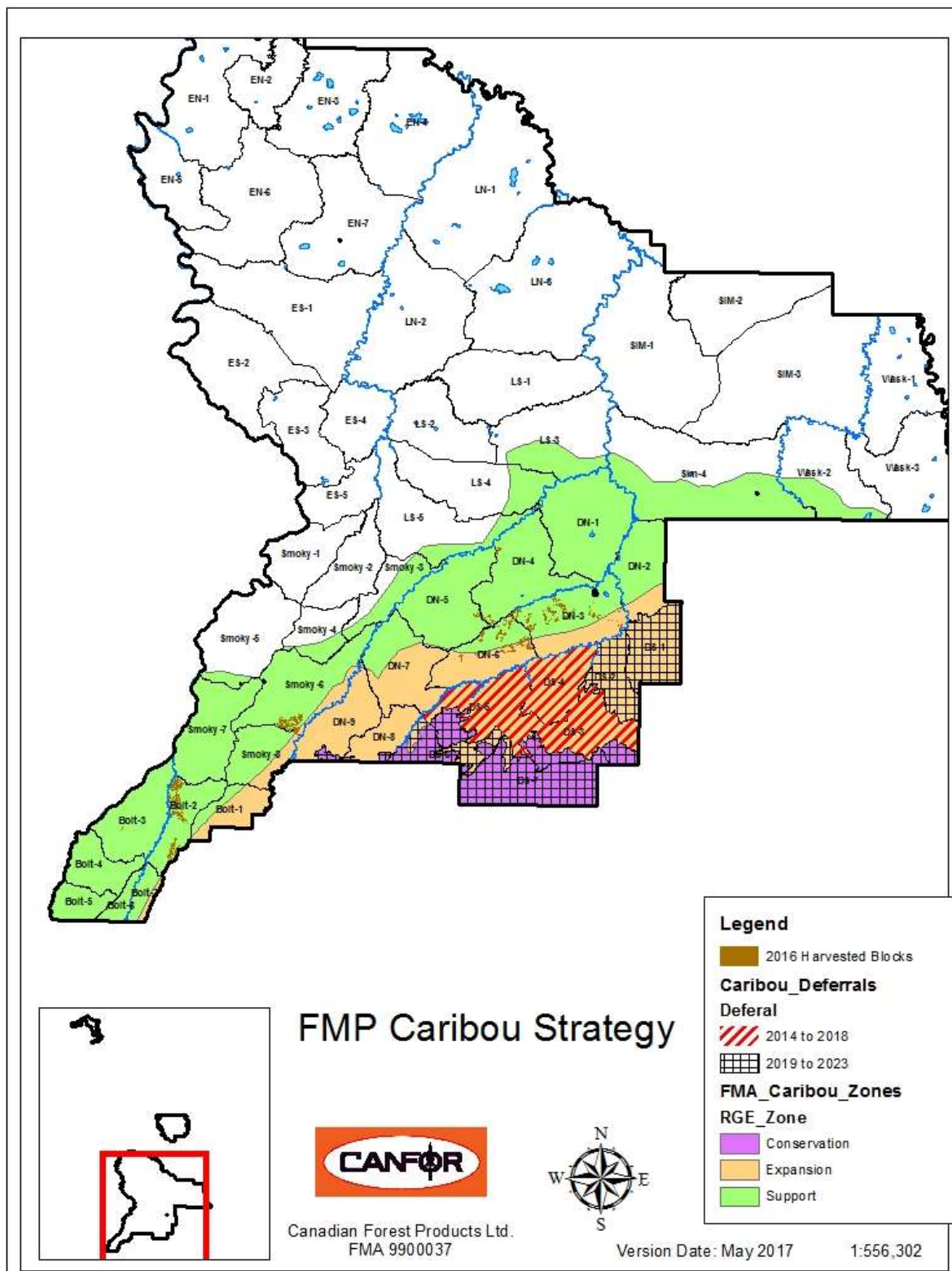


Figure 3. Caribou Deferral Areas

Target 1.2.2a) (2):

All future harvested areas, excluding the deciduous broad cover group, in all identified Caribou Management Zones will be reforested to a coniferous standard to reduce alternate prey habitat

Acceptable variance:

90% of mixedwoods will be transitioned to conifer

Status: Meets

All openings harvested since the 2015 timber year within the Caribou Management Zone have been designated as a coniferous standard.

Target 1.2.2a) (3):

Canfor Alberta will have zero contribution to open-route density south of the Deep Valley

Acceptable variance:

None

Status: Meets

Canfor had no harvesting operations in the 2017 timber year South of Deep Valley Creek within the caribou range therefore no open-route (permanent) roads were constructed by Canfor.

Indicator Statement 1.2.2b): Fish risk ranking for bull trout and Arctic grayling
Target 1.2.2b):

100% of watersheds with a high or very high fish risk ranking and >25% Canfor influence will be assessed using Canfor's Fish Risk Flow Chart and have mitigation strategies scheduled and implemented

Acceptable variance:

90% of identified very high and high risk watersheds with >25% Canfor influence will have mitigation strategies scheduled and implemented according to plan

Status: Meets

By monitoring the fish risk using road densities, forest managers at Canfor and GoA are able to identify high risk watersheds and collaboratively develop mitigation strategies that will reduce the risk to bull trout and Arctic grayling fish populations. Canfor and GoA have been actively working together to develop a strategy in which Canfor will implement (Canfor, 2012). Figure 4 shows the fish risk for bull trout and Arctic grayling by watershed and road density (km/km²) of permanent and non-reclaimed temporary forest industry roads within the Main parcel of the DFA.

Of the total 200 crossings on the DFA, 169 crossings are located in the high to very high fish risk watersheds that Canfor has >25% influence and are scheduled for future maintenance based on the Foothills Stream Crossing Partnership (FSCP) program and Canfor's Fish Risk Flow Chart to prioritize maintenance in areas with potentially higher risk.

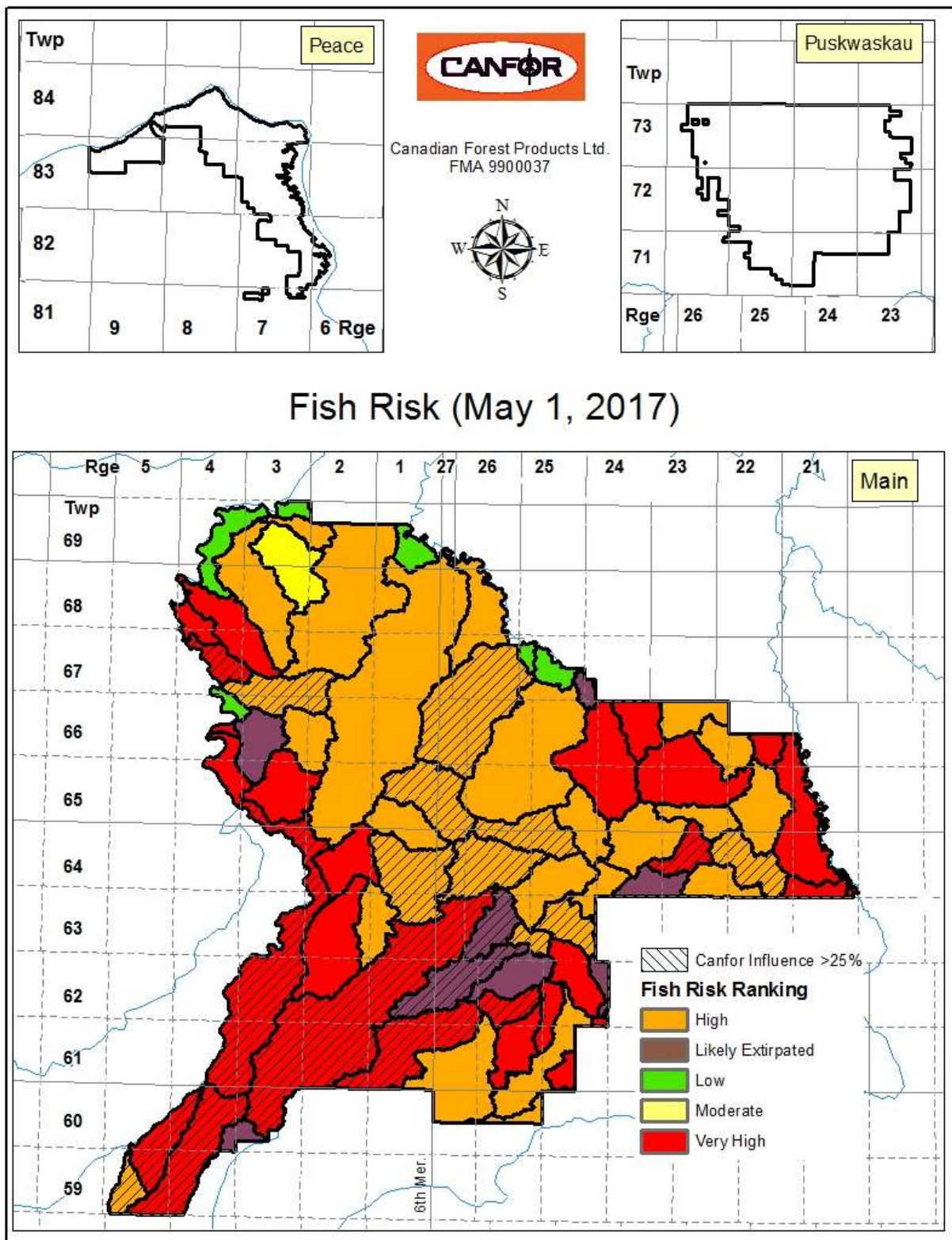


Figure 4 Fish Risk by Watershed

In 2017 Canfor planned and completed maintenance on 56 crossings within the high and very high fish risk watersheds that Canfor has >25% influence (Table 8). 30 of the crossings have FSCP inspections completed and 26 have not yet been inspected, but still had maintenance activities completed on them. Canfor is utilizing the Fish Risk Flow Chart to prioritize maintenance in areas with potentially higher risk and also completes maintenance activities on some low and medium risk crossings while working in the same area in order to achieve operational and budgetary efficiencies.

Table 8. Fish Risk Mitigation Strategies Completed

Year	FSCP Inspection Ranking			Total Crossings Maintained	% High Risk
	HIGH	LOW	MEDIUM		
2017 (Planned and Completed)	9	11	10	56	16%

Indicator Statement 1.2.2c): Amount of barred owl habitat available for breeding pairs

Target 1.2.2c):

The amount of the potential Barred Owl habitat for breeding pairs will not be less than 10% below current levels across the DFA

Acceptable variance:

The amount of potential Barred Owl Habitat will not be less than 15% below current levels across the DFA

Status: Meets

The amount of potential Barred Owl habitat for breeding pairs in the 2017 timber year decreased by 1% from the 2016 timber year, however is still within the targeted amount of Barred Owl habitat.

Table 9. Barred Owl Habitat

Current Amount of Barred Owl Habitat (2012 TY)	2017 TY Suitable Barred Owl Habitat (ha)	% Change in Suitable Barred Owl Habitat
631,901	596,515	6%

Indicator Statement 1.2.2d): Density (lineal km/km²) of open (License of Occupation and Temporary non-reclaimed) roads

Target 1.2.2d):

Density of open roads (lineal km/km²) not to exceed 0.6 km/km² for the Grizzly Bear Range and Caribou Range and 1.2 km/km² for the remainder of the Defined Forest Area parcels (Main, Puskwaskau & Peace) and secondary Grizzly Bear Range

Acceptable variance:

Road density will not exceed 0.66 km/km² in the Grizzly Bear and Caribou Range and 1.2 km/km² in the remainder of the DFA

Status: Meets

Road density has decreased for all reporting areas except the Puskwaskau parcel. Puskwaskau's increase of 41km was primarily due to temporary roads as Canfor was actively harvesting in the parcel in the 2017 timber year.

The road density within the caribou range is currently at the variance target, of which other industry roads represent 80 percent of the road density. Canfor is responsible for 20 percent of the roads within the caribou range, of which 12 percent are temporary roads.

All Canfor temporary roads are reclaimed after use and planted the following summer. These roads are then monitored and generally final cleared two years after harvest, after which time they will no longer contribute to the density of open roads.

A number of permanent roads owned by other industrial users may also be reclaimed but are still noted as active in the Digital Integrated Dispositions (DIDs) database. It is difficult for Canfor to know where these are on case by case basis; therefore they will continue to contribute to the density of open roads until verified as reclaimed.

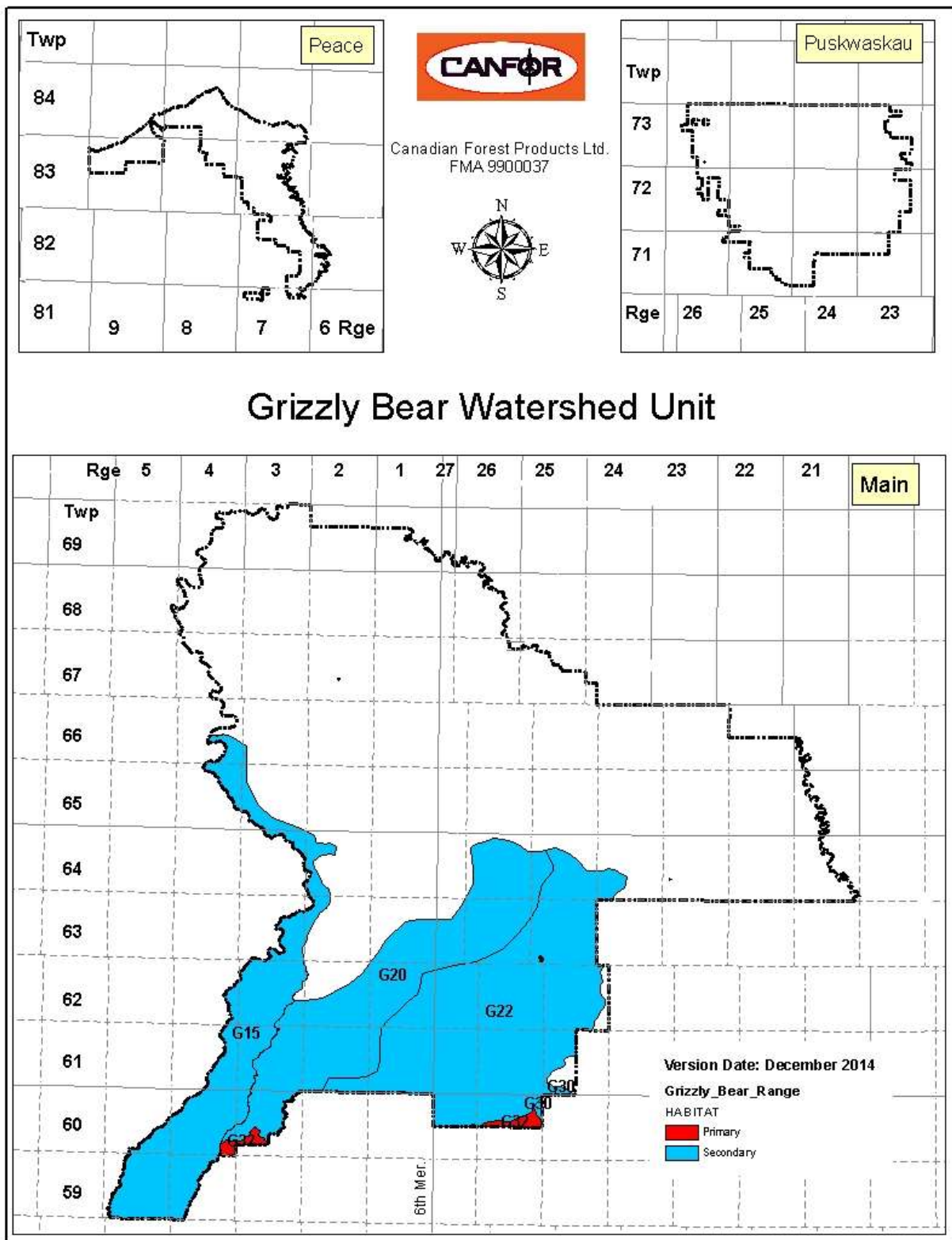


Figure 5 Grizzly Bear Range

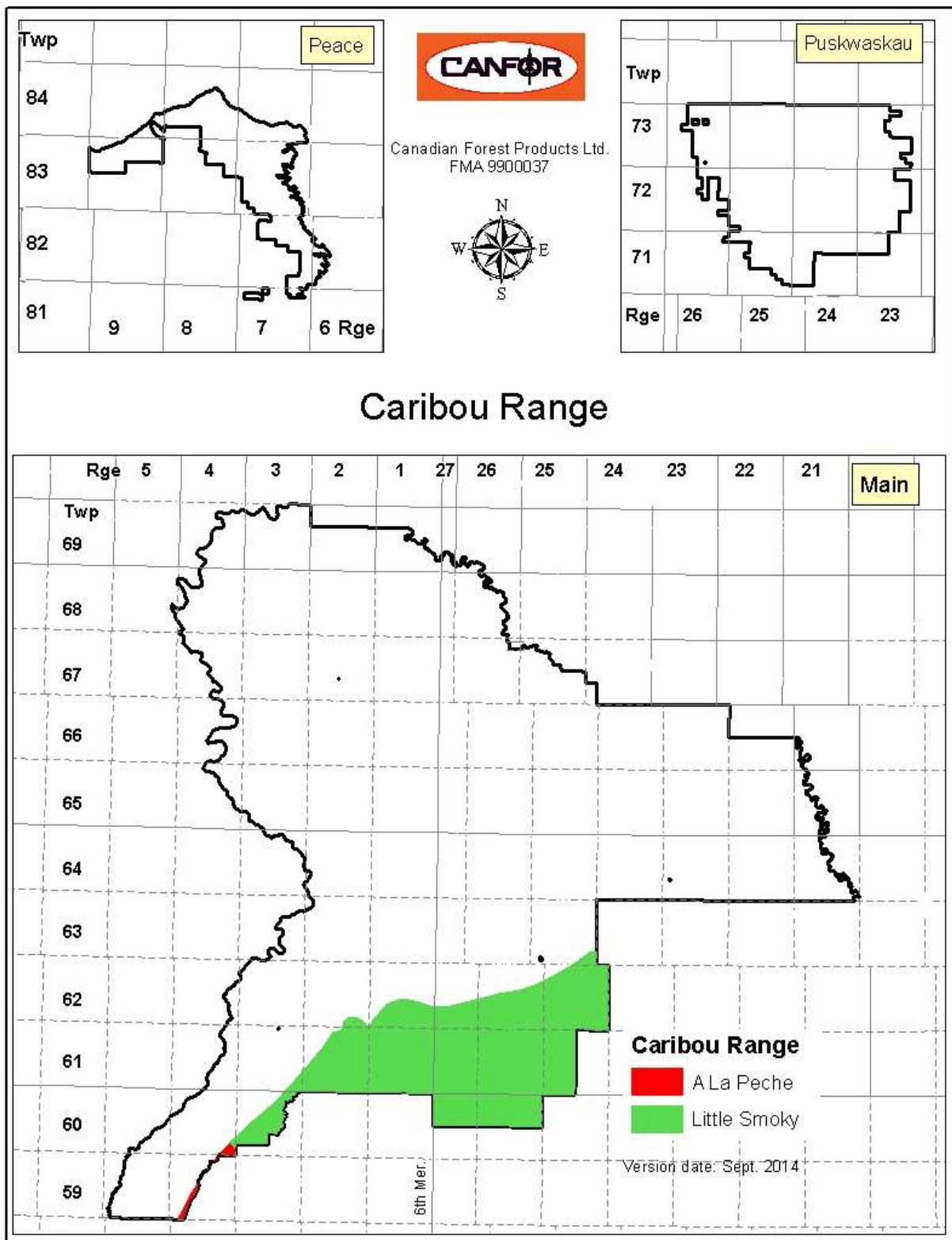


Figure 6: Caribou Range in Canfor FMA Area

Table 10. Density of Open Roads

Area	2017 (Road Km)	2017 Density (Km/Km ²)	2017 Density (Km/Km ²)
Main	3078	5509	0.56
Peace	198	241	0.82
Puskwaskau	217	697	0.31
Grizzly Bear Range	1369	1899	0.72
Caribou Range	467	713	0.66

CSA Core Indicator 1.2.3: Proportion of regeneration comprised of native species

Indicator Statement 1.2.3: Regeneration consistent with provincial regulations and standards for seed and vegetative material use

Target 1.2.3:

100% conformance with the Alberta Forest Genetics Resources Management and Conservation Standards (AFGRMS)

Acceptable variance:

No variance; all regeneration will be consistent with the Forest Genetics Resources Management System

Status: Meets

Analysis of the planting data showed no non-native species were planted on the DFA in the 2017 timber year.

Element (1.3): Genetic Diversity

Conserve genetic diversity by maintaining the variation of genes within species and ensuring that reforestation programs are free of genetically modified organisms.

Value: Natural genetic diversity

Objective: Genetic diversity will be maintained on the landscape

CSA Core Indicator 1.3: No core indicator in Z809-08 for Element 1.3-waiting for practical indicators to be developed

Indicator Statement 1.3: Regeneration consistent with provincial regulations and standards for seed and vegetative material use

Target 1.3:

100% conformance with the Alberta Forest Genetic Resources Management and Conservation Standards for all seed collection and seedling deployment

Acceptable variance:

No variance; all regeneration will be consistent with the Forest Genetics Resources Management System

Status: Meets

The Alberta Forest Genetic Resources Management and Conservation Standards (AFGRMS) outlines seed collection and seedling deployment guidelines for Stream 1 (wild seed) and Stream 2 (genetic superior seeds grown in seed orchards) seedlings.

There was no Stream 1 wild seed collection on the DFA area in 2017. Stream 2 seed is collected at the Huallen Seed Orchard on an annual basis pending crop availability. All requirements are adhered to and managed by the orchard manager. This program is monitored by the Alberta Government for compliance.

Seed deployment guidelines are known by the company silviculture supervisors and adhered to during the planting allocation program. An analysis is done at the end of the program to determine that the planting program meets all seed deployment guidelines. The analysis looks at the actual seed zone/breeding region (Figure 5-7) and compares it to the seed lot that was planted. Each seed lot is from a specific seed zone or breeding region.

Breeding regions are specific to species; G1 breeding region is for white spruce, B1 breeding region is for lodgepole pine and L2 breeding region is for black spruce. Seed zones are not species specific; rather they are ecologically and elevation based. Canfor's DFA contains the following seed zones: Upper Foothills (UF1.3), Lower Foothills (LF1.4), Central Mixedwood (CM3.4) and the Dry Mixedwood (DM1.2), Sub Alpine (SA 1.1).

If there are no seedlings available for a seed zone in which blocks were harvested, a variance from the government must be approved prior to planting that block. If it is not approved, the block must be planted the following year and appropriate seedlings ordered.

An analysis of blocks planted in the 2017 timber year was conducted and all planting units were in compliance with appropriate variances on file.

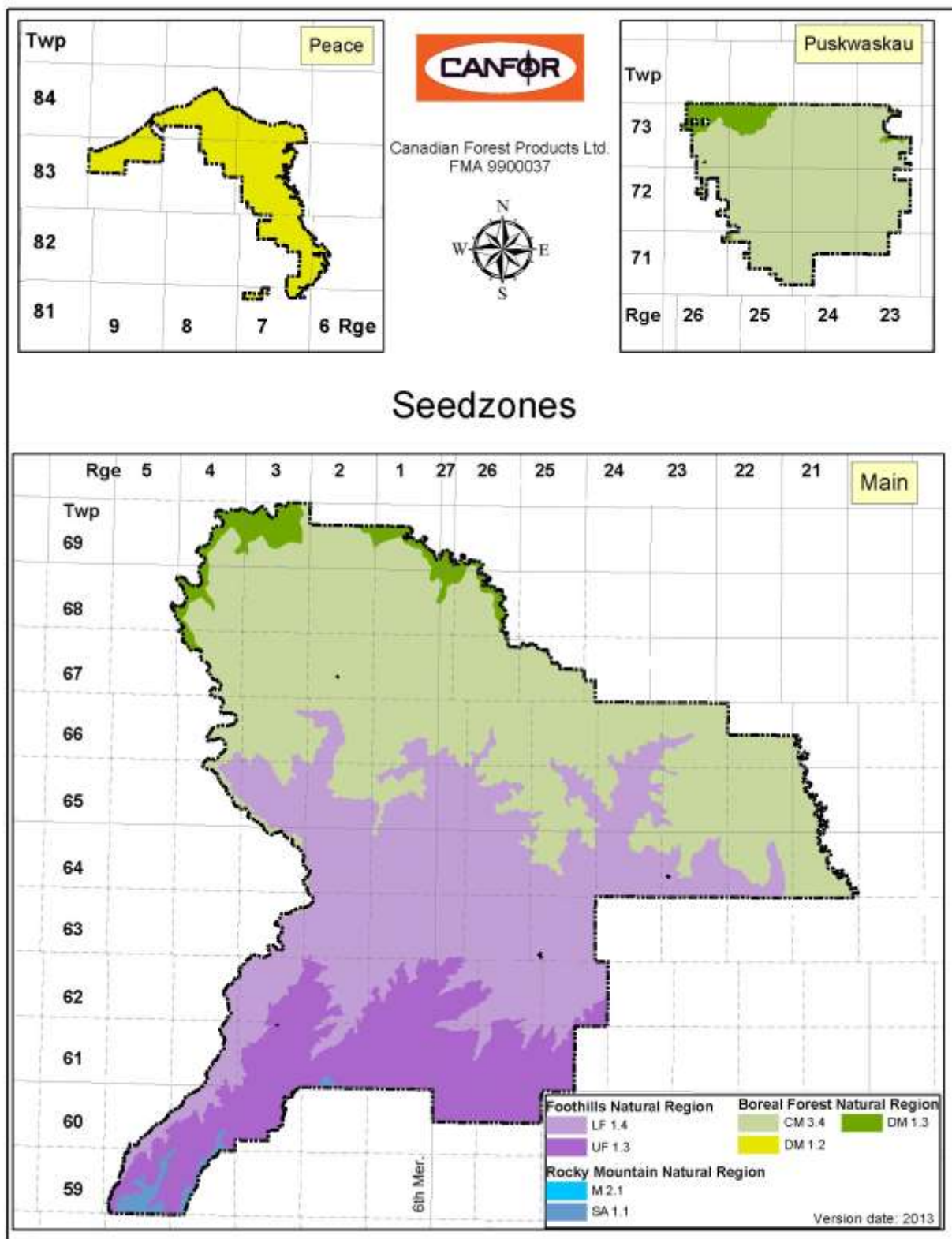


Figure 7. Seed zones

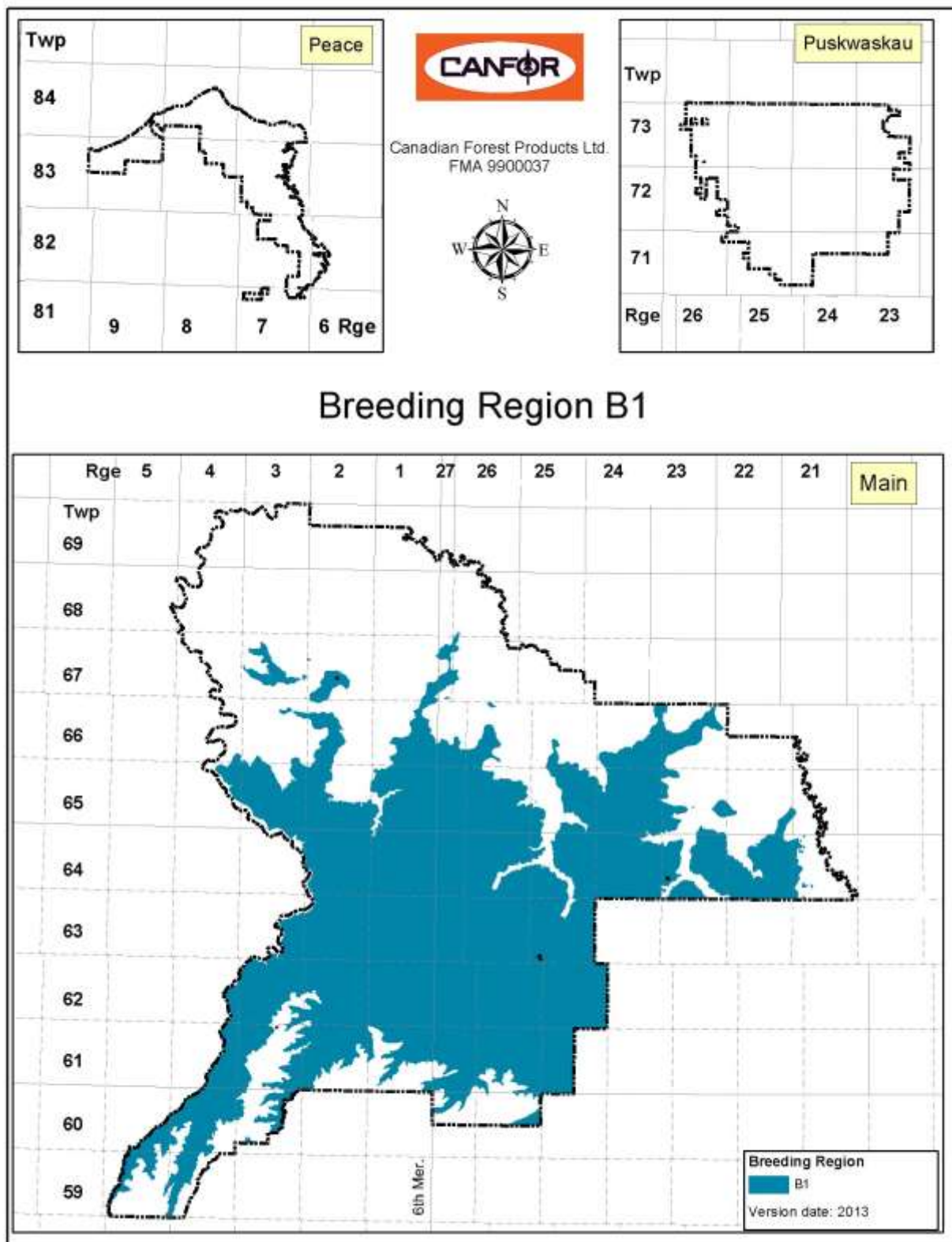


Figure 8. Breeding Region B1

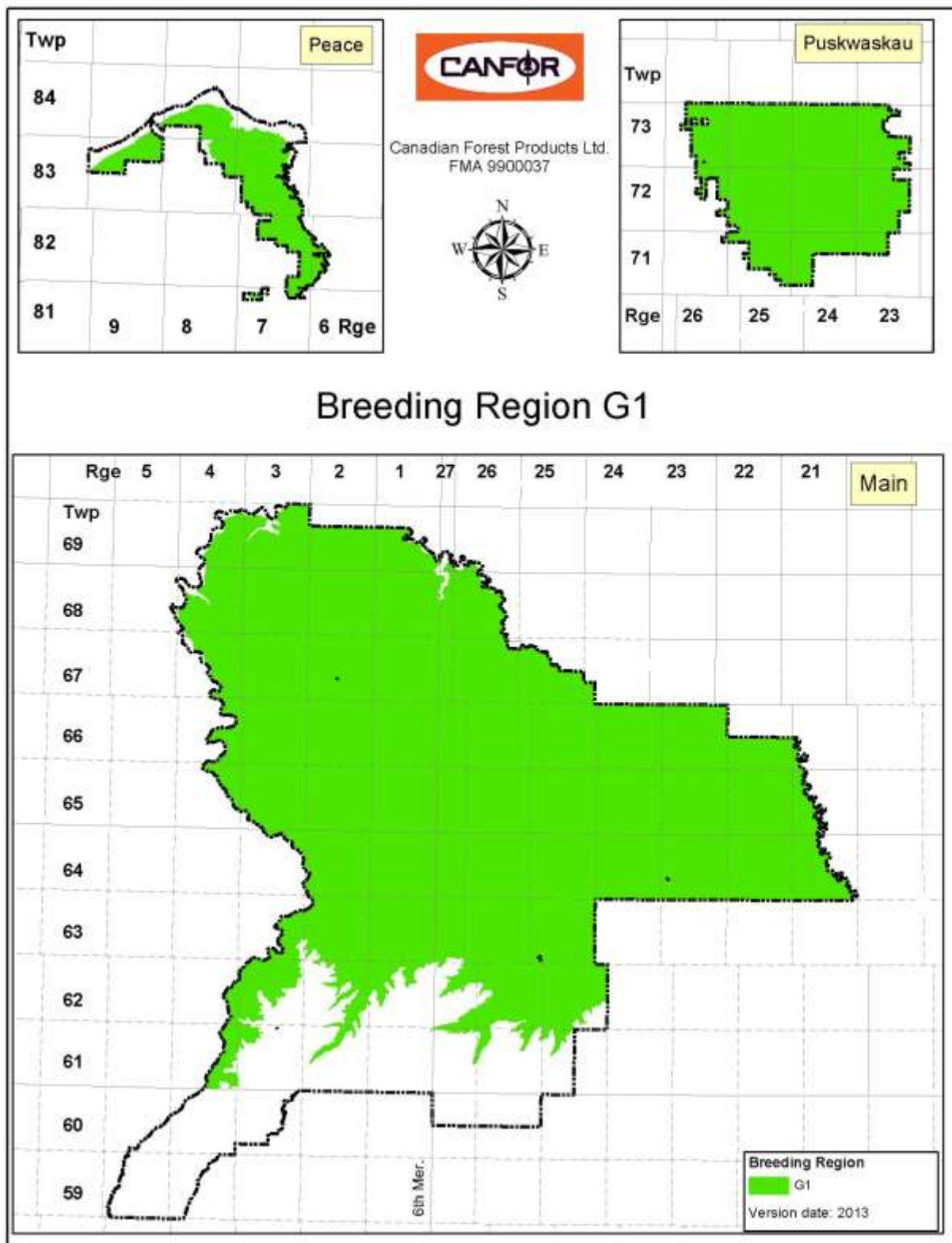


Figure 9. Breeding Region G1

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

Respect protected areas identified through government processes. Cooperate in broader landscape management related to protected areas and sites of special biological and cultural significance. Identify sites of special geological, biological, or cultural significance within the DFA and implement management strategies appropriate to their long-term maintenance.

Value: Identified protected areas and sites that have special biological significance

Objective: Conservation of the natural states and processes to maintain protected areas and sites that have special biological significance

CSA Core Indicator 1.4.1: Proportion of identified sites with implemented management strategies

Indicator Statement 1.4.1a): Percent of forest management activities where consultation has occurred for operations near protected park areas

Target 1.4.1a):

The Province will be consulted 100% of the time when operations will occur within one kilometer of legally protected park areas

Acceptable variance:

No variance; All planned harvest within one kilometer of a Protected Park area will have consultation records.

Status: Meets

Canfor did not harvest within one kilometer of any legally protected park areas during the 2017 timber year.

Indicator Statement 1.4.1b): Percent of forest management activities consistent with management strategies for sites of biological significance

Target 1.4.1b):

100% of identified biologically significant sites will have implemented management strategies identified in consultation with the Province

Acceptable variance:

No variance; all identified special biologically significant sites will have management strategies developed with the Province

Status: Meets

Table 11 lists all sites that were identified during layout in the 2017 timber year. All sites of biological significance identified had management strategies implemented in consultation with the Province and according to the OGRs.

Table 11. Sites of Biological Significance

Site Type	Number of Sites Found	% With Implemented Management Strategies
Grizzly Bear Den	1	100%
Wildlife Licks	3	100%
Nests	2	100%
Springs	5	100%
Vernal Pool	0	100%

Value: Identified protected areas and sites that have special biological and cultural significance. Understand and respect Aboriginal special needs

Objective: The natural states and processes to maintain protected areas and sites that have special biological and cultural significance will be conserved. Early and effective consultation with Aboriginal peoples will be provided

CSA Core Indicator 1.4.2: Protection of identified sacred and culturally important sites

Indicator Statement 1.4.2 (6.2.1): Percent of identified historic, sacred and culturally important sites, forest values, traditional knowledge and uses considered in forestry planning processes

Target 1.4.2 (6.2.1):

100% of historic, sacred and culturally important sites, forest values, traditional knowledge and uses known or identified through communication are considered in forestry planning processes

Acceptable variance:

No variance; all identified sites will be considered

Status: Meets

All of Canfor's planned harvest blocks from May 1, 2017 to April 30, 2018 were screened in a Historical Resources Overview Assessment. 21% of the screened developments exhibited historic resources potential and were field assessed prior to December 1st, 2017. The field assessment of the planned harvest blocks resulted in the discovery of 12 new archaeological sites. These sites were excluded from the harvested areas during the forestry planning process.

All records and action plans from May 1, 2017 to April 30, 2018, in Canfor's Creating Opportunities for Public Involvement (COPI) database were reviewed and it was determined that 100% of historic, sacred, and culturally important sites, forest values, traditional knowledge, and uses were considered in the forestry planning process.

4. Criterion 2: Ecosystem Condition and Productivity

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

Element (2.1): Forest Ecosystem Resilience

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

Value: Healthy forest ecosystem

Objective: Meet reforestation targets on all harvested areas

CSA Core Indicator 2.1.1: Reforestation success

Indicator Statement 2.1.1a): Prompt reforestation

Target 2.1.1a):

100% of all harvested blocks will be reforested within 2 years

Acceptable variance:

No variance; 100% of all harvested blocks will be reforested within 2 years. Planting of top piles and roads are not considered in this target as they may be completed later than two years to accommodate the burning of top piles

Status: Meets

All blocks harvested in the 2015 timber year received a planting treatment within 2 years of skid clearance date (by the end of year 2017).

Value: Healthy forest ecosystem

Objective: Forest ecosystem health will be maintained

CSA Core Indicator 2.1.1: Reforestation success

Indicator Statement 2.1.1b): Prompt retreatment of failed areas

Target 2.1.1b):

All harvested blocks that have not achieved the regeneration targets as per the Regeneration Standards of Alberta establishment survey standards will have remedial treatments completed within 12 months of the survey date

Acceptable variance:

A six-month variance to the twelve-month retreatment period will apply for up to 50% of the blocks requiring remediation treatments. The six months allows for surveys done in the spring of one year to have treatments done in the following summer when seedlings may not be available the first summer

Status: Meets

Establishment surveys are conducted every second May in Canfor's DFA. Harvested blocks that are 5 and 6 years old are pooled and surveyed in one year. Canfor completed establishment surveys on the DFA in 2017 and has scheduled the next set of establishment surveys for the 2019 timber year. There were 6 blocks surveyed in 2017 on the DFA that did not meet the regen standard of Alberta and they have received a remedial treatment in 2017 or are scheduled for one in 2018.

Indicator Statement 2.1.1c): Actual regenerated stand yield compared to the yield expectations of the Timber Supply Analysis

Target 2.1.1c):

The regenerated stand yield (Mean Annual Increment) for the total of all sampling populations will meet or exceed the regenerated stand yield assumptions of the Timber Supply Analysis in the Regeneration Standards of Alberta performance survey process

Acceptable variance:

The 5 year average must meet the mean annual increment targets for the current quadrant period

Status: Meets

Performance surveys are conducted every other year on the DFA. Harvested blocks that are 13 and 14 years old are pooled and surveyed in one year. Canfor completed performance surveys on the DFA in the 2017 timber year and has scheduled the next set of performance surveys for the 2019 timber year

Table 12 depicts the 5 year weighted rolling average, as of the 2017 timber year, of the expected MAI compared to the resultant MAI. Results indicate that Canfor is exceeding the 5 year rolling weighted average MAI for both conifer and deciduous.

Table 12. Summary of Regenerated Stand Yield

	MAI Target (m ³ /ha/yr)		MAI Survey Results	
	Conifer	Deciduous	Conifer	Deciduous
5 yr average	2.31	0.41	3.00	0.99

Indicator Statement 2.1.1d): Noxious weed program implementation

Target 2.1.1d):

100% of noxious weeds identified along Canfor Alberta's dispositions will have treatments scheduled and completed according to the plan

Acceptable variance:

90% of identified weeds must be treated

Status: Meets

In 2017, 100% of identified noxious weeds were treated in Canfor's Defined Forest Area along Canfor held dispositions.

Table 14. Percent of Identified Noxious Weeds Treated

No. of Planned Records	No. of Completed Records	% Complete in 2017
16	16	100%

Element (2.2): Forest Ecosystem Productivity

Conserve ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species. Reforest promptly and use tree species ecologically suited to the site.

Value: Sustained forest ecosystem productivity

Objective: Limit the conversion of productive forest to other uses

CSA Core Indicator 2.2.1(4.2): Additions and deletions to the forest area

Indicator Statement 2.2.1(4.2): Percent of gross forested land base in the DFA converted to non-forest land use through forest management activities

Target 2.2.1(4.2):

Forest management company activities not to exceed 3% reduction in gross Defined Forest Area over the life of the Forest Management Agreement (May 26, 1964)

Acceptable variance:

No variance; forest management company activities will not exceed 3% reduction in gross Defined Forest Area over the life of the Forest Management Agreement (May 26, 1964)

Status: Meets

In the 2017 timber year, Canfor did not apply for nor construct any non-forest land use dispositions in the DFA. However, Canfor did acquire two non-forest land use dispositions in the DFA by assignment or existing dispositions as follows:

- DML 040066 – Campsite located in 15-31-62-02-W6M – 3.347 hectares
- DLO 041605 – Access road located in 15-31-62-02-W6M – 31.9 hectares

In the 2017 timber year, Canfor returned the following non-forest area dispositions to forest land by reforestation:

- MSL 930111 located in 10-32-64-21-W5M – 1.4 hectares
- LOC 780790 & 961393 located in 5-2-62-25-W5M – 22.7 hectares
- MSL 005036/LOC 003518 – located in 2-31-64-26-W5M – 2.4 hectares

The percentage of forest land converted to non-forest land use by Canfor over the life of the FMA agreement (May 26, 1964) is 0.2%.

Table 13. Percentage of Forest Land Converted to Non-Forest Land Use

DFA Total Area (ha)	Area Converted to Non-Forest Area Use May 1/17 to April 30/18 (ha)	Net Non-Forest Area Dispositions as of April 30/18 (ha)	PERCENTAGE of Forest Land Converted to Non-Forest Land Use	Non-forest area Returned to Forest Land May 1/17 to April 30/18 (ha)	Total Non-forest Area Returned to Forest Land May 1/12 to April 30/17 (ha)	NET reduction in forest land area (ha)
644,695	4.5	1,530.8	0.2%	26.5	49.6	1,481.2

Value: Sustained forest ecosystem productivity

Objective: Maintain productive harvest level

CSA Core Indicator 2.2.2: Proportion of the calculated long-term sustainable harvest level that is actually harvested

Indicator Statement 2.2.2: Percent of volume harvested compared to long-term approved harvest level

Target 2.2.2:

Not to exceed 100% of the approved harvest level (Annual Allowable Cut) over 5 years (5 yr. quadrant balance)

Acceptable variance:

The actual quadrant harvest volume will not exceed 5% of the allowable harvest level

Status: Meets

The coniferous harvest level is at 69% of the approved harvest level for Canfor's quadrant ending May 4, 2019. Delivered Timber Volume Monitoring is a condition of the Forest Management Plan approval.

Table 14. Percent of Volume Harvested

Timber Disposition	Quadrant Period	Quadrant Harvest Level (m3)	Harvested as of April 30, 2018 (m3)	Percent	Remaining (m3)
FMA9900037 (Q1)	May 5, 2014 - April 30, 2019	3,513,674	2,424,082	69	1,089,592
DTA150001	May 1, 2013 - April 30, 2018	689,738	43,443	6	646,295
DTA150002	May 1, 2014 - April 30, 2019	1,101,453	0	0	1,101,453
DTA150003 (Q2)	May 1, 2013 - April 30, 2018	872,269	455,592	52	416,677

5. Criterion 3: Soil and Water

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

Element (3.1): Soil Quality and Quantity

Conserve soil resources by maintaining soil quality and quantity.

Value: Soil quality and quantity

Objective: Soil productivity will be maintained or enhanced

CSA Core Indicator 3.1.1: Level of soil disturbance

Indicator Statement 3.1.1a): Percent of harvested blocks meeting soil disturbance objectives identified in plans and Operating Ground Rules

Target 3.1.1a):

100% of harvested blocks will not exceed 5% soil disturbance without government approval as outlined in Canfor Operating Ground Rules

Acceptable variance:

No variance; 100% of harvested blocks will not exceed 5% soil disturbance without government approval as outlined in Canfor Operating Ground Rules

Status: Does Not Meet

In the 2017 Timber Year, 11 blocks exceeded 5% soil disturbance, however approval was received from the government prior to construction with the exception of one block; The one block over 5% that didn't receive prior approval from the government as outlined in the Canfor Operating Ground Rules was E631277; a road was added during operations due to slopes within the block. In the future, harvesting supervisors and contractors will determine whether the addition of new roads will exceed 5% soil disturbance prior to construction and seek approval from the Forest Officer as required.

Table 15. Percent of Blocks Exceeding 5% Soil Disturbance without Prior Approval

# of Harvested Blocks in 2016 TY	# of Blocks Exceeding 5% Soil Disturbance	# of Blocks Exceeding 5% Soil Disturbance with Prior Approval	% of Blocks Exceeding 5% Soil Disturbance without Prior Approval
88	9	8	1.14%

Value: Soil quality and quantity

Objective: Soil erosion will be minimized

CSA Core Indicator 3.1.1: Level of soil disturbance

Indicator Statement 3.1.1b): Percent of soil erosion and slumping incidences with mitigation strategies implemented

Target 3.1.1b):

100% of known significant erosion and slumping events caused by forest operations will have mitigation strategies implemented within one year of identification

Acceptable variance:

No variance; all reportable incidents will have mitigation strategies implemented within one year of identification

Status: Meets

There were no significant slumps or erosion events greater than or equal to 1000m² caused by forest operations identified in the 2017 Timber Year.

Value: Soil quality and quantity

Objective: Maintain onsite coarse woody debris

CSA Core Indicator 3.1.2: Level of downed woody debris

Indicator Statement 3.1.2: Percentage of harvested area by subunit with coarse woody debris equivalent to pre-harvest conditions

Target 3.1.2:

100% of subunits (Peace, Puskwaskau and Main) will meet or exceed coarse woody debris conditions equivalent to the pre-harvest state

Acceptable variance:

No variance; 100% of subunits (Peace, Puskwaskau, and Main) will meet or exceed coarse woody debris conditions equivalent to the pre-harvest state

Status: Pending

Canfor developed a coarse woody debris monitoring program in 2017. Blocks are sampled from the timber year to assess the amount of post-harvest coarse woody debris left on site compared to pre-harvest levels. 25 coarse woody debris transects were randomly sampled from the 2017 timber year. Canfor will complete the assessment on a five year rolling average in order to have a large enough sample to make a statistically valid comparison.

Element (3.2): Water Quality and Quantity

Conserve water resources by maintaining water quality and quantity.

Value: Water Quantity

Objective: Water quantity will be maintained

CSA Core Indicator 3.2.1: Proportion of watershed or water management areas with recent stand-replacing disturbance

Indicator Statement 3.2.1a): Watersheds with moderate or high risk level assessments with mitigation strategies implemented

Target 3.2.1a):

100% of watersheds with a moderate or high risk level will have approved mitigation strategies implemented

Acceptable variance:

No variance; all high and moderate risk ranked watersheds based on the 10 year SHS with scheduled operations will have mitigation strategies implemented, in consultation with AESRD

Status: Meets

Figure 10 depicts the risk ranking of each watershed on the DFA based on Canfor's 2015 Forest Management Plan (FMP) 10-year spatial harvest sequence. In the development of the Preferred Forest Management Scenario (PFMS), Canfor constrained its timber supply model from harvesting watersheds above the 50% ECA level (high risk), therefore reducing the risk to watersheds on the DFA. Figure 10 identifies where Canfor should implement mitigation strategies and best management practices based on the 10 year spatial harvest sequence in order to reduce the risk to watersheds.

In the development of the 2015 FMP, Canfor and AESRD identified potential mitigation strategies and best management practices to implement when operating in the moderate and high risk watersheds, with a primary focus on watersheds with high risk to fish (1.2.2b). Canfor identified mitigation strategies that were implemented within the 2017 harvest blocks in their Forest Harvest Plans and also had some block specific prescriptions to help mitigate risk to fish and water such as prompt reclamation, reduced roading, upgraded water crossings from log fills to wood culverts, and increased buffers.

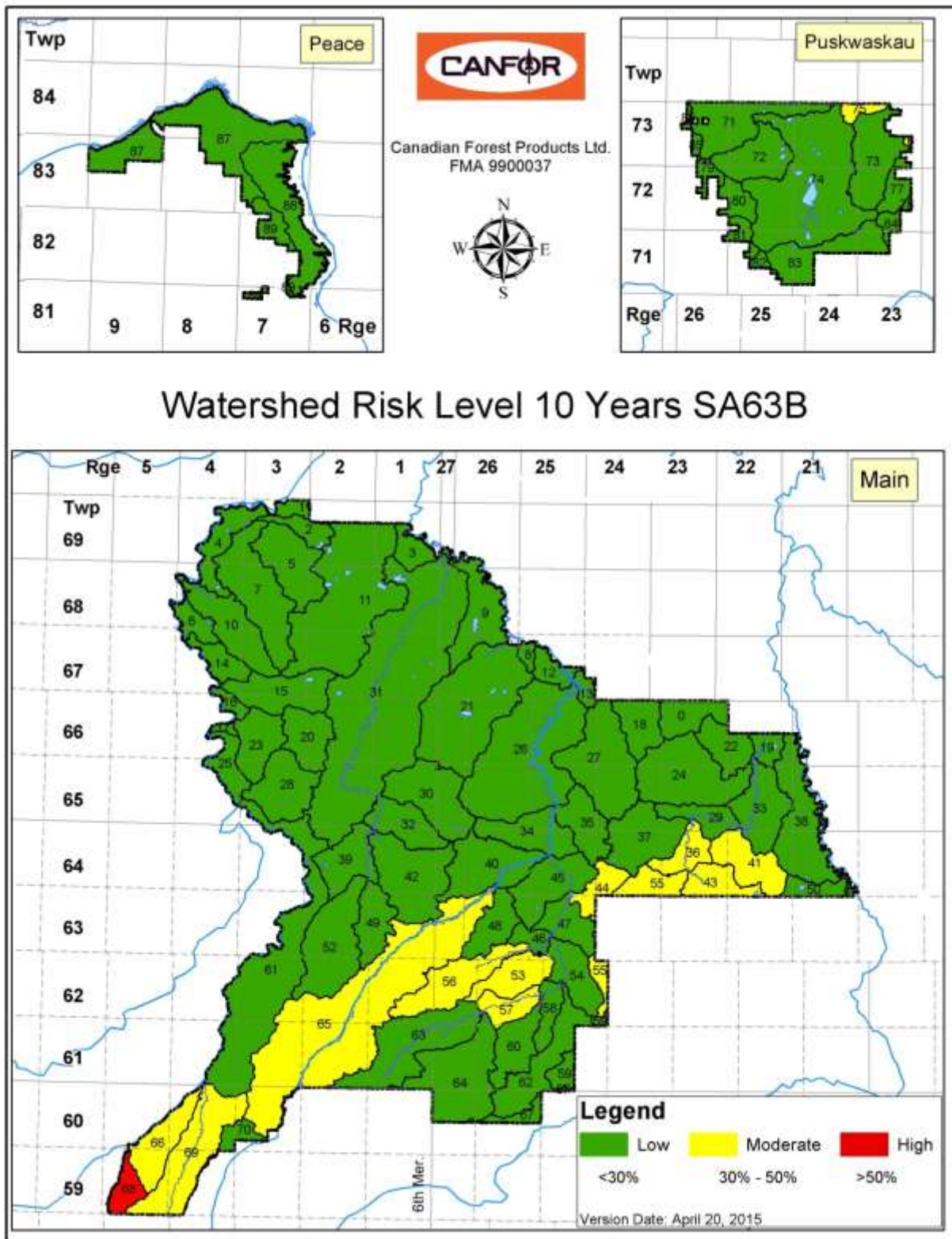


Figure 10. Watershed Risk

Value: Water Quality

Objective: Water quality will be conserved

CSA Core Indicator 3.2.1: Proportion of watershed or water management areas with recent stand-replacing disturbance

Indicator Statement 3.2.1b): Drainage structures with identified water quality concerns that have mitigation strategies implemented

Target 3.2.1b):

100% of medium and high hazard drainage structures will have mitigation strategies implemented according to the road maintenance plan for permanent Canfor Alberta roads

Acceptable variance:

90% of medium and high hazard drainage structures will have mitigation strategies implemented according to the road maintenance plan for permanent Canfor Alberta roads

Status: Meets

Canfor Alberta utilizes the Foothills Stream Crossing Partnership to identify risk. The Foothills Stream Crossing Partnership is administered by the Foothills Research Institute. The program is a creditable standardized procedure that is used by other forest companies and other industrial users across Alberta.

Stream crossing inspections are usually completed in June thru September of each year. All crossing inspections that indicate a high risk for safety are addressed immediately. In 2017 there were 59 inspections completed as part of the Foothills Stream Crossing Partnership (FSCP) program in the Main portion of the DFA. As of 2017, remediation plans including the recommendations from the previous inspections for all medium and high hazard drainage structures were developed within six months of the stream crossing inspections. These remediation plans are scheduled to be implemented on a priority basis.

Currently there are 259 crossings inspected; 124 (49%) pose a high risk to water quality and 89 (33%) pose a medium risk, 44 (17%) are low risk and none are no risk. Over the next three-year period, Canfor Alberta should have all initial inspections of stream crossings completed. The crossings requiring maintenance are scheduled for repairs based on lead-time for budgeting and priorities are evaluated by risk to safety and risk to fish.

Table 16. Percent of Crossings in Remediation Plan

Risk Ranking	Number of crossings by Risk	Percent of Total Crossings	Percent of Crossings in Remediation Plan	Number of Crossings in Remediation Plan repaired in 2014	Number of Crossings in Remediation Plan repaired in 2015	Number of Crossings in Remediation Plan repaired in 2016	Number of Crossings in Remediation Plan repaired in 2017
High Risk Inspections	124	49%	100%	1	23	20	9
Medium Risk Inspections	89	33%	100%	9	11	11	10
Low Risk Inspections	44	17%	100%	31	13	13	11
No Risk Inspections	N/A	NA	NA	0	0	35	26
Total Crossings Inspected	259	100%	100%	41	47	79	56

Value: Water Quality

Objective: Impacts to water quality will be minimized

CSA Core Indicator 3.2.1: Proportion of watershed or water management areas with recent stand-replacing disturbance

Indicator Statement 3.2.1c): Forestry water crossing construction and maintenance work in compliance with Code of Practice for Water Course Crossings or Operating Ground Rules within each subunit

Target 3.2.1c):

100% of forestry water crossing construction and maintenance work in compliance with Code of Practice for Water Course Crossings or Operating Ground Rules

Acceptable variance:

No variance; all construction and maintenance will have the required approvals and will be carried out in compliance with Code of Practice for Water Course Crossings or Operating Ground Rules

Status: Meets

Work was completed on 56 permanent stream crossings within the 2017 timber year. All work was completed within the Code of Practice for Watercourse Crossings and Operating Ground Rules.

Table 17. Crossing Construction and Maintenance Completed in Compliance with Code of Practice and Operating Ground Rules

No. of New Crossings	No. of Crossings Maintenance Complete	CoP or OGR Apply?	CoP or AOP Approval Obtained?
0	56	OGR	AOP Approval

6. Criterion 4: Role in Global Ecological Cycles

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

Element (4.1): Carbon Uptake and Storage

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

Value: Carbon uptake and storage

Objective: Carbon uptake and storage (i.e. carbon balance) will be maintained

CSA Core Indicator 4.1.1: Net carbon uptake

Indicator Statement 4.1.1: The tons of carbon stored in each of the carbon pools

Target 4.1.1:

Achieve 100% of the carbon stored in each of the carbon pools as defined by the Preferred Forest Management Scenario forecast

Acceptable variance:

+/- 20% of the Preferred Forest Management Scenario for the 10 year forecast values

Status: Pending

The amount of carbon stored in each of the carbon pools is trending towards the 10 year FMP PFMS forecasted levels. The numbers shown in Table 18 will be summarized annually as a method to monitor that Canfor is trending towards the 10 year forecasted target.

Table 18. Carbon Storage Current Status Summary

Year	Carbon Sequestration by Carbon Pool			
	Above Ground Biomass	Below Ground Biomass	Dead Organic Matter	Soil Biomass
2013 TY	29.00	6.57	47.97	52.43
2014 TY	28.77	6.51	47.88	52.36
2015 TY	28.84	6.52	47.83	52.45
2016TY	28.89	6.53	47.78	52.48
2017TY	28.73	6.49	47.77	52.52
10 yr PFMS Forecast	26.96	6.15	47.49	52.84

Element (4.2): Forest Land Conversion

Protect forest lands from deforestation or conversion to non-forests, where ecologically appropriate.

Value: Sustainable yield of timber

Objective: Limit the conversion of productive forest to other uses

CSA Core Indicator 4.2 (2.2.1): Additions and deletions to the forest area

Indicator Statement 4.2 (2.2.1): Percent of gross forested land base in the DFA converted to non-forest land use through forest management activities

Target 4.2 (2.2.1):

Forest management company activities not to exceed 3% reduction in gross Defined Forest Area over the life of the Forest Management Agreement (May 26, 1964)

Acceptable variance:

No variance; forest management company activities will not exceed 3% reduction in gross Defined Forest Area over the life of the Forest Management Agreement (May 26, 1964)

Status: Meets

In the 2017 timber year, Canfor did not apply for nor construct any non-forest land use dispositions in the DFA. However, Canfor did acquire two non-forest land use dispositions in the DFA by assignment or existing dispositions as follows:

- DML 040066 – Campsite located in 15-31-62-02-W6M – 3.347 hectares
- DLO 041605 – Access road located in 15-31-62-02-W6M – 31.9 hectares

In the 2017 timber year, Canfor returned the following non-forest area dispositions to forest land by reforestation:

- MSL 930111 located in 10-32-64-21-W5M – 1.4 hectares
- LOC 780790 & 961393 located in 5-2-62-25-W5M – 22.7 hectares
- MSL 005036/LOC 003518 – located in 2-31-64-26-W5M – 2.4 hectares

The percentage of forest land converted to non-forest land use by Canfor over the life of the FMA agreement (May 26, 1964) is 0.2%.

Table 19. Percentage of Forest Land Converted to Non-forest Land Use

DFA Total Area (ha)	Area Converted to Non-Forest Area Use May 1/17 to April 30/18 (ha)	Net Non-Forest Area Dispositions as of April 30/18 (ha)	PERCENTAGE of Forest Land Converted to Non-Forest Land Use	Non-forest area Returned to Forest Land May 1/17 to April 30/18 (ha)	Total Non-forest Area Returned to Forest Land May 1/12 to April 30/17 (ha)	NET reduction in forest land area (ha)
644,695	4.5	1,530.8	0.2%	26.5	49.6	1,481.2

7. Criterion 5: Economic and Social Benefits

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

Element (5.1) Timber and Non-Timber Benefits

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

Value: Sustainable yield of timber and non-timber benefits

Objective: Sustainable forest management that maintains timber and non-timber benefits

CSA Core Indicator 5.1.1: Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA

Indicator Statement 5.1.1a): Percent of volume harvested compared to long term approved harvest level

Target 5.1.1a):

Not to exceed 100% of the approved harvest level (Annual Allowable Cut) over 5 years (5 yr. quadrant balance)

Acceptable variance:

The actual quadrant harvest volume will not exceed 5% of the allowable harvest level

Status: Meets

The coniferous harvest level is at 69% of the approved harvest level for Canfor's quadrant ending May 4, 2019. Delivered Timber Volume Monitoring is a condition of the FMP approval.

Table 20. Percent of Volume Harvested

Timber Disposition	Quadrant Period	Quadrant Harvest Level (m3)	Harvested as of April 30, 2018 (m3)	Percent	Remaining (m3)
FMA9900037 (Q1)	May 5, 2014 - April 30, 2019	3,513,674	2,424,082	69	1,089,592
DTA150001	May 1, 2013 - April 30, 2018	689,738	43,443	6	646,295
DTA150002	May 1, 2014 - April 30, 2019	1,101,453	0	0	1,101,453
DTA150003 (Q2)	May 1, 2013 - April 30, 2018	872,269	455,592	52	416,677

Indicator Statement 5.1.1b): Maintenance of recreational areas for non-timber values

Target 5.1.1b):

Canfor Alberta will maintain a minimum of 3 recreational areas for use by the public within DFA

Acceptable variance:

No variance; Canfor Alberta will maintain a minimum of 3 recreational areas for use by the public within the DFA

Status: Meets

Canfor maintains and supports several recreational areas (Figure 9) in both its Grande Prairie and Hines Creek operations. In 2017, Canfor maintained 4 public recreational areas within the DFA, and supported 2 recreational sites outside the DFA area:

- MacLeod Flats;
- Economy Lake;
- Frying Pan Creek;
- Westview;
- Swan Lake (located outside DFA area, approximately 25 km west of Valleyview); and
- Stoney Lake (located outside DFA area, approximately 30 km northeast of Hines Creek).

A typical site includes camping stalls, picnic tables, firewood, garbage receptacles and pit toilets. MacLeod Flats, Economy Lake and Stoney Lake also have well water which must be boiled before using.

In 2017 the Swan Lake Recreation Area was operated and maintained by the MD of Greenview with Canfor providing financial support. Many positive comments were received regarding the facility and fishing resource.

Stoney Lake Campsite is located in Canfor's quota area northeast of Hines Creek. This recreation area has 28 overnight sites, a boat launch area, day use area, toilets, and non-potable water supply. An agreement was signed in 2006 with Alberta Tourism, Parks and Recreation whereby Canfor provides a financial contribution and Tourism, Parks and Recreation manages and operates the Stoney Lake site. This agreement continued in 2017.

To promote public use of the recreation areas, Canfor Alberta has produced a pamphlet titled *Canfor Public Recreation Areas* that is available through the Grande Prairie Tourism Association, Muskoseepi Park and Canfor Alberta's Administration Office.

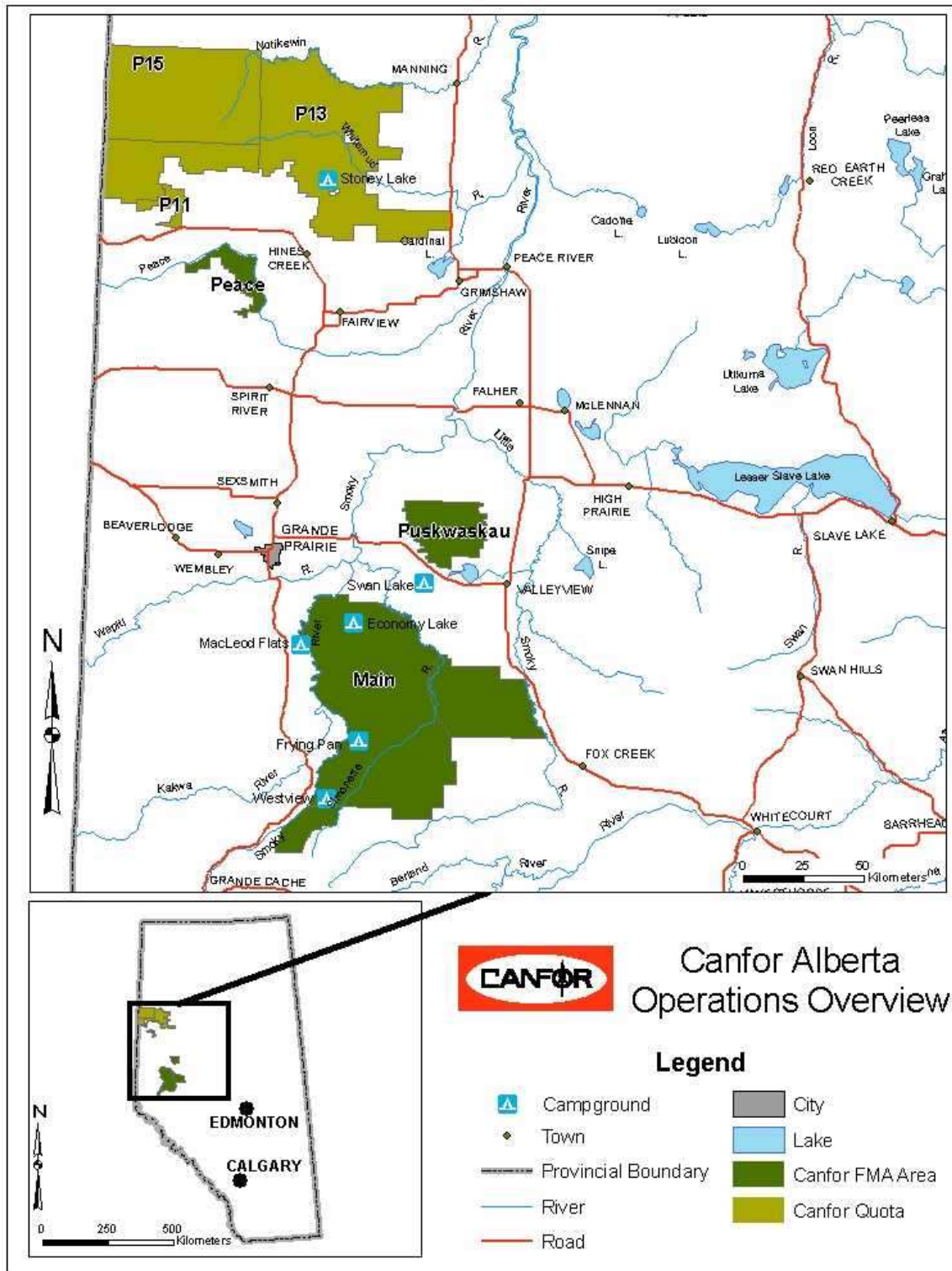


Figure 11. Location of Recreation Areas Managed by Canfor

Element (5.2): Communities and Sustainability

Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and by supporting local community economies.

Value: A range of benefits to local communities

Objective: Local communities and contractors will have the opportunity to share in benefits such as jobs, contracts and services

CSA Core Indicator 5.2.1: Level of investment in initiatives that contribute to community sustainability

Indicator Statement 5.2.1a): Investment in local communities

Target 5.2.1a):

Over a rolling 5-year period, a minimum of 75% of Canfor Alberta forest operations dollars paid for contract services will be expended locally

Acceptable variance:

No variance; over a 5 year period, a minimum of 75% of Canfor Alberta forest operations dollars paid for contract services will be expended locally

Status: Meets

In the 2017 fiscal year, Canfor Alberta forest operations spent 91% (5-year rolling average) of its dollars on local contract services.

Table 21. Investment in Local Communities

Contribution	2013	2014	2015	2016	2017
Local Contract Services (\$ millions)	47.9	54.9	81.5	65.8	72.2
Non-Local Contract Services (\$ millions)	4.3	5.4	6.9	8.5	5.5
Subtotal	52.2	60.2	88.4	74.3	77.6
% Local Contract Services (5 year rolling avg.)	90%	90%	91%	90%	91%

Indicator Statement 5.2.1b): Investment in local communities

Target 5.2.1b):

Canfor Alberta will provide financial/in-kind support to a minimum of 8 community events or services

Acceptable variance:

No variance; Canfor will provide financial/in-kind support to a minimum of 8 community events or services

Status: Meets

For the 2017 fiscal year, Canfor provided financial support to 16 community events and services:

1. Shock Trauma Air Rescue Service Foundation (STARS);
2. Grande Prairie Regional Emergency Medical Services (GPREMS);
3. QE11 Hospital Foundation;
4. Grande Prairie Regional Hospital Foundation;
5. Grande Prairie Firefighters Charity Foundation (Sparky's Wish);

6. Ronald McDonald House Northern Alberta;
7. Peace Valley Snow Riders;
8. Clear Hills Agri-show;
9. Sexsmith and Area Christmas Hampers;
10. Grande Prairie Ski Patrol;
11. Sexsmith Little Sliders Curling;
12. Salvation Army – Adopt A Family;
13. Duncan First Nations Elder Supper;
14. Odessey House;
15. Northern Spirit of Lights show; and
16. Big Brothers Big Sisters.

Canfor provided in-kind support to 5 community events and services:

1. Earth Rangers presentations to 4 local schools;
2. Nitehawk Ski Patrol (office space);
3. Arbour Day (Canfor foresters presentations to school classrooms);
4. Walk through the Forest (hosted wildlife and harvesting booth with Canfor forester presenters); and
5. Seedling donations to Junior Forest Ranger program.

CSA Core Indicator 5.2.2: Level of investment in training and skills development

Indicator Statement 5.2.2: Training in environmental and safety procedures in compliance with company training plans

Target 5.2.2:

100% of Canfor FMG Alberta employees and contractors have required environmental and safety training

Acceptable variance:

No variance; 100% of Canfor FMG Alberta employees and contractors have required environmental and safety training

Status: Meets

Canfor records from May 1, 2017 to April 30, 2018 show that all FMG Alberta employees and all DFA-related contractors have been given the required environmental and safety training as outlined by company training procedures.

Value: Fair distribution of benefits across communities

Objective: A fair distribution of benefits and costs will be ensured across all communities in the local area

CSA Core Indicator 5.2.3: Level of direct and indirect employment

Indicator Statement 5.2.3: Level of direct and indirect employment

Target 5.2.3:

Report annually on trend of Canfor Alberta's level of direct and indirect jobs created from the DFA

Acceptable variance:

No variance; report annually on trend of Canfor Alberta's level of direct and indirect jobs created from the Defined Forest Area

Status: Meets

Direct and indirect employment levels remain stable.

Table 22. Level of Direct and Indirect Employment

	Production Volume (m ³)	Employment
Potential	714,100	2928
2012	704,514	2889
2013	505,296	2072
2014	385,281	1580
2015	724,699	2971
2016	602,724	2,471
2017	714,361	2,929

CSA Core Indicator 5.2.4: Level of Aboriginal participation in the forest economy

Indicator Statement 5.2.4: Opportunities for Aboriginal communities and contractors to participate in the forest economy

Target 5.2.4:

Maintain evidence that opportunities have been provided

Acceptable variance:

No variance

Status: Meets

No open bid projects or services that are not secured under existing multi-year agreements were made available for tender in 2017.

Canfor provided opportunity for consultation on the Annual Operating Plan (AOP), General Development Plan (GDP) and Forest Management Plan (FMP), and site level dispositions in 2017.

During consultation discussions, Canfor verbally relays that the company is actively hiring as an employer in a multitude of positions. Contact information is provided to aboriginal communities with respect to the current application process.

Canfor continues to aid in funding of an Aboriginal economic opportunity through projects or events such as;

- The Foothills Landscape Management Forum (FLMF) as funding partner for the Caribou Patrol Program in which members of a local Aboriginal Community are hired to:
 - Reduce the potential of vehicle collisions with woodland caribou
 - Enhanced awareness of caribou management through education and outreach initiatives for three specific user groups, the public, industry and students; and
 - Collect data on wildlife sightings
- Participation in a culture camp where employees of Canfor partake in a 3 day event hosted by a local Aboriginal Community in which they educate participants on their traditional values and way of life
- Participation in a cultural event held by a local Aboriginal Community

8. Criterion 6: Society's Responsibility

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

Element (6.1): Aboriginal and Treaty Rights

Recognize and respect Aboriginal title and rights, and treaty rights. Understand and comply with current legal requirements related to Aboriginal title and rights, and treaty rights.

Value: Understanding and respecting Aboriginal and treaty rights

Objective: Aboriginal and treaty rights will be respected

CSA Core Indicator 6.1.1: Evidence of a good understanding of the nature of Aboriginal title and rights

Indicator Statement 6.1.1: Canfor FMG Alberta employees will receive Aboriginal awareness training

Target 6.1.1:

100% of Canfor FMG Alberta Forestry Supervisors, Coordinators, Superintendents, and the Operations Manager will receive credible and effective Aboriginal awareness training once every two years

Acceptable variance:

A minimum of 75% of Canfor FMG Alberta staff receives a minimum of one credible and effective Aboriginal training session every two years

Status: Does Not Meet

In September 2016, four Canfor FMG Alberta staff attended a three day cultural camp hosted by Aseniwuche Winewak Nation. The cultural camp provided a great opportunity for staff to receive credible and effective Aboriginal awareness knowledge. Although this only represents 31% of Canfor FMG Alberta staff, Canfor has contacted several of the other local Aboriginal communities to schedule Aboriginal awareness training for all staff. At this time, several other staff members are registered to attend another cultural camp hosted by Aseniwuche Winewak Nation in 2018.

CSA Core Indicator 6.1.2: Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans

Indicator Statement 6.1.2: Members of local Aboriginal communities will be provided ample opportunity to understand Canfor Alberta's forest management plan

Target 6.1.2:

Opportunity to communicate key components of the Forest Management Plan have been provided to each affected local Aboriginal group

Acceptable variance:

No variance; opportunity to communicate key components of the forest management plan have been provided to each affected local Aboriginal group

Status: Meets

Canfor initiated development of its Forest Management Plan (FMP) in 2010. The plan was submitted to Alberta Environment and Sustainable Resource Development (AESRD) on May 1, 2015 for review and approval. Throughout the FMP development, Canfor contacted four

Aboriginal groups (Aseniwuche Winewak Nation, Horse Lake First Nation, Sucker Creek First Nation and Sturgeon Lake Cree Nation) identified as having some interest in the DFA.

Canfor provided opportunities for participation with the Forest Management Advisory Committee in the development of VOITs that were in the FMP, opportunities to attend Open Houses, and made presentations and held meetings with each Aboriginal group to provide information on the FMP.

As Canfor began selection of the Preferred Forest Management Scenario (PFMS), Canfor contacted each of the Aboriginal groups to present the PFMS and discuss the management assumptions that were used in the development of the scenario.

Canfor's 2015 Forest Management Plan was approved by the Province on April 18, 2016.

CSA Core Indicator 6.1.3: Level of management and/or protection of areas where culturally important practices and activities (hunting, fishing, gathering) occur

Indicator Statement 6.1.3: Percent of forest operations in conformance with operational/site plans developed to address Aboriginal forest values, traditional knowledge and uses

Target 6.1.3:

100% of forest operations are conducted in conformance with operational/site plans that have been developed to address Aboriginal forest values, traditional knowledge and uses

Acceptable variance:

No variance; all operational/site plans that have been developed to address Aboriginal forest values, traditional knowledge and uses will be implemented

Status: Meets

Through the consultation process, there were no Aboriginal forest values, traditional knowledge and uses identified within operational/site plans in the 2017 timber year. 100% of forest operations were conducted in conformance with operational/site plans that were developed to address previously identified Aboriginal forest values, traditional knowledge, and uses.

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

Respect traditional Aboriginal forest values, knowledge, and uses as identified through the Aboriginal input process.

Value: Identified protected areas and sites that have special biological and cultural significance. Understand and respect Aboriginal special needs

Objective: The natural states and processes to maintain protected areas and sites that have special biological and cultural significance will be conserved. Early and effective consultation with Aboriginal peoples will be provided.

CSA Core Indicator 6.2.1: Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values

Indicator Statement 6.2.1 (1.4.2): Percent of identified historic, sacred and culturally important sites, forest values, traditional knowledge and uses considered in forestry planning processes

Target 6.2.1 (1.4.2):

100% of historic, sacred and culturally important sites, forest values, traditional knowledge and uses known or identified through communication are considered in forestry planning processes

Acceptable variance:

No variance; all identified sites will be considered

Status: Meets

All of Canfor's planned harvest blocks from May 1, 2017 to April 30, 2018 were screened in a Historical Resources Overview Assessment. 21% of the screened developments exhibited historic resources potential and were field assessed prior to December 1st, 2017. The field assessment of the planned harvest blocks resulted in the discovery of 12 new archaeological sites. These sites were excluded from the harvested areas during the forestry planning process.

All records and action plans from May 1, 2017 to April 30, 2018, in Canfor's Creating Opportunities for Public Involvement (COPI) database were reviewed and it was determined that 100% of historic, sacred, and culturally important sites, forest values, traditional knowledge, and uses were considered in the forestry planning process.

Element (6.3): Forest Community Well-Being and Resilience

Encourage, co-operate with, or help to provide opportunities for economic diversity within the community.

Value: Inclusive public process

Objective: Affected and locally interested parties will be involved in the development of the decision-making process through an open, transparent and accountable process

CSA Core Indicator 6.3.1: Evidence that the organization has co-operated with other forest-dependent businesses, forest users, and the local community to strengthen and diversify the local economy

Indicator Statement 6.3.1: Relationships with other forest businesses and users

Target 6.3.1:

Evidence of minimum of 4 relationships with forest products businesses annually within the vicinity of the DFA

Acceptable variance:

No variance; Canfor Alberta will maintain a minimum of four relationships with other forest products businesses

Status: Meets

In the 2017 timber year, Canfor actively initiated and participated in direct relationships with six forest products businesses within the vicinity of the DFA. Activities ranged from fiber purchase and sales agreements to benchmarking and industry involvement meetings.

Table 23. Relationships with Forest Products Businesses

Forest Industry User	Evidence of Relationship
Norbord Inc.	Fiber Agreements/Consultation on AOP/GDP
DMI	Fiber Agreements/Operational Meetings/Interactions
Tolko	Fiber Agreements/Consultation on AOP/GDP
Weyerhaeuser	Fiber Agreements
International Paper	Fiber Agreements
Millar Western	Fiber Agreements
Total # of Relationships	6

Value: Worker safety

Objective: Effective worker safety program

CSA Core Indicator 6.3.2: Evidence that the organization has co-operated with other forest-dependent businesses, forest users, and the local community to strengthen and diversify the local economy

Indicator Statement 6.3.2: Implementation and maintenance of a certified safety program

Target 6.3.2:

100% of Canfor FMG Alberta and eligible DFA-related contractors will obtain and maintain a Certificate of Recognition (COR) or equivalent

Acceptable variance:

90% of Canfor FMG Alberta and contractors will have COR certification or equivalent.

Status: Meets

Records from the 2017 timber year show that Canfor FMG Alberta and most of the DFA-related contractors (35 of 38, 92%) maintained a Certificate of Recognition (COR) or equivalent.

Two of the three contractors without certification are currently in the process to receive their COR certificate. The one contractor that does not have COR certification is no longer employed by CANFOR as a result of the COR certification requirements not being met.

Value: Worker safety

Objective: Approved safety program

CSA Core Indicator 6.3.3: Evidence that a worker safety program has been implemented and is periodically reviewed and improved

Indicator Statement 6.3.3: Implementation and maintenance of a certified safety program

Target 6.3.3:

100% of recommendations from Partners in Injury Reduction (PIR) audit will be addressed and action plans developed

Acceptable variance:

No variance; Canfor will address all issues in the review of the safety program

Status: Meets

A PIR audit was conducted in November 2017 that evaluated Canfor Alberta Forest Management Group (FMG) and Mill safety performance. 13 Elements were audited and scored individually in which the overall score was 85%. No elements were found to be non-compliant nor were there any recommendations specific to the Canfor Alberta Forest Management Group to address.

Element (6.4): Fair and Effective Decision Making

Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants and that there is general public awareness of the process and its progress.

Value: Current scientific, local, and traditional knowledge

Objective: Forest management decisions will be based on scientific, local, and traditional knowledge

CSA Core Indicator 6.4.1: Level of participant satisfaction with the public participation process

Indicator Statement 6.4.1: Public advisory group maintained and satisfaction survey implemented

Target 6.4.1:

80% annual satisfaction from surveys in all four targets

Acceptable variance:

A minimum of 70% annual satisfaction from surveys from all four sections

Status: Meets

There were two Forest Management Advisory Committee (FMAC) meetings held in the 2017 timber year. One on October 18th, 2017 and the second was on April 18th, 2017. FMAC

Members filled out a Forest Management Advisory Committee Evaluation Forms for the both meeting of which there was 98% satisfaction of which zero percent was less than acceptable.

CSA Core Indicator 6.4.2: Evidence of efforts to promote capacity development and meaningful participation in general

Indicator Statement 6.4.2: Number of educational opportunities for information/training/capacity building that are delivered to the public advisory group annually

Target 6.4.2:

Provide one educational opportunity per Forest Management Advisory Committee meeting, plus one field tour opportunity per year

Acceptable variance:

No variance; Opportunities will be provided

Status: Meets

Canfor provided one opportunity for information/training/capacity development in the 2017 timber year to the Forest Management Advisory Committee (FMAC). At the spring FMAC meeting, Ducks Unlimited Canada (DUC) presented information on the importance of wetlands and forest management and talked about the DUC Boreal Program.

The FMAC also participated in two field tours in the 2017 timber year. The first one was held in August in which Canfor's FMAC joined DMI's Public Advisory Committee on a tour of EMEND. The tour a field tour included an opportunity for the FMAC to walk through the interpretive trails at EMEND where University of Alberta staff and research students, as well as Natural Resources Canada staff led discussions on active research and key findings regarding boreal ecology. The tour provided insight into how the research that is being conducted at EMEND helps inform the development of sustainable forest management plans as well as helps drive policy development in the Province of Alberta.

In February 2018, the FMAC visited one of Canfor's active logging operations. The group was able to discuss archeological site protection, water management strategies, and silviculture plans while observing active machinery working on site.

CSA Core Indicator 6.4.3: Evidence of efforts to promote capacity development and meaningful participation for Aboriginal communities

Indicator Statement 6.4.3: Number of opportunities for information/training/capacity development that are delivered to the Aboriginal communities annually

Target 6.4.3:

Greater than or equal to 1 Aboriginal information/training/capacity development opportunity per year

Acceptable variance:

No variance; greater than or equal to 1 Aboriginal information/training/capacity development opportunity per year

Status: Meets

Canfor provided three opportunities for information/training/capacity development in the 2017 timber year:

- One member from the Metis 6 Nation attended the FMAC tour to EMEND;

- Two members of the Metis Nation Zone 6 attended a FMAC meeting in which presentations were made by Ducks Unlimited Canada regarding the importance of wetlands and forest management.
- Two members of the Sucker Creek First Nation and one member of the Aseniwuche Winewak Nation attended Canfor's FMAC tour which included a tour of logging operations.

Element (6.5): Information for Decision-Making

Provide relevant information and educational opportunities to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem.

Value: Current scientific, local, and traditional knowledge

Objective: Forest management decisions will be based on scientific, local, and traditional knowledge

CSA Core Indicator 6.5.1: Number of people reached through educational outreach

Indicator Statement 6.5.1: The number of educational opportunities provided to the community

Target 6.5.1:

A minimum of 5 educational opportunities provided to the community annually

Acceptable variance:

No variance; at least five opportunities will be provided annually

Status: Meets

Canfor Alberta participated in 7 educational outreach initiatives in the 2017 timber year:

1. An active Forest Management Advisory Committee (3 opportunities);
2. The Grande Prairie and Area Environmental Sciences Education Society;
3. Arbour Day;
4. Walk Through the Forest presentations to local elementary schools;
5. Presentation to Ecole St.Gerard Kindergarten class;
6. Earth Rangers presentations to 4 regional elementary schools; and
7. Public Open Houses (2 opportunities).

CSA Core Indicator 6.5.2a): Availability of summary information on issues of concern to the public

Indicator Statement 6.5.2a): CSA Z809-08 Sustainable Forest Management Plan monitoring report made available to the public annually

Target 6.5.2a):

CSA Z809-08 Sustainable Forest Management Plan and Annual Performance Monitoring Report made available to public annually on Canfor's external website

Acceptable variance:

No variance; the SFMP and the APMR will be available digitally on Canfor's external website

Status: Meets

Canfor FMG Alberta's CSA Z809-08 *Sustainable Forest Management Plan 2012* and *Annual Performance Monitoring Report (APMR)* are publicly available on the Canfor Corporation website www.canfor.com. The 2016 APMR can specifically be found at this link:

http://www.canfor.com/docs/default-source/responsibility/2016_annualperformancemonitoringreport_final_june28_2017.pdf?sfvrsn=33ffeb91_2

Indicator Statement 6.5.2b): Percentage of public inquiries that receive an initial contact

Target 6.5.2b):

100% of all inquiries receive initial contact within 1 month of receipt

Acceptable variance:

90% of public inquiries will generate a response within one month

Status: Meets

Canfor Alberta received one public inquiry during the 2017 reporting year, which received an initial response within one month of receipt.

9. Summary

The status of the 56 targets found throughout this *2016 Annual Performance Monitoring Report* is summarized in Table 24 below.

Table 24. Summary of Performance

Classification	2017
Number of targets "Meets"	49
Number of targets "Does Not Meet"	2
Number of targets "Pending"	5
Total number of CSA Z809-08 targets	56

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 defines audit findings in the following categories:

- Best Management Practice: An Auditor's professional judgment where he/she notes a particular practice that stands out as above the industry norm or is an area where significant improvement over the previous year has been noted and the auditor wishes to recognize the company's efforts.
- 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 could be made.

In 2017, 2 audits of Canfor Alberta's forestry systems were conducted in the DFA:

- Internal audit of CAN/CSA Z809-08, including PEFC Chain of Custody for the Alberta FMA area and ISO 14001:2004 for the Canfor Alberta Division, with the following findings reported:
 - 1 best management practice; and
 - 4 opportunities for improvement
 - 0 minor non-conformances
- An External audit was completed by an independent third party for CAN/CSA Z809-08, including multisite PEFC Chain of Custody and ISO 14001:2004, with the following findings reported for the Canfor Alberta Division:
 - 3 best management practices;
 - 2 opportunities for improvement;
 - 0 minor non-conformances; and
 - 0 major non-conformances.

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 Forest Management Group staff.

10. Literature Cited

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