# Fort St. John Pilot Project

# Sustainable Forest Management Plan 2019/2020 CSA and Regulatory Annual Report

For the period April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020

BC Timber Sales Canadian Forest Products Ltd. Cameron River Logistics Ltd. Louisiana-Pacific Canada Ltd. Mackenzie Pulpmill Corp. Dunne-za LP Peace Valley OSB



**Final Report** October 19<sup>th</sup>, 2020

# Fort St. John Pilot Project

# Sustainable Forest Management Plan 2019/2020 CSA and Regulatory Annual Report

For the period April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020

BC Timber Sales (BCTS) Canadian Forest Products Ltd. (CANFOR) Cameron River Logistics Ltd. (CRL) Louisiana-Pacific Canada Ltd. (LP) Mackenzie Pulpmill Corp. (MPMC) Dunne-za LP Peace Valley OSB (PVOSB)

Submitted on behalf of the participants by:

Stacy Gibbons, RPF Planning Supervisor Canfor

they Hikkow

#### Prepared by:

Andrew Tyrrell, RPF, Harvesting Supervisor, Canfor Anthony Nickel, RPF, Harvesting Supervisor, Canfor Carmen Anderson, RPF, Forestry Superintendent, Canfor Darrell Regimbald, RPF, Certification Specialist, Canfor Dawn Griffin, RPF, Silviculture Supervisor, Canfor Debbie Ewanchuk, Woodlands Accountant, Canfor Jim Schilling, Operations Supervisor, Canfor Kim Verbruggen, GIS Coordinator, Canfor Kristine Bock, RPF, Harvesting Supervisor, Canfor Kyle Winters, RPF, Permitting Supervisor, Canfor Larry McFadden, RPF, Woodlands Supervisor, BC Timber Sales (BCTS) Rod Higgins, RFT, Field Operations Supervisor, Canfor Sarah Curtis, RPF, Planning Supervisor, Canfor Shelley Miller, Administrative Assistant, Canfor Stacy Gibbons, RPF, Planning Supervisor, Canfor Tabatha Nedokus, RPF, Permit and Appraisal Supervisor, Canfor Tony Wipfli, RPF, Planning Forester BC Timber Sales (BCTS) Walter Fister, RPF, Area Forester, BC Timber Sales (BCTS) Wes Neumeier, RPF, Harvest Superintendent, Canfor





#### **EXECUTIVE SUMMARY**

#### Highlights of 2019-2020

- Sixteenth year under Sustainable Forest Management Plan (SFMP) The 2019-2020 reporting year was the second year of operation under SFMP #3. SFMP #3 was approved on May 4th, 2018. This Annual Report is a derivative of SFMP #3 and the SFMP is referred to throughout the document. The indicators numerically listed in Section 3 of the Annual Report correspond with the indicators listed in section 6 of SFMP #3. For example: Section 6.25 in SFMP #3 equates to Section 3.25 in this document and both refer to Indicator 25. SFMP The #3 and this document can be found at: https://www.fsjpilotproject.com/project.html.
- Spruce beetle probing/management Blocks containing live beetles were proposed to be added to the Forest Operations Schedule (FOS) through FOS Major Amendment 373. Also through timber reconnaissance, Canfor detected and monitored spruce beetle activities in other parts of the Defined Forest Area (DFA).
- Indicator performance The participants achieved consistent positive performance regarding overall conformance to indicator targets with 67 of 69 (97.1%) indicator targets achieved in the 2019-20 year.
- Legal indicator performance For the period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020, the
  participants achieved the performance indicator objectives on 27 of the 28 different
  regulatory landscape level strategy indicators (Section 42 of the Fort St. John Pilot Project
  Regulation (FSJPPR), or affecting Part 3 Division 5 of the FSJPPR (see Section 11)
  included in SFMP# 3).

## Summary of Participants Consistency with the Landscape Level Strategies

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

Timber Harvesting Strategy - Activities were consistent with the targets or acceptable variances on 100% (7 of 7) of the Fort St. John Pilot Project Regulation (FSJPPR) Section 42 performance indicators, and 100% (3 of 3) of non-regulatory SFMP indicators (Canadian Standards Association (CSA) indicators) linked to the Timber Harvesting Strategy.

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

Patch Size, Seral Stage and Adjacency Strategy - Activities were consistent with the targets or acceptable variances on 100% (4 of 4) of the FSJPPR Section 42 performance indicators, and 100% (2 of 2) of the Section 35 (6) performance standard indicators linked to the Patch size, Seral Stage and Adjacency Strategy. The Wildlife Tree Retention target was achieved on 11 of 11 Landscape Units.

<u>Riparian Management Strategy</u> - Activities were consistent with the targets or acceptable variances on 100% (4 of 4) of the FSJPPR Section 42 performance indicators, and 100% (2 of 2) of the Section 35 (6) performance standard indicators linked to the Riparian Management Strategy.



<u>Visual Quality Management Strategy</u> - Activities were assessed as being consistent with the target or acceptable variance for the Section 42 performance indicator on blocks requiring assessment prior to the end of the reporting period. Therefore, activities were consistent with the target or acceptable variance on 100% (1 of 1) of the Section 42 performance indicator linked to the Visual Quality Strategy.

Forest Health Management Strategy - Activities were consistent with the targets or acceptable variances on 83% (5 of 6) of the Section 42 performance indicators (indicator 49 not met) and 100% (1 of 1) non regulatory SFMP indicators linked to the Forest Health Management Strategy.

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

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

Soil Management Strategy – Activities were consistent with the target or acceptable variance for the Section 42 performance indicator linked to the Soil Management Strategy. 100% (1 of 1) legal indicators were met.



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

The following table summarizes non-conformances to indicators in the 2019-20 reporting year, and revisions made to the SFMP for the reporting year (note that indicators in red text refer to those related to regulatory requirements under the FSJPPR).

Indicator		Non Conformance	
Indicator 57	Percentage of known traditional site-specific aboriginal values and uses identified that are addressed in operational plans (See Section 3.57)	Since less than 100% of known traditional site- specific values and uses identified were addressed in operational plans, this indicator was not met for the reporting period.	
Indicator 49	Forest Health FOS Planning (See Section 3.49)	The number of pine leading FOS blocks was below target.	
Indicator		Significant Revisions	
Indicator 2	Seral stages (see Section 3.2)	The minimum proportion (%) of late seral stage forest retention by NDU.	
Indicator 10	Noxious weed content and invasive plant content (see Section 3.10)	The percentage of noxious weeds, and known invasive plant species of concern in the seed mix analyses.	
Indicator 41	Range action plans (see Section 3.41)	The revision addresses SFMP approval condition #2.	
Indicator 42	Damage to range improvements (see Section 3.42)	Number of natural range barriers or range improvements rendered ineffective by participants activities.	
Indicator 48	Summer and fall volumes (see Section 3.48)	The indicator and target or portions thereof, will not apply during periods of indefinite mill closures or curtailments.	
Indicator 49	Forest health FOS planning (see Section 3.49)	Percentage of significant detected forest health damaging agents which have treatment plans prepared and implemented.	
Indicator 51	Timber profile deciduous (see Section 3.51)	The volume of deciduous species that has been identified in planned cutblocks in the FOS within the core partition area.	
Indicator 51A	Timber profile deciduous (see Section 3.51)	The volumes of deciduous species (measured using planning stage block volume data), that has been harvested by participants within the core partition area since May 10, 2018	
Indicator 52	Timber profile Conifer (see Section 3.52)	The volume of conifer species that has been in planned cut blocks in the FOS within the core partition area.	



7

Indicator		Significant Revisions
Indicator 52A	Timber profile Conifer (see Section 3.52)	The volume of conifer species (measured using planning stage block volume data), that has been harvested by the participants within the core partition area since May 10, 2018
Indicator 56	Maintenance of wildlife and fisheries habitat values (see Section 3.56)	Ecosystem and species diversity indicators supporting hunting and trapping opportunities. Water quality and quantity indicators supporting fishing opportunities.

SFMP #3 was approved May 4<sup>th</sup>, 2018. Therefore, the 2019-2020 Annual Report describes the participants performance to indicators and targets as written in SFMP #3.

This report was discussed with the Fort St John Pilot Project Public Advisory Group on October  $15^{\mbox{th}},\,2020.$ 



# TABLE OF CONTENTS

Ex	Executive Summary4		
1.	Introd	uction and Overview	13
2.	Descri	ption of the Pilot Project	15
3.	SFM Ir	ndicators, Objectives and Targets	15
	3.1	FOREST TYPES	17
	3.2	SERAL STAGES	
	3.3	PATCH SIZE	24
	3.4	SOIL DISTURBANCE	-
	3.5	SNAGS/CAVITY SITES	
	3.6	COARSE WOODY DEBRIS VOLUME	31
	3.7	RIPARIAN RESERVES	
	3.8	SHRUBS	
	3.9	WILDLIFE TREE PATCHES	35
	3.10	NOXIOUS WEED CONTENT AND INVASIVE PLANT CONTENT	
	3.11	SPECIES AT RISK STAND LEVEL MANAGEMENT GUIDELINES	
	3.12	FOREST WORKERS' SAFETY	
	3.13	SEED USE	
	3.14	ASPEN REGENERATION	42
	3.15	CLASS A PARKS, ECOLOGICAL RESERVES AND LRMP DESIGNATED PROTECTED AREAS	40
	0.40	UNGULATE WINTER RANGES, WILDLIFE HABITAT AREAS AND MKMA	
	3.16		
	3.17	REPRESENTATIVE EXAMPLES OF ECOSYSTEMS	
	3.18	GRAHAM HARVEST TIMING GRAHAM MERCH AREA HARVESTED	
	3.19 3.20		
	3.20 3.21	GRAHAM CONNECTIVITY	
	3.21	RIVER CORRIDORS	
	3.22	TOTAL NUMBER OF CONTRACTS AWARDED TO FIRST NATIONS	
	3.23 3.24	PERMANENT ACCESS STRUCTURES	
	3.24	FOREST HEALTH	
	3.25	SALVAGE	
	3.20	SALVAGE	•••••
	3.27	SPECIES COMPOSITION	
	3.29	REFORESTATION ASSESSMENT	
	3.30	ESTABLISHMENT DELAY	
	3.31	LONG TERM HARVEST LEVEL	
	3.32	SITE INDEX	
	3.33	FIRST NATIONS CONSULTATION & INFORMATION SHARING	
	3.34	PEAK FLOW INDEX.	
	3.35	WATER QUALITY CONCERN RATING	
	3.36	PROTECTION OF STREAMBANKS AND RIPARIAN VALUES ON SMALL STREAMS	
	3.37	SPILLS ENTERING WATERBODIES	
	3.38	CARBON SEQUESTRATION RATE	
	3.39	ECOSYSTEM CARBON STORAGE	
	3.40	COORDINATED DEVELOPMENTS	
	3.41	RANGE ACTION PLANS	



	3.42	DAMAGE TO RANGE IMPROVEMENTS	07
	3.42 3.43	RECREATION SITES	
	3.43	VISUAL QUALITY OBJECTIVES	
	3.45	RECREATION OPPORTUNITY SPECTRUM (ROS)	
	3.46	Actions Addressing Guides, Trappers and Other Interests	00 92
	3.47	TIMBER PROCESSED IN THE DFA	
	3.48	SUMMER AND FALL VOLUMES	
	3.49	FOREST HEALTH FOS PLANNING	
	3.50	COORDINATION	
	3.51	TIMBER PROFILE-DECIDUOUS	97
	3.52	TIMBER PROFILE-CONIFER	
	3.53	CUT CONTROL	
	3.54	DOLLARS SPENT LOCALLY ON EACH WOODLANDS PHASE	106
	3.55	DIRECT AND INDIRECT EMPLOYMENT	
	3.56	MAINTENANCE OF WILDLIFE AND FISHERIES HABITAT VALUES	108
	3.57	NUMBER OF KNOWN VALUES AND USES ADDRESSED IN OPERATIONAL PLANNING	109
	3.58	REGULATORY PUBLIC REVIEW AND COMMENT PROCESSES	
	3.59	TERMS OF REFERENCE (TOR) FOR PUBLIC PARTICIPATION PROCESSES	111
	3.60	PUBLIC INQUIRIES	112
	3.61	EDUCATIONAL OUTREACH	
	3.62	BRUSHING PROGRAM AERIAL HERBICIDE USE	114
	3.63	WORKER TRAINING	-
	3.64	PAG SATISFACTION SURVEYS	
	3.65	AVAILABILITY OF INFORMATION ON ISSUES OF CONCERN	
	3.66	DELETIONS TO FOREST AREA	
	3.67	RARE ECOSYSTEMS	
	3.68	EFFECTIVE COMMUNICATION – NON TIMBER RESOURCES.	
	3.69	EFFECTIVE COMMUNICATION – ABORIGINAL COMMUNITIES	
		nary of Access Management	
5.	Sumn	nary of Timber Harvesting	124
6.	Sumn	nary of Basic Forest Management (Reforestation)	125
7.	Increr	nental Forest Management (Stand Tending)	126
8.	Sumn	nary of any Variances Given	126
9.	Comp	liance	
	9.1.	CONTRAVENTIONS REPORTED	126
	9.2.	COMPLIANCE AND ENFORCEMENT MEASURES IMPOSED BY THE GOVERNMENT	120
	0.2.	UNDER PART 6 OF THE ACT	126
10	۸mon	dments to FDP's or Forest operations schedule	
		cape Level Strategy implementation	
11.			
	11.1	TIMBER HARVESTING STRATEGY	
	11.2	ROAD ACCESS MANAGEMENT STRATEGY	
	11.3	RIPARIAN MANAGEMENT STRATEGY	
	11.4	RANGE AND FORAGE MANAGEMENT STRATEGY	
	11.5	PATCH SIZE, SERAL STAGE DISTRIBUTION AND ADJACENCY STRATEGY FOREST HEALTH MANAGEMENT STRATEGY	136
	11.6	FUREST MEALTH MANAGEMENT STRATEGY	137

11.7	REFORESTATION STRATEGY138
11.8	SOIL MANAGEMENT STRATEGY
11.9	VISUAL QUALITY MANAGEMENT STRATEGY140

# LIST OF TABLES

Table 1: 2017 Status for Forest Types1	18
Table 2: Boreal Plains Conifer 2017 and 2025 Seral Stage and Target	21
Table 3: Boreal Plains Deciduous 2017 and 2025 Seral Stage and Target	22
Table 4: Boreal Foothills Valley and Mtn, Northern Boreal Mountains, Omineca Mtns and Valley         2017 and 2025 Seral Stage and Targets	
Table 5: Natural Disturbance Unit Early Patch Distribution Targets	25
Table 6: Early Patch Size Class Current Status & Post FOS Condition	26
Table 7: Shrub Habitat 2017 Status, FOS Condition and Targets	34
Table 8: Harvest Area and Proportion of WTPs by Landscape Unit (2019-2020)	36
Table 9: Harvest Activities in the MKMA4	44
Table 10: Proportion of Leading Species by NDU Unmanaged Current State4	46
Table 11: Proportion of Leading Species by NDU Unmanaged Future State4	48
Table 12: Graham River IRM Plan- Cluster Area and Timing Schedule (Revised Oct 2006)5	51
Table 13: Current 3-year Average in Permanent Access Structures (PAS)	58
Table 14: Area Damaged / Salvaged in Merchantable Timber During the SFMP Period6	32
Table 15: Silviculture System Summary by area6	63
Table 16: 2019 Planting vs. cruise species comparison6	64
Table 17: PFI FOS #3 Condition and Targets	
Table 18: Summary of WQCR data collected during 20197	
Table 19: Projection of Changes to ROS Class from 1996 to 2025	
Table 20: Proportion of Total Volume Locally Processed	93
Table 21 Supply Block F Deciduous Leading Stand Proposed Harvest Area	97
Table 22: Height-class 2 Pine area harvested during the reporting period10	)1
Table 23: Licensee Conifer Licence AAC10	
Table 24: Licensee Deciduous Licence AAC10	)4
Table 25: BCTS Volume Allotment10	
Table 26: Dollars Spent Locally by Woodlands Phase - 201910	)6
Table 27: Fort St. John TSA employment summary10	)7
Table 28: Herbicide Area Removal11	14
Table 29: Road Area Constructed by Managing Participants since 2004 under SFMP # 111	18
Table 30: Road Area Constructed by Managing Participants since 2011 under SFMP # 211	19
Table 31: Road Area Constructed by Managing Participants since 2018 under SFMP # 311	
Table 32: Summary of Participants' Road and Bridge Construction Activities12	23
Table 33: Summary of Timber Volume Harvested by Licence in 2019-202012	24



Table 34: Summary of Harvested Area by Licence in 2019-2020	124
Table 35: Summary of FOS Amendments with No Publication Requirement	127
Table 36: Summary of FOS Amendments with Publication Requirement	128
Table 37: Landscape Level Strategies and Related Performance Indicators	130
Table 38: 47.0 CSA Matrix Fort St. John Pilot Project SFM Matrix (Effective Feb 7, 2018)	145
Table 39: Road Construction Activity – Forest Licensees April 1st 2019- March 31st 2020	170
Table 40: Licensee Deactivation Activities for April 1st, 2019-March 31st, 2020	175
Table 41: Licensee Access Structure Activities for April 1st, 2019-March 31st, 2020	181
Table 42: Annual Report on Roads Constructed in the Fort St. John BCTS field office area f         April 1 <sup>st</sup> , 2019 to March 31 <sup>st</sup> , 2020	
Table 43: Annual Report on Roads deactivated in the Fort St John BCTS field office area fo         April 1 <sup>st</sup> , 2019 to March 31 <sup>st</sup> , 2020	r 184
Table 44: BCTS Establishment Delay Complete (Inventory Label) 2019	188
Table 45: BCTS Establishment Delay Complete (Silviculture Label) 2019	192
Table 46: BCTS Planting Activities (2019)	195
Table 47: Predicted and Target Volumes by Stratum for Coniferous - BCTS 2019	200
Table 48: Predicted and Target Volumes by Stratum for Deciduous - BCTS 2019	201
Table 49: Predicted and Target Volumes by Conifer Stratum-Canfor 2019	202
Table 50: Predicted and Target Volumes by Deciduous Stratum - Canfor 2019	203
Table 51: Licensee Participant Planting Activities 2019	204
Table 52: Establishment Delay Report – Inventory Layer – Licensee Participants 2019	210
Table 53: BCTS Establishment Delay Calculation for Reporting Period of April 1, 2019 to M 31, 2020	215
Table 54: Licensee Participants Conifer Establishment Delay Calculation for Reporting Peri April 1, 2019 to March 31, 2020	
Table 55: Licensee Participants Deciduous Establishment Delay Calculation for Reporting Period of April 1, 2019 to March 31, 2020	221
Table 56: Licensee Participants Mixedwood Establishment Delay Calculation for Reporting Period of April 1, 2019 to March 31, 2020	224
Table 57: Licensee Participant Contraventions Reported to Agencies - April 1, 2019 - March 2020	
Table 58: BCTS Contraventions Reported to Agencies - April 1, 2019 - March 31, 2020	227

# LIST OF FIGURES

Figure 1: Project Area Map	.14
Figure 2: Example of current retention practices in mixedwood blocks	.29
Figure 3: Example of a coarse woody debris measurement transect (Block 01056)	.32
Figure 4: Typical habitat favored by Connecticut Warbler (Oporornis agilis) in the Peace Rive	er
Region	.39
Figure 5. Graham River operating area clustered harvest pattern, cluster 2	.53
Figure 6: Three year reporting results of 3-year rolling averages of PAS % (2018-2020)	.59



Figure 7: Establishment delay 3-year summary	69
Figure 8: Example of a crossing with a 'High' Water Quality Concern Rating	
Figure 9: Example of a crossing with a 'Low' Water Quality Concern Rating	79
Figure 10: Fort St. John LU's and RMZ's	143

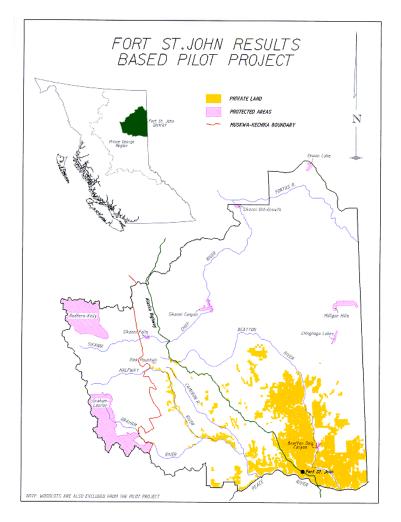
# APPENDICES

Appendix 1:	Fort St. John LU's and RMZ's	141
Appendix 2:	CSA Sustainable Forest Management Matrix	144
Appendix 3:	Access Management	169
Appendix 4:	Reforestation	187
Appendix 5:	Compliance	225
Appendix 6:	Acronym Listing & Definitions	228
Appendix 7:	Contact Information	232



# 1. INTRODUCTION AND OVERVIEW

This annual report summarizes activities completed between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020 on tenures managed by participants in the Fort St. John Pilot Project. Activities occurred on the following tenures: BC Timber Sales, FL A18154 and PA 12 held by Canadian Forest Products Ltd; FL A59959 held by Cameron River Logging Ltd.; FL A60972, held by Mackenzie Pulp Mill Corp.; FL A60050, FL A60049 and PA 20 held by Louisiana-Pacific Canada Ltd.; FL A85946 held by Louisiana Pacific - Peace Valley OSB; and FL A56771 jointly held by Dunne-za Ventures and Canadian Forest Products Ltd.





#### Figure 1: Project Area Map

The Pilot Participants achieved registration under the Canadian Standards Association CAN/CSA Z809-02 Sustainable Forest Management System for the Fort St. John TSA (Timber Supply Area) (see Figure 1) forestry operations on October 17<sup>th</sup>, 2003. In partial fulfillment of achieving registration, a public group, the Public Advisory Group (PAG), was formed in 2001 to help identify and select values, objectives, indicators, and targets for sustainable forest management. The original indicators and targets identified by the PAG, along with associated forest management practices to achieve those objectives, were detailed in the Sustainable Forest Management Plan #1 (SFMP #1) and revised in SFMP #2 and SFMP #3. In 2019 the participants started the process of moving towards a new certification standard – the Sustainable Forestry Initiative (SFI). Two participants were registered under SFI on May 1<sup>st</sup>, 2019 (BCTS) and June 7<sup>th</sup>, 2019 (Canfor). LP is in the process of transitioning to SFI as well. The 2019/20 Annual Report is a summary report on the status of each indicator. The report includes revisions to the indicators, targets, or the way they are measured, as noted in amendment #1 to SFMP #3. Future revisions, if any, to the indicators, targets, or the way they are measured will be captured in subsequent annual reports.

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

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

The following indicators are reported on periodically, typically at the close of an SFMP/FOS management period. For greater clarity, these indicators are analyzed at the time the SFMP is developed and in addition, when a new FOS is developed to ensure that a new FOS is consistent with the SFMP. The indicators referenced are:

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

Analysis of these indicators, and comparison against the condition present when the SFMP was developed, illustrates both the effect of changing stand dynamics (i.e. forests aging) and the impact of the participants' activities in the Defined Forest Area (DFA). The results presented here will account for the areas amended into the FOS, in response to wildfires, Mountain Pine Beetle, and the harvest needs of the Participants between 2010 and 2019.

These indicators are anticipated to be reported on again in the 2022-23 annual report.



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

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

These issues account for the variation in the forest inventory data presented between the analyses completed when the SFMP was developed and those completed to reflect the current forest condition for the 2009 and this the 2019 annual report.

# 2. DESCRIPTION OF THE PILOT PROJECT

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

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

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

The SFMP was approved by the Regional Manager, Northern Interior Forest Region, Ministry of Forests and the Regional Director, Omineca-Peace Region, Ministry of Water, Land and Air Protection, in April 2004. A revised SFMP was prepared and submitted to Government for approval in July 2010. SFMP #2 has undergone thorough review by the PAG, First Nations, the public and scientific technical advisors and Government. Government, on November 1<sup>st</sup>, 2010 approved SFMP #2.

SFMP #3, which is based on SFMP #2 was prepared during 2015 and has undergone thorough review by the PAG, First Nations, the public and scientific technical advisors and Government. SFMP #3 was submitted to government for approval on May 30<sup>th</sup>, 2016 and revised on April 18<sup>th</sup>, 2017. SFMP #3 was given conditional approval on May 4<sup>th</sup>, 2018 by Ministry of Forests, Lands, Natural resource Operations and Rural Development (MFLNRORD).

# 3. SFM INDICATORS, OBJECTIVES AND TARGETS



The format of each status report is described below:

# X.X INDICATOR

statement
c statement describing a desired ate or condition of an indicator. are succinct, measurable, ale, realistic, and time bound.
ab 

**SFM Objective:** A description the SFM objectives that this indicator and target relate to. **Linkage to FSJPPR:** If applicable, a brief statement regarding whether this indicator affects

performance requirements of the FSJPPR, or if it will be used to evaluate success of the implementation of the landscape level strategy. Any linkages expressed in this section refer to the SFMP #3 which can be found at <u>https://www.fsjpilotproject.com/project.html</u>.

## Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

This section provides an update on the status of each indicator and objective. The best information available up to and including March 31, 2020 (except where noted) was used for the preparation of this status report.

Target Achieved		
✓ Yes	No	

#### **REVISIONS**

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



#### Status of Indicators in 2019-2020

#### 3.1 FOREST TYPES

Indicator Statement	Target Statement
Percent distribution of forest type (deciduous, deciduous mixedwood, conifer mixedwood, conifer) >20 years old by landscape unit.	All forest type groups by landscape unit will meet or exceed the minimum area percentage in Table 9. <sup>1</sup>
SFM Objective:	

Maintain the diversity and pattern of communities and ecosystems within a natural range.

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

**Linkage to** *FSJPPR*: For the purposes of Section 42 of the *FSJPPR* this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Forest Health Landscape Level Strategy.

# Acceptable Variance:

There is no acceptable variance for this indicator.

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

# CURRENT STATUS AND COMMENTS

This indicator monitors the change in the proportion of forest type groups (> 20 years old), within broad groups based on leading tree species, over time. Stands less than 20 years of age are not included as they typically show significant fluctuations in tree species composition each year due to things such as silviculture practices or rapid natural ingress of species in regenerating stands. Forest type groups are the designation of stand types into one of 4 ecologically significant groups – pure deciduous, deciduous leading mixedwood, conifer leading mixedwood, and pure conifer. The following table (Table 1) is taken from Forest Operations Schedule #3, and presents the baseline status as of 2017 and the SFMP targets by Forest Type and Landscape Unit. All forty-four Forest Type / Landscape Unit combination targets were found to be above the target minimums, and therefore consistent with the SFMP target.

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

<sup>&</sup>lt;sup>1</sup> Refers to Table 9 in the Fort St. John Pilot Project Sustainable Forest Management Plan #2

# Table 1: 2017 Status for Forest Types

Landscape Unit	Forest Type	2017 5		Min Target Area
		Area (ha)	% of L.U.	%
	Coniferous Leading	156706	41%	33%
Blueberry	Coniferous Mixed	44109	12%	8%
Dideberry	Deciduous Leading	125321	33%	28%
	Deciduous Mixed	54135	14%	119
Blueberry Total		380270		
	Coniferous Leading	54310	93%	76%
	Coniferous Mixed	1818	3%	19
Crying Girl	Deciduous Leading	915	2%	19
	Deciduous Mixed	1164	2%	19
Crying Girl Total		58207	270	17
Orying an rotai	Coniferous Leading		059/	77%
		217145	95%	
Graham	Coniferous Mixed	5227	2%	19
	Deciduous Leading	3748	2%	19
	Deciduous Mixed	3416	1%	1%
Graham Total		229536		
	Coniferous Leading	91975	73%	62%
Halfway	Coniferous Mixed	8698	7%	3%
i lan way	Deciduous Leading	15426	12%	9%
	Deciduous Mixed	9436	8%	49
Halfway Total		125535		
,	Coniferous Leading	95973	40%	29%
	Coniferous Mixed	23186	10%	10%
Kahntah	Deciduous Leading	86178	36%	30%
	Deciduous Mixed	34257	14%	10%
Kahntah Total	Deciduous Mixed		1470	107
Natifilati Tulai		239594	150/	050
	Coniferous Leading	40457	45%	35%
Kobes	Coniferous Mixed	10127	11%	8%
	Deciduous Leading	29484	33%	28%
	Deciduous Mixed	9988	11%	9%
Kobes Total		90056		
	Coniferous Leading	14040	14%	119
Lower Beatton	Coniferous Mixed	6784	7%	5%
Lower beatton	Deciduous Leading	69195	70%	56%
	Deciduous Mixed	8519	9%	79
Lower Beatton Total		98538		
	Coniferous Leading	85504	59%	45%
	Coniferous Mixed	9692	7%	6%
Milligan	Deciduous Leading	40048	28%	24%
Milligon Total	Deciduous Mixed	9668	7%	5%
Milligan Total	0. 11	144911		
	Coniferous Leading	151088	95%	75%
Sikanni	Coniferous Mixed	3008	2%	19
Ginaliti	Deciduous Leading	3001	2%	19
	Deciduous Mixed	2152	1%	19
Sikanni Total		159250		
	Coniferous Leading	149471	50%	45%
Terreret	Coniferous Mixed	29899	10%	8%
Tommy Lakes	Deciduous Leading	73617	25%	18%
	Deciduous Mixed	44272	15%	9%
Tommy Lakes Total		297258	1070	97
I offining Lanes Told	Coniforous Looding		E C 0/	489
	Coniferous Leading	116855	56%	
Trutch	Coniferous Mixed	18389	9%	79
	Deciduous Leading	47023	23%	17%
	Deciduous Mixed	25408	12%	9%
Trutch Total		207674		

18



Reforestation is balanced on the landscape using the mixedwood ledger for the area that is impacted by harvesting which accounts for a small percentage of the landscape unit. Large variances in the forest type areas are due to updated Vegetation Resources Inventory (VRI) information.

## Change Monitoring Inventory (CMI)

Long term monitoring of species composition change within managed stands will occur throughout the DFA via Change Monitoring Inventory (CMI) plot establishment and re-measurement. Starting in 2003, the Participants have contracted the establishment of Change Monitoring Inventory plots in the Defined Forest Area on harvested or burnt areas. The location of these plots is on a systematic 3km square grid overlaid on the DFA. It is intended to establish plots on predefined points located on the grid, where they fall in managed stands, 15 years after harvest. Over time and subsequent re-measurements, the data from these plots can be used to detect long-term changes in managed stands' species composition. CMI work is dependent on contractor availability and budgets. Annual CMI activities may include establishment of new plots as well as re-measurement of plots established at least 10 years ago.

Target Achieved							
	√ Yes	No					

# **REVISIONS**

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



#### 3.2 SERAL STAGES

Indicator Statement	Target Statement									
The minimum proportion (%) of late seral stage forest by NDU.	The minimum proportion (%) of late seral forest by NDU as identified in Table 11 <sup>2</sup> will be met.									
SFM Objective:										
Maintain the diversity and pattern of communities and ecosystems within a natural range.										
Ecosystem functions capable of supporting naturally occurring species that exist within the range of natural variability.										
Maintain a natural range of variability in ecosy	stem function, composition and structure which									
allows ecosystems to recover from disturbanc	e and stress.									
Linkage to FSJPPR: For the purposes of Sec	ction 42 of the FSJPPR this indicator statement,									
target and acceptable variance will be one of t										
practices are consistent with the Patch Size, S	Seral Stage and Adjacency and Forest Health									
Management Landscape Level Strategies.										

Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

The Seral Stages indicator is in place to ensure that a minimum proportion of late seral stage forest will be present across the DFA through time. It sets limits on harvest planning in later seral stage stands, by Natural Disturbance Unit (note, in SFMP #1 the limits pertained to Landscape Units). A landscape-level analysis (based on NDUs) was completed when FOS #3 was developed. The projection through 2025, which considered all the newly proposed FOS blocks, indicates that the amount of area in late seral stands through 2025 will be above the minimum targets set for all NDUs in the DFA. Therefore, the participants are consistent with the target for this indicator.

The following tables (Table 2, Table 3, and Table 4) are excerpted from the FOS #3, and present the results of the most recent seral stage analyses. The 'current condition' values account for the harvesting activities that started prior to March 31, 2017. For further detail regarding seral stages target development and application, please refer to the *Fort St. John Pilot Project Sustainable Forest Management Plan #3 (section 6.2)* and the *Fort St. John Pilot Project Forest Operations Schedule #3. (section 3.3)*.

The analysis for this indicator will be conducted again when significant amendments to the Forest Operations Schedule are proposed (eg. significant addition of proposed block area) or significant natural disturbance occurs across multiple landscape units.

<sup>&</sup>lt;sup>2</sup> Refers to Table 11 in the Fort St. John Pilot Project Sustainable Forest Management Plan #2

		< 40	years			41 - 10	0 years			101 - 14	10 years				> 140	years			
LU NAME	2017 20		202	5	2017		2025	5	201	2017		2025		2017			2025		Total
	area (ha)	%	area (ha)	%	area (ha)	%	area (ha)	%	area (ha)	%	area (ha)	%	area (ha)	%	Surplus (ha)	area (ha)	%	Surplus (ha)	Area
Blueberry	59410	17%	61911	18%	148573	43%	141809	41%	92814	27%	84738	24%	45741	13%		58080	17%		346538
Crying Girl		0%		0%		0%		0%	3	32%		0%	7	68%		10	100%		10
Halfway	11944	8%	16182	11%	29040	20%	23512	16%	49798	34%	41485	28%	55489	38%		65093	45%		146271
Kahntah	6831	1%	6767	1%	395913	67%	337770	58%	144102	25%	182690	31%	40406	7%		60026	10%		587252
Kobes	14037	17%	15077	18%	10722	13%	10762	13%	37992	46%	31967	39%	19035	23%		23982	29%		81787
Lower Beatton	19202	42%	19398	42%	16023	35%	13656	30%	9049	20%	10621	23%	1953	4%		2554	6%		46227
Milligan	29617	8%	28901	8%	244595	65%	241125	64%	45332	12%	37986	10%	59481	16%		71012	19%		379025
Sikanni		0%		0%		0%		0%	0	100%	0	100%		0%			0%		0
Tommy Lakes	22563	4%	37445	7%	215421	39%	183368	33%	217759	39%	218253	39%	103357	18%		120034	21%		559100
Trutch	2258	1%	6018	2%	126169	36%	107972	31%	131570	38%	131558	38%	87138	25%		101586	29%		347134
Grand Total	165862	7%	191698	8%	1186456	48%	1059972	43%	728419	29%	739297	30%	412607	17%	25187	502376	20%	100747	2493343
													l gas area luded:	16%		gas area Ided:	20%	Total:	2518676
												Ta	arget:	16%	Tar	get:	16%		

#### Table 2: Boreal Plains Conifer 2017 and 2025 Seral Stage and Target

2017 - uses FOS blocks with harvest start date <Mar 31, 2017

2025 - uses FOS blocks with harvest start date >Mar 31, 2017

Table 2 identifies the current and expected 2025 conifer seral condition upon the completion of all harvest activities proposed by FOS #3 for the Boreal Plains Natural Disturbance Unit (NDU). Upon completion of all conifer harvest activities proposed in FOS #3 the conifer seral targets are achieved for the Boreal Plains NDU and the analysis indicates a surplus of 100,747 ha of old forest (amount of old forest above the target).

The old seral analysis also considered the cumulative effect of timber harvesting and oil and gas disturbance on the landbase. The existing calculated area occupied by wellsites and pipelines is 25,333ha, by adding this area (25,333ha) to the harvested area, the Boreal Plains Conifer late seral current condition is 16% and future is 20%.

		< 40	years			41 - 1	00 years				> 10	0 years				
	201	7	202	25	201	2017 2025			2017				2025			
LU_NAME	area (ha)	%	area (ha)	%	area (ha)	%	area (ha)	%	area (ha)	%	surplus (ha)	area (ha)	%	surplus (ha)	area	
Blueberry	17320	9%	26845	14%	101907	55%	93261	50%	67578	36%		66699	36%		186805	
Crying Girl		0%		0%	5	100%	3	62%	0	0%		2	38%		5	
Halfway	1599	6%	3692	14%	10475	41%	8415	33%	13531	53%		13497	53%		25604	
Kahntah	2737	2%	3084	2%	98870	79%	86639	69%	24111	19%		35996	29%		125718	
Kobes	3013	8%	7700	19%	10911	27%	7696	19%	26222	65%		24750	62%		40146	
Lower Beatton	10618	13%	9990	12%	59051	70%	54504	64%	15189	18%		20364	24%		84858	
Milligan	6059	12%	5534	11%	42256	81%	42553	81%	4130	8%		4358	8%		52445	
Tommy Lakes	4859	4%	17272	14%	58998	49%	49532	41%	56354	47%		53407	44%		120211	
Trutch	612	1%	2186	3%	39857	53%	34940	47%	34045	46%		37388	50%		74514	
Grand Total	46817	7%	76303	11%	422329	59%	377543	53%	241160	34%	129287	256460	36%	143652	710306	
									l gas area luded:	34%		nd gas area cluded:	36%	Total:	718260	
										16%	1	Farget:	16%			

#### Table 3: Boreal Plains Deciduous 2017 and 2025 Seral Stage and Target

2017 - uses FOS blocks with harvest start date <Mar 31, 2017

2025 - uses FOS blocks with harvest start date >Mar 31, 2017

Table 3 identifies the current and expected 2025 deciduous seral condition upon the completion of all harvest activities proposed by FOS #3 for the Boreal Plains NDU. Upon completion of all deciduous harvest activities proposed in FOS #3 the deciduous seral targets are achieved for the Boreal Plains NDU and the analysis indicates a surplus of 143,652 ha of old forest (amount of old forest above the target).

The old seral analysis also considered the cumulative effect of timber harvesting and oil & gas disturbance on the landbase. By including existing oil and gas area in the calculation (7,954ha) the Boreal Plains Deciduous late seral current condition is 34% and future is 36%.

NDU Sub-		1	< 40 y	ears			40 - 100	) vears			101 - 14	40 years			> 140	vears			
Unit	Landscape Unit	20	17	2025												,			Target
		Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Grand Total	ľ
Boreal	Crying Girl	931	2%	792	2%	4020	10%	3087	7%	19132	46%	16118	38%	17845	43%	21930	52%	41927	
Foothills -	Graham	1870	2%	1817	2%	10561	13%	6597	8%	41091	49%	35436	42%	30960	37%	40632	48%	84482	
Mountain	Halfway	15	0%	15	0%	2069	16%	1764	13%	4471	34%	3335	25%	6636	50%	8077	61%	13192	
	Kobes									8	54%	8	54%	7	46%	7	46%	15	
	NDU Total	2815	2%	2624	2%	16650	12%	11448	8%	64702	46%	54897	39%	55448	40%	70646	51%	139616	3
NDU Sub-			< 40 y				40 - 100	) years			101 - 14	40 years			> 140	years			
Unit	Landscape Unit	20	17	2025															1
		Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Grand Total	i i
Boreal	Crying Girl	1386	7%	977	5%	2747	13%	2561	12%	9308	45%	8560	41%	7347	35%	8689	42%	20787	
Foothills -	Graham	218	0%	47	0%	6741	13%	4502	8%	22847	43%	19927	38%	23298	44%	28628	54%	53104	
Valley	Halfway	7	0%	7	0%	211	13%	138	9%	435	28%	349	22%	916	58%	1076	69%	1570	
	Kobes									86	49%	82	47%	89	51%	93	53%	175	
	Grand Total	1611	2%	1032	1%	9699	13%	7201	10%	32675	43%	28918	38%	31650	42%	38486	51%	75636	2
NDU Sub-			< 40 y				40 - 100	) years			101 - 14	40 years			> 140	years			
Unit	Landscape Unit	20	17	2025															i i
		Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%		ĺ
Northern	LU_NAME	Young		Young		Mid		Mid		Mature		Mature		Old		Old		Grand Total	
Boreal	Graham	245	1%	4	0%	5732	18%	3918	12%	7997	25%	8367	26%	18025	56%	19708	62%	31998	
Mountains	Sikanni	822	0%	86	0%	23262	13%	14790	8%	57350	32%	58108	33%	96379	54%	104829	59%	177813	
	Trutch									4	100%	4	100%					4	
	Grand Total	1067	1%	90	0%	28994	14%	18708	9%	65350	31%	66479	32%	114404	55%	124537	59%	209815	3
NDU Sub-			< 40 y				40 - 100	) years			101 - 14	40 years			> 140	years			1
Unit	Landscape Unit	20		2025															l
		Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%		
Omenica	LU_NAME	Young		Young		Mid		Mid		Mature		Mature		Old		Old		Grand Total	
Mountains	Crying Girl					33	18%	33	18%	115	64%	91	51%	32	18%	56		180	
	Graham	290	0%	288	0%	5026	5%	4699	5%	26616	27%	20915	21%	68227	68%	74257	74%	100159	
	Grand Total	290	0%	288	0%	5059	5%	4732	5%	26731	27%	21006	21%	68259	68%	74313	74%	100338	4
NDU Sub-			< 40 y				40 - 100	) years			101 - 14	40 years			> 140	140 years			1
Unit	Landscape Unit	20		2025				l I											
		Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%		
Omineca	LU_NAME	Young		Young		Mid		Mid		Mature		Mature		Old		Old		Grand Total	
Valley	Crying Girl					0		0		3.9	57%	3.9	57%		43%	2.9		6.8	
	Graham	141.8	2%	138.3	2%	1146.4	13%	926.2	11%	4392.6	51%		42%	2887.8	34%	3942.7	46%	8568.6	
	Grand Total	141.8	2%	138.3	2%	1146.4	13%	926.2	11%	4396.5	51%	3565.3	42%	2890.7	34%	3945.6	46%	8575.4	1

# Table 4: Boreal Foothills Valley and Mtn, Northern Boreal Mountains, Omineca Mtns and Valley: 2017 and 2025 Seral Stage and Targets



Table 4 identifies the current and expected 2025 seral condition upon the completion of all harvest activities proposed by FOS #3 for the Boreal Foothills Mountain and Valley, NDUs, the Omineca Mountains and Valley NDUs and the Northern Boreal Mountains NDU. Upon completion of all harvest activities proposed in FOS #3 the seral targets are achieved for each of these NDUs.

Landscape units are large and in the foothills area, can encompass more than one natural disturbance unit due to elevational changes.

The seral analysis assumes that all blocks in FOS #3 will have been harvested prior to the end of 2025. The seral analysis indicates that all NDU old forest targets are met in 2017 and 2025. Therefore, performance to date and projected performance under FOS #3 is consistent with this indicator.

Target Achieved								
	✓ Yes	No						

#### **REVISIONS**

The following revisions, highlighted in green, are proposed to this indicator to take effect with the 2020 reporting year.

Indicator Statement	Target Statement							
The minimum	<ul> <li>All Periods: The minimum proportion (%) of late seral stage forest retention by NDU as identified in Table 11<sup>1</sup> will be met.</li> <li>B) By the close of Period 1 (April 1, 2019 – March 31, 2020): a minimum of 30% of the eld late seral stage forest retention target will be achieved by contribution from spatially identified OFMAs, in all NDUs.</li> </ul>							
proportion (%) of late seral stage forest retention by NDU.	By the close of Period 2 (April 1, 2020 –March 31, 2021): a minimum of 60% of the <del>old</del> <i>late seral stage</i> forest retention target will be achieved by contribution from spatially identified OFMAs, in all NDUs.							
	By the close of Period 3 (April 1, 2021 –March 31, 2022): A minimum of 100% of the <del>old</del> <i>late seral stage</i> forest retention target will be achieved by contribution from spatially identified OFMAs, in all NDUs.							
SFM Objective: Maintain the diversity and pattern of communities and ecosystems within a natural range. Ecosystem functions capable of supporting naturally occurring species that exist within the range of natural variability. Maintain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress.								
target and acceptable va practices are consistent v Management Landscape	r the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, riance will be one of the indicators used to determine if forest with the Patch Size, Seral Stage and Adjacency and Forest Health Level Strategies. ort St. John Pilot Project Sustainable Forest Management Plan #2							



l	ndicator Statement	Target Statement
	Percent area by Patch Size Class (0-50, 51- 00, and >100 ha) by NDU.	A minimum of 9 of 18 of the baseline targets for early patches will be achieved during the term of this SFMP (Table $16)^3$ .
N E	SFM Objective: Maintain the diversity and pattern of communiti Ecosystem functions capable of supporting nat ange of natural variability.	, , , , , , , , , , , , , , , , , , , ,
	,	tion 42 of the FSJPPR this indicator statement,

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

# Acceptable Variances:

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

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

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

# CURRENT STATUS AND COMMENTS

This indicator is set up to monitor the patch size distribution for 'early' ( $\leq$ 40 yrs.) forest within the Fort St. John Pilot Project area, on a Natural Disturbance Unit basis (note, in SFMP #1 the limits pertained to Landscape Units). The targets are presented in Table 5.

Natural Disturbance Unit		yrs) Patch S acceptable ra	h Size Target (%) e range)			
Natural Disturbance Onit	<50 ha	51-100 ha	100+ ha			
Boreal Plains Uplands (BPU)	5 (5-15)	5 (5-15)	90 (65-90)			
Boreal Foothills Valley (BV)	20 (15-25)	10 (5-15)	70 (55-85)			
Boreal Foothills Mountain (BM)	20 (15-25)	10 (5-15)	70 (55-85)			
Northern Boreal Mountains (NBM)	5 (5-15)	5 (5-15)	90 (65-90)			
Omineca Mountains (OM)	20 (15-25)	10 (5-15)	70 (55-85)			
Omineca Valley (OV)	5 (5-15)	5 (5-15)	90 (65-90)			

# Table 5: Natural Disturbance Unit Early Patch Distribution Targets

<sup>&</sup>lt;sup>3</sup> Refers to Table 16 in the Fort St. John Pilot Project Sustainable Forest Management Plan #2



A landscape-level analysis (based on NDUs) was conducted when FOS #3 was developed. Stand ages were projected through 2025, and all the newly proposed FOS blocks were assumed to be harvested by 2025. The results of the analyses are presented in Table 6.

# Table 6: Early Patch Size Class Current Status & Post FOS Condition

		2017 Ea	rly (<40 ye	ars) Pa	tch Size Dis	tributio	n
Natural Disturbance Unit (NDU)	Small (<	50ha)	Med. ( 100h		Large (>1	Totals	
Boreal Plains - Upland	20875	7%	22138	8%	248601	85%	291616
Boreal Foothills - Valley	371	16%	208	9%	1764	75%	2344
Boreal Foothills - Mountain	463 14%		257	8%	2522	78%	3244
Northern Boreal Mountains	187	21%	62	7%	647	72%	898
Omineca - Mountains	44	9%	2	0%	426	90%	473
Omineca - Valley	29	14%		0%	177	86%	206
Total DFA (All NDUs)	21972		22669		254140		295537
<mark>Yellow</mark> = Below Target Range	<mark>Red</mark> = Above Target	Blue =	= No Harve Planned	sting			
	2025	5 Curren	t Early (<4	0 years	) Patch Size	Distrib	ution
Natural Disturbance Unit (NDU)	Small (<	50ha)	Med. ( 100h		Large (>1	Totals	
Boreal Plains - Upland	19757	6%	21351	6%	311756	88%	352865
Boreal Foothills - Valley	250	12%	374	17%	1549	71%	2173
Boreal Foothills - Mountain	464	14%	296	9%	2506	77%	3268
Northern Boreal Mountains	47	100%		0%		0%	47
Omineca - Mountains	43	9%	2	0%	426	91%	471
Omineca - Valley	26	13%		0%	177	87%	203
Total DFA (All NDUs)	20588		22024		316417		359027
<mark>Yellow</mark> = Below Target Range	<mark>Red</mark> = Above Target	Blue =	= No Harve Planned	sting			



Table 6 identifies the current patch size condition as well as the expected patch size condition in 2025. This analysis assumes that all blocks proposed in FOS #3 will be harvested prior to the end of 2025 and that no new natural disturbance will create new young patch areas.

The 2017 state indicates that 12 of 18 or 66% of NDU patch size combinations achieve the desired patch size distribution. This is an improvement over the FOS #2 projected condition where 8 of 18 or 44% of early patches were projected to meet the target ranges.

When early patches are analyzed based on the FOS condition (all blocks in FOS #3 harvested by March 31, 2025), 8 of 18 or 44% of early patches meet the target ranges. However it must be noted that the harvesting planned in FOS #3 is situated almost exclusively within the Boreal Plains Upland and Boreal Foothills Valley NDUs. A very minor amount of harvesting is proposed for the Boreal Foothills Mountain NDU, however the majority of young patch disturbance in this NDU is attributable to wildfire.

Harvesting is proposed by FOS #3 in only 2 of the of the 10 NDU patch size combinations where the desired patch size distribution is not achieved in 2025. In 8 of these NDU patch size combinations where harvesting is not proposed and the target distribution is not achieved, it is expected that natural disturbance may alter the actual distribution achieved in 2025.

The foregoing indicates that the participants are consistent with the patch size indicator.

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

Target Achieved		
√ Yes	No	

#### **REVISIONS**

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



#### 3.4 SOIL DISTURBANCE<sup>4</sup>

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

# Acceptable Variance:

#### None

# CURRENT STATUS AND COMMENTS

There were no incidents of detrimental soil disturbance reported by the Licensee participants during the 2019-2020 reporting period.

BCTS had no incidents of detrimental soil disturbance reported during the 2019-2020 reporting period.

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

Target Achieved		
√ Yes	No	

# **REVISIONS**

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

# 3.5 SNAGS/CAVITY SITES

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

Linkage to FSJPPR: N/A

# Acceptable Variance:

Prescribed areas within blocks on which the SLP's were completed prior to April 1<sup>st</sup> 2010 will have a target of 6 snags and/or live trees greater than 23.0 cm dbh (diameter at breast height), consistent with the SFMP in effect at that time.

<sup>&</sup>lt;sup>4</sup> New indicator in 2010 SFMP. Previous SFMP #1 indicator 6.4 was Shape Index, which has been deleted.

# CURRENT STATUS AND COMMENTS

The indefinite closure of Peace Valley OSB and the subsequent lack of market for deciduous fiber has resulted in a large increase in the amount of standing trees retained on logging sites. Much of the authorized volume available to the participants was planned and authorized prior to the closure announcement, with the assumption that the majority of deciduous stems would be harvested. In some cases it has been possible to completely avoid distinct patches of deciduous trees and amend logging plans, but most of the time it has been necessary to log around the deciduous trees and leave them standing where possible and safe to do so. Figure 3 shows an example of a block where the merchantable conifer has been felled and a large amount of deciduous (and immature spruce) stems remain. This block was planned and laid out for harvest prior to PVOSB shutting down. As layout plans have adapted to the indefinite absence of a deciduous fibre market and the participants work through the older authorized blocks, we will start to see fewer scenes like this.



Figure 2: Example of current retention practices in mixedwood blocks

Surveying and tallying sites like these poses a challenge not previously contemplated when this indicator was first developed, and the participants may have to modify their approach to field estimation of retention numbers in at least the short-term.

'Stubs' (*in-situ* remaining 3-5m base of trees cut off during logging operations) have made up the majority of vertical habitat elements tracked for this indicator in past reports. They were used as a surrogate for snags and live trees, and pose a much lower hazard to ground workers and aerial spray operations. Stubs are still created, often along drainages and boundaries, where they can serve a role of delineating important features and not posing any overhead hazard. While they do provide residual habitat for nesting, foraging, and perching, there has been a strong trend towards more full-tree retention. This is due to the relatively higher value full trees represent for



both migratory and non-migratory birds as well as addressing concerns raised by wildlife biologists and First Nations.

Data for the Canfor-managed blocks included in this report were collected during the harvesting phase and as part of final harvest inspections conducted during the reporting period. The total prescribed area surveyed by licensee participants was 1478 ha, with 21,972 snags and/or live tree residuals retained. The actual retention level of snags or live trees in the blocks averaged 14.9 stems/ha. All blocks surveyed exceeded the landscape level target.

#### BCTS:

Increased demands were noted by First Nations during consultation for more retention, and particularly live tree retention. In fact, in the opinion of some First Nations the stub requirement should be removed completely and instead focused on live tree retention only. As a result, a shift to prescriptions is being developed with retention of 8-12 mature trees per hectare on conifer leading TSLs and 12-24 trees per hectare on deciduous leading TSLs. The retention of trees became a non-issue with the indefinite closure of the OSB plant in the spring of 2019. No longer having a market for deciduous, the Licencees chose to leave as many deciduous trees standing as possible. The individual counts to determine amounts of live tree retention became virtually impossible and as a result, BCTS staff no longer tracked this on blocks. Stubs are still created, often along drainages and boundaries, where they serve an additional important role of delineating important features and not posing any overhead hazard. BCTS has made the decision not to report on specific numbers or the prescribed area.

The participants have met the target for this indicator.

Target Achieved		
✓ Yes	No	

#### REVISIONS

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

### 3.6 COARSE WOODY DEBRIS VOLUME

Indicator Statement	Target Statement
Average retention level of Coarse Woody Debris volume (m <sup>3</sup> /ha) on blocks logged in the DFA between December 1 <sup>st</sup> , 2016 and November 30 <sup>th</sup> , 2022.	Average retention level over the DFA will be at least 46 m <sup>3</sup> /ha (50% of average pre- harvest volume) on harvested blocks assessed between December 1 <sup>st</sup> , 2016 and November 30 <sup>th</sup> , 2022.
SEM Objective:	

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

#### Suitable habitat elements for indicator species.

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

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

## Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

For the purposes of this indicator, coarse woody debris is measured along two 24m transects originating at predetermined points in harvested areas, following established provincial procedures. Figure 3 is included to provide an example of one such transect.

Three CWD plots were completed in the reporting period. Post-harvest CWD levels from these samples averaged 80 m3/ha. The average CWD level for the period December 1st, 2016 to November 30th, 2022 is 81 m3/ha.

The participants exceeded the minimum target for this indicator for the period of April 1<sup>st</sup> 2019 – March 31st 2020 and also for the period December 1st, 2016 and November 30th, 2022 calculated as an average for this period.



Figure 3: Example of a coarse woody debris measurement transect (Block 01056)

Target Achieved		
✓ Yes	No	

<u>**REVISIONS**</u> There are no proposed revisions to the indicator statement or target at this time.



#### 3.7 **RIPARIAN RESERVES**

Indicator Statement	Target Statement
The number of non-compliances to riparian reserve zone standards.	No non-compliances to riparian reserve zone standards.
SFM Objective:	

Suitable habitat elements for indicator species.

Maintenance of water quality.

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

the application of this Riparian Management Landscape Level Strategy, specifically the acceptable variance for this indicator.

# Acceptable Variance:

No variances, unless authorized by the district manager.

# CURRENT STATUS AND COMMENTS

A review of BCTS compliance issues from April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020 indicated that BCTS had no non-compliances to riparian reserve zone standards. BCTS achieved the target for this indicator.

A review of Canfor's compliance issues occurring between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020 indicated no non-compliances to riparian reserve zone standards. The licensee participants achieved the target for this indicator.

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

Target Achieved		
✓ Yes	No	

# **REVISIONS**

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

### 3.8 SHRUBS

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

## Acceptable Variance:

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

#### CURRENT STATUS AND COMMENTS

This indicator is monitored at each new SFMP, using the most up to date vegetation resource inventory data. Table 7 shows the shrub condition projected through 2025, accounting for harvesting of all blocks presented in the FOS #3. The "2017 Shrub Area" includes shrub-type inventory polygons plus harvested areas <20yrs old.

Targets were established for this indicator by reviewing the amount of naturally occurring shrub areas by landscape unit, as well as forested areas less than 20 years old. Landscape units with low levels of naturally occurring shrubs generally have lower targets than areas with higher levels of shrubs. The targets reflect the same proportionate change as in the 2004 SFMP.

LANDSCAPE UNIT	LU Net Area (ha)	2017 Shrub Area (ha)	2017 Shrub Area % of LU	Future Shrub Area (ha)	Future Shrub Area % of LU	Baseline Target
Blueberry	588,013	123,191	21%	95,089	16%	8%
Crying Girl	67,180	7,338	11%	4,349	7%	8%
Graham	334,884	58,170	17%	57,973	17%	15%
Halfway	196,226	28,996	15%	25,803	13%	6%
Kahntah	749,236	185,981	25%	184,568	25%	21%
Kobes	136,697	27,328	20%	23,475	17%	8%
Lower Beatton	154,954	20,622	13%	16,666	11%	7%
Milligan	454,005	75,996	17%	74,999	17%	13%
Sikanni	312,129	38,257	12%	38,257	12%	6%
Tommy Lakes	705,760	88,772	13%	77,247	11%	8%
Trutch	436,582	33,042	8%	31,860	7%	6%
Grand Total	4,135,665	687,693		630,286		

#### Table 7: Shrub Habitat 2017 Status, FOS Condition and Targets

The future analysis of Change Monitoring Inventory (CMI) plots – after re-measurement - will permit comparisons of shrub composition and abundance over time. Table 7 shows that the participants have met or exceeded the baseline target in all LU's except Crying Girl but the % future shrub area % is within the approved variance.

The participants are consistent with the target for this indicator.

Target Achieved		
√ Yes	No	

# **REVISIONS**

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

#### 3.9 WILDLIFE TREE PATCHES

Indicator Statement	Target Statement		
	Cumulative Wildlife Tree Patch % will meet or exceed the minimum target in each LU		
Cumulative Wildlife Tree Patch percentage in blocks harvested under the <i>FSJPPR</i> in each Landscape Unit.	Landscape Unit Blueberry Halfway Kahntah Kobes Lower Beatton Milligan Tommy Lakes Trutch Sikanni Graham Crying Girl	WTP % 9% 6% 5% 8% 3% 4% 8% 5% 4% 4% 3%	

# SFM Objectives:

Suitable habitat elements for indicator species.

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

**Linkage to FSJPPR:** For the purposes of 29(1) of the *FSJPPR* the applicable performance standard is specified by this indicator statement, target statement and acceptable variance. For the purposes of Section 42 of the *FSJPPR* this indicator statement, target and acceptable variance will be one of the indicators used to determine if forest practices are consistent with the Patch Size, Seral Stage and Adjacency Landscape Level Strategy

# Acceptable Variance:

Aggregate Wildlife Tree Patch (WTP) percentages will only apply if 200 hectares or more has been harvested under the *FSJPPR* in a landscape unit.

# CURRENT STATUS AND COMMENTS

Table 8 indicates the amount of harvest area and proportion of Wildlife Tree Patches by each Landscape Unit where the harvest start date is between April 1, 2019 and March 31, 2020.



Table 8: Harvest Area and Proportion of WTPs by Landscape Unit (2019-2020)

LU	Gross Block Area (ha)	WTP Area (ha)	WTP %	Target %
Blueberry	3742.0	415.7	11.1%	9
Halfway	892.4	140.2	15.7%	6
Kahntah	463.4	51.5	11.1 %	5
Kobes	1775.3	253.8	14.3%	8
Lower Beatton	41.6	5.3	12.7%	3
Milligan	0.0	0.0	n/a	4
Tommy Lakes	1,745.4	176.1	10.1%	8
Trutch	104	15.1	14.5%	5
Sikanni	0.0	0.0	n/a	4
Graham	0.0	0.0	n/a	4
Crying Girl	0.0	0.0	n/a	3
Grand Total:	7,247.2	723.8	10.0%	

No harvesting took place in the Milligan, Sikanni, Graham, and Crying Girl LU.

The participants have met the target minimum WTP % for all Landscape Units where logging has occurred.

Target Achieved		
√ Yes	No	

# **REVISIONS**

A revision to the target retention levels is noted in SFMP #3 and was implemented in the 2018-19 reporting year.



3.10 NOXIOUS WEED CONTENT AND INVASIVE PLANT CONTENT

Indicator Statement	Target Statement
The % prohibited and primary noxious weeds, and known invasive weed species of concern, in seed mix analyses.	Seed mix analyses will have 0% content of prohibited and primary noxious weeds, and known invasive weed species of concern, as identified in the most current publication of "Listing of Invasive Plants" available from the Peace River Regional District.
SFM Objective: Suitable habitat elements for indicator species	
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are	

consistent with the Range Management Landscape Level Strategy

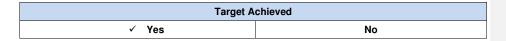
# Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

For all broadcast seeding on road reclamation areas completed by the licensee participants during the April 1<sup>st</sup>, 2019 – March 31<sup>st</sup>, 2020 reporting period, the review of our seed tags and seed analysis certificates verified that our seed mix has a 0% content of prohibited and primary noxious weeds, and known invasive weed species of concern, as identified in the SFMP.

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



## **REVISIONS**

A revision to the target statement and implementation of this indicator will be implemented in the 2020-2021 reporting year pending government approval. Appendix 8: Listing of Invasive Plants in the Fort St John Pilot Project SFMP #3 (please refer to page 455 of SFMP #3) will be removed and instead the primary sources used to comprise Appendix 8 will be listed within the noxious weed indicator 6.10 Plants in the Fort St John Pilot Project Sustainable Forest Management Plan #3 (please refer to page 141 of SFMP #3).

The following revisions, highlighted in green, are proposed to this indicator to take effect within the 2020 reporting year.

Indicator Statement	Target Statement	
The percent <b>of</b> <del>prohibited and primary</del> noxious weeds, and known invasive plant <del>wood</del> species of concern, in seed mix analyses.	Seed mix analyses will have 0% content of prohibited and primary noxious weeds, and known invasive weed species of concern, as identified in the most current publication of "Listing of Invasive Plants" available from the Peace River Regional District . Seed lots utilized by the Participants will meet standards established by the Canadian Seed Growers Association regarding allowable contentof seeds of noxious weedsand invasive plants as identified in the most current Provincial and Federal Regulations, and Regional District guidelines.	
SFM Objective: Suitable habitat elements for indicator species		
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Range Management Landscape Level Strategy.		

#### 3.11 SPECIES AT RISK STAND LEVEL MANAGEMENT GUIDELINES

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

#### Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

During the reporting period of April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020, 22 SLPs were prepared by Canfor in cutblocks where SLMGs for species and sites of management concern were required to be specified. One or more guidelines were applied in all 22 of these plans.

During the reporting period of April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020, 69 SLPs were prepared by BCTS in cutblocks where SLMGs for species and sites of management concern were required to be specified. One or more guidelines were applied in all 69 of these plans.





100 % of all SLPs where SLMGs were required incorporated at least 1 guideline, therefore the participants achieved the target for this indicator.



Figure 4: Typical habitat favored by Connecticut Warbler (Oporornis agilis) in the Peace River Region

(photo by A. Tyrrell)

Target Achieved	
✓ Yes	No

# **REVISIONS**



#### 3.12 FOREST WORKERS' SAFETY

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

### Acceptable Variance:

None

# CURRENT STATUS AND COMMENTS

Currently the Managing Participants (BCTS and Canfor) are certified to the B.C. Forest Safety Council S.A.F.E. Companies Standard. Surveillance audits are completed at regular intervals to ensure the managing participants safety programs continue to meet the S.A.F.E. Companies safety criteria, and to identify where there may be opportunities for improving the safety programs.

The Managing Participants each maintained their individual certifications to the B.C. Forest Safety Council S.A.F.E. Companies Standard during the 2019-20 reporting year.

The participants have achieved the target for this indicator.

Target Achieved	
✓ Yes	No

# **REVISIONS**



#### 3.13 SEED USE

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

## Acceptable Variance:

As per Section 8 Transfer Limits in the Chief Forester's Standards for Seed Use, no less than 95% of the combined total of the number of seedlings and vegetative material planted during each fiscal year within the DFA will comply with the transfer requirements of section 8.2 through 8.7, of those standards. As the standards are amended from time to time, the allowable variance will change consistent with any amendments.

## CURRENT STATUS AND COMMENTS

# BCTS

2,095,876 seedlings were planted within the reporting period. All seedlings were planted in accordance with the standard.

Licensee Participants (Canfor, Chetwynd Mechanical Pulp, CRL, Dunne-za, Louisiana-Pacific)

5,143,555 seedlings were planted within the reporting period. All seedlings were planted in accordance with the standard.

#### **Combined**

The total number of seedlings planted was 7,239,431. Therefore 7,239,431 were planted in accordance with the standard

Target Achieved	
✓ Yes	No

## **REVISIONS**

<sup>&</sup>lt;sup>5</sup> Revisions to this indicator initially made in 2005/2006 Annual -Report



#### 3.14 ASPEN REGENERATION

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

# Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

All Participants have relied on 100% natural regeneration for aspen stocking in the 2019-2020 reporting period.

Target Achieved		
	✓ Yes	No

# **REVISIONS**

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

Indicator Statement	Target Statement
Hectares of forestry related harvesting or road construction within Class A parks, protected areas, ecological reserves and LRMP designated protected areas.	Zero hectares of forestry related harvesting or road construction within Class A parks, protected areas, ecological reserves or LRMP designated protected areas.

#### SFM Objective:

To have representative areas of naturally occurring and important ecosystems, and rare physical environments protected at both the broad and site specific levels across or adjacent to the DFA.

Linkage to FSJPPR: N/A

#### Acceptable Variance:

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

#### CURRENT STATUS AND COMMENTS

No forestry related harvesting or road construction has occurred, nor was any harvesting planned in FOS #3, in Class A Parks, Ecological Reserves and Land and Resource Management Plan (LRMP) Designated Protected Areas. The participants have achieved the target for this indicator.

Digital boundaries of all known protected areas were used in the development of the FOS #3 and to ensure proposed blocks or roads did not fall within any of the protected areas.

Target Achieved	
✓ Yes	No

# **REVISIONS**

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

Target Statement				
All Pilot Participant activities will be consistent with the objectives of the MKMA and the general wildlife measures for UWR and WHAs.				
To have representative areas of naturally occurring and important ecosystems, and rare physical environments protected at both the broad and site specific levels across or adjacent to the DFA.				
Linkage to FSJPPR: N/A				

# Acceptable Variance:

No variances unless authorized by the Ministry of Environment and Climate Change Strategy (MOE).

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

There are currently 45 approved Wildlife Habitat Area's (WHAs), and 3 Ungulate Winter Ranges (UWRs) wholly or partially within the Peace Forest District. General Wildlife Measures, the legal management regimes that dictate operational practices in these areas, have been developed and enacted by government. The participants will follow the General Wildlife Measures for each specific area when operations are proposed within these areas. For the reporting period, there were no activities conducted within approved WHAs or UWRs.

The WHA and UWR areas for Caribou (Boreal ecotype) in the north and eastern portions of the Timber Supply Area will be revised by the provincial government. The participants are honoring the boreal caribou WHA and UWR areas by applying the General Wildlife Measures in the UWRs and avoiding operational activities in the WHAs.

The Government of Canada (Canadian Wildlife Service) is coordinating a national recovery program for the boreal caribou, but it is not yet known what implications that holds for operations within the DFA, beyond the impacts of the provincial set-asides (WHA and UWR designations).

Table 9 summarizes harvest activities within grand parented blocks within the Muskwa-Kechika Management Area (MKMA) up to March 31<sup>st</sup>, 2020.

#### Table 9: Harvest Activities in the MKMA

Licensee	Licence	Timber Mark	Block ID	Gross Area	Merch Area	Harvest Start Date	Harvest Completion Date	System <sup>6</sup>
CANFOR	A18154	EK8335	20007	57.6	52.0	1/19/2005	2/14/2006	CCRES
CANFOR	A18154	EK8335	20008	101.4	88.7	1/19/2005	3/31/2006	CCRES
CANFOR	A18154	EK8335	20060	75.1	68.5	1/5/2005	3/4/2005	CCRES
Total				234.1	209.2			

<sup>&</sup>lt;sup>6</sup> CCRES – Clear Cut with Reserves



The total cumulative area logged to date within blocks in the MKMA is 209.2 ha. All harvesting operations within the MKMA have been consistent with previously approved Forest Development Plans, as well as provisions within the MKMA Act that grandparent previously approved blocks.

Harvesting within the MKMA that is proposed within the FOS #3 is currently limited to previously grand parented blocks within the MKMA, and is therefore consistent with the objectives of the MKMA. There were no activities completed within the MKMA during this reporting period.

Target Achieved		
•	Ý Yes	No

## **REVISIONS**

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

#### 3.17 REPRESENTATIVE EXAMPLES OF ECOSYSTEMS

Target Statement					
100% of baseline targets for forested stands in an unmanaged condition, by leading species, by NDU will be met.					
SFM Objective:					
rring and important ecosystems, and rare oad and site-specific levels across or adjacent					
Linkage to FSJPPR: N/A					

#### Acceptable Variance:

10 ha or 10% of area, whichever is greater for Leading Species by NDU that have an uncommon distribution (as noted in Table 23 of SFMP #3) if required for access purposes.

No acceptable variance for Leading Species by NDU that are not identified as uncommon in Table 23 of SFMP #3.

## CURRENT STATUS AND COMMENTS

An assessment of the future condition of this indicator was completed to confirm consistency of FOS #3 with SFMP #3. The targets specified in SFMP #1 and SFMP #2 for the proportion of area in forest stands by leading species in an unmanaged condition were carried over to SFMP #3 without any revision. The assessment of future condition for this indicator is presented in Table 11 and indicates the future status of forest stands by leading species and NDU for the Non-Timber Harvesting Land Base (NHLB). This reflects the stand types that will exist in an unmanaged state. FOS blocks have been identified within the portion of the land base that is considered as the timber harvesting land base.

Where harvesting is proposed, the SFMP requires an assessment of those NDU species combinations considered unique, highlighted in yellow in Table 10, to ensure that targets are not compromised.

A re-analysis of this indicator is required after each Timber Supply Review (TSR) is completed. Data collection for the next TSR for the DFA commenced in the summer of 2013 and the TSR



was released in May, 2018. If a significant amount of block area is added to the Forest Operations Schedule, through an amendment prior to the completion of the TSR, the analysis for this indicator will be redone to ensure ongoing conformance. So far, the results are up to date and have incorporated the FOS340 data. The above would likely not be necessary for the Boreal Plains NDU due to the amount of area already in the NHLB.

Table 10 indicates the current status of forest stands by leading species and NDU for the Non-Timber Harvesting Land Base (NHLB). This reflects the stand types that exist in an unmanaged state. FOS blocks have been identified within the portion of the landbase that is considered as the timber harvesting landbase.

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

Natural		Looding	Total		Unmanaged Fore	ests
Disturbance Unit	Sub NDU	Leading Species	Forested Area (ha)	NHLB	% NHLB	Baseline Target %
		AC	24921	15946	64%	12%
		AT	564457	294148	52%	12%
		BL	2154	1774	82%	12%
Boreal Plains		EP	62327	51552	83%	12%
Upland		LT	42067	41077	98%	12%
Opiano		PL	428736	229106	53%	12%
		SB	1344989	1216928	90%	12%
		SW	251908	150734	60%	12%
		SX	136623	55832	41%	12%
Boreal Pl	ains Upland 1	otal	2858182	2057096	72%	
		AC	104	93	90%	100%
	Mountain	AT	2974	2431	82%	12%
		BL	14016	13422	96%	12%
		EP	30	26	<mark>86%</mark>	100%
		PL	20627	8933	43%	12%
		SB	1005	630	63%	12%
		SW	109942	73865	67%	12%
		SX	88	54	61%	12%
Boreal Foothills	Mounta	in Total	148785	99452	67%	
Doreal Footnins		AC	151	101	67%	80%
		AT	2837	2062	73%	12%
		BL	13	7	53%	0%
	Valley	EP	2	0	0%	100%
	valley	PL	9766	3897	40%	12%
		SB	1699	1216	72%	12%
		SW	19930	9687	49%	12%
		SX	31	17	53%	12%
	Valley	<sup>,</sup> Total	34429	16985	49%	

# Table 10: Proportion of Leading Species by NDU Unmanaged Current State

Natural		Localina	Total		Unmanaged For	ests
Disturbance Unit	Sub NDU	Leading Species	Forested Area (ha)	NHLB	% NHLB	Baseline Target %
		AC	203	175	86%	70%
		AT	6893	5992	87%	12%
Nextle and Develo		BL	11888	10801	91%	12%
Northern Boreal Mountains		PL	20005	13290	66%	12%
WOULTLAINS		SB	2914	2431	83%	12%
		SW	18688	15095	81%	12%
		SX	121095	102284	84%	12%
Northern Bo	real Mountain	s Total	181687	150068	83%	
	Mountain	AC	2	2	100%	100%
		AT	528	469	89%	50%
		BL	17897	17513	98%	12%
		PL	5239	3501	67%	12%
		SB	271	236	87%	100%
		SW	61294	54155	88%	12%
Omineca	Mountains Total		85230	75876	89%	
Omneca		AC	32	30	95%	100%
		AT	598	533	89%	50%
	Velley	BL	11	11	100%	100%
	Valley	PL	2700	1784	66%	12%
		SB	351	307	88%	12%
		SW	6873	5165	75%	12%
	Valley	Total	10565	7831	74%	
G	rand Total		3,318,877	2,407,309	73%	

The majority of future proposed harvesting under FOS #3 is planned to occur in the Boreal Plains NDU. The analysis completed reports on the condition expected as of March 31<sup>st</sup>, 2025 and assumes that all blocks presented in the FOS #3 will be harvested by that date. The results show that the majority of the baseline targets for retention of a representative sample of forest stands in an unmanaged condition are achieved in the NHLB. Several of the species / NDU combinations do not have sufficient area within the NHLB to meet the target. However, in none of the cases is there any area identified for harvesting, and therefore a 'managed' designation does not apply.



# Table 11: Proportion of Leading Species by NDU Unmanaged Future State

Natural		Looding	Total	l	Jnmanaged For	ests
Disturbance Unit	Sub NDU	Leading Species	Forested Area (ha)	Future NHLB	Future % NHLB	Baseline Target %
		AC	24,921	15,946	64%	12%
		AT	564,457	294,147	52%	12%
		BL	2,154	1,774	82%	12%
Boreal Plains		EP	62,327	51,552	83%	12%
Upland		LT	42,067	41,077	98%	12%
opiariu		PL	428,736	229,095	53%	12%
		SB	1,344,989	1,216,916	90%	12%
		SW	251,908	150,731	60%	12%
		SX	136,623	55,831	41%	12%
Boreal Pla	ains Upland 1	Fotal	2,858,182	2,057,069	72%	
		AC	104	93	90%	100%
		AT	2974	2,431	82%	12%
		BL	14016	13,422	96%	12%
	Mountain	EP	30	26	86%	100%
		PL	20627	8,933	43%	12%
		SB	1005	630	63%	12%
		SW	109942	73,865	67%	12%
		SX	88	54	61%	12%
Boreal Foothills	Mountain Total		148785	99,452	67%	
Doreal Footnins		AC	151	101	67%	80%
		AT	2837	2,062	73%	12%
		BL	13	7	53%	0%
	Vallav	EP	2	0	2%	100%
	Valley	PL	9766	3,897	40%	12%
		SB	1699	1,216	72%	12%
		SW	19930	9,687	49%	12%
		SX	31	17	53%	12%
	Valley	<sup>,</sup> Total	34429	16,985	49%	
		AC	203	175	86%	70%
		AT	6893	5,992	87%	12%
Northern		BL	11888	10,801	91%	12%
Boreal		PL	20005	13,290	66%	12%
Mountains		SB	2914	2,431	83%	12%
1		SW	18688	15,095	81%	12%
		SX	121095	102,284	84%	12%
Northern Bo	real Mountair	ns Total	181687	150,068	83%	

Natural		Leading	Total	U	nmanaged For	ests
Disturbance Unit	Sub NDU	Species	Forested Area (ha)	Future NHLB	Future % NHLB	Baseline Target %
		AC	2	2	100%	100%
		AT	528	469	89%	50%
	Mountain	BL	17897	17,513	98%	12%
	Mountain	PL	5239	3,501	67%	12%
		SB	271	236	87%	12%
		SW	61294	54,155	88%	100%
Omineca	Mountains Total		85230	75,876	89%	
Onnineca		AC	32	30	95%	100%
		AT	598	533	89%	50%
	Valley	BL	11	11	100%	100%
	valley	PL	2700	1784	66%	12%
		SB	351	307	88%	12%
		SW	6873	5,165	75%	12%
	Valley	Total	10565	7,831	74%	
Gi	Grand Total		3,318,877	2,407,281	72%	

The table indicates that 100% of the baseline targets for retention of a representative sample of forest stands in an unmanaged condition is achieved for all NDUs, including the 'uncommon' associations, either through the identified NHLB area or through avoidance of harvest planning. FOS #3 does not compromise the performance to the baseline targets, and therefore FOS #3 is consistent with this indicator.

Target Achieved			
✓ Yes	No		

# **REVISIONS**

# 3.18 GRAHAM HARVEST TIMING

Indicator Statement	Target Statement						
The number of clusters in the Graham IRM <sup>7</sup> Plan area where active operational harvesting is concurrently occurring.	Operational harvesting within the Graham IRM Plan area will be constrained to no more than one 'cluster' of cutblocks at any one .time.						
SFM Objective:	SFM Objective:						
Provide opportunities for a feasible mix of timber, recreational activities and non-timber commercial activities. Management strategies address important values in SMZ <sup>8</sup> areas.							

**Linkage to FSJPPR:** For the purposes of Section 42 of the *FSJPPR* this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Timber Harvesting Landscape Level Strategy.

#### Acceptable Variance:

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

## CURRENT STATUS AND COMMENTS

No harvesting occurred in any part of the Graham IRM plan area during the 2019-20 reporting period covered by this Annual Report.

The Forest Operations Schedule Section 3.1, submitted to MFLNRORD in October 2017, identifies the blocks that still remain unharvested in the FOS in Graham clusters 5, 6 and 6a.

The Graham IRM Area harvest sequencing is also noted in Table 17 of the FOS. No harvesting is currently planned in the Graham IRM area. The harvest sequencing presented in the FOS is consistent with achieving the target for this indicator.

Target Achieved				
✓ Yes	No			

#### REVISIONS

The conditional approval letter for SFMP#3 requested an indicator to address harvest performance in the Graham area. After a review of the indicator, it was determined that no changes were required. However, the Participants are reviewing the Graham River Integrated Resource Management Plan to determine the best way to move forward, given the operational and economic constraints on harvesting strategies, and considering harvesting slightly out of sequence in the Plan area, as the economic and operation constraints of harvesting polygons remaining in the clusters is not feasible at this time.

## 3.19 GRAHAM MERCH AREA HARVESTED



<sup>&</sup>lt;sup>7</sup> IRM – Integrated Resource Management

<sup>&</sup>lt;sup>8</sup> SMZ – Special Management Zone



Indicator Statement	Target Statement				
Cumulative merchantable area (hectares) within blocks harvested within the Graham River IRM Plan area since 1997.	The cumulative merchantable area (hectares) within harvested blocks will not exceed the planned maximum cumulative harvest areas as measured at the end of each time period. Period # 2 (ending April 2012): 6569 ha Period # 3 (ending April 2017): 9355 ha Period #4 (ending April 2022): 10,858 ha				
SFM Objective:					

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

Management strategies address important values in SMZ areas.

Linkage to FSJPPR: For the purposes of Section 42 of the FSJPPR this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Timber Harvesting Landscape Level Strategy.

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

# CURRENT STATUS AND COMMENTS

No harvesting has taken place within the Graham River IRM Plan area during the annual reporting period of April 1<sup>st</sup>, 2019-March 31<sup>st</sup>, 2020.

# Table 12: Graham River IRM Plan- Cluster Area and Timing Schedule (Revised Oct 2006)

Definition	s:									
Total Area:			The total size of a Cluster including inoperable areas							
Gross Co	ntributing Area:			The Contributing Area (base area) for Forest Practices Code (FPC) Biodiversity calculations						
IRM Net	Harvest Area:			Estimated amount of Gross Operable area considered harvestable after IRM factors are taken into account						
Proposed	Schedule:			General tim	ing of harves	t sequence o	over the cour	se of the F	Plan	
Maximur	n Cumulative Me	erch ha			um cumulat to period en			previous	periods	s) allowed in
Cluster #	Resource Management Zone	Total Area (ha)	Gross Contrib. Area (ha)	Est. IRM Net Harvest Area (1) (ha)	Est. Proportion of Cluster Proposed for Harvest	Sche Start		Harvest Period	# of Years	Maximum Cumulative Merch ha within blocks to be harvested
1	Graham-South	1,946	1,922	706.0			July 1999			
	Graham-South	627	620	294.0						
_	Graham-South	2,208	2,085		,.					
	Crying Girl	2,439	2,115							
4	Graham-South	3,975	3,504			July 2003	April 2007			
Sub-total		11,195	10,246	2910.0		1998	2007	Period 1	9	3638
5	Crying Girl	2,228	2,181			April 2007				
	Graham-South	2,508	2,570	1078.8		Nov. 2008				
6b	Graham-South	884	775	257.5						
6c	Graham-South	726	541	260.0	35.0%	April 2010	April 2012			
Sub-total		6,346	5,665	2344.9		2007	2012	Period 2	5	6569



Definition	s:										
Total Are	a:			The total size	ze of a Cluste	r inclu	ding i	noperable ar	eas		
Gross Contributing Area:				The Contributing Area (base area) for Forest Practices Code (FPC) Biodiversity calculations							
IRM Net	Harvest Area:				amount of Gro taken into acc		erabl	e area consic	dered harv	estable	after IRM
Proposed	Schedule:			General tim	ing of harves	t seau	ence	over the cour	rse of the I	Plan	
	n Cumulative Me	wah ha			0						allowed in
Maximui	II Cumulative Me	arch na		cutblocks	to period en	d (indi	cator	·)		1	
Cluster #	Resource Management Zone	Total Area (ha)	Gross Contrib. Area (ha)	Est. IRM Net Harvest Area (1) (ha)	Est. Proportion of Cluster Proposed for Harvest	Pro	Sch	d Harvest edule t-End	Harvest Period	# of Years	Maximum Cumulative Merch ha within blocks to be harvested
7	Crying Girl	1,848						2 April 2013			
8a	Crying Girl	1,904	,					3 April 2014			
8b	Crying Girl	2,184	1,877	812.3				3 April 2017			
Sub-total		5,936	5,327	2229.5		201		2017	Period 3	5	9355
9	Crying Girl	952	840	291.0				7 Nov. 2017			
10	Crying Girl	966	788	317.0				7 April 2018			
11	Graham-South	1,768	1,717	594.0				B-April 2022	D : 14	-	10050
Sub-total	<b>A A A A</b>	3,686	3,345			201		2022	Period 4	5	10858
12 13	Graham-North	3,439	3,249					2 April 2024			
Sub-total	Crying Girl	2,493	2,359			202		4 April 2027 2027	Period 5	5	13400
	Crying Girl	5,932 2.643	5,608 2,583				_	2027 7 April 2028		5	13400
14	Graham-North	2,643	,					8 April 2028			
Sub-total	Granaminortin	5,901	5,249			202		2032	Period 6	5	16033
16	Graham-North	2,108	1,917			202		April 2035	1 61100 0	5	10000
Sub-total	Ciranan North	2,108	1,917			203		2035	Period 7	3	17162
18	Graham-North	1.341	1,017	468.0						Ŭ	
19	Graham-North	3,121	2,782								
Sub-total		4,462	3,999			203		2040	Period 8	5	19024.
20	Crying Girl	1,317	1,188	527.0	40.0%	Nov.	2041	April 2045			
Sub-total		1,317	1,188			204		2045	Period 9	5	19683
Totals (Clu	ister only)	46883	42946	15746.4					Period 1- 9	47.0	19683
D. Total Plan Area 198,140 145,053				15,746	8%				-		10%

April 1<sup>st</sup>, 2007 marked the completion of Harvest Period #1 for this indicator, which covers all logging in the Graham plan area from June of 1998 to April 2007. The Period 1 target was 2,910.4 ha, with a variance of an allowable maximum area harvested of 3,638 ha (including the SFMP #1 allowable variance of 25% additional area). As noted in the 2009 annual report, the area harvested to the end of Harvest Period 1 was 3,515.6 ha, consistent with the acceptable range of area harvested for the first harvest period.

The second harvest period ended April 1, 2012, with a 6,569-hectare maximum cumulative harvest target. No harvesting occurred in the Graham during period 2. Therefore the total cumulative area harvested to the end of Period 2 is 3,515.6 ha (Period 1) +0 ha (Period 2) = 3515.6 ha. This is well within the maximum cumulative harvest area target of 6,569 ha for Period 2. The Participants performance for Period 2 is in conformance with this indicator.

Period 3 ran until April 1 2017, with a maximum cumulative harvest area target of 9,355 ha. No harvesting has taken place in the Graham during Period #3. Therefore, the cumulative area harvest to the end of Period 3 is 3,515.6ha. This is well within the maximum cumulative harvested area target of 9,355ha and the Participants are in conformance to this indicator.



Period 4 runs until April 1, 2022, with a maximum cumulative harvest area target of 10,858ha. No harvesting has taken place within the Graham since the commencement of period 4 and the preparation of this report. Therefore, the cumulative area harvested is 3,515.6ha. This is well within the maximum cumulative harvested area target of 10,858ha and the Participants are in conformance to this indicator.



Figure 5. Graham River operating area clustered harvest pattern, cluster 2.

(photo by D. Menzies)

Target Achieved	
✓ Yes	No

# **REVISIONS**

The conditional approval letter for SFMP#3 requested an indicator to address harvest performance in the Graham area. After a review of the indicator, it was determined that no changes were required. However, the Participants are reviewing the Graham River Integrated Resource Management Plan to determine the best way to move forward, given the operational and economic constraints on harvesting strategies, and considering harvesting slightly out of sequence in the Plan area, as the economic and operation constraints of harvesting polygons remaining in the clusters is not feasible at this time.

# 3.20 GRAHAM CONNECTIVITY

Indicator Statement	Target Statement		
Area (hectares) harvested in cutblocks in the Graham IRM area, within the permanent alluvial and non-productive/non-commercial components of the connectivity corridors.	Zero hectares harvested within cutblocks in the permanent alluvial and non- productive/non-commercial components of the connectivity corridors.		
SFM Objective:			
Ecosystem functions capable of supporting naturally occurring species exist within the range of natural variability.			
Management strategies address important values in SMZ areas.			
Linkage to EC IDDD. For the purposes of Section 40 of the EC IDDD this indicator atotament			

**Linkage to FSJPPR:** For the purposes of Section 42 of the *FSJPPR* this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Timber Harvesting Landscape Level Strategy.

#### Acceptable Variance:

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

#### CURRENT STATUS AND COMMENTS

The Participants completed no harvesting within the recognized corridors during the time period covered by this report – April 1<sup>st</sup>, 2019 – March 31<sup>st</sup>, 2020.

Target Achieved			
✓ Yes	No		

# **REVISIONS**

The conditional approval letter for SFMP#3 requested an indicator to address harvest performance in the Graham area. After a review of the indicator, it was determined that no changes were required. However, the Participants are reviewing the Graham River Integrated Resource Management Plan to determine the best way to move forward, given the operational and economic constraints on harvesting strategies, and considering harvesting slightly out of sequence in the Plan area, as the economic and operation constraints of harvesting polygons remaining in the clusters is not feasible at this time.

## 3.21 MKMA HARVEST

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

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

Management strategies address important values in SMZ areas.

**Linkage to FSJPPR:** For the purposes of Section 42 of the *FSJPPR* this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Timber Harvesting Landscape Level Strategy.

# Acceptable Variance:

Timing of submission may be delayed no more than one additional year.

# CURRENT STATUS AND COMMENTS

No new clustered harvest plans have been prepared for the MKMA to date.

No new harvesting is proposed in the MKMA, other than that previously approved under grandfathering provisions of the Muskwa-Kechika Management Act and Regulation, for the duration of FOS #2. Grandfathered blocks in the MKMA left unharvested during FOS #2 were dropped from FOS #3 (submitted Oct 2017). There are no unharvested blocks in the MKMA remaining in the current FOS.

Initial planning for development of an MKMA harvest plan commenced in 2006, and continued in 2007. An area has been selected for plan development. However, Landscape Unit Objectives must be developed for the area by the government, with input from the participants. Progress towards the completion of this plan has been made, however the participants must wait for Landscape Unit Objectives to be approved by government before a plan can be finalized, submitted to government for review and endorsed. The SFMP 3 approval letter dated May 4<sup>th</sup>, 2018, suggested that a forestry objective be established in the MKMA. As a result of the lack of approval of Landscape Unit Objectives no new clustered harvest plans have been prepared for the MKMA to date.

Target Achieved			
✓ Yes	No		

## **REVISIONS**

Revisions to this indicator will be considered over the next year in light of the SFMP #3 approval letter.



Indicator Statement	Target Statement		
The percentage of harvested areas that create openings greater than 1 hectare within 100 meters of RRZ's in identified major river corridors.	No openings exceeding 1 hectare in blocks within the major river corridors harvested under the <i>FSJPPR</i> (i.e. after November 15th 2001).		
SFM Objective:			
Management strategies address important values in SMZ areas.			
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Riparian Management Landscape Level Strategy			

## Acceptable Variance:

3.22 RIVER CORRIDORS

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

## CURRENT STATUS AND COMMENTS

As part of the preparation of the Forest Operations Schedule #3, a digital spatial layer was used for those portions of streams identified in the Fort St. John LRMP in the Major River Corridor Resource Management Zone. The coverage assigned a 100-metre buffer to the riparian reserve zone (RRZ) stream classification, which was based on inventory information if known, or defaulted to S1 classifications if unknown. This coverage is displayed on all 1:50,000 maps where the Major River Corridor Resource Management Zone occurs. Any blocks not previously authorized and occurring within a major river corridor were either deleted or amended prior to inclusion in the FOS.

Canfor did not conduct any block harvest or road construction activities in major river corridors, during the reporting period between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

BCTS did not conduct any block harvest or road construction activities in major river corridors, during the reporting period between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

Target Achieved			
✓ Yes	No		

## **REVISIONS**



3.23 TOTAL NUMBER OF CONTRACTS AWARDED TO FIRST NATIONS<sup>9</sup>

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

Linkage to FSJPPR: N/A

<u>Acceptable Variance:</u> This is a reporting indicator so no variance is required.

## CURRENT STATUS AND COMMENTS

During the reporting period, the licensee participants provided forty-eight contracts to companies or groups owned, operated, or sponsored by First Nations. These contracts provided First Nations with the opportunity to be involved in the local forest industry and economy by conducting slash burning and brushing projects, archaeological assessments, and harvesting and hauling of timber generated through hazard abatement projects. These contracts totaled \$307,703.90.

During the 2019-2020 reporting period, BC Timber Sales did not have any contractual arrangements with First Nations.

Target Achieved		
√ Yes	No	

## REVISIONS

<sup>&</sup>lt;sup>9</sup> New indicator in 2010 SFMP. Replaces old indicator #23 'Visual Screening' which has been deleted

## 3.24 PERMANENT ACCESS STRUCTURES

Indicator Statement	Target Statement		
Percentage of the total area in Managing Participants' cutblocks occupied by permanent access structures in which harvesting was completed.	A maximum of 5% of the total area in Managing Participants' cutblocks occupied by permanent access structures in which harvesting was completed, as determined on a 3 year rolling average.		
SFM Objective: Sustain forest lands within our control within the Defined Forest Area. Maintain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress.			
<b>Linkage to</b> <i>FSJPPR</i> : For the purposes of Section 35(5) of the <i>FSJPPR</i> , this indicator statement, target statement and acceptable variance will replace Section 30(1) of the <i>FSJPPR</i> .			
For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Access Management Landscape Level Strategy.			

# Acceptable Variance:

None.

<u>CURRENT STATUS AND COMMENTS</u> The current 3-year average area in permanent access structures ending March 31<sup>st</sup>, 2020 is 3.6%, details are presented in Table 13. The target for this period is a maximum of 5% of total area in permanent access structures. All participants' permanent access structure values were consistent with the targets during the reporting period - Canfor 4.5%, and BCTS 2.9% (3.6% combined).

# Table 13: Current 3-year Average in Permanent Access Structures (PAS)

Managing Participant	Annual Reporting Period (Ending Mar. 31st of Year Indicated)	PAS Area (ha)	Total Area (ha)	% PAS of Total Area	
Canfor	2018	225.7	4881.9	4.6%	
Canfor	2019	221.4	4910.2	4.51%	
Canfor 2020		102.5	2449.9	4.2%	
Ca	Canfor Total:10		12,242.0	4.5%	
BCTS	2018	150.3	5204.1	2.9%	
BCTS	2019	141.3	4736.9	3.0%	
BCTS 2020		137.3	4889.8	2.8%	
E	CTS Total: <sup>11</sup>	428.9	14,830.8	2.9%	
Combined	Participants Totals:	978.5	27,072.8	3.6%	

<sup>11</sup> based on 6 metre wide road widths

<sup>10</sup> based on 10 metre wide road widths

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

Figure 6 shows the participants' performance relative to the Permanent Access Structure indicator over the last three reporting periods.

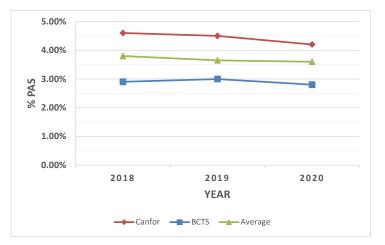


Figure 6: Three year reporting results of 3-year rolling averages of PAS % (2018-2020)

Target Achieved		
√ Yes	No	

# **REVISIONS**

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



#### 3.25 FOREST HEALTH

Indicator Statement	Target Statement
Percentage of silviculture obligation areas	100% of silviculture obligation areas with
with significant detected forest health	significant forest health damaging agents will
damaging agents which have treatment plans	have treatment plans developed for them,
developed for them. <sup>12</sup>	and initiated within 1 year of detection.

#### SFM Objective:

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

Ecosystem functions capable of supporting naturally occurring species continue to exist within the DFA.

# Maintain or enhance landscape level productivity.

**Linkage to** *FSJPPR*: For the purposes of Section 42 of the *FSJPPR* this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Forest Health Landscape Level Strategy.

#### Acceptable Variance:

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

## CURRENT STATUS AND COMMENTS

# BCTS

BCTS fill planted 44.0 ha over seven openings during the reporting period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020. Prior year silviculture surveys conducted on these openings identified the need for fill planting. The causes were primarily due to heavy grass competition that led to mortality in plantations of conifer and decreased natural regeneration of deciduous. Some of these stands may be managed as mixedwood going forward while some will continue with a conifer management objective.

From the silviculture surveys conducted during the reporting period on BCTS obligation areas, there were minor incidences of forest health damage such as western gall rust and surveys have indicated that grass has been inhibiting the re-establishment of aspen in isolated pockets in some deciduous stands. Venturia spp. has continued to be prevalent in many of the deciduous plantations. None of the forest damages identified were considered at levels significant enough to warrant development of a treatment plan.

The efficacy of the BCTS 2019 aerial herbicide spray program was determined to be good.

<sup>&</sup>lt;sup>12</sup> Indicator changed in 2010 SFMP to apply to silviculture obligation areas



Licensee participants fill planted 246.0 ha of obligation area over 7 different openings during the reporting period of April 1<sup>st</sup>, 2019 through March 31<sup>st</sup>, 2020. The need for fill planting on these sites was identified during surveys, and the cause was attributed mainly to competition from grass, and/or deciduous, herbaceous and frost damage, as well as fill-planting deciduous blocks where the aspen were not regenerating in sufficient quantities.

Surveys conducted on obligation areas during the reporting period identified minor incidences of aspen twig blight, frost, and animal browse. None of the forest damages identified were considered at levels significant enough to warrant development of a treatment plan.

Target Achieved		
✓ Yes	No	

#### **REVISIONS**

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

# 3.26 SALVAGE

Indicator Statement	Target Statement		
The relative proportion of area of merchantable fire-damaged stands salvaged within a management intensity class <sup>13</sup> .	The relative proportions of salvage hectares will be highest in the high intensity zones <sup>14</sup> , and lowest in the low intensity zones over an SFMP period (April 1 <sup>st</sup> , 2016 - March 31 <sup>st</sup> , 2022).		
SFM Objective:			
A natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress.			
Linkage to FSJPPR: N/A			

# Acceptable Variance:

None.

#### CURRENT STATUS AND COMMENTS

During the summer of 2016, 24 forest fires burned a combined area of 77,593.9 ha within the DFA. These fires occurred in High and Moderate Management Intensity Zones. 3020 ha of the burned areas were salvaged.

During the summer of 2017, 3 forest fires burned a combined area of 11.3 ha within the DFA. These fires occurred in low Management Intensity Zones. Due to the size of the individual fires and the limited amount of merch timber impacted by the fires, salvage was not pursued.

<sup>&</sup>lt;sup>13</sup> Modified in 2010 from SFMP # 1 to include only fire damaged stands

<sup>&</sup>lt;sup>14</sup> See Section 1.4.1 (page 22) of SFMP# 3 for description of LU's in high, moderate and low forest management intensities.



During the summer of 2018, fires occurred in Moderate and High Intensity Management Zones of the DFA, resulting in a total of 49,496 ha of burned area. A total of 116.6 ha were salvaged in the Moderate Intensity Zone.

During the summer of 2019, fires occurred in Moderate and High Intensity Management Zones of the DFA, resulting in a total of 990.8 ha of burned area. Of the total area burned, 447.7 ha of that was considered merchantable timber. Due to the size of the individual fires and their location within the DFA, salvage was not pursued.

MANAGE -MENT INTENSI TY EMPHASI S		HIGH		MODERATE		LOW			ALL			
Year	Total Area burned (ha)	Merch* Timber Damag ed (ha)	Merch Timber Salvag ed (ha)	Total Area burned (ha)	Merch* Timber Damag ed (ha)	Merch Timber Salvag ed (ha)	Total Area burne d (ha)	Merch* Timber Damag ed (ha)	Merch Timber Salvag ed (ha)	Total Merch* Timber Damag ed (ha)	Total Area Salvag e (ha)	Total Area Damage d (ha)
2016	1248 4	4239	1375	66114	16951	1645	0	0	0	21190	3020	78599
2017	0	0	0	0	0	0	11	0	0	0	0	11.3
2018	2993 9	1024	0	19556	2107	116	0	0	0	3131	116	49496
2019	305.9	211	0	684.9	236.7	0	0	0	0	447.7	0	990.8
SFMP Totals	4272 9	5474	1375	86355	19295	1761	11	0	0	24769	3136	129097

#### Table 14: Area Damaged / Salvaged in Merchantable Timber During the SFMP Period

\*Based on VRI from Land Resource Data Warehouse (LRDW) on stands with a total estimated volume of >= 140m<sup>3</sup>/ha and occurring on the Crown Forest Landbase (CFLB).

During the 2019-2020 reporting period, 0% of the areas burned were salvaged. The participants are consistent with the target for this indicator.

## REVISIONS

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

Acceptable Variance:

No acceptable variance.

# CURRENT STATUS AND COMMENTS

Table 15 summarizes the silviculture system (merchantable hectares) on blocks harvested between April  $1^{st}$ , 2019 and March  $31^{st}$ , 2020.

# Table 15: Silviculture System Summary by area

Managing Participant	Even-aged (ha)	Uneven-aged (ha)	Total (ha)
Licensee Participants	2140.2	0	2140.2
BCTS	1627.0	0	1627.0
Total	2767.2	0	2767.2

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

Target Achieved		
√ Yes	No	

# **REVISIONS**

# 3.28 SPECIES COMPOSITION

Indicator Statement	Target Statement		
Relative change in plantation composition versus harvest composition for spruce and pine.	The relative proportion of spruce and pine planted annually will equal the proportions harvested annually (excluding fill planting).		
SFM Objectives: Maintain the diversity and pattern of communities and ecosystems within a natural range.			
Maintain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress.			
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Reforestation Landscape Level Strategy.			

# Acceptable Variance:

An annual variance of plus or minus 20% absolute difference between the planted pine/spruce percentages and cruise pine/spruce percentage estimates is allowed to reflect potential annual harvest composition fluctuations, site treatment impacts, annual seedling delivery fluctuations (i.e. nursery production shortfalls/overruns), and to allow site level decisions to be signed off by Professional Foresters for variances (e.g. to address potential forest health concerns such as areas highly susceptible to rusts, insects, etc.)<sup>15</sup>

# CURRENT STATUS AND COMMENTS

Table 16 summarizes the blocks planted between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020 and the corresponding cruise species percentages by licensee:

Division	Data	Total	Percentages
	Sum of CruiseSpruce (m3)	174,801	63%
BCTS	Sum of Cruise Pine (m3)	102,054	37%
BCIS	Sum of Planted Spruce (trees)	1,090,471	61%
	Sum of Planted Pine (trees)	702,176	39%
	Sum of Cruise Spruce (m3)	848,530	88%
Licensee	Sum of Cruise Pine (m3)	114,924	12%
Participants	Sum of Planted Spruce (trees)	3,749,070	76%
	Sum of Planted Pine (trees)	1,444,755	24%
	Total Sum of Cruise Spruce (m3)	1,023,331	82%
Combined	Total Sum of Cruise Pine (m3)	216,978	18%
Totals	Total Sum of Planted Spruce (trees)	4,839,541	69%
	Total Sum of Planted - Pine (trees)	2,146,931	31%

# Table 16: 2019 planting vs. cruise species comparison

<sup>&</sup>lt;sup>15</sup> The original variance was amended in the 2006-2007 Annual Report- clarified that the assessment is based on cruised volumes vs seedlings planted



As indicated above the blocks planted in the reporting period contained 82% spruce volume in the cruise and were planted with 69% spruce. These blocks contained 18% pine volume in the cruise and were planted with 31% pine. The planted species percentages are within 20% of the cruise species percentages and therefore the participants are within the acceptable variance for this indicator and target.

Target Achieved		
✓ Yes	No	

# **REVISIONS**

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

### 3.29 REFORESTATION ASSESSMENT

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

#### SFM Objectives:

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

Maintenance of the processes for carbon uptake and storage.

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

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

#### Acceptable Variance:

A variance of 5% below the Target Merchantable Volume will be acceptable (i.e. 90% of the Maximum Predicted Merchantable Volume for coniferous areas, and 85% of the Maximum Predicted Merchantable Volume for deciduous areas). The variance accounts for the complexity of ecosystems and silviculture regimes combined with the long time frames and variety of influences on reforestation outcomes.



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

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

The deciduous compiler has been developed. MSQ reports for deciduous are now included in this section.

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

## CURRENT STATUS AND COMMENTS

Tables corresponding to the results presented below can be found in Appendix 4 -Reforestation. MSQ is conducted on coniferous blocks 15 years after harvest and on deciduous blocks 10 years after harvest.

# BCTS

A total of twelve BCTS blocks were MSQ surveyed from the 2004/2005 harvest year in 2019. These twelve blocks had productive standard units that are managed using coniferous stocking standards. This accounted for a sample size of 574.4 ha. The field data collected in July and August 2019 was compiled over the winter using a compiler developed by Timberline Natural Resource Group. The 574.4 ha were broken down into ten different stratums based on species composition, site index, stocking class and target stocking standards. For each stratum a target merchantable volume (TMV) was determined based on TASS (Tree and Stand Simulator) models. Using the inputs of mean stocked quadrant (MSQ), mean effective age and site index, a predicted merchantable volume (PMV) was then calculated for each stratum. The PMV for the 2004/2005 harvest year for coniferous managed stands was 388,779 m<sup>3</sup> and the TMV was 370,483 m<sup>3</sup>. This put the PMV at 104.9 % of the TMV, which means that the target has been achieved.

In addition to the above, a total of five BCTS blocks were MSQ surveyed from the 2009/2010 harvest year using deciduous stocking standards in 2019. This accounted for a sample site of 450.1 ha. The field data was collected in the summer of 2019 and compiled using a deciduous compiler developed by Craig Farnden Forestry Consulting (2012) and in 2016, THEXLWIZ Consulting developed a new Microsoft Excel version with advanced data validation and a complete reporting system. This sample represents two stratums based on species composition, site index, stocking class and target stocking standard. The target merchantable volume (TMV) was determined based on TASS models. Using the inputs of mean stocked quadrant (MSQ), mean effective area and site index, a predicted merchantable volume (PMV) was then calculated. The PMV for the 2009/2010 harvest year for deciduous managed stands was 199,965 m<sup>3</sup> and the TMV was 179,812 m<sup>3</sup>. This put the PMV at 111.2% of the TMV, which means the target has been achieved.



## Licensee Participants

A total of 46 blocks were surveyed from the 2004/2005 harvest year, accounting for a sample size of 2499.3 ha. The field data collected between August and October of 2019 were compiled over the winter using a compiler developed by J.S. Thrower and Associates. The 2499.3 ha were grouped into 29 different strata based on species composition, site index, stocking class, and target stocking standard. For each stratum a target merchantable volume (TMV) was determined based on TASS models. Using inputs of mean stocked quadrant (MSQ), mean effective age and site index, a predicted merchantable volume (PMV) was then calculated for each stratum. The PMV for the 2004/2005 harvest year was 1,589,850 m<sup>3</sup>, and the TMV was 1,473,822 m<sup>3</sup>. This put the PMV at 107.9% of the TMV, which means the target was met.

In addition to the above, a total of 17 Canfor blocks were surveyed from the 2009/2010 harvest year using deciduous stocking standards. This accounted for a sample size of 1,065.9 ha. The field data was collected in the summer and compiled using a deciduous compiler developed by Craig Farnden Forestry Consulting (2012) and in 2016, THEXLWIZ Consulting developed a new Microsoft Excel version with advanced data validation and a complete reporting system. This sample represents three strata based on species composition, site index, stocking class, and target stocking standards. The target merchantable volume (TMV) was determined based on TASS models. Using the inputs of mean stocked quadrant (MSQ), mean effective area and site index, a predicted merchantable volume (PMV) was then calculated. The PMV for the 2009/2010 harvest year for deciduous managed stands was 295,037 m<sup>3</sup> and the TMV was 265,519 m<sup>3</sup>. This put the PMV at 111.1% of the TMV, which means the target has been achieved.

Target Achieved	
√ Yes	No

# **REVISIONS**

## 3.30 ESTABLISHMENT DELAY

Indicator Statement	Target Statement
Establishment Delay (years)	The area weighted average establishment delay for coniferous regeneration will not exceed two years The area weighted average establishment delay for deciduous regeneration will not exceed three years The area weighted average establishment delay for mixedwood stands regeneration will not exceed three years.
SFM Objectives:	
Maintain the diversity and pattern of communities and ecosystems within a natural range.	
Maintain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress.	
Maintenance of the processes for carbon uptake and storage.	
Linkage to FSJPPR: For the purposes of Section 42 of the FSJPPR this indicator statement,	

**Linkage to** *FSJPPR*: For the purposes of Section 42 of the *FSJPPR* this indicator statement target statement and acceptable variance will be used to determine if forest practices are consistent with the Reforestation Landscape Level Strategy.

#### Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

#### Coniferous Regeneration:

BCTS coniferous establishment delay was 1.1 years, which is within the acceptable performance range for coniferous establishment timelines for this indicator. Canfor coniferous establishment delay was 2.0 years, which is within the acceptable performance range for coniferous establishment timelines for this indicator.

# Deciduous Regeneration:

The BCTS deciduous establishment delay was 2.4 years, which is within the acceptable performance range for deciduous establishment timelines for this indicator. The Canfor deciduous establishment delay was 2.9 years, which is within the acceptable performance range for deciduous establishment timelines for this indicator.

#### Mixedwood Regeneration

The BCTS mixedwood establishment delay was 2.0 years, which is within the acceptable performance range for mixedwood establishment timelines for this indicator. The Canfor mixedwood establishment delay was 2.6 years, which is within the acceptable performance range for mixedwood establishment timelines for this indicator.

Refer to the tables found in Appendix 4 - Reforestation, for a detailed listing of how this establishment delay value was calculated.

Figure 7 shows a 3-year summary for the indicator:





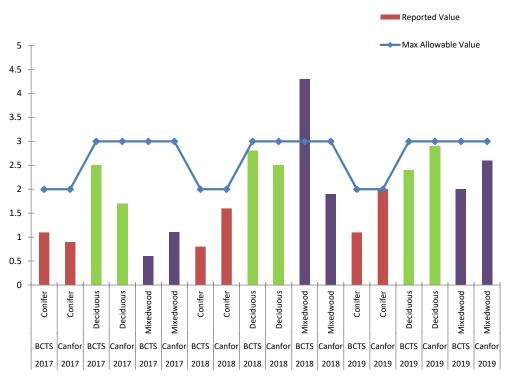


Figure 7: Establishment delay 3-year summary

The participants achieved all three targets associated with this indicator.

Target Achieved	
√Yes	No

# **REVISIONS**

## 3.31 LONG TERM HARVEST LEVEL

Target Statement	
We will propose an Allowable Annual Cut (AAC) that sustains the LTHL of the Defined Forest Area (DFA).	
SFM Objective:	
Maintain or enhance landscape level productivity.	
No decrease in the LTHL in the DFA.	
Linkage to FSJPPR: N/A	

# Acceptable Variance:

At the time of SFMP #1 government policy direction was to have Timber Supply Reviews (TSRs) prepared by industry for the Chief Forester's consideration, and determination of the AAC. This policy has changed, government is now preparing TSRs with input from the public and stakeholder. Forest industry participation in the TSR process is now limited to providing information and feedback.

Although the Participants may propose information to be considered in the calculation of a sustainable long-term harvest level, the responsibility and authority to determine an AAC rests with the MFLNRORD. Ultimately, it is the MFLNRORD Chief Forester who determines the AAC for the management unit.

# CURRENT STATUS AND COMMENTS

Work on the current TSR commenced in the summer of 2013. The TSR analysis results document was released in early 2016. The Participants provided information for consideration by the MFLNRORD in the preparation of the data package and the review of the analysis report, which supports the TSR AAC determination. In May 2018, MFLNRORD released the updated AAC. The Chief Forester set the AAC at 2,115,000m<sup>3</sup>, which is the same AAC that was released in 2003.

Target Achieved	
✓ Yes	No

## **REVISIONS**

#### 3.32 SITE INDEX

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

# Acceptable Variance:

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

## CURRENT STATUS AND COMMENTS

The majority of SPs/SLPs for blocks harvested since Nov. 15<sup>th</sup>, 2001 have been updated to include pre-harvest site index, so that the data will be readily available when well-growing assessments are made to them in the future. Blocks for which licensees developed SLPs during the reporting period have Site Index identified for each Standard Unit.

This indicator applies to blocks harvested since Nov. 15<sup>th</sup>, 2001 that have undergone completion of a well growing assessment as per the required well growing assessment schedule. This is the second reporting season where a population of cutblocks have met the conditions required for inclusion. Multiple blocks, however, were removed from the population due to recent wildfire.

## Licensee Participants

The average pre-harvest site index was 12.0, whereas the average post-harvest site index was determined to be 18.9.

# BCTS

The average pre-harvest site index was 15.0, whereas the average post-harvest site index was determined to be 22.3.

Target Achieved	
✓ Yes	No

# **REVISIONS**

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

#### 3.33 FIRST NATIONS CONSULTATION & INFORMATION SHARING<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> New indicator in 2010 SFMP- previous SFMP#1 Indicator # 33 was Landslides, which has been deleted



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

## Acceptable Variance:

No acceptable variance.

# CURRENT STATUS AND COMMENTS

During the 2019-2020 reporting period there were 2 major FOS amendments (#367, and #373) that were prepared jointly by Canfor and BCTS. Information sharing related to the major FOS amendments were conducted with the affected Treaty 8 First Nations and other affected First Nations with identified interest in the FSJ TSA. FOS amendment packages including maps and letters were provided to each affected First Nation for each major amendment and appropriate follow-up meetings and discussions were held as requested.

All Treaty 8 First Nations were invited to the Public Advisory Group meetings that occurred during the reporting period

Canfor initiated bi-annual meetings with Treaty 8 First Nations to facilitate better info sharing and communication of Canfor's field layout operations and harvesting activities. First Nations' concerns and comments were considered and/or incorporated into the future plans.

In addition to this, Canfor Silviculture staff conducted info sharing with all First Nations where brushing activities were proposed to occur. Through the Notice of Intent to Treat process, First Nations were provided with information and proposed treatment areas in an initial package, followed by many subsequent communications and/or contact attempts.

BCTS sent notification of the April 2019 Sale Schedule to the following First Nation groups: Blueberry River First Nation (BRFN), Dene Tha First Nation (DTFN), Doig River First Nation (DRFN), Halfway River First Nation (HRFN), Horse Lake First Nation (HLFN), Prophet River First Nation (PRFN), Saulteau First Nations (SFN) and West Moberly First Nations (WMFN).



BCTS sent notification of the July 2019 Sale Schedule to the following First Nation groups: Blueberry River First Nation (BRFN), Dene Tha First Nation (DTFN), Doig River First Nation (DRFN), Halfway River First Nation (HRFN), Horse Lake First Nation (HLFN), Prophet River First Nation (PRFN), Saulteau First Nations (SFN) and West Moberly First Nations (WMFN).

BCTS sent notification of the October 2019 Sale Schedule notification to the following First Nation groups: Blueberry River First Nation (BRFN), Dene Tha First Nation (DTFN), Doig River First Nation (DRFN), Halfway River First Nation (HRFN), Horse Lake First Nation (HLFN), Prophet River First Nation (PRFN), Saulteau First Nations (SFN) and West Moberly First Nations (WMFN).

BCTS sent notification of the January 2020 Sale Schedule notification to the following First Nation groups: Blueberry River First Nation (BRFN), Dene Tha First Nation (DTFN), Doig River First Nation (DRFN), Halfway River First Nation (HRFN), Horse Lake First Nation (HLFN), Saulteau First Nations (SFN) and West Moberly First Nations (WMFN).

BCTS communicated with Blueberry River First Nation (BRFN), Dene Tha First Nation (DTFN), Doig River First Nation (DRFN), Halfway River First Nation (HRFN), Horse Lake First Nation (HLFN), Saulteau First Nations (SFN) and West Moberly First Nations (WMFN) through the Notice of Intent to Treat process for brushing/silviculture treatments. The First Nations were provided with information and proposed treatment areas in an initial package followed by many subsequent communications and/or contact attempts.

Target Achieved			
✓ Yes	No		

# **REVISIONS**



# 3.34 PEAK FLOW INDEX

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

# Acceptable Variance:

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

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

# CURRENT STATUS AND COMMENTS

A DFA wide analysis of watersheds was conducted. The analysis was done during development of FOS #3 to determine the impact of blocks harvested to March 31<sup>st</sup>, 2025 to each watershed's peak flow index. The analysis showed that 105 of 105 watersheds are below the baseline target for current state and 104 of 105 watersheds (99%) are below the baseline target for future state upon completion of all harvest activities by both participants.

Table 17 identifies the current and expected future state of Peak Flow Index (PFI) upon completion of all harvest activities proposed in FOS #3 as of October 2017.

Watershed Group	Watershed Name	Class	Size (km2)	Elevation range (m)	H60 Elevation (m)	Baseline Threshold PFI	PFI 2017	PFI 2025
Fontas	Bedji Creek		230.42	460 - 600	508	50	1.6	1.9
Fontas	Chasm Creek		168.21	539 - 680	599	50	0.0	0.0
Fontas	Dazo Creek		260.27	360 - 494	460	50	1.0	0.7
Fontas	FONT Unnamed 1		117.73	361 - 481	461	50	0.6	0.4
Fontas	Fontas River		320.35	536 - 800	660	50	15.0	16.2
Fontas	Kataleen Creek		162.95	380 - 451	413	50	3.0	3.3
Fontas	Teklo Creek		212.81	380 - 474	426	50	0.1	0.1
Fontas	Upper Etthithun River		404.45	620 - 842	680	50	20.5	21.6
Fontas	Ekwan Creek	LB	850.5	360 - 481	420	50	2.0	2.1
Fontas	Etthithun River	LB	1161.6	440 - 842	535	50	8.0	8.6
Fontas	Fontas River - LB	LB	714.32	440 - 800	580	50	7.0	7.5
Kahntah	Dahl Creek		412.84	535 – 943	700	50	0.2	4.6
Kahntah	Helicopter Creek		147.32	505 - 742	613	62	0.1	0.1

# Table 17: PFI FOS #3 Condition and Targets

Watershed Group	Watershed Name	Class	Size (km2)	Elevation range (m)	H60 Elevation (m)	Baseline Threshold PFI	PFI 2017	PFI 2025
Kahntah	KAHN Unnamed 4		226.87	640 - 944	720	50	0.9	2.9
Kahntah	KAHN Unnamed 5		126.05	538 – 721	624	62	0.5	0.4
Kahntah	Upper Cautley Creek		478.27	660 - 1022	740	62	9.8	11.6
Kahntah	Cautley Creek	LB	865.02	518 - 1022	680	62	5.6	6.6
Kahntah	Kahntah Creek	LB	1096.59	518 - 944	700	50	0.5	3.9
Lower Beatton	Aitken Creek		828.45	654-985	815	43	16.1	14.2
Lower Beatton	Charlie Lake		292.66	690-889	773	62	11.7	13.1
Lower Beatton	Doig River		983.34	623-852	731	43	1.1	1.5
Lower Beatton	Osborn River		735.95	623-987	745	43	38.2	58.6
Lower Beatton	Umbach Creek		430.91	611-866	741	43	7.8	8.9
Lower Beatton	Upper Blueberry		857.77	655-1048	820	50	15.9	17.1
Lower Halfway	Aikman Creek		118.74	640 - 1120	815	43	9.0	17.0
Lower Halfway	Blair Creek		230.44	698 - 1142	902	43	25.2	34.3
Lower Halfway	Cameron Creek		495.18	699 - 1203	944	43	6.8	11.8
Lower Halfway	Colt Creek		158.53	719 – 1701	913	43	7.0	8.0
Lower Halfway	Deadhorse Creek		208.99	560 - 959	820	43	19.9	23.5
Lower Halfway	Ground Birch Creek		338.39	558 - 1062	735	43	16.0	15.3
Lower Halfway	Horn Creek		426.61	1079 – 2347	1474	37	0.0	0.0
Lower Halfway	Kobes Creek		299.88	620 - 1648	828	50	10.9	13.3
Lower Halfway	LHAF Unnamed 1		216.47	699 - 1022	860	43	11.3	14.5
Lower Halfway	Needham Creek		328.94	938 – 2269	1430	43	0.0	0.0
Lower Halfway	Poutang Creek		179.97	1098 – 2393	1453	43	0.0	0.0
Lower Halfway	Townsend Creek		295.8	698 - 1081	880	43	19.0	17.0
Lower Halfway	Cameron River - Residual	LB	2029.32	538 - 1205	837	37	14.9	19.8
Lower Halfway	Graham River	LB	2309.94	530 - 2404	1279	43	2.4	2.4
Lower Sikanni	Bull Creek		351.34	639 - 981	752	50	1.8	16.0
Lower Sikanni	Dechacho Creek		172.51	378 – 762	516	50	1.2	1.2
Lower Sikanni	Katah Creek		594.82	419 – 915	660	50	0.8	7.6
Lower Sikanni	Kenai Creek		78.86	400 - 621	1000	50	3.6	2.6
Lower Sikanni	LSIK Unnamed 2		162.43	536 - 858	720	43	5.5	11.3
Lower Sikanni	LSIK Unnamed 4		59.29	519 – 721	641	50	1.3	1.4
Lower Sikanni	Niteal Creek		516.6	359 - 520	475	50	0.1	0.1
Lower Sikanni	Upper Gutah Creek		806.45	559 - 901	728	62	1.1	3.2
Lower Sikanni	West Conroy		248.28	638 - 1020	782	50	5.8	24.5
Lower Sikanni	Conroy Creek	LB	1096.67	417 – 1020	720	50	3.2	15.5
Lower Sikanni	Gutah Creek	LB	1450.99	380 - 901	645	50	1.4	3.3
Milligan	Dede Creek		128.35	680 - 740	720	62	0.8	0.8
Milligan	Flick Creek		203.24	700 – 859	780	62	0.3	0.3
Milligan	Little Beaverdam Creek		334.14	690 - 854	732	62	0.4	0.4
Milligan	MILL Unnamed 3		325.52	780 – 962	880	62	4.3	4.7
Milligan	Milligan Creek		432.38	680 - 941	780	50	0.3	0.3
Milligan	Upper Milligan Creek		382.2	719 – 941	832	50	13.2	14.5
Milligan	Milligan Creek - LB	LB	1836.56	619 – 941	758	50	3.6	3.9

75

Watershed Group	Watershed Name	Class	Size (km2)	Elevation range (m)	H60 Elevation (m)	Baseline Threshold PFI	PFI 2017	PFI 2025
Upper Beatton	Arrow Creek		507.02	661 - 902	783	50	1.1	1.2
Upper Beatton	Beatton River		1071.09	777 – 1780	984	43	7.0	9.5
Upper Beatton	Black Creek		666.11	700 – 1022	807	50	6.8	7.7
Upper Beatton	Grewatsch Creek		269.73	736 - 1103	927	50	5.8	11.1
Upper Beatton	Holman Creek		150.18	719 – 1080	896	50	10.9	14.6
Upper Beatton	Jedney Creek		128.76	779 – 1101	952	43	7.9	13.0
Upper Beatton	La Prise Creek		338.99	717 – 1021	860	50	16.9	16.1
Upper Beatton	Martin Creek		120.24	700 - 980	830	50	42.3	47.6
Upper Beatton	McMillan Creek		103.34	659 - 770	736	43	0.2	0.2
Upper Beatton	Nig Creek		476.81	680 - 920	782	50	22.0	24.2
Upper Beatton	UBTN Unnamed 9		156.26	677 – 880	757	50	0.4	0.5
Upper Beatton	Upper Beatton Lrg	LB	2345.63	719 - 1782	924	50	9.1	12.4
Upper Halfway	Blue Grave Creek		158.63	720 – 1722	960	37	4.4	8.7
Upper Halfway	Horseshoe Creek		197.41	739 - 1762	1060	37	1.7	6.1
Upper Halfway	Two Bit Creek		160.23	980 - 1888	1235	37	0.4	0.4
Upper Halfway	UHAF Unnamed 3		127.86	922 - 1862	1221	37	0.0	0.0
Upper Halfway	UHAF Unnamed 6		211.34	778 – 1981	976	37	16.5	19.4
Upper Halfway	Upper Chowade		426.75	925 - 2336	1395	37	5.3	5.8
Upper Halfway	Upper Cypress		334.89	1099 – 2316	1493	37	0.0	0.0
Upper Halfway	Upper Halfway River		629.22	1103 – 2590	1235	37	0.0	0.0
Upper Halfway	Chowade River	LB	988.88	779 - 2331	1475	43	6.6	7.8
Upper Halfway	Cypress Creek	LB	620.07	840 - 2229	1200	37	2.4	3.2
Upper Halfway	Upper Halfway River - LB	LB	1096.06	914 - 3057	1241	37	0.1	0.2
Upper Peace	Coplin Creek		350.04	582-942	773	43	22.3	24.4
Upper Peace	Farrel Creek		646.01	447-1686	713	43	16.4	24.5
Upper Peace	North Cache Creek		187.89	548-909	759	43	15.6	17.6
Upper Peace	Red Creek		239.85	446-919	753	43	14.0	16.4
Upper Prophet	Besa Creek		515.61	1136 – 2993	1568	43	0.0	0.0
Upper Prophet	Minaker River		170.31	859 - 1742	1060	43	1.3	1.3
Upper Prophet	Nevis Creek		182.43	1019 - 2102	1422	37	0.0	0.0
Upper Prophet	Pocketknife Creek		235.85	860 - 1884	1110	43	0.5	0.7
Upper Prophet	Upper Prophet River		269.62	1137 – 2920	1683	37	0.0	0.0
Upper Prophet	Minaker River - Residual	LB	555.08	819 - 1820	1070	43	0.8	1.0
Upper Prophet	Upper Prophet	LB	1177.85	1020 - 2993	1569	37	0.0	0.0
Upper Sikanni	Boat Creek		391.83	455 – 1081	719	50	0.0	0.0
Upper Sikanni	Buckinghorse River		389.18	840 - 1936	1119	43	1.0	1.6
Upper Sikanni	Coal Creek		214.49	637 - 1079	900	43	12.7	16.1
Upper Sikanni	Daniels Creek		223.39	758 – 1263	1041	43	3.3	4.5
Upper Sikanni	Donnie Creek		122.16	520 - 1043	822	50	10.4	16.8
Upper Sikanni	Loranger Creek		132.18	1025 - 2018	1390	43	0.0	0.0
Upper Sikanni	Medana Creek		138.68	702 - 1183	1000	43	0.2	2.0
Upper Sikanni	Middle Fork Creek		207.97	857 – 1269	1060	43	2.3	2.4
Upper Sikanni	Sidenius Creek		460.87	1119 – 2619	1489	43	2.6	2.8

76

# 

# Fort St. John Pilot Project 2019-2020 SFMP Annual Report

Watershed Group	Watershed Name	Class	Size (km2)	Elevation range (m)	H60 Elevation (m)	Baseline Threshold PFI	PFI 2017	PFI 2025
Upper Sikanni	Sikanni Chief		470.52	1119 – 2739	1488	43	0.0	0.0
Upper Sikanni	Temple Creek		216.19	458 - 901	760	43	5.0	16.6
Upper Sikanni	Trimble Creek		160.27	1082 – 2122	1439	43	0.0	0.0
Upper Sikanni	Trutch Creek		858.44	491 – 1262	781	43	5.0	8.5
Upper Sikanni	Buckinghorse River - Residual	LB	1239.18	618 - 1936	1029	43	1.5	2.5
Upper Sikanni	Sikanni Chief - Residual	LB	2902	618 – 2739	1143	43	1.7	2.2

With respect to current state, the analysis indicates that all watersheds (105 of 105 - 100%) are within the target threshold for peak flow and the participants are in conformance with this indicator. Concerning future state, with the exception of the Osborn River, 104 of 105 (99%) watersheds are within the variance threshold for peak flow and the participants are in conformance with this indicator target.

Target Achieved			
✓ Yes	No		

# **REVISIONS**



# 3.35 WATER QUALITY CONCERN RATING

Indicator Statement	Target Statement
The percentage of surveyed stream crossings annually identified with a high WQCR rating on forestry roads within the DFA for which Participants have stewardship. *WQCR – water quality concern rating	On an annual basis fewer than 30% of the total number of surveyed stream crossings on roads for which the Participants have stewardship will have 'High' WQCR. <sup>17</sup>
SFM Objective:	
Maintenance of water quality.	
Linkage to FSJPPR: N/A	

# Acceptable Variance:

Maximum 'high' WQCR allowable will be 35%.

# CURRENT STATUS AND COMMENTS

SQCI (Stream Quality Crossing Index) - Water Quality Effectiveness Evaluation (WQEE) field surveys were conducted on 17 crossings in the reporting period. From these surveys, the WQCR was assigned using the translation tables from "Stream Crossing Quality Index (using the WQEE Computation Procedure) Field Manual" by P. Beaudry. None of the crossings were on fish bearing streams. Results of the field surveys are presented in Table 18.

The participants achieved the indicator target for the 2019/2020 reporting period.

# Table 18: Summary of WQCR data collected during 2019

Status	WQCR 'High' or 'Very High' (# crossings)	WQCR 'Medium' (# crossings )	WQCR 'Low' or 'Very Low' (# crossings)	WQCR 'None' (# crossings)	Total (#)	%crossings rated 'High'
All combined	0	2	5	10	17	0

The following photos are included to give the reader an impression of what 'high' and 'low' Water Quality Concern Ratings may relate to in the field.

Figure 8 is an example of a crossing rated 'high'. Sites assessed soon after deactivation often look like this and can require further application of reclamation seed to lower the concern rating. Incorporating pieces of woody debris along the exposed soil surfaces can further reduce risk of soil erosion and sediment delivery, but can interfere with recreation traffic if excessive.

<sup>&</sup>lt;sup>17</sup> 2010 SFMP target revised to annual measurement from three year rolling average of 2004 SFMP



Figure 8: Example of a crossing with a 'High' Water Quality Concern Rating

Figure 9 is an example of a crossing rated 'low'. Abundant reclamation mix and natural vegetation has colonized soil exposures and lowered the risk of soil erosion and sediment delivery to waterbodies.



Figure 9: Example of a crossing with a 'Low' Water Quality Concern Rating

Target Achieved			
√ Yes	No		

# **REVISIONS**

3.36 PROTECTION OF STREAMBANKS AND RIPARIAN VALUES ON SMALL STREAMS

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

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

# CURRENT STATUS AND COMMENTS

A review of BCTS incidents related to Site Level Plan (SLP) measures to protect stream bank, stream channel stability and riparian vegetation on small streams due to harvesting or silviculture activities from April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020 indicated that there were no instances of non-conformance to SLP measures during that reporting period.

A review of Canfor incidents related to SLP measures to protect stream bank, stream channel stability and riparian vegetation on small streams due to harvesting or silviculture activities from April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020 indicated that there were no instances of non-conformance to SLP measures during that reporting period.

A variance of one non-conformance per participant is allowed annually. There was no participant non-conformances; the participants were in conformance to the indicator and are within the tolerance provided by the variance.

Target Achieved				
√ Yes	No			

# **REVISIONS**



# 3.37 SPILLS ENTERING WATERBODIES

Indicator Statement	Target Statement
Number of spills of a reportable substance (i.e. antifreeze, diesel fuel, gasoline, greases, hydraulic oil, lubricating oil, methyl hydrate, paints and paint thinners, solvents, pesticides, and explosives) entering water bodies.	Zero spills entering water bodies.
SFM Objective:	
Maintenance of water quality.	
Linkage to FSJPPR: N/A	

# Acceptable Variance:

None.

<u>CURRENT STATUS AND COMMENTS</u> A review of the Participant's Incident Tracking Systems (ITS) incidents indicate that the licensee participants as well as BCTS had no spills of a reportable substance that entered water bodies during the 2019-20 reporting period.

Target Achieved	
√ Yes	No

# **REVISIONS**



# 3.38 CARBON SEQUESTRATION RATE

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

# Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

There have been no changes in the status of this indicator since the development of SFMP #1.

The strategy to manage sequestration rates is through prompt reforestation (Section 3.30 of this document) and maintaining acceptable levels of stocking over the landscape on previously harvested and regenerated sites (Section 3.29 of this document). The participants are in conformance with the requirements of indicators 29 and 30 (conifer and deciduous establishment).

Updating of the carbon sequestration rates for the DFA will be initiated provided that a revised carbon budget modeling analysis, which is expected to be a component of the current MFLNRORD timber supply analysis, is actually completed by the MFLNRORD.

	Target Achieved	
ſ	✓ Yes	No

# **REVISIONS**



# 3.39 ECOSYSTEM CARBON STORAGE

Indicator Statement	Target Statement	
The percentage of ecosystem carbon stored in the Fort St. John DFA relative to projected natural levels.	Maintain ecosystem carbon storage at a minimum of 95% of projected natural storage levels.	
SFM Objective:		
Maintenance of the processes for carbon uptake and storage.		
Linkage to FSJPPR: N/A		

# Acceptable Variance:

No acceptable variance.

# CURRENT STATUS AND COMMENTS

There have been no changes in the status of this indicator since the development of SFMP #1. The strategy to manage carbon storage is through prompt reforestation (Section 3.30 of this document) and maintaining acceptable levels of stocking over the landscape on previously harvested and regenerated sites (Section 3.29 of this document) and adherence to cut control requirements (Section 3.53 of this document) which will sustain the long term harvest level for the DFA (Section 3.31). The participants are in conformance with the requirements of indicators 29, 30 (deciduous and coniferous establishment delay), 31 and 53.

Updating of the natural carbon storage levels for the DFA will be initiated provided that a revised carbon budget modeling analysis, which is expected to be a component of the current MFLNRORD timber supply analysis, is actually completed by the MFLNRORD.

Target Achieved	
✓ Yes	No

# **REVISIONS**



# 3.40 COORDINATED DEVELOPMENTS

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

# Acceptable Variance:

The opportunities for coordinated development will fluctuate annually based on the overall activity of the oil and gas industry as well as the proximity of operations to one another. Any amount of coordinated development on the basis of making participants' plans readily available will be viewed as a positive step in reducing the conversion of forested lands to non-forest conditions. No variance is necessary, as the target is to report out on coordinated activities that occurred between the industries.

# CURRENT STATUS AND COMMENTS

Following is a summary of proposed changes to activities related to coordinating development between licensee participants and the oil and gas industry between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

Canfor provided oil and gas companies with a total of 254 road use agreements for use of Canfor roads, representing 4,272 km total. Oil and gas companies consequently provided a number of road use agreements for their roads to Canfor. In most of the referrals received, planned access to the proposed oil and gas development had considered information from the Participant's Forest Operations Schedule (FOS).

Canfor received a total of 108 referrals from the Oil and Gas industry during the reporting period. Of these, 17 referrals indicated that coordinating activities were occurring in that Oil and Gas were requesting to use the Participant's existing roads.

BCTS does not hold any RUA, as the successful bidder for each TSL is responsible for acquiring these before hauling.

BCTS received a total of 31 oil and gas referrals during the reporting period. Of the 31 referrals BCTS received, there were 4 proposed changes that indicated coordinating activities were occurring including sharing of oil and gas post construction shapefiles with BCTS and coordination of harvesting timelines to ensure oil and gas and forestry activities were not occurring at the same time. The remaining 27 referrals had very little or no impact to BCTS blocks and required minor or no changes to the proposed oil and gas activity. Most of the referrals from oil/gas industry appeared to have utilized the FOS maps provided to the industry. In doing so BCTS planned and/or developed infrastructure was considered.

Target Achieved	
√ Yes	No

# REVISIONS

Previous reports have missed reporting out on two targets for this indicator in the approved SFMP:

- The number of proposed roads eliminated or revised that were included in the FOS due to the Participants using new O&G access roads instead.
- The length of roads covered by RUA provided to O&G

Conversely, previous reports have reported out on other significant coordinated developments not covered under RUAs or O&G referrals, which was not required in the SFMP. For the 2021 reporting year we propose continuing to report out on significant coordinated developments outside of RUAs and referrals, and reporting out on the total length of roads covered under RUAs. We propose removing the following target as it is hard to accurately track and is likely already covered by the other targets in this indicator (RUA or O&G referrals)

 The number of proposed roads eliminated or revised in the FOS due to using newer O&G access roads.

# 3.41 RANGE ACTION PLANS

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

# Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

The formality and process of a Timber and Range Action Plan (TRAP) that originated from the Timber and Range Impact Mitigation Committee (TRIMC), over time, has become less formal. However, this has not reduced the efforts that BCTS and Canfor have made in attempting to engage in conversations with range tenure holders. The intent for these joint communications continues to be to anticipate possible timber range issues in advance and focus on creating mutually agreeable actions to mitigate these issues.

There were no new Timber Range Action Plans (TRAP) completed and signed between Canfor and range tenure holders during the 2019-2020 reporting period. Three mutually agreed-upon action plans occurred with Tenures: RAN074079, RAN074995 and RAN076290. The range tenure holder's concerns were mitigated with on-the-ground plans. Operations were 100% consistent with resultant range action plans.

There were no new TRAP completed and signed between BCTS and range tenure holders during the 2019-2020 reporting period.

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



Target Achieved	
✓ Yes	No

# **REVISIONS**

Revisions are proposed to the strategy for implementing indicator #41 – Range Action Plans. The indicator and Target statements are not revised. The revision **addresses SFMP approval condition #2.** Revisions to Indicator #41 will become effective April 1<sup>st</sup>, 2020 for the purposes of monitoring management performance to the indicator target. Revised indicator #41 will continue as a non-legal indicator for evaluating performance to the SFMP Range & Forage Strategy and therefore does not require approval from MFLNRORD.

# **Revisions to Indicator Descriptive Text**

- Detailed description regarding the formality and process of a mutually agreed upon action plan.
- More emphasis on the frequency and timing of meaningful communication attempts for Managing Participants to reach out to range tenure holders.
- Terminology change to better describe Managing Participant's different engagement formats and tracking systems

# 3.42 DAMAGE TO RANGE IMPROVEMENTS

Indicator Statement	Target Statement	
Number of range improvements damaged by Participants' activities.	Zero range improvements damaged by Participants' activities.	
SFM Objective:		
Provide opportunities for a feasible mix of timber, recreational activities, and non-timber commercial activities.		
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indictor statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.		

# Acceptable Variance:

Temporary removal or alteration of a range improvement to enable short-term forestry activities to proceed is permissible. However, repairs to or replacement of improvements must be completed in less than one year from the time they were damaged. The indicator target would not apply if a Participant can implement alternative mitigation measures to the satisfaction of the range tenure holder.

# CURRENT STATUS AND COMMENTS

In May 2019, Canfor was notified by a range tenure holder that the range fence was damaged during harvesting at the pipeline and trees had come down onto the fence. His cows go out June 1st and he needed the fence repaired by then. By June 1, the section of the fence line was repaired to the satisfaction of the range tenure holder.

During the April 1<sup>st</sup>, 2019 – March 31<sup>st</sup>, 2020 reporting period BCTS did not incur any instances whereby a range improvement was damaged.

Managing Participants are in conformance with the indicator's acceptable variance.

Target Achieved	
√ Yes	No

# **REVISIONS**

The following revisions, highlighted in green, are proposed to this indicator to take effect with the 2020 reporting year.

Indicator Statement	Target Statement			
Number of natural range barriers or range improvements <del>damaged</del> rendered ineffective by Participants' activities.	Zero Natural range barriers or range improvements will be damaged or rendered ineffective by Participants' activities will be repaired within 2 years of harvest completion.			
SFM Objective:				
Provide opportunities for a feasible mix of timber, recreational activities, and non-timber commercial activities.				
Linkage to FSJPPR: For the purposes of Section 42 of the FSJPPR this indictor statement,				

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

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

# Acceptable Variance:

No less than the target.

# CURRENT STATUS AND COMMENTS

During the reporting period Canfor and BCTS continued maintenance of the Crying Girl Prairie campsite, utilizing a local contractor to provide site cleanup, outhouse cleaning, and garbage disposal.

Target A	chieved
√ Yes	No

# **REVISIONS**

# 3.44 VISUAL QUALITY OBJECTIVES

Indicator Statement	Target Statement		
Consistency with Visual Quality Objectives (VQOs).	Pilot participants' forest operations will be consistent with the established VQOs.		
SFM Objective: Provide opportunities for a feasible mix of timber, recreational activities, and non-timber commercial activities.			
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the FSJPPR this indicator, statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the landscape level strategies.			

# Acceptable Variance:

A variance to the requirement for consistency with established VQOs, where approved by the District Manager, is permitted on a site-specific basis, where required to address risks to resource values or safety issues (e.g. fire salvage, sanitation harvesting for forest pest control), as identified in a SLP. A rationale will be prepared by a professional forester, and must specify the reasons for the variance and the measures that will be implemented to address the resource value at risk and mitigate impacts on the visual resource.

# CURRENT STATUS AND COMMENTS

The SFMP strategy directing the timing of visual quality assessments specifies that post-harvest reviews of harvested areas that fall within visually sensitive landscapes will be completed no later than December 31<sup>st</sup> of the following year after harvesting is completed (e.g. if logging is finished in November of 2016, the post-harvest assessment must be done by December 31<sup>st</sup>, 2017).

For the 2019/2020 reporting period, Canfor assessed the blocks where harvesting was completed between January 1<sup>st</sup>, 2018 and December 31, 2018 and found 7 blocks that fell into visual quality objective polygons and would require visual quality objective (VQO) assessments during the reporting period. All 7 post-harvest visual quality assessments were completed and were found to have met or in many cases exceed the visual quality objectives for the polygon. There were no variances requested or approved by the MFLNRORD for the requirement to complete a post-harvest visual quality assessment. Canfor is therefore in conformance with the target for this indicator.

For the 2019/2020 reporting period, BCTS had three blocks that fell within areas requiring management of VQOs. Three post-harvest visual quality assessments were required to be completed. These assessments were completed. The VQO was achieved for all three blocks. There were no variances requested or approved by the MFLNRORD for the requirement to complete a post-harvest Visual Quality Assessment. BCTS is therefore in conformance with the target for this indicator.

Target Achieved		
√ Yes	No	

# **REVISIONS**

There are no proposed revisions to the indicator statement or target at this time. 3.45 RECREATION OPPORTUNITY SPECTRUM (ROS)

Indicator Statement	Target Statement				
Area in primitive and semi-primitive non- motorized classifications of the Recreation Opportunity Spectrum (ROS) for the Graham, Sikanni, and Crying Girl LUs.	A minimum of 65,839 ha in primitive ROS area (100% of 1996 primitive ROS area) and 180,726 ha in semi primitive non-motorized ROS area (50% of the 1996 total semi primitive NM ROS area) in the combined Graham, Crying Girl and Sikanni LU's (excluding the Graham Laurier and Redfern- Keily PAs).				
SFM Objective:					
Provide opportunities for a feasible mix of timber, recreational activities and non-timber commercial activities.					
Linkage to FSJPPR: For the purposes of Section 42 of the FSJPPR this indictor statement,					

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

# Acceptable Variance:

The Primitive ROS percentage may fluctuate over time as roads are constructed and permanently deactivated to retain the percentage at 1996 levels. At any given time the Primitive ROS percentage may decrease down to 10% on a temporary basis until such time as the constructed forest roads are permanently deactivated and the Primitive classification is restored.

There is no allowable variance for the Semi-Primitive non-motorized target.

# CURRENT STATUS AND COMMENTS

During development of the FOS #3, the FOS was analyzed to project the potential impact on the ROS targeted percentages; all of proposed development was consistent with the SFMP ROS targets. Many of the blocks proposed by FOS #1 and FOS #2 for harvest in the Crying Girl and Graham RMZs have not been harvested and no new activities were proposed in FOS #3.

Table 19 identifies the condition of the recreation opportunity spectrum expected upon the completion of all harvest operations in FOS #3. In the event that the FOS is amended to include new block or road area that may impact the Participants' performance to this indicator, the ROS analysis will be redone to determine the potential impact.



# Table 19: Projection of Changes to ROS Class from 1996 to 2025

	F	ROS Clas	s Projectio	n to 2016	- After Mo	deling Im	pact of	Propose	ed Devel	opment	in 2010 FC	S
Crying Girl Graham & Sikanni LU	Prim	itive	Semi Pri Non-Mot		Semi Pr Motor		Roa	ded	Urb Agrici		Total Area	Total %
	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%	(ha)	
Total 1996 ha	65,839	12.1%	361,451	66.2%	116,090	21.3%	269	0.0%	2287	0.4%	545,936	100.0%
Total 2010 Projected ha (from 2004 FOS)	65,839	12.1%	344,488	63.1%	133,056	24.4%	269	0.0%	2,287	0.4%	545,939	100.0%
2010 SFMP Target	65,839		180,726		NA		NA		NA		NA	

Table 19 summarizes the projected ROS condition presented in FOS #3. It should be noted that FOS #3 included developments proposed in the Crying Girl and the Graham landscape units. The proposed development of FOS #3 was found to be consistent with the SFMP ROS targets.

No logging occurred in this area between 2008 and March 31<sup>st</sup>, 2020. The current status remains consistent with the target range for this indicator.

As the minimum targets of 65,839 ha in primitive ROS area (100% of 1996 primitive ROS area) and 180,726 ha in semi primitive non-motorized ROS area have been identified to be maintained through completion of harvesting of all blocks in FOS #3, the participants are therefore in conformance with the target for this indicator.

Target Achieved		
✓ Yes	No	

# **REVISIONS**

A revision may be required to address the issue of trying to match up the base layer areas identified in the LRMP with current data for LUs/RMZs –which don't match up.

# 3.46 ACTIONS ADDRESSING GUIDES, TRAPPERS AND OTHER INTERESTS

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

<u>Acceptable Variance:</u> Variances are permissible only on reaching mutual agreement between the affected tenure holders and the Participant.

# CURRENT STATUS AND COMMENTS

During the reporting period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020 there was no Canfor operations conducted in areas where mutually agreed upon action plans were prepared with guides, trappers or other non-commercial timber interests.

During the reporting period of April 1st, 2019 to March 31st, 2020 there was no BCTS operations conducted in areas where mutually agreed upon action plans were prepared with guides, trappers or other non-commercial timber interests.

Target Achieved		
✓ Yes	No	

# **REVISIONS**

Revisions to this indicator will be considered over the next year in light of the SFMP #3 approval letter.



# 3.47 TIMBER PROCESSED IN THE DFA

Indicator Statement	Target Statement
Volume of timber processed in the DFA in proportion to volume harvested in the DFA.	The annual equivalent of a minimum of 70% of the DFA's harvest is primary processed in the DFA <sup>18</sup> .
SFM Objective: Viable timber processing fac	ilities in the DFA.
Linkage to FSJPPR: N/A	

# Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

Table 20 outlines the volume of timber processed at facilities in the DFA in proportion to the entire volume of timber harvested and delivered to professing facilities in the DFA up to and including March 31<sup>st</sup>, 2020.

# Table 20: Proportion of Total Volume Locally Processed

	Total Scaled Volume of Timber Delivered to Local Processing Plants (m <sup>3</sup> )	(a) Total Scaled Volume of Timber Originating Within the DFA (m <sup>3</sup> )	(b) Total Scaled Volume of Timber Originating Within the DFA and Processed Within the DFA (m <sup>3</sup> )	(b/a) % of Total DFA Volume Processed Locally
Conifer volume (m <sup>3</sup> )	1,513,819	1,215,310	1,215,067	99.98%
Deciduous volume (m <sup>3</sup> )	20,727	17,455	17,455	100%
All	1,534,548	1,232,765	1,232,522	100%

The above quoted volumes <u>include</u> woodlot and private wood, but <u>exclude</u> oil and gas salvage since the originating Timber Supply Area cannot be confirmed for salvage wood deliveries. Also excluded from the TSA delivery totals were deliveries from Alberta, Dawson Creek (including Site C salvage volumes).

The majority of the timber harvested in the DFA was processed at facilities within the DFA (100%).

Target A	chieved
✓ Yes	No

# **REVISIONS**

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

# 3.48 SUMMER AND FALL VOLUMES

<sup>&</sup>lt;sup>18</sup> Indicator as revised in Oct 30,2005 submission of 2004-2005 Annual Report

Indicator Statement	Target Statement						
Volume of timber (m <sup>3</sup> ) delivered annually to wood processing facilities within the Fort St. John Defined Forest Area (DFA) wood processing facilities between May 1 <sup>st</sup> and	Minimum of 100,000 m <sup>3</sup> to conifer mills in the DFA. Minimum of 185,000 m <sup>3</sup> to deciduous mills in						
November 30 <sup>th</sup> .	the DFA.						
SFM Objective:							
Maintain viable timber processing facilities in the DFA.							
Linkage to FSJPPR: N/A							

# Acceptable Variance:

The target volumes assume planned production levels are achieved at the local mills. Allowable variances for the minimum acceptable deliveries may be reduced proportionally for the number of actual operating weeks, divided by the normal fifty operating weeks of the facilities per year.

# CURRENT STATUS AND COMMENTS

Between May 1<sup>st</sup>, 2019 and November 30<sup>th</sup>, 2019, a total of 1,513,819 was delivered to the Fort St. John sawmill, and a total of 20,727m<sup>3</sup> was delivered to the deciduous manufacturing facility to support continuing operations throughout the early summer. The total volumes delivered exceed the minimum volumes required for conifer to meet the target. The minimum volume was not met for deciduous due to the indefinite closure of Peace Valley- Louisiana Pacific.

Target Achieved			
√ Yes	No		

# **REVISIONS**

The following revisions, highlighted in green, are proposed to this indicator to take effect with the 2020 reporting year.

Indicator Statement	Target Statement					
Volume of timber (m <sup>3</sup> ) delivered annually to wood processing facilities within the Fort St. John Defined Forest Area (DFA) wood processing facilities between May 1 <sup>st</sup> and	Minimum of 100,000 m <sup>3</sup> to conifer mills in the DFA. Minimum of 185.000 m <sup>3</sup> to deciduous mills in					
November 30 <sup>th</sup> .	the DFA.					
SFM Objective:						
Maintain viable timber processing facilities in the DFA.						
Linkage to FSJPPR: N/A						

# Acceptable Variance:

The target volumes assume planned production levels are achieved at the local mills. Allowable variances for the minimum acceptable deliveries may be reduced proportionally for the number of actual operating weeks, divided by the normal fifty operating weeks of the facilities per year. The indicator and target or portions thereof, will not apply during periods of indefinite mill closures or curtailments.

# 3.49 FOREST HEALTH FOS PLANNING <sup>19</sup>

Indicator Statement	Target Statement				
Percentage of new conifer-leading harvest blocks in the 2017 Forest Operations Schedule that are pine-leading.	A minimum of 50% of new conifer-leading harvest blocks in the 2017 FOS will be pine-leading.				
SFM Objective: Maintain or enhance landscape level productivity.					

Maintain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance.

**Linkage to** *FSJPPR*: For the purposes of Section 42 of the *FSJPPR* this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Forest Health Management Landscape Level Strategy.

# Acceptable Variance:

A 10% variance (i.e. minimum of 40% new conifer leading blocks in the 2017 FOS will be pine leading) is required in the event some FOS proposed blocks are dropped prior to submission of the final FOS due to public input during or after the public review and comment period.

# CURRENT STATUS AND COMMENTS

The revised indicator 3.49 will be reported out on in the 2020 reporting year, once the SFMP #3 Amendment #1 is approved by government. This indicator was not reported out on for the 2019-2020 reporting year. Below is the report from the previous year:

Approximately 16% of the blocks in FOS 2017 are pine leading. Much of the pine leading stands that were identified during planning exercises did not meet merchantability requirements when reviewed in the field. This is a function of beetle killed pine surpassing its shelf life.

Target Achieved				
Yes	✓ No			

# **REVISIONS**

The following revisions, highlighted in green, are proposed to this indicator to take effect with the 2020 reporting year.

<sup>&</sup>lt;sup>19</sup> New indicator in 2010- previous # 49 in SFMP # 1 was Harvest Systems which has been deleted



Indicator Statement	Target Statement				
Percentage of new conifer leading harvest blocks in the 2017 Forest Operations Schedule that are pine-leading.	A minimum of 50% of new conifer-leading harvest blocks in the 2017 FOS will be pine- leading.				
Percentage of significant detected forest health damaging agents which have treatment plans prepared and implemented.	100% of significant detected forest health damaging agents will have treatment plans prepared and implemented within 1 year of initial detection.				
SFM Objective: Maintain or enhance landscape level productivity.					

Maintain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance.

**Linkage to** *FSJPPR*: For the purposes of Section 42 of the *FSJPPR* this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Forest Health Management Landscape Level Strategy.

# 3.50 COORDINATION<sup>20</sup>

Indicator Statement	Target Statement					
Percentages of SFMPs and FOSs jointly prepared by the Participants.	100% of all SFMPs and FOSs will be jointly prepared by the Participants.					
SFM Objective:						
Maintain viable timber processing facilities in the DFA           Linkage to FSJPPR:         For the purposes of Section 42 of the FSJPPR this indicator statement target statement and acceptable variance will be used to determine if forest practices are consistent with the Timber Harvesting Landscape Level Strategy.						

# Acceptable Variance:

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

# CURRENT STATUS AND COMMENTS

FOS amendments continue to be coordinated through a mutual notification protocol. The participants were consistent in following the established amendment procedures, pertaining to ensuring that all participants are aware of, or are involved in, amendments to the FOS.

Target Achieved		
	✓ Yes	No

# **REVISIONS**

<sup>&</sup>lt;sup>20</sup> The indicator was made a legal indicator in SFMP#2 to emphasize the commitment to coordinated planning by the Participants



Target Statement						
A minimum of 200 ha of deciduous-leading cutblocks located in Supply Block F will be identified for harvest during the term of the new SFMP.						
<b>Linkage to FSJPPR:</b> For the purposes of Section 42 of the <i>FSJPPR</i> this indicator statement, target statement and acceptable variance will be used to determine if forest practices are consistent with the Timber Harvesting Landscape Level Strategy.						

# Acceptable Variance:

None.

# CURRENT STATUS AND COMMENTS

The revised indicator 3.51 will be reported out on in the 2020 reporting year, once the SFMP #3 Amendment #1 is approved by government. This indicator was not reported out on for the 2019-2020 reporting year. Below is the table for the current indicator 3.51 from the 2018 reporting period.

To date there has been no harvesting in deciduous-leading cutblocks located in Supply Block F. During the development of Forest Operations Schedule #3, a substantial amount of deciduous-leading area was identified for harvest in Supply Block F – over 4558.6ha. Table 21 presents a summary by block.

BLOCK ID	At %	Ac%	Pl %	S %	BI %	Gross Area (ha)
14014	93	2	0	5	0	11.9
14018	64	1	6	29	0	62.4
14020	86	0	0	14	0	42.8
14035	71	4	2	23	0	104
14039	67	0	1	26	0	18.7
14042	53	11	3	33	0	61.8
14044	64	0	19	15	0	141.4
14055	77	3	0	19	0	115.4
14056	86	0	7	6	0	46.1
14061	83	0	2	14	0	134.7
14063	59	0	3	38	0	58.4
16010	97	0	0	2	0	622.3
16011	82	0	11	7	0	107.3
16014	91	0	0	9	0	135
16015	99	1	0	0	0	63.5
17004	59	1	0	33	0	126.2

# Table 21 Supply Block F Deciduous Leading Stand Proposed Harvest Area

<sup>&</sup>lt;sup>21</sup> New indicator in 2010 SFMP. Previous Indicator # 51 in SFMP # 1 was 'Utilization' which has been dropped

BLOCK ID	At %	Ac%	Pl %	S %	BI %	Gross Area (ha)
17008	76	0	0	7	0	22.9
41030	85	5	0	10	0	25.7
41040	58	0	18	24	0	266.2
41044	89	0	11	0	0	245.4
41053	51	18	27	4	0	112.9
41054	48	6	31	15	0	80.9
41070	90	0	5	5	0	136.7
41096	75	0	0	25	0	20.9
42024	97	2	0	0	0	60.9
42026	79	0	0	16	0	49.2
50001	68	12	0	20	0	75.9
50002	95	0	0	5	0	20.9
50003	95	0	0	5	0	80.2
50004	60	10	3	27	0	169.7
50005	60	10	3	27	0	37.7
50007	95	0	0	5	0	38.3
50008	90	0	0	10	0	25.5
50009	90	0	0	10	0	17.5
50010	70	10	5	10	5	84.5
50011	90	0	0	10	0	4.4
50012	88	0	0	12	0	7.6
50013	80	10	2	8	0	57.6
50014	90	0	0	10	0	4.7
50015	70	10	0	20	0	10.7
50016	70	10	0	20	0	123.9
50017	70	10	0	20	0	49.3
50018	80	10	5	5	0	107.5
50020	90	0	0	10	0	17.5
50022	90	0	0	10	0	17
50023	90	0	0	10	0	7
50025	75	0	0	25	0	19.9
50026	90	0	2	8	0	114.2
50031	89	2	2	6	0	20.8
50034	74	3	0	23	0	38.2
50037	64	0	0	35	0	43.4
50038	81	0	0	19	0	55.2
50041	66	0	0	34	0	29.2
50047	85	0	15	0	0	18.4
51011	96	0	0	4	0	58.3
51013	66	0	0	34	0	168.5
51015	63	0	0	37	0	116



98

<b>BLOCK ID</b>	At %	Ac%	Pl %	S %	BI %	Gross Area (ha)
51019	73	0	0	27	0	45.5
					Total	4558.6

As noted in the above table, a total of 4,558.6 ha of deciduous-leading stands have been identified in Supply Block F.

Target Achieved				
√ Yes	No			

# **REVISIONS**

The following revisions, highlighted in green, are proposed to this indicator to take effect with the 2020 reporting year.

**Details of Amendment:** Replacement of existing SFMP #3 Indicator #51 –Timber Profile Deciduous with two indicators that focus on addressing the Annual Allowable Cut partition referenced in the Fort St John Timber Supply Area (TSA) Rationale for Allowable Annual Cut Determination, dated May 10, 2018. The addition of Indicator #51 AAC Partition –Deciduous Planning and Indicator #51A AAC Partition –Deciduous Harvest Performance, addresses SFMP#3 approval condition 1a & 1b. Replacement Indicators #51& #51A are proposed as legal indicators and therefore require approval from MFLNRORD. For the purposes of monitoring management performance to the indicator target and the SFMP Timber Harvesting Strategy, Indicators #51& #51A will become effective April 1, 2020. Replacement indicators #51& 51A continue as legal indicators for evaluating performance to the SFMP Timber Harvesting Strategy 4.1.4 AAC Rationale Assumptions.

# #51 AAC Partition-Deciduous Planning

Indicator Statement	Target Statement
The area (ha) of deciduous-leading cutblocks identified in Supply Block F for harvest during the term of the SFMP.	A minimum of 200 ha of deciduous-leading cutblocks located in Supply Block F will be identified for harvest during the term of the new SFMP.
The volume of deciduous species that has been identified in planned cutblocks in the FOS within the Core partition area.	The Core area will have a maximum of 56% of the total planned deciduous harvest volume identified in the Fort St John TSA area.
SFM Objective:	
Linkage to FSJPPR:	





Addition of new Harvest Performance Indicator

#51A AAC Partition-Deciduous Harvest Performance

Indicator Statement	Target Statement
The volume of deciduous species (measured using planning stage block volume data), that has been harvested by the Participants within the Core partition area since May 10, 2018.	On a 3 year rolling basis, deciduous harvest in the Core area will not exceed an average of 512,000m3 annually.
SFM Objective:	

Linkage to FSJPPR:

# ACCEPTABLE VARIANCE:

- 20% variance on the target due to: reduction in block volume from WTP's, revisions to old seral retention, other retention, VRI inaccuracies, harvest deferrals necessary to address public, first nation or stakeholder concerns. This variance gives the participants flexibility to meet the target with planned blocks in light of the uncertainties inherent in the VRI and harvest scheduling.
- If FSJ sawmill mill is down for greater than six months, conifer blocks contributing deciduous volume will not be tallied (incidental deciduous volume within planned conifer blocks will not be tallied because the conifer blocks will not be harvested).
- If the harvest planning indicator is not achieved, the participants have one year to amend the FOS to get it back into compliance.
- BCTS volume is considered harvested once the volume has been sold.

## 3.52 TIMBER PROFILE-CONIFER

Indicator Statement	Target Statement				
The percentage of the total cutblock area in harvested blocks that was identified as pre- harvest height-class two pine inventory types.	April 1, 2016-March 31, 2022: 8% or more of the total coniferous cutblock area harvested by managing participants during the 5-year period will be in height-class two pine inventory types.				
SFM Objective: No decrease in the LTHL in the DFA.					

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

# Acceptable Variance:

April 1<sup>st</sup>, 2016-March 31<sup>st</sup>, 2022: Allowable Minimum 0%. This indicator is to be reviewed after the next TSR to ensure relevance to the new TSR.

The dramatic shift in harvesting directed at Mountain Pine Beetle (MPB) infested or "at risk" stands has begun to decline as the "shelf life" for the dead standing pine is coming to a close, where the dead fibre is no longer suitable for milling. The impacts on mid-term AAC



sustainability in the TSA are likely to be less if activities are directed towards maximizing harvest from the currently infested MPB areas, (which tend to be in larger diameter mixed pine/spruce stands) and away from lower risk, smaller diameter pine stands (i.e. height class two pine polygons). Harvest performance in height class two pine stands is no longer a pressing issue and was not identified as a priority in the TSR (Timber Supply Review) III AAC determination released May 10, 2018. For the 2019 reporting year, the Participants will no longer report on height class two pine harvest.

# CURRENT STATUS AND COMMENTS

The revised indicator 3.52 will be reported out on in the 2020 reporting year, once the SFMP #3 Amendment #1 is approved by government. This indicator was not reported out on for the 2019-2020 reporting year. Below is the table for the current indicator 3.52 from the 2018 reporting period.

The Managing Participants have harvested 161.9 ha of height class two pine since the start of the period for this indicator. This equates to 1.1% of the total conifer leading cutblock area harvested in the period. The Managing Participants are within the acceptable variance of this indicator.

# Table 22: Height-class 2 Pine area harvested during the reporting period

Annual Report Period	Conifer Cutblock Merch Area - Canfor (ha)	Height class II Pine area - Canfor (ha)	Conifer Cutblock Merch Area - BCTS (ha)	Height class Il Pine area - BCTS (ha)	Participants Height class II Pine area (%)
2016/17	3478.7	14.6	980.8	15.2	0.7%
2017/18	3201.7	7.1	1280.1	0	0.16%
2018/19	4524.7	69.9	1728.9	55.1	2.0%
Total	11205.1	91.6	3989.8	70.3	1.06%

Target Achieved				
√ Yes	No			

# **REVISIONS**

The following revisions, highlighted in green, are proposed to this indicator to take effect with the 2020 reporting year.

**Details of Amendment:** Replacement of existing SFMP #3 Indicator #52 –Timber Profile Conifer (Height Class 2 Pine) with two indicators that focus on addressing the Annual Allowable Cut partition referenced in the Fort St John Timber Supply Area (TSA) Rationale for Allowable Annual Cut Determination, dated May 10, 2018. The addition of Indicator #52 AAC Partition – Conifer Planning and Indicator #52A AAC Partition –Conifer Harvest Performance, **addresses SFMP#3 approval condition1a & 1b**. Replacement Indicators #52 & #52A are proposed as a legal indicators and therefore require approval from MFLNRORD. For the purposes of monitoring management performance to the indicator target and the SFMP Timber Harvesting Strategy, Indicators #52 & #52A will become effective April 1, 2020. Replacement indicators #52 & 52A are legal indicators for evaluating performance to the SFMP Timber Harvesting Strategy 4.1.4 AAC Rationale Assumptions.

# #52 AAC Partition-Conifer Planning

Indicator Statement	Target Statement			
The percentage of the total cutblock area in harvested blocks that was identified as pre- harvest height class two pine inventory types. The volume of conifer species that has been identified in planned cutblocks in the FOS within the Core partition area.	<ul> <li>April 1, 2016-March 31, 2022: 8% or more of the total coniferous cutblock area harvested by managing participants during the 5 year period will be in height class two pine inventory types.</li> <li>A) In the Core area non spruce conifer species will comprise, a minimum of 50% of the total planned conifer harvest volume.</li> <li>B) The Core area will have a maximum of 56% of the total planned conifer harvest volume identified in the Fort St John TSA area.</li> </ul>			
SFM Objective:				
Linkage to FSJPPR:				

# Addition of new Harvest Performance Indicator

# #52A AAC Partition-Conifer Harvest Performance

Indicator Statement	Target Statement
The volume of conifer species (measured using planning stage block volume data),that has been harvested by the Participants within the Core partition area since May 10, 2018.	<ul> <li>On a three year rolling average:</li> <li>A) Conifer harvest in the Core area will not exceed an average of 672,000 m3 annually.</li> <li>B) In the Core area non spruce conifer species will comprise, a minimum of 50% of the total conifer volume harvested by the Participants.</li> </ul>
SFM Objective:	
Linkage to FSJPPR:	

Acceptable Variance:

20% variance on the target due to: reduction in block volume from WTP's, revisions to
old seral retention, other retention, VRI inaccuracies, harvest deferrals necessary to
address public, first nation or stakeholder concerns. This variance gives us flexibility to
meet the target with planned blocks in light of the uncertainties inherent in the VRI and
harvest scheduling.

 If PVOSB mill is down for greater than six months, deciduous blocks contributing conifer volume will not be tallied (incidental coniferous volume within planned deciduous blocks will not be tallied because the deciduous blocks will not be harvested).

 If the harvest planning indicator is not met, the participants have one year to amend the FOS to get it back into compliance.

BCTS monitoring, volume is considered harvested once the volume has been sold.

 This indicator is to be reviewed after the next timber supply review (TSR) to ensure continued relevance to the new TSR.

# 3.53 CUT CONTROL

Indicator Statement	Target Statement
Percentage of total Allowable Annual Cut (AAC) charged to licensee tenure holders or BCTS Participants during the term of the SFMP.	Jan 1 2016- Dec 31 2021: <u>Industry Participants</u> : -Not to exceed 110% of the combined cumulative coniferous AAC for the 6 year period. -Not to exceed 110% of the combined cumulative deciduous AAC for the 6 year period. <u>BCTS Participant:</u> -Not to exceed 110% of the combined cumulative coniferous commitment offered for sale for the 6 year period. -Not to exceed 110% of the combined cumulative deciduous commitment offered for sale for the 6 year period.
SFM Objective:	
No decrease in the Long Term Harvest Level (	LTHL) in the Defined Forest Area (DFA).

Linkage to FSJPPR: N/A

# Acceptable Variance:

None, however the actual volume permissible to be harvested may be adjusted through time if additional licenses are awarded to Participants to address past undercuts, or changes made by the Chief Forester to the approved AAC for the TSA.

# CURRENT STATUS AND COMMENTS

Tables 23, 24 & 25 identify the volume harvested by the Participants during the monitoring period established for this indicator.

# Table 23: Licensee Conifer Licence AAC

		Planning Period		Total					
Licence (m <sup>3</sup> ) Cum	Cumulative Volume AAC (m <sup>3</sup> )	2016	2017	2018	2019	2020	2021	Volume Harvested (m <sup>3</sup> )	
Canfor A18154	394,952	2,369,712	488,560	764,245	311,706	459,280			2,023,791
DZ A56771	150,000	900,000	175,712	0	226,995	36,278			438,986
CRL A59959*	70,000	70,000	59,223	Exp	Exp	Exp			59,223
Tembec A60972	83,494	500,964	54,890	59,510	169,100	93,143			376,643
Total	698,446	3,840,676	778,385	823,755	707,801	588,701	0	0	2,866,042
Maximum Cumulative AAC 4,224,744 (m <sup>3</sup> )									
* In 2016 tl	ne CRL lic	ence expired.	The cu	mulative A	AC has t	aken this	into acc	count	
Maximum o	cumulative	e AAC = 110%	6 of cum	ulative AA	С				

# Table 24: Licensee Deciduous Licence AAC

		Planning Period	Volume Harvested (m <sup>3</sup> ) by Year						Total
Licence		2016	2017	2018	2019	2020	2021	Volume Harvested (m <sup>3</sup> )	
LP A60049	193,000	1,158,000	334,534	155,573	205,630	21,742			717,479
PVOSB A85946	150,000	900,000	-1,789	347,312	341,997	90,604			778,124
Canfor / LP PA 12 & 20*	500,000	3,000,000	29,771	12,935	150,888	0			193,594
Total	843,000	5,058,000	362,516	515,820	698,515	112,346	0	0	1,683,051
Maximum (	Cumulativ	ve AAC (m <sup>3</sup> )	5,563,800						

\*In 2013 PA 12 was subdivided creating PA 20. Combined AAC of the 2 PAs remains unchanged at 500,000 m3. Volume is based on deliveries to the three facilities in the DFA.

Maximum cumulative AAC = 110% of cumulative AAC

Tables 23 and 24 reflect adjusted volumes found in the most recent cut control statements. Annual adjustments can occur in each license. Therefore, volumes reported in the annual report may not reflect previous annual reports.



# Table 25: BCTS Volume Allotment

		Planning	Volume Offered for Sale by Calendar Year (m <sup>3</sup> )						
Species	AAC (m³)	Period 6 year cumulative volume commitment offered for sale (m <sup>3</sup> )	2016	2017	2018	2019	2020	2021	Total Volume Offered (m <sup>3</sup> )
Conifer	372,059	2,232,354	443,210	293,742	524,095	598,016			1,859,063
Deciduous	180,000	1,080,000	60,245	92,486	215,761	0			368,492
	imum cu oniferous	mulative s AAC			2,45	5,589			
-	imum cu eciduous	mulative S AAC	1,188,000						

Maximum cumulative AAC = 110% of cumulative AAC

The annual BCTS coniferous allotment for 2019/20 was 372,059 m<sup>3</sup>. Between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020, BCTS offered 598,016 m<sup>3</sup> (161%) of the annual allocation. Of the 598,016 m<sup>3</sup> offered, 25 TSL's with a volume of 573,066 m<sup>3</sup> was sold.

The annual BCTS deciduous allotment in 2019/20 was 180,000 m<sup>3</sup>. Between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020, BCTS offered 0 m3 (0%) of the annual allocation. Indefinite closure of the OSB plant thwarted the sales schedule for deciduous and 0 m3 was offered.

2019 represented the 4<sup>th</sup> year of this 6-year cumulative cut review period, which concludes December 31<sup>st</sup>, 2021.

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

Target Achieved	
√ Yes	No

# **REVISIONS**

# 3.54 DOLLARS SPENT LOCALLY ON EACH WOODLANDS PHASE

Indicator Statement	Target Statement
Percentage of dollars spent locally on each woodlands phase in proportion to total expenditures.	Woodlands Phases to be monitored: Logging/hauling: minimum of 80%. Road construction/maintenance: minimum of 80%. Silviculture: minimum of 5%. Planning and administration: minimum of 50%.
SFM Objective: Diverse local forest employment opportunities exist in the DFA.	
Linkage to FSJPPR: N/A	

# Acceptable Variance:

A 10% variance to the minimum target (e.g. logging/hauling 10% lower than 80%= 72% of costs) is required for each identified woodlands phase, as the dollars to be spent fluctuate annually, depending on the amount of harvesting completed that year.

# CURRENT STATUS AND COMMENTS

Table 26 outlines local expenditures by woodlands phase, and performance of the participants relative to the targets for this reporting period.

# Table 26: Dollars Spent Locally by Woodlands Phase - 2019

Combined BCTS & Canfor Phases	Total Dollars Spend (\$)	Total Dollars Spent Locally (\$)	Percentage of Dollars Spent Locally (%)	Indicator Target Percent (%)
Logging and hauling	\$65,388,331.16	\$59,169,756.09	90.5%	80%
Road construction and maintenance	\$4,049,150.00	\$3,536.203.37	87.3%	80%
Silviculture	\$5,645,269.04	\$348,988.88	6.2%	5%
Planning and administration	\$12,887.003.13	\$7,820,177.57	60.7%	50%
Total	\$87,969,752.89	\$70,875,125.92	80.6%	

All four phases met the minimum targets for dollars spent locally. Approximately 81% of all expenditures were made locally.

Target Achieved		
	✓ Yes	No

# **REVISIONS:**



# 3.55 DIRECT AND INDIRECT EMPLOYMENT

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

# Acceptable Variance:

None

# CURRENT STATUS AND COMMENTS

2019 harvest level (based on cut control report in Indicator 53) = 1,299,063 m3 deciduous and coniferous combined (D= 112,346 m3 C=1,186,717m3)

During the reporting period, Participants reported a total of 313 full-time equivalent positions (BCTS= 16, LP=92 Canfor =205). There is a significant decrease in this number from previous years due to the LP's Peace Valley OSB mill's indefinite curtailment in August of 2019. A summary of the current level of direct and indirect employment are expressed as a factor of the harvest level in Table 27.

Table 27: Fort St. John TSA employment summary

Direct employment	Indirect and induced employment	Direct employment/1000m <sup>3</sup> harvested	Indirect employment/1000m <sup>3</sup> harvested	Total employment/1000m <sup>3</sup> harvested
313	138	0.24	0.11	0.35

\*Employment multiplier is set at 1.44, a median number based on the 2002 Fort St John Timber Supply Analysis' suggested range (employment multiplier is not updated in TSR 3' analysis report).

Target Achieved	
✓ Yes	No

# REVISIONS

One suggested revision for next year is to align the employment numbers with the calendar year instead of the reporting year so they match the cut control timeframe.

# 3.56 MAINTENANCE OF WILDLIFE AND FISHERIES HABITAT VALUES

Indicator Statement	Target Statement	
Conformance to the SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat.	Participants will conform to the identified SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat.	
SFM Objective: Recognition of Treaty 8 rights and respect of aboriginal rights through maintenance of landscape level biodiversity.		
Linkage to FSJPPR: N/A		

# Acceptable Variance:

Variances provided in the specific indicators will apply.

# CURRENT STATUS AND COMMENTS

During the period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020 the participants conformed to 7 of 7 (100%) of the Ecosystem Diversity and Species Diversity indicators (indicators 2, 3, 5, 6, 7, 8 & 9), targets and acceptable variances.

The participants conformed to 4 of 4 (100%) of the Water Quality and Quantity indicators (indicators 34, 35, 36 & 37), targets and acceptable variances during this period.

Target Achieved		
	✓ Yes	No

# **REVISIONS**

The following revisions are made to the indicators that this indicator will conform to:

# Ecosystem and Species Diversity Indicators supporting hunting and trapping opportunities:

- 6.1 Forest Types
- 6.2 Seral Stages
- 6.3 Patch Sizes
- 6.5 Snags/Cavity Sites
- 6.6 Coarse Woody Debris Volume
- 6.7 Riparian Reserves
- 6.8 Shrubs
- 6.9 Wildlife Tree Patches
- 6.11 Species At Risk Stand Level Management Guidelines
- 6.22 Riparian Corridors
- Water Quality and Quantity Indicators supporting fishing opportunities:
- 6.34 Peak Flow Index
- 6.35 Water Quality Concern Rating
- 6.36 Protection of Streambanks and Riparian Values on Small Streams
- 6.37 Spills Entering Waterbodies
- In addition, Indicator 6.5 Snags/Cavity Sites, Indicator 6.6 Coarse Woody Debris Volume and Indicator
- 6.22 River Corridors contribute to furbearer management, ensuring furbearer habitat and travel corridors are protected at the stand and landscape levels.



Indicator Statement	Target Statement	
Percentage of known traditional site-specific aboriginal values and uses identified that are addressed in operational plans.	100% of known traditional site-specific aboriginal values and uses identified will be addressed in operational plans.	
SFM Objective: Respect known traditional aboriginal forest values and uses.		
Linkage to FSJPPR: N/A		

#### Acceptable Variance: None

#### CURRENT STATUS AND COMMENTS

Between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020, opportunity for First Nations to provide information on site-specific values to Canfor & BCTS was available through the formal processes of NIT (notice of intent to treat) communications, the FOS amendment info-sharing process as well as other formal or informal communication. Assessments by professional archaeologists are another method used by the participants to gather information on site-specific First Nations' values.

Canfor received comments from First Nation bands regarding the identification of site specific values in response to the 2019 Notice of Intent to Treat (NIT) referral for herbicide treatment. Canfor flew blocks proposed for herbicide treatment with three First Nations. The concerns raised resulted in a number of blocks being dropped from herbicide treatment. A request to protect the integrity of moose habitat values on a number of blocks was implemented that included an enlarged buffer extending from the standing timber boundary maintained as an edge effect to allow for species such as willow, alder and red-osier dogwood as well as aspen and cottonwood species established within this area to continue to provide browse opportunities for moose.

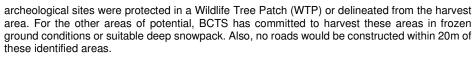
Of the 113 Canfor blocks that were permitted, Canfor provided mitigation tables for all 113 blocks to address First Nations concerns.

Canfor completed 306 Archaeological Overview Assessments (AOA) which identified 166 areas of potential (AOP). From the AOA process, 21 Archaeological Impact Assessments (AIA) were completed. Two new Archaeological sites were identified from the AIAs and a number of the AOPs were verified as having no arch potential. These two arch sites were removed from the harvest area. All AOPs not tested were either removed from the harvest area, placed in a machine free zone or harvested under frozen conditions, in line with recommendations from the AIA. Due to a longer than usual wait time to have permits approved by the government Arch Branch, 50 Preliminary Field Reconnaissance (PFR) were conducted.

Canfor also participated in 6 field visits with Blueberry River First Nations, Doig River First Nations and Halfway River First Nations to gain better understanding of the traditional site-specific Aboriginal values, and as a result, an area of block 10053 was removed from the harvest area to address the concern of roadside hunting and provide screening into the block, and several other guidelines were implemented in several of the blocks visited.

BCTS received one comment from First Nations in response to the 2019 Notice of Intent to Treat (NIT) referral process. A First Nations requested a 30 meter no treatment buffer be added around the treatment area boundaries.

During the reporting period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020, BCTS commissioned nine archaeological overview assessments (AOA) which identified 74 areas of potential (AOP). From the AOA process, two archaeological impact assessments (AIA) were completed. Existing known



Of the 31 BCTS blocks harvested during the reporting period, 24 had commitments made through the Harvest Authorization process to address First Nations concerns. All other blocks had no concerns reported to BCTS. BCTS upheld 88.5% of these commitments.

Since less than 100% of known traditional site-specific values and uses identified were addressed in operational plans, this indicator was not met for the reporting period. BCTS will be reviewing the errors made in upholding commitments in the operational plans that were reported as not met and coming up with an action plan to support improvement in this area.

Target Achieved		
Yes	✓ No	

#### **REVISIONS**

No revisions to the target or indicator suggested, however some clarity on wording for this indicator defining what constitutes a "known traditional site specific aboriginal value" is required. In the approved SFMP it is defined as an arch or traditional use site, but the Participants have been reporting out on all site specific commitments made for First Nations.

#### 3.58 REGULATORY PUBLIC REVIEW AND COMMENT PROCESSES

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

#### Acceptable Variance:

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

#### CURRENT STATUS AND COMMENTS

During the reporting period, there were four cases where the Participants were required to follow the formal Public Review and Comment Process identified in the *Fort St. John Pilot Project Regulation*.

The Licensee Participants initiated separate public reviews regarding amendments to the Forest Operations Schedule. The review and comment period for FOS amendment # 367 was between March 22<sup>nd</sup>, 2019 and May 21<sup>st</sup>, 2019. The review and comment period for FOS amendment #373 was between August 21<sup>st</sup> 2019 and October 21<sup>st</sup>, 2019. The amendment proposals were advertised in the Alaska Highway News as well as on FSJ Now! in a form acceptable to the District Manager of the Ministry of Forests, Lands, and Natural Resource Operations.

During the reporting period Canfor conducted two public reviews regarding audits. The results of both audits were presented to the Public Advisory Group as per the SFMP. The Forest



Management System internal audit occurred in November of 2019. The Sustainable Forest Initiative (SFI) external audit occurred in October/November of 2019.

During the reporting period BCTS conducted one public review regarding audits. The results of this were presented to the PAG as per the SFMP. The SFI external audit occurred in November of 2019.

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

Target Achieved		
√ Yes	No	

#### **REVISIONS**

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

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

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

#### Acceptable Variance:

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

#### CURRENT STATUS AND COMMENTS

The Public Advisory Group and the Pilot Participants conducted their biennial review of the Terms of Reference during the March 22<sup>nd</sup>, 2018 PAG meeting.

The PAG approved an updated TOR on March 22<sup>nd</sup>, 2018. The complete Terms of Reference is located on the pilot project website (<u>http://fsjpilotproject.com</u>). The next review is scheduled for the fall meeting of 2020.

Target Achieved	
√ Yes	No

#### **REVISIONS**



#### 3.60 PUBLIC INQUIRIES

Indicator Statement	Target Statement		
The percentage of timely responses to Public Inquiries.	Respond to 100% of public inquiries regarding Participants' forestry practices that are additional to the pilot public review and comment processes, within one month of receipt.		
SFM Objective:			
To facilitate a satisfactory public participation process.			
Relevant information used in decision making process is provided to PAG, general public and affected parties.			
Linkage to FSJPPR: N/A			

#### Acceptable Variance:

Responses will be provided to all inquiries, provided contact information is provided so that the Participants can reach the person making the inquiry.

#### CURRENT STATUS AND COMMENTS

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

During the annual report period Canfor had the following inquiries from members of the public or stakeholders.

- 4 inquiries from range tenure holders were received.
- 3 inquiries from private land owners were received.
- 2 inquiries from trapline tenure holders were received.
- Numerous inquiries from the general public were received during the 2019 Fort St John Tradeshow.

In all the instances, Canfor responded to the inquiry as soon as possible and always within one month of receipt.

BCTS received one inquiry from a trapper, one inquiry from a private land owner, and one inquiry from the general public during the annual report period. BCTS responded to the inquiry within one month of receipt.

All inquiries received by the participants during the reporting period were responded within one month of the receipt; therefore, the participants are in conformance with this indicator.

Target Achieved		
✓ Yes	No	

#### **REVISIONS**

There are no proposed revisions to the indicator statement or target at this time. Note that inquiries related to the FOS, SFMP, or PMP received during established review and comment periods fall under indicator 58 (Section 3.58 of this document), and not measured here.



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

#### Acceptable Variance:

None

#### CURRENT STATUS AND COMMENTS

Canfor participated with BCTS in presenting a booth at the 2019 FSJ Trade Show. Over the course of the 3 days of the show, the Participants answered several questions on various forestry related topics. With the help of the Junior Forest Wardens, seedlings from Canfor and from BCTS as well as swag items were given out to people who stopped by the booth.

Canfor employees acted as field workshop leaders in the 2019 Council of Forest Industries (COFI) and School District 60 (SD60), by way of teaching the high school students how to plant trees at Peace Island Park.

Canfor employees also participated in Explore Fest for the elementary school kids teaching forestry activities.

On June 21<sup>st</sup>, Canfor teamed up with Whiskey Jack Nordic Ski Club to plant 800 spruce seedlings in Beatton Provincial Park. It was to offset area cleared for the BC Winter Games in February 2020. There were 7 volunteers from Canfor.

BCTS presented a "BCTS 101" session to DRFN on January 29<sup>th</sup>, 2020. There were 4 people present.

On October 24<sup>th</sup>, 2019 BCTS had a table at the SFN open house to answer any questions regarding BCTS purpose, activities and/or processes. Unsure how many people were reached or attended the booth.

Target Achieved		
✓ Yes	No	

#### **REVISIONS**

#### 3.62 BRUSHING PROGRAM AERIAL HERBICIDE USE

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

#### Acceptable Variance:

None.

#### CURRENT STATUS AND COMMENTS

In 2019, BCTS had originally proposed to aerially herbicide 399.5 ha as a vegetation management treatment. Based on input received from First Nations, the public and final treatment layout conducted by the participants, the actual aerial herbicide program was reduced to 340.70 ha treated. This reflects that 15.8% of the total area originally planned for treatment was removed from the final treatment area.

In 2019 Canfor had originally proposed to aerially herbicide 929.8 ha as a vegetation management treatment. Based on input received from First Nations, the public and final treatment layout conducted by the participants, the actual aerial herbicide program was reduced to a total of 322.4 ha actually treated. This reflects that 65.4% of the total area originally planned for treatment was removed from the final treatment area.

#### Table 28: Herbicide Area Removal

Number of Hectares Removed Annually From Plan			
Participant	Notification of Intent to Treat (NIT) (ha)	Remaining Area Post-Input from First Nation and Public and Final Layout (ha)	Final Treatment Area Reported (ha)
BCTS	399.5	176.5	164.3
Canfor	929.8	322.4	322.4
Participants Total	1,329.3	498.9	486.7

Target Achieved	
√ Yes	No

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

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

Formatted Table



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

#### Acceptable Variance:

3.63 WORKER TRAINING

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

#### CURRENT STATUS AND COMMENTS

For the purposes of the 2019-2020 annual report, it was found that 36 out of 36 (100%) Canfor woodland employee records were within the 90% tolerance.

For the purposes of the 2019-2020 annual reporting period, it was found that 11 out of 11 (100%) BCTS staff completed greater than 90% of their training requirements.

Canfor and BCTS are in conformance with the target of this indicator.

Target Achieved		
✓ Yes	No	

#### **REVISIONS**



#### 3.64 PAG SATISFACTION SURVEYS

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

#### Acceptable Variance:

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

#### CURRENT STATUS AND COMMENTS

PAG members and advisors were asked to complete an anonymous public participation process satisfaction survey. The results were favorable. The average score for the satisfaction survey was 90.0%. The satisfaction survey continues to provide insight into areas for future improvement.

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

Target Achieved	
√ Yes	No

#### **REVISIONS**

3.65 AVAILABILITY OF INFORMATION ON ISSUES OF CONCERN

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

Acceptable Variance:

No variance.

#### CURRENT STATUS AND COMMENTS

The 2019 SFM Annual Report was posted to the Fort St. John Pilot project website and to the Canfor external website, for access to the public. Copies of the 2019 SFM Annual Report were also provided to the Fort St. John Public Advisory Group, the MFLNRORD and MOE. A hard copy can also be found at the Fort St. John public library.

Target Achieved	
✓ Yes	No

#### **REVISIONS**



## 3.66 DELETIONS TO FOREST AREA

Indicator Statement	Target Statement			
Percentage of the gross crown forest landbase in the DFA converted to non-forest land use through forest management activities of the participants during the term of SFMP# 3.	Less than 0.6% of the gross crown forest landbase in the DFA will be converted to non-forest land use through forest management activities of the participants during the term of SFMP# 3.			
SFM Objective: Sustain forest lands within the participant's control within the DFA.				
Linkage to FSJPPR: N/A				

#### Acceptable Variance:

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

#### CURRENT STATUS AND COMMENTS

The Timber Supply Review for the Fort St John Timber Supply Area was completed in May, 2018. The TSR determined that the total area of the Fort St John is 4,676,602 hectares. Of the total TSA area, about 2,791,340 hectares (58 percent) is classified as productive Crown forest land base (CFLB).

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

During the implementation of forest management activities under SFMP #1 between 2004 and 2010, the participants constructed a total of 1,605.8 km of new road as indicated in Table 31. The Participants assumed an average disturbance width of 20m (for out of block road) and 8m (for in block road) in the calculation of area disturbed due to permanent access construction. This 1,605.8 km of road equates to 3,211.7 ha or 0.12% of the crown forest landbase disturbed by the participants up to and including March 31<sup>st</sup>, 2011.

#### Table 29: Road Area Constructed by Managing Participants since 2004 under SFMP # 1

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

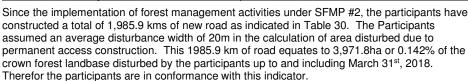


Table 30: Road Area Constructed by Managing Participants since 2011 under SFMP # 2

	2011 (m)	2012 (m)	2013 (m)	2014 (m)	2015 (m)	2016 (m)	2017 (m)	Total (m)	Total (ha)
BCTS	26,918	19,547	42,963	81,896	103,967	73555	55983	404,829	809.7
Canfor	234,983	258,571	217,563	164,800	231,137	177502	296508	1,581,064	3,162.1
Total	261901	278118	260526	246696	335104	251057	352491	1,985,893	3,971.8

Since the implementation of forest management activities under SFMP #3, the participants have constructed a total of 477.8 kms of new roads as identified in Table 31. The Participants assumed an average disturbance width of 20 m in calculation of area disturbed due to permanent access construction. The 477.8 kms of roads equate to 955.7 ha or 0.034% of the crown forest landbase disturbed by the Participants up to and including March 31, 2020. Therefore, the Participants are in conformance with this indicator.

Table 31: Road Area Constructed by Managing Participants since 2018 under SFMP # 3

	2018 (m)	2019 (m)	Total (m)	Total (ha)
BCTS	67175	57973	125148	250.3
Canfor	251723	100970	352693	705.4
Total	318898	158943	477841	955.7

Target Achieved		
	✓ Yes	No

#### **REVISIONS**



Indicator Statement	Target Statement			
Percentage of the area of rare ecosystem groups reserved from harvest.	100% of the area of rare ecosystem groups will be reserved from harvest.			
SFM Objective: Maintain the diversity and pattern of communities and ecosystems within a natural range.				
Linkage to FSJPPR: N/A				

3.67 RARE ECOSYSTEMS

<u>Acceptable Variance:</u> 10% of the total rare ecosystem group forest area may be harvested, where required to construct safe access or in situations where less overall environmental disturbance is created by building access through the rare ecosystem group versus building access to avoid the rare ecosystem group. Based on assessments completed by professionals, those sites deemed poor representations of the rare ecosystem group may be harvested.

#### CURRENT STATUS AND COMMENTS

Monitoring of management performance under this indicator will begin with cut blocks harvested after April 1st, 2015.

For blocks with a harvest completion date between April 1st, 2019 and March 31st, 2020, the participants had the following results:

Canfor had two blocks with potential rare eco identified in a geographic information system (GIS) guery. These two blocks were assessed in the field, and areas of rare eco were removed from the harvest area.

BCTS had no blocks with potential rare eco identified during the reporting period.

Target Achieved			
√ Yes	No		

#### REVISIONS



#### 3.68 EFFECTIVE COMMUNICATION - NON TIMBER RESOURCES

Indicator Statement	Target Statement					
Evidence of communication and consideration of non-timber resources into forest management planning.	100% of non-timber resource values, identified through communication, have been responded to and considered and may be accommodated in forest management plans.					
SFM Objective: Ongoing communication and meaningful engagement with stakeholders regarding non- timber forest benefits.						
Linkage to FSJPPR: N/A						

#### Acceptable Variance:

Variances are permissible only on reaching mutual agreement between the affected stakeholder and Participant.

#### CURRENT STATUS AND COMMENTS

During the reporting period between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020, Forest Operation Schedule (FOS) amendments 367 and 373 were jointly prepared by Canfor and BCTS.

During FOS amendment 367, 62 stakeholders were sent information packages requesting review and comment. There were 53 trapline tenure holders contacted, 2 guide outfitters contacted, and 7 range tenure holders contact. These information packages resulted in email, phone, and in person discussions with 1 range tenure holder. In addition, an advertisement describing the proposed amendment was printed in the Alaska Highway news on June 28<sup>th</sup>, 2019 and July 5<sup>th</sup>, 2019.

During FOS amendment 373, 30 stakeholders were sent information packages requesting review and comment of the proposed amendment. There were 20 trapline tenure holders contacted, 5 range tenure holders contacted, and 5 guide outfitters contacted. The information packages resulted in an email conversation with 1 range tenure holder, a meeting with a trapper, and a phone conversation with a guide outfitter. In addition, an advertisement describing the proposed amendment was printed in the Alaska Highway News on August 22<sup>nd</sup>, 2019 and August 29<sup>th</sup>, 2019.

#### Canfor:

During the annual reporting period between April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020, Canfor responded to, considered, and/or accommodated 17 inquiries and requests from stakeholders. In addition, 4 field visits were conducted to gain better understanding of stakeholders' concerns.

Notification and Intent to Treat Brushing/Silviculture activities were info-shared with 51 affected stakeholders. 1 engagement email/phone call was made proactively to inquire about stakeholders' concerns.

#### BCTS:

NIT info was shared with 8 trapline holders, 1 Range tenure holder, and 1 Guide/Outfitter during reporting period

Target Achieved			
√ Yes	No		

#### **REVISIONS**



#### 3.69 EFFECTIVE COMMUNICATION - ABORIGINAL COMMUNITIES

Indicator Statement	Target Statement				
Evidence of ongoing communication with Aboriginal communities and consideration of information gained.	100% of information on aboriginal titles and rights, identified through on-going communication with Aboriginal communities, has been responded to and considered and may be accommodated in forest management planning.				
SFM Objective: Ongoing communication and meaningful engag	ement with First Nations.				
Linkage to FSJPPR: N/A					

#### Acceptable Variance:

No acceptable variance.

#### CURRENT STATUS AND COMMENTS

During the reporting period between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020, Forest Operations Schedule (FOS) 367 and 373 were jointly prepared by Canfor and BCTS.

During the review and comment period of FOS amendment 367, the managing participants sent out a total of 33 requests for comment to 9 First Nations. This resulted in comments from 3 First Nations that included 19 block specific comments and 2 face to face meetings.

During the review and comment period of FOS amendment 373, the managing participants sent out a total of 59 requests for comment to 9 First Nations. This resulted in comments from 2 First Nations that included 4 block specific comments.

#### Canfor:

Canfor initiated bi-annual meetings with Treaty 8 First Nations to facilitate better info sharing and communication of Canfor's field layout operations and harvesting activities. Canfor met with four First Nations in the fall of 2019. First Nations' concerns and comments were considered and/or incorporated into future plans.

Notification and Intent to Treat Brushing/Silviculture activities were info-shared with 9 affected First Nations.

In addition, during the reporting period between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020, 18 engagement emails/phone calls were made proactively to understand First Nations' concerns. There were also 6 field trips conducted, and 14 face to face meetings held.

#### BCTS:

Notification and Intent to Treat Brushing/Silviculture activities were info-shared with 6 First Nations during the reporting period between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

BCTS contacted 8 First Nation groups with sale schedule notifications and BCTS had one field trip as a result of comments from consultation which resulted in a change to block configuration to protect wildlife values.

Target Achieved				
✓ Yes	No			

#### **REVISIONS**



#### 4. SUMMARY OF ACCESS MANAGEMENT

Table 32 represents a summary of access construction activities by participant:

Steward	Bridge Construction	New Construction or Subgrade (meters)	Reconstructed or Reactivated (meters)	Surfacing (meters)	Grand Total (meters)
BCTS	0	57,973	2,461	0	60,434
Cameron River	0 0		0	0	0
Canfor Fort St. John	3	94,914	9,257	32,400	107,459
L.P.	0	6056	5593	0	11,649
Chetwynd Mechanical Pulp			0	0	0
Dunne Za	Dunne Za 0		0	0	0
Grand Total	3	158,943	17,311	32,400	179,542

#### Table 32: Summary of Participants' Road and Bridge Construction Activities

The Licensee Participants and BC Timber Sales access management activities for the period April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020 are detailed in **Appendix 3 – Access Management**.



#### 5. SUMMARY OF TIMBER HARVESTING

#### Table 33: Summary of Timber Volume Harvested by Licence in 2019-2020

Participant/Licence	Conifer Licence Volume Harvested (m <sup>3</sup> )	Deciduous Licence Volume Harvested (m <sup>3</sup> )	
Canfor - A18154	208,235	0	
DZ - A56771	20,623	0	
MPMC - A60972	4,213	0	
LP - A60049	0	14,402	
PVOSB - A85946	0	0	
LP - PA 20	0	0	
Canfor - PA 12	0	0	
BCTS	342,701	0	
Total	575,772	14,402	

#### Table 34: Summary of Harvested Area by Licence in 2019-2020

Participant/Licence	Gross Area (ha)	Merch Area (ha)
Canfor - A18154	2589.5	1947.7
DZ - A56771	153.8	110.7
MPMC - A60972	50.0	44.9
LP - A60049	417.8	372.1
PVOSB - A85946	0	0
LP - PA 20	0	0
Canfor - PA 12	0	0
BCTS	1834.7	1629.8
Total	5,045.8	4,105.2

#### 6. SUMMARY OF BASIC FOREST MANAGEMENT (REFORESTATION)

A summary of the reforestation activities carried out by all participants is included in a variety of Tables within **Appendix 4 - Reforestation.** BCTS results are shown separately from other Licensee results.

#### Mixedwood Management

The commitment for the term of SFMP #3 regarding intimate mixtures of conifer and deciduous is to manage intimate mixtures on ten percent of the harvested mixedwood land base as operational trials.

#### BCTS

SFMP #1 – Licensees holding BCTS tenures harvested 5,966 ha of forested lands over the time of SFMP #1. Of this area, 2,708 ha was from stands classified by the percentage of net merchantable volume by species as being either conifer leading or deciduous leading mixtures (CD or DC). This equated to an amount of 270.8 ha of harvested area as a minimum commitment to manage towards intimate mixtures. At the end of SFMP #1, BCTS has designated a total of 282.2 ha as intimate mixtures, which is 10.4% of the mixedwood allocation area. This demonstrates achievement of the ten percent target over the term of the SFMP #1 by BCTS.

SFMP #2 – Licensees holding BCTS tenures harvested 15,224.3 ha of forested lands since the start of SFMP #2 to the end of the 2017 annual reporting period. Of this area, 2284.4 ha was from stands classified by the percentage of net merchantable volume by species as being either conifer leading or deciduous leading mixtures (CD or DC). This equates to an amount of 228 ha of harvested area as a minimum commitment to manage towards intimate mixtures. Currently BCTS has designated a total of 445.5 ha as intimate mixtures, which is 19% of the mixedwood allocation area. This demonstrates that BCTS is currently managing 9% (or 217.5 ha) above the 10% target over the term of the SFMP.

#### Licensee Participants

SFMP #1-Licensees harvested 55,079 ha of forested lands over the period of SFMP #1. Of this area, 10,884.3 ha was from stands classified by the percentage of net merchantable volume by species as being either conifer leading or deciduous leading mixtures (CD or DC). This equates to an amount of 1088.4 ha of harvested area as a minimum commitment to manage towards intimate mixtures. Currently participants have designated a total of 1312.5 ha as intimate mixtures, which is 12.05% of the mixedwood allocation area. This demonstrates that the licensee tenures are currently 2.05% (or 224.1 ha) above the 10% target over the term of the SFMP.

SFMP #2 – Licensees harvested 29,396.8 ha of forested lands since the start of SFMP #2 to the end of the 2017 annual reporting period. Of this area, 12,646.4 ha was from stands classified by the percentage of net merchantable volume by species as being either conifer leading or deciduous leading mixtures (CD or DC). This equates to an amount of 1264 ha of harvested area as a minimum commitment to manage towards intimate mixtures. Currently participants have designated a total of 1775.6 ha as intimate mixtures, which is 14% of the mixedwood allocation area. This demonstrates that the licensee tenures are currently 4% (or 511.6 ha) above the 10% target over the term of the SFMP.





#### 7. INCREMENTAL FOREST MANAGEMENT (STAND TENDING)

There were no stand tending activities carried out between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

#### 8. SUMMARY OF ANY VARIANCES GIVEN

There were no variances given or received between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

#### 9. COMPLIANCE

#### 9.1. CONTRAVENTIONS REPORTED

The licensee participants reported no contraventions between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020 to government agencies (MFLNRORD).

Licensee participants received no notification of non-compliances by government agencies (MFLNRORD) between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

BCTS reported 1 contravention between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

BCTS received 0 notifications of non-compliances by government agencies (MFLNRORD) between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

A description of the contraventions reported can be found in **Appendix 5 – Compliance.** 

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

There were no compliance and enforcement penalties imposed or measures taken on licensee participants by the government under Part 6 of the Act for activities completed between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.

There were no compliance and enforcement penalties imposed or measures taken on BCTS by the government under Part 6 of the Act between April 1<sup>st</sup>, 2019 and March 31<sup>st</sup>, 2020.



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

Table 35 is a summary of amendments for which notice was not required to be published, that were made from April  $1^{ST}$ , 2019 to March  $31^{st}$ , 2020.

### Table 35: Summary of FOS Amendments with No Publication Requirement

Plan	Licence	Amend- ment #	Date	Block / Road	Amendment Description	MFLNRORD Notified of Change
FOS	CANFOR	371	April 16, 2019	36055, 36056, 36081, 36085, 36095, S36020, 36066, 36068, 36069, 36071, 36070, 21055, 21147, 21092, 21093	Amalgamated blocks and transferred to suitable licenses. 21055 was split into two blocks.	April 16, 2019
FOS	CANFOR	372	June 12, 2019	05150, 05063	Merged blocks into one block.	June 12, 2019
FOS	CANFOR	374	July 23, 2019	09130, 09133, 09134	Merged blocks into one block.	July 23, 2019
FOS	CANFOR	375	August 27, 2019	36043, 36101, 36102	Merged blocks into one block.	August 27, 2019
FOS	CANFOR	376	September 9, 2019	45095, 45102	45095 was split into two blocks.	September 9, 2019
FOS	CANFOR	377	October 8, 2019	24049, 24050, S24080, S24078, 24233, 24277, 24278, S24083, 24366, 24372, 24373	All of these blocks have had a license change. Blocks S24080 and S24078 were combined. Block S24083 was split into two blocks.	October 8, 2019
FOS	CANFOR	378	October 25, 2019	01168, 01169, 01170, 01197, 01198, 01289, 01309	Amalgamated blocks and transferred to suitable licenses.	October 25, 2019
FOS	BCTS	379	November 13, 2019	07054, 07087, 07169	Block 07054 split into 07054 and 07169. Block 07054 and 07087 merged into 07054	December 6, 2019
FOS	CANFOR	380	November 27, 2019	19110	Proposed road within 200m.	November 27, 2019
FOS	CANFOR	381	November 27, 2019	04302, 04351	04302 is split into two blocks. Second block number is 04351	November 27, 2019
FOS	CANFOR	382	December 6, 2019	19138, 19148	19138 is split into two blocks. Second block number is 19148	December 6, 2019
FOS	BCTS	383	December 10. 2019	24216, 24222, 24230, 24072, 10062, 38030, 06061, 06049, 45046, 45051, 45029, 01225, 01229, 01239, 01241, 04115, 04200, 04116, 04118	TSL numbers associated with these blocks have been changed.	December 10, 2019

(April 1<sup>st</sup>, 2019 – March 31<sup>st</sup>, 2020)

127

2	

Plan	Licence	Amend- ment #	Date	Block / Road	Amendment Description	MFLNRORD Notified of Change
FOS	BCTS	384	February 5, 2020	45017, 45026	Merged into 45017	February 5, 2020
FOS	CANFOR	385	December 11, 2019	07142, 07167	07142 is split into two blocks. Second block number is 07167	December 11, 2019
FOS	CANFOR	386	December 18, 2019	24049, 24050, 24277, 24278, 24366	License change	December 18, 2019
FOS	CANFOR	387	January 22, 2020	05062	License Change	January 22, 2020
FOS	BCTS	388	February 7, 2020	18060, 18061	TSL number associated with these blocks changed from A95094 to TA1211	February 7, 2020
FOS	CANFOR	389	February 13, 2020	09167, 09168, 09181	Proposed FOS roads within 200m	February 13, 2020
FOS	CANFOR	390	February 19, 2020	09137, 09501	09137 is split into two blocks. Second block number is 09501	February 19, 2020
FOS	CANFOR	392	March 18, 2020	19113, 19146, 19115, 19150, 19151, 19152, 19153, 19116, 19147, 19046, 19144	Blocks were split	March 18, 2020
FOS	CANFOR	393	March 24, 2020	09165, 09201, 09505	Block 09165 was split into three blocks	March 24, 2020

Table 36 is a summary of major amendments made from April 1, 2019 to March 31, 2020 that went through the formal public review process.

# Table 36: Summary of FOS Amendments with Publication Requirement (Apr1/19-Mar 31/20)

Plan	Licence	Amendment #	Date	Block/ Road	Amendment Description	MOF Notified of Change Date
FOS	CANFO R/ BCTS	373	Nov 18, 2019	Major Amendment	51 blocks and 24 roads are added on amendment	Nov 18, 2019
FOS	CANFO R/ BCTS	367	July 10, 2019	Major Amendment	15 Canfor blocks,2 BCTS blocks, 6 access to Canfor blocks, 6 access to BCTS blocks, 2 Canfor roads	July 10, 2019

#### Fort St. John Pilot Project 2019-2020 SFMP Annual Report 11. LANDSCAPE LEVEL STRATEGY IMPLEMENTATION



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

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

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

The SFMP #3 also includes a Landscape Level Reforestation Strategy and a Soil Management strategy.

The FSJPPR also requires the participants to ensure that each strategy contained in the plan specifies the performance indicators for evaluating whether or not the strategy has been successfully implemented. The participants will regularly review each of these indicators for appropriateness and evaluate performance and progress towards the associated targets.

A summary of these reviews and any proposals for change will be reported in the SFMP annual reports. The targets will be managed within the continuous improvement process as described in section 3.4 of SFMP #3<sup>22</sup>.

Table 37 is a summary of the landscape level strategies and related performance indicators, (as identified in Table 8 of SFMP #3<sup>23</sup>) approved by the regional manager (MFLNRORD) and regional director (MOE) are:

<sup>&</sup>lt;sup>22</sup> See Section 3.4 "Continuous Improvement" on page 51 of SFMP #3.

<sup>&</sup>lt;sup>23</sup> See Table 8 in Section 4 "Landscape Level Strategies" on page 54 of SFMP #3.



Table 37: Landscape Level Strategies and Related Performance Indicators

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

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

#### 11.1 TIMBER HARVESTING STRATEGY

<u>Harvesting Strategy #1:</u> Timber harvesting within the Crying Girl LU and the portion of the Graham LU that falls within the Graham River valley will be based on sequential clustered development. Operational harvest activities will be concentrated in one 'cluster' during a harvesting season to minimize costs, and to minimize the extent of industrial disturbance to wildlife. The total extent of allowable harvesting area will be consistent with the Graham Resource Integrated Management Plan (GRIMP) harvest schedule. Exceptions to this that may be required to address abnormal forest health and damaging events will be reviewed with the PAG and government agencies prior to conducting activities.

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

**Indicator #19 - Graham Merchantable Area Harvested (Section 3.19):** The first reporting period finished in April 2007. The total area harvested in the first reporting period was 3,516 ha, while the maximum allowable harvest for the period was 3,638 (which had been amended downward from 3,869 ha as a result of transferring block 11058 from cluster 4 to cluster 6, as noted in the 2005-2006 Annual Report). The second reporting period ended in April 2012. The third period concluded April 2017. The fourth period will conclude April 2022. Since the beginning of period 2 to date of preparation of this report, no harvesting has occurred in the Graham. The participants are therefore consistent with the indicator's targeted range.

<sup>&</sup>lt;sup>24</sup> Includes indicators related to both Sec35(5) and Sec35(6)of FSJPPR

<sup>&</sup>lt;sup>25</sup> Indicators 2 (Seral Stage) and 3 (Patch Size) are Performance Indicators for both Strategy 4.5 and 4.6 from SFMP #3



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

**Indicator #20 - Graham Connectivity (Section 3.20):** No new harvesting occurred in the Graham in the 2019-2020 reporting period. The participants are in conformance to this indicator's target and allowable variance. As well, GIS coverage was used as an overlay during the development of the FOS to ensure consistency of future blocks with this indicator.

<u>Harvesting Strategy #3:</u> Long term harvest plans will be prepared depicting the approximate location of blocks and roads, to address key wildlife and road access issues for one or more drainages within the Muskwa-Kechika Management Area (MKMA). These plans will be submitted to government and the public for review and comment prior to inclusion of any new proposed blocks in any FOS or similar plan.

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

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

Indicator #51 - Timber Profile - Deciduous (Section 3.51): During the development of Forest Operations Schedule #3, a substantial amount of deciduous-leading area was identified for harvest in Supply Block F – 4,558.6ha

Indicator #52 - Timber Profile – Coniferous (Section 3.52): The first 5-year period expired March 31<sup>st</sup>, 2006. The participants' harvesting for that five-year period was 5.0% in height class two pine stands, which, while below the target of 8%, was equal to the minimum acceptable level of 5.0%. The next calculation of this indicator will occur at the end of the next five-year harvest period. It was recognized that achievement of this target in the current five-year period April 1, 2007- March 31<sup>st</sup>, 2011, would be negatively impacted by the large-scale salvage harvesting programs currently implemented to address the mountain pine beetle infestation. Accordingly, the variance for this period was revised to 0% at the March 6, 2008 Fort St. John Public Advisory Group meeting to provide flexibility to address the urgent forest health issue.

Very little new harvesting occurred in height class two pine stands during the second period in order to concentrate harvest activity on mountain pine beetle infested areas. During the 2011-2016 reporting period Canfor harvested 189.6 ha in height-class two pine inventory types of a total conifer stand type area of 31,542.9 ha harvested (1.4%) and BCTS harvested 169.1 ha in height-class two pine inventory types out of a total conifer stand type area of 4187.4 ha harvested (4.0%). The combined conifer harvest in height class 2 pine stands for the 2011 – 2016 reporting period is 2.0% (358.7 ha out of a total of 17,730.3 ha harvested).



The current 5 year period started April 1<sup>st</sup> of 2016. To date, the Managing Participants have harvested 161.9ha in height class two pine types which equates to 1.1% of the conifer harvest area. With a variance of 0%, the participants are within the variance for this indicator.

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

**Indicator #53 - Cut Control (Section 3.53):** The end of the monitoring period identified for indicator 53 was December 31, 2015.

The licensee six-year cumulative target for coniferous cut control volume is 4,609,744 m3. The actual harvested coniferous volume at the end of the period was 588,701 m3 (12.8% of the cumulative target).

The licensee six-year target cumulative deciduous cut control volume is 5,826,260 m3. The actual harvested volume for the period is 112,346 m3 (1.9% of the cumulative target).

The BCTS six-year target cumulative coniferous allotment volume is 2,864,854m3. The actual volume offered for sale in the reporting period was 598,016 m3 (20.9% of the cumulative target).

The BCTS six-year target cumulative deciduous allotment volume is 1,386,000m3. The actual volume offered for sale in the reporting period was 0 m3 (0% of the cumulative target).

The target for this indicator was met at the end of the last monitoring period.

The next cut control monitoring period will be January 1, 2016 – Dec 31, 2021. The results of the period will be presented at the time.

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

**Indicator #50 - Coordination (Section 3.50):** The participants completed and submitted a coordinated FOS in October 2017 2010-11, and continued to coordinate and collaborate on FOS #3 amendments, therefore meeting the target for this indicator.

<u>Harvesting Strategy #7:</u> Identify suitable areas for summer and fall harvesting, and maintain deliveries during this time period sufficient to meet processing plant fibre requirements, while meeting environmental objectives.

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

<u>Harvesting Strategy #8:</u> Even-aged silviculture systems such as clearcuts, or clearcuts with reserves, will be the predominant silviculture systems employed, as these systems most closely parallel the even aged forests that result from natural disturbance events in the TSA. Where other resource values are particularly high, small patch or strip cuts may be proposed to maintain non-timber resource values, while allowing for some timber utilization. Modified



shelterwoods will be employed in deciduous logging to protect coniferous understory on an operational trial basis, consistent with the reforestation strategy.

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

Timber Harvesting Strategy Summary: The participants conformed to all seven (100%) legal indicators, and 3 of 3 non legal indicators (100%) used to quantify conformance to the timber harvesting strategies.

#### 11.2 ROAD ACCESS MANAGEMENT STRATEGY

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

**Indicator #24 - Permanent Access Structures (Section 3.24):** Licensee participant's current permanent access structures area is at 4.5%, BCTS is at 2.9%, the participants combined PAS is 3.6%, therefore the participants are consistent with the target for this indicator.

<u>Road Access Management Strategy #2:</u> Forest industry road access in the Sikanni, Graham and Crying Girl LU's will be planned to maintain over time the primitive ROS class at 1996 levels, and maintain a component of semi-primitive non-motorized ROS classes.

**Indicator #45 - Recreation Opportunity Spectrum (Section 3.45):** As no logging occurred in this area since 2007, the current status remains consistent with the target range for this indicator. As well, projections of proposed roads and blocks from the FOS #3 indicate that harvest plans will allow future activities through 2020 to be consistent with achieving these targets.

**Road Access Management Strategy #3:** Participants will communicate and provide the opportunity for forest industry access management plans to be shared with the oil and gas sector through the Oil and Gas Commission. This includes providing critical forest industry road construction standards so that the forest industry road specifications can be linked with those of the oil and gas sector. Forest industry access plans encompassing all of the Participants' activities will be clearly identified within the Forest Operations Schedule (FOS). By making this information well known and easily available to the oil and gas sector, coordinated infrastructure developments within common operating areas can be implemented, thus eliminating duplicate entries and thereby reducing the amount of forest land converted to non-forest conditions and minimizing the negative impacts on other resources.

Indicator #40 - Coordinated Developments (Section 3.40) - The licensee participants proposed changes to 17 of the 108 referrals received, BCTS proposed changes to 4 of the 31 referrals received from Oil and Gas, to either coordinate development, or otherwise minimize impacts to the timber harvesting land base. The oil and gas company proponents agreed to implement many of these proposed changes. Participants noted that in many referrals oil and gas activities were



already designed to reduce impacts to the timber harvesting land base. Licensee participants issued 254 Road use agreements to oil and gas companies.

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

#### **11.3 RIPARIAN MANAGEMENT STRATEGY**

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

**Indicator #7 - Riparian Reserves (Section 3.7):** This is an indicator of progress related to maintaining riparian reserves as proposed by this strategy. The participants were in conformance to the target for this indicator during the reporting period.

<u>Riparian Management Strategy #2:</u> Qualified personnel will conduct assessments of streams that do not have mandatory reserve zones. Site-specific management practices will be incorporated into SLP's to protect streambanks, stream channel stability, and riparian vegetation, water quality, and other riparian values.

Indicator #36 - Protection of Stream banks and Riparian Values on Small Streams (Section 3.36): During the 2019-2020 reporting period the participants had no instance of nonconformance to SLP riparian management measures. The participants were therefore in conformance with the target for this indicator during the reporting period.

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

**Indicator #22 - River Corridors (Section 3.22):**, During the reporting period, no block harvest or road construction activities were conducted in major river corridors by Canfor or BCTS. The participants' activities are therefore consistent with the target for this indicator.

<u>Riparian Management Strategy #4:</u> Excessive runoff at the watershed level, which can disturb stream channel integrity and adjacent habitats, will be managed by limiting the extent of harvesting within watersheds, as determined through peak flow index analyses

**Indicator #34 - Peak Flow Index (Section 3.34):** The participants are consistent with the target for this indicator. No non-conformances to this indicator were identified to have taken place during this reporting period.

As part of the preparation of Forest Operations Schedule #3, a DFA wide analysis of watersheds was conducted. The analysis determined the impact of FOS #3 to each watershed's peak flow index, by modelling both the impact of the participants' total proposed harvest and the projected



growth of forest stands. The analysis showed that all watersheds (104 of 105, 99%) are within the target threshold for peak flow upon completion of all harvest activities proposed in FOS #3 in 2025.

Riparian Management Strategy Summary: The participants conformed to the target or acceptable variance for 4 of the 4 (100%) legal indicators used to quantify conformance to the riparian management strategy.

#### 11.4 RANGE AND FORAGE MANAGEMENT STRATEGY

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

**Indicator #42 - Damage to Range Improvements (Section 3.42):** In this reporting period, the participants repaired a fenceline within one year of the incident. Consequently, the participants are consistent with the indicator's target.

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

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

**<u>Range and Forage Management Strategy #3</u>:** The Participants will endeavor to create and implement mutually agreed action plans (TRAPs) with range tenure holders that address forage and forest management overlap issues and other concerns, over the areas identified in the current Forest Operations Schedule.

**Indicator #41 - Range Action Plans (Section 3.41):** is the indicator which shows progress on this strategy. No Timber Range Action Plan (TRAP) was developed (signed) by the participants during the reporting period. Three mutually agreed upon action plans were developed. Participants' operations were 100% consistent with the mutually agreed upon action plans for range during the reporting period.

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



#### 11.5 PATCH SIZE, SERAL STAGE DISTRIBUTION AND ADJACENCY STRATEGY

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

#### Seral Stage Distribution Strategy

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

The seral stage analyses conducted in 2016 to identify the current condition of the indicator and to identify the future condition of the indicator, assuming all blocks in FOS #3 are harvested by 2025, identified that the Participants' activities are in conformance with the requirements of this indicator. To date of preparation of this report, a significant amount of FOS #2 blocks remain unharvested.

#### Patch Size Strategy

The patch size distribution targets for early and mature patches for the duration of the SFMP are outlined in **Indicator #3 - Patch Size (Section 3.3)**. The patch size analyses conducted in 2017 to identify the current condition of the indicator and to identify the future condition of the indicator assuming all blocks in FOS #3 are harvested by 2025, Identified that the participants' activities are in conformance with the requirements of this indicator.

In FOS #3 harvesting is proposed only in two of the of the ten NDU patch size combinations where the desired patch size distribution is not achieved by 2025. Of the two NDUs where harvesting is proposed, the patch targets are achieved in 4 of 6, or 67%, of the relevant patch size NDU combinations. In the 2 NDU patch size combination where harvesting does not achieve the desired patch size distribution, it must be noted that a slight improvement over the baseline condition (2010 condition) is achieved. This demonstrates a trend to moving toward achieving the desired patch size distribution over the course of implementation of FOS #3. Participants are in conformance with the target of having 9/18 baseline targets for early patches. The results of the FOS #3 analysis showed 12/18 baseline targets met.

#### Forest Structure and Adjacency

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

#### Indicator #6 - Coarse Woody Debris (Section 3.6):

The current reporting period is December 1<sup>st</sup>, 2016 - November 30<sup>th</sup>, 2022. So far in this reporting period the CWD plots have shown 81 m<sup>3</sup>/ha of CWD retained on harvested blocks. The participants are in conformance to this indicator.

#### Indicator #9 - Wildlife Tree Patches (Section 3.9):

Wildlife Tree Patches have cumulative targets by LU for harvesting initiated after November 15<sup>th</sup>, 2001. The participants' activities are currently consistent with the targets for 6 of the 6 LU's that were harvested during the reporting period. No harvesting took place in the Milligan, Sikanni, Graham, and Crying Girl LU's. The participants are in conformance with this indicator.



#### Adjacency

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

Seral Stage Distribution Strategy Summary: The participants conformed to the targets for 4 of 4 (100%) legal indicators used to quantify conformance to the patch size, seral stage distribution and adjacency strategy.

#### 11.6 FOREST HEALTH MANAGEMENT STRATEGY

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

Indicators, strategies and implementation details for maintaining ecological processes are included in indicators dealing with Forest Types (Indicator #1, Section 3.1), Seral Stage (Indicator #2, Section 3.2), and Patch Size (Indicator #3, Section 3.3) and Salvage (Indicator #26, Section 3.26). The participants are in conformance with the target for each of these indicators.

Forest Health Strategy #2: The Participants will identify potential forest health issues within their silviculture obligation areas (harvested blocks), and prioritize those that may have a significant impact on forest resources. Within their silviculture obligation areas, the Participants will detect and monitor significant forest health agents in a timely manner, and, where potential impacts are significant, implement cost effective treatment controls where practical.

Indicator #25 - Forest Health (Section 3.25): The participants' activities were consistent with the targets for this indicator. Surveys conducted on obligation areas during the reporting period identified minor incidences of forest health damaging agents, primarily vegetation press, ungulate browse, and Cooley spruce gall adelgid, Western Gall Rust, Aspen Twig Blight, frost and hare browse.

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

**Indicator #49 - Forest Health FOS Planning (Section 3.49):** 15% of conifer blocks identified in FOS #3 are pine leading. The participants are not in conformance with this indicator or the variance.

<u>Forest Health Strategy #4:</u> Reduce Forest Health Impacts from Climate Change Where practical, manage for climate change by implementing standards specified in the Chief Foresters Standard for Seed Use (CFSSU).



Indicator #13 - Seed Use (Section 3.13): The total number of seedlings planted by the participants were in compliance with the CFSSU.

Forest Health Strategy Summary: The participants' activities conformed to the target or acceptable variance for 5 of 6 (83%) legal indicators and 1 of 1 (100%) non legal indicators used to quantify conformance to the forest health strategy.

#### 11.7 REFORESTATION STRATEGY

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

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

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

The strategy includes the following components:

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

The Reforestation strategy has the following key features to:

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

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

This strategy applies to all area harvested after November 15, 2001, under the FSJPPR. Participants may elect to include areas harvested under prescription between 1987 and



November 15, 2001. A statement of election to include areas must be made in writing to the District Manager.

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

**Indicator #13 - Coniferous Seed (Section 3.13):** This indicator measures conformance to the Chief Foresters Standards for Seed Use. 100% of seedlings planted by the participants were in conformance with the Chief Foresters Standards for Seed Use. The participants are in compliance with the indicator.

**Indicator #28 - Species Composition (Section 3.28):** This indicator measures the progress participants make in retaining relative consistent species composition between pre and post-harvest operations on the landscape. The planted species percentages are within 20% of the cruise species percentages and therefore the participants are within the acceptable variance for this indicator and target.

**Indicator #29 - Reforestation Assessment (Section 3.29):** This indicator provides a landscape level assessment of reforestation success for *coniferous leading and deciduous leading stands*, based on a comparative measure of future volume. The participants are in compliance with this indicator.

Indicator #30 - Establishment Delay (Section 3.30): This indicator provides a broad view of the average amount of time being taken to confirm establishment of a new forest on conifer leading, deciduous leading and mixedwood harvested areas. BCTS and the licensee participants achieved the target for conifer, deciduous, and mixedwood. The participants are in compliance with this indicator.

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

<u>Reforestation Strategy Summary</u>: The participants conformed to 4 of the 4 legal indicator targets (100%) and 1 of 1 (100%) non legal indicators that measure conformance with the reforestation strategy.

#### 11.8 SOIL MANAGEMENT STRATEGY

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

**Indicator #4 - Soil Disturbance (Section 3.4):** This indicator measures whether detrimental soil disturbance occurred during harvesting or reforestation activities on cutblocks. There were no incidents of detrimental soil disturbance reported by the participants during the 2019-2020 reporting period.

Soil Management Strategy Summary: The participants conformed to 1 of the 1 (100%) of the legal indicators that measure conformance to the soil management strategy.



Fort St. John Pilot Project 2019-2020 SFMP Annual Report 11.9 VISUAL QUALITY MANAGEMENT STRATEGY

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

Indicator #44 - Visual Quality Objectives (Section 3.44): This indicator measures whether activities were consistent with VQO's during the reporting period, and is used to quantify conformance to the visual quality management strategy. The participants (Canfor and BCTS) completed 10 of 10 required assessments during the reporting period. The completed assessments concluded the VQO's were achieved on all 10 blocks.

Visual Quality Management Strategy Summary: The participants did conform to the target or acceptable variance for the one (100%) legal indicator used to quantify conformance to the visual quality management strategy.



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



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

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

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

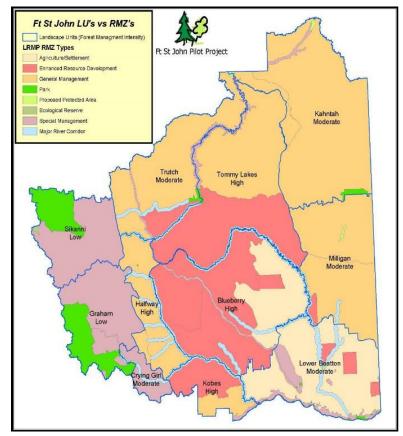


Figure 10: Fort St. John LU's and RMZ's



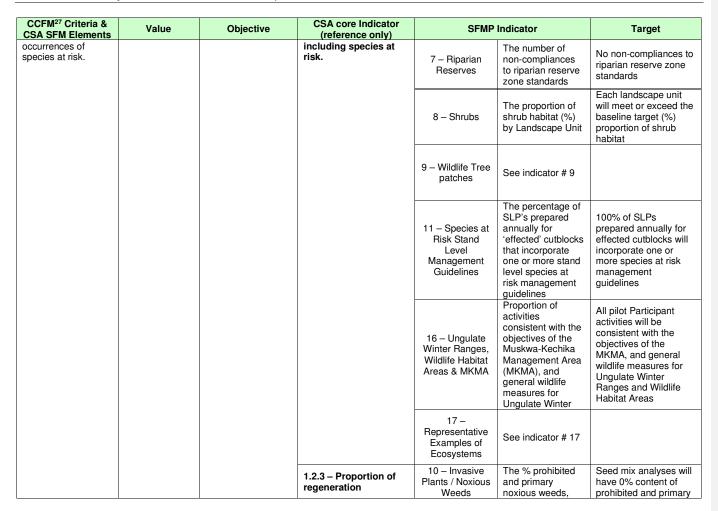
Appendix 2: CSA Sustainable Forest Management Matrix

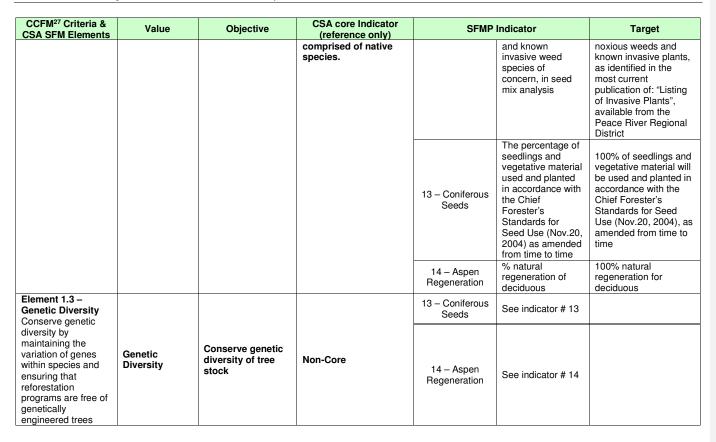
# Table 38: 47.0 CSA Matrix<sup>26</sup> Fort St. John Pilot Project SFM Matrix (Effective Feb 7, 2018)

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target			
		(	CCFM Criterion 1 – Conserva	ation of Biological D	oiversity				
Conserve biological diversity by maintaining integrity, function and diversity of living organisms and the complexes of which they are part, including ecological elements that contribute to cultural values									
	Ecosystem Diversity Diversity Ecosystem Diversity Ecosystem communities and ecosystems within a natural range		1.1.1 – Ecosystem area by type.	67 – Rare Ecosystems	Percentage of the area of rare ecosystem groups reserved from harvest	100% of the area of rare ecosystem groups will be reserved from harvest			
		Maintain the		17 – Representative Examples of Ecosystems	Percentage of area of forest stands in an unmanaged condition, by leading species, by NDU	100% of baseline targets for forested stands in an unmanaged condition, by leading species, by NDU will be met			
		1.1.2 – Forest area by type or species composition.	1 – Forest Types	Percent distribution of forest type (deciduous, deciduous mixedwood, conifer mixedwood, conifer) >20 years old by landscape unit	All forest type groups by landscape unit will meet or exceed the minimum area percentage in table 9				
				28 – Species Composition	Relative change in plantation composition versus harvest composition for spruce and pine	The relative proportion of spruce and pine planted annually will equal the proportions harvested annually (excluding fill planting)			

 $^{26}$  matrix number reflects the PAG meeting at which it was approved.  $^{27}$  CCFM – Canadian Council of Forest Ministers

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
			1.1.3 – Forest Area by seral stage or age	2 – Seral Stage	The minimum proportion (%) of late seral forest by NDU	The minimum proportion (%) of late seral forest by NDU as identified in table 11 will be met
			1.1.4 – Degree of within-stand structural retention.	3 – Patch Size	Percent area by Patch Size Class (0-50, 51-100, and >100 ha) by NDU	A minimum of 9 of 18 of the baseline targets for early patches will be achieved during the term of this SFMP
				5 – Snags / cavity Sites	Number of snags and/or live trees (>23 cm dbh) per ha on prescribed areas	Retain annually an average of at least 6 snags and/or live trees (>23cm dbh) per hectare on prescribed areas
				9 – Wildlife Tree Patches	Cumulative Wildlife Tree Patch percentage in blocks harvested under the FSJPPR in each Landscape Unit	Cumulative Wildlife Tree Patch % will meet or exceed the minimum target in each LU (Blueberry 9%, Halfway 6%, Kahntah 5%, Kobes 8%, Lower Beatton 3%, Milligan 4%, Tommy Lakes 8%, Trutch 5%, Sikanni 4%, Graham 4%, Crying Girl 3%)
Element 1.2 – Species Diversity			1.2.1 – Degree of habitat protection for	5 – Snags / Cavity Sites	See indicator # 5	
Conserve species diversity by ensuring that habitats and forest conditions for the native species found in the DFA are maintained through time, including habitats for known	Species Richness	Suitable habitat elements for indicator species. Maintain habitats for species at risk	selected focal species, including species at risk. 1.2.2 – Degree of suitable habitat in the long term for selected focal species,	6 – Coarse Woody Debris Volume	Average retention level of Coarse Woody Debris volume/ (m <sup>3</sup> /ha) on blocks logged in the DFA between December 1, 2016 and November 30, 2022	Average retention level over the DFA will be at least 46 m <sup>3</sup> /ha (50% of average pre-harvest volume) on harvested blocks assessed between December 1, 2016 and November 30, 2022





CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
Element 1.4 – Protected areas and sites of special biological, geological, heritage				15 – Class A Parks, Ecological Reserves & LRMP Designated Protected Areas	Hectares of forestry related harvesting or road construction within Class A parks, protected areas, ecological reserves, or LRMP designated protected areas	Zero hectares of forestry related harvesting or road construction within Class A parks, protected areas, ecological reserves, or LRMP designated protected areas
or cultural significance Respect protected areas identified through government processes. Co- operate in broader landscape management related to protected areas and sites of special biological or cultural significance. Identify biological, Beserves etr	To have representative areas of naturally		16 – Ungulate Winter Ranges, Wildlife Habitat Areas & MKMA	See indicator # 16		
	and Conservation	occurring and important ecosystems and rare physical	identified sites with	17 – Representative Examples of Ecosystems	See indicator # 17	
	areas, for example Special Management Zones, Ecological Beserves etc	Management		18 – Graham Harvest Timing	The number of clusters in the Graham IRM Plan area where active operational harvesting is concurrently occurring	Operational harvesting within the Graham IRM Plan area will be constrained to no more than 1 'cluster' of cutblocks at any one time
or cultural significance within the DFA, and implement management strategies appropriate to their long-term maintenance.		strategies address important values in SMZ areas		19 – Graham Merch Area	Cumulative merchantable area (hectares) within blocks harvested in the Graham IRM Plan area since 1997	The cumulative merchantable area (hectares) within harvested blocks will not exceed the planned maximum cumulative harvest areas, as measured at the end of each time period: Period 2 (April 2012): 6569 ha; Period 3 (April 2017): 9355 ha; Period # 4 (ending April 2022): 10.858 ha

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
				20 – Graham Connectivity	Area (hectares) harvested in cutblocks in the Graham IRM area, within the permanent alluvial and non- productive/non- commercial components of the connectivity corridors	Zero hectares harvested within cutblocks in the permanent alluvial and non-productive/non- commercial components of the connectivity corridors
				21 – MKMA harvest	The number of long term harvest plans within the MKMA completed and submitted to government	A minimum of one long-term harvest plan submitted no later than 1 year following government approval of a landscape unit objective under the MKMA Act, that applies to the Fort St. John TSA portion of the MKMA
				22 – River Corridors	The percentage of harvested areas that create openings greater than 1 hectare within 100 metres of RRZ's in identified major river corridors	No openings exceeding 1 hectare in blocks within the major river corridors harvested under the FSJPPR (i.e. after November 15, 2001)
				57 – Number of known Values and Uses addressed in Operational Planning	Percentage of known traditional site-specific aboriginal values and uses that are addressed in operational plans	100% of known traditional site-specific aboriginal values and uses identified will be addressed in operational plans

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target					
	CCFM Criterion 2 – Maintenance and Enhancement of Forest Ecosystem Condition and Productivity										
	Conserve forest ecosystem condition and productivity by maintaining the health, vitality, and rates of biological production.										
Element 2.1 – Forest Ecosystem Condition and Productivity Conserve forest ecosystem productivity and		Maintain a natural range of variability		25 – Forest Health	Percentage of silviculture obligation areas with significant detected forest health damaging agents which have treatment plans developed for them	100% of silviculture obligation areas with significant forest health damaging agents will have treatment plans developed for them, and initiated within 1 year of detection					
	in ecosystem function, composition and structure with allows ecosystems to recover from		27 – Silviculture Systems	Percentage of area harvested annually using even aged silviculture systems	Even aged silviculture systems will be employed on at least 80% of the total area harvested annually in the DFA						
productive capacity by maintaining	Ecosystem Resilience /	nce / stress. Ecosystem	2.1.1 – Reforestation	28 – Species Composition	See indicator 28						
ecosystem conditions that are capable of supporting naturally occurring species. Reforest promptly and use tree species ecologically suited to the site.	Ecosystem Productivity	of supporting naturally occurring species exist within the range of natural variability. Maintain or enhance landscape level productivity.	success.	29 – Reforestation Assessment	Predicted Merchantable Volume (PMV) (cubic meters) coniferous and separate deciduous surveyed areas. See indicator #2	Predicted Merchantable Volume will meet or exceed the Target Merchantable Volume (TMV). The TMV is set at 95% of the Maximum Predicted Merchantable Volume attainable on coniferous areas. The TMV is set at 90% of the Maximum Predicted Merchantable Volume attainable on deciduous areas					

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
				30 – Establishment Delay	Establishment Delay (years)	The area weighted average establishment delay for coniferous regeneration will not exceed two years. The area weighted average establishment delay for deciduous regeneration will not exceed three years. The area weighted average establishment delay for mixedwood stands regeneration will not exceed three years
				2 – Seral Stage 9 – Wildlife Tree	See indicator # 2	
				Patches	See indicator # 9	
			Non-Core	24 – Permanent Access Structures	Percentage of the total area in Managing Participants' cutblocks occupied by permanent access structures, in which harvesting was completed	A maximum of 5% of the total area in Managing Participants' cutblocks occupied by permanent access structures in which harvesting was completed, as determined on a 3 year rolling average
				26 – Salvage	The relative proportion of area of merchantable fire-damaged stands salvaged within a management intensity class	The relative proportions of salvage will be highest in the high intensity zones, and lowest in the low intensity zones over the SFM Plan period (April 1, 2016 - March 31, 2022
				49 – Forest Health FOS Planning	Percentage of new conifer-leading harvest blocks in	A minimum of 50% of new conifer-leading harvest blocks in the

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
					the 2017 FOS that are pine-leading	2017 FOS will be pine- leading
			2.1.2 – Proportion of	13 – Coniferous Seeds	See indicator #13	
			regeneration comprised of native species.	14 – Aspen Regeneration	See indicator #14	
				28 – Species Composition	See indicator #28	
				24 – Permanent Access Structures	See indicator # 24	
				40 – Coordinated Developments	Number of coordinated developments	Report annually the number of proposed coordinated developments that occurred
			2.1.3 – Additions and deletions to the forest area.	66 – Deletions to Forest Area	Percentage of gross crown forest landbase in the DFA converted to non-forest land use through forest management activities of the participants during the term of SFMP #3	Less than 0.6% of the gross crown forest landbase in the DFA will be converted to non-forest land use through forest management activities of the participants during the term of SFMP #3
			2.1.4 – Proportion of	25 – Forest Health	See indicator # 25	
			term sustainable harvest level that is actually harvested.	31 – Long Term Harvest Level	Long-term harvest level (LTHL) as measured in cubic metres per year (m <sup>3</sup> /yr)	We will propose an Allowable Annual Cut (AAC) that sustains the LTHL of the Defined Forest Area (DFA)

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
				32 – Site Index	Site index	Average post harvest site index will not be less than average pre- harvest site index on blocks harvested under the pilot project regulation
				53 – Cut Control	Percentage of total Allowable Annual Cut (AAC) charged to licensee tenure holders or BCTS Participants during the term of the SFMP	Jan 1 2016 - Dec 31 2021: Industry Participants: -Not to exceed 110% of the combined cumulative coniferous AAC for the 6 year period, -Not to exceed 110% of the combined cumulative deciduous AAC for the 6 year period. BCTS Participant: -Not to exceed 110% of the combined cumulative coniferous commitment offered for sale for the 6 year period, -Not to exceed 110% of the combined cumulative deciduous commitment offered for sale for the 6 year period

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
		CCF	M Criterion 3 – Conservatio	n of Soil and Water	Resources	
		Conserve soil and wa	ter resources by maintaining	g their quantity and o	quality in forest ecosys	stems.
Element 3.1 – Soil Quality and Quantity Conserve soil resources by maintaining soil	Soil Productivity	Protect soil resources to sustain productive forests	3.1.1 – Level of Soil Disturbance.	4 – Soil Disturbance	Number of blocks with non- conformances to soil disturbance limits reported annually by Managing Participant	Zero blocks will have non conformances to soil disturbance limits
quality and quantity				32 – Site Index	See indicator # 32	
			3.1.2 – Level of downed woody material.	6 – Coarse Woody Debris Volume	See indicator # 6	
Element 3.2 – Water		Maintenance of water quantity	3.2.1 – Proportion of watershed or water management areas with recent stand- replacing disturbance.	34 – Peak Flow Index	The percentage of watersheds achieving baseline targets for the peak flow index and the percent of watershed reviews completed where the baseline target is exceeded	95% or more of the watersheds will be below the baseline target. All watersheds that exceed the baseline target will have a watershed review completed wherever new harvesting is planned
Quality and Quantity	Water Quantity			7 – Riparian Reserves	See indicator # 7	
	Water Quantity Maintenance of water quality		3.2.2 – Proportion of forest management activities, consistent with prescriptions to protect identified water features.	35 – Water Quality Concern Ratings	The percentage of surveyed stream crossings annually identified with a high WQCR rating on forestry roads within the DFA for which participants have stewardship (*WQCR – water quality concern rating)	On an annual basis, fewer than 30% of the total number of surveyed stream crossings on roads for which the participants have stewardship will have 'High' WQCR

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
				36 – Protection of Stream banks and Riparian Values of Small Streams	The number of annual non- conformances to SLP measures related to protecting stream bank, stream channel stability and riparian vegetation from harvesting or silviculture activities	No non-conformances to SLP measures related to protecting stream bank, stream channel stability and riparian vegetation from to harvesting or silviculture activities
				37 – Spills Entering Water Bodies	Number of spills of a reportable substance (i.e. antifreeze, diesel fuel, gasoline, greases, hydraulic oil, lubricating oil, methyl hydrate, paints and paint thinners, solvents, pesticides, and explosives) entering water bodies	Zero spills entering water bodies

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
		CCFM Criteri	on 4 – Forest Ecosystem Co	ontributions to Globa	al Ecological Cycles	
	Mai	ntain forest conditions a	nd management activities th	nat contribute to the	health of global ecolog	gical cycles.
Element 4.1 – Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and				24 – Permanent Access Structures	See indicator # 24	
				29 – Reforestation Assessment	See indicator # 29	
	Carbon Uptake and Storage	Maintenance of the processes for carbon uptake and storage		30 – Establishment Delay	See indicator # 30	
			4.1.1 – Net Carbon Uptake.	38 – Carbon Sequestration Rate	Maintenance of DFA Average carbon sequestration rates	Maintain DFA average carbon sequestration rates that are consistent with or greater than natural sequestration rates
store it in forest ecosystems.				39 – Ecosystem Carbon Storage	The percentage of ecosystem carbon stored in the Fort St. John DFA relative to projected natural levels	Maintain ecosystem carbon storage at a minimum of 95% of projected natural storage levels
			4.1.2 – Reforestation Success. (2.1.1 – Reforestation Success)	See indicators # 25, 27, 28, 29, 30 (related to CSA z809-08 Con Indicator 2.1.1 above)		
Element 4.2 – Forest Land Conversion Protect forest lands from deforestation. Encourage afforestation where ecologically appropriate.	Forest Land Base	Sustain forest lands within our control within the DFA	4.2.1 – Additions and deletions to the forest area. (2.2.1 - Additions and deletions to the forest area)	See indicators	s # 24, 40, 55 (related Indicator 2.2.1 abc	



CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
			CCFM Criterion 5 – Mult	iple Benefits to Soc	iety	
	Su	stain flows of forest ben	efits for current and future g	· · · · ·	ding multiple goods an	d services.
				18 – Graham Harvest Timing	See indicator # 18	
				19 – Graham Merch Area	See indicator # 19	
Element 5.1 – Timber and Non- Timber Benefits Manage the forest				21 – MKMA harvest	See indicator # 21	
		Provide opportunities for a feasible mix of Non-Timber timber, Multi-use recreational Benefits activities, and non- timber commercial activities	5.1.1 – Documentation of the diversity of timber and non-timber resources, including products and services produced in the DFA.	31 – Long Term harvest Level (Timber)	See indicator # 31	
sustainably to produce a mix of timber and non- timber benefits. Support a diversity of	Non-Timber Multi-use			41 – Range Action Plan	Percent consistency with mutually agreed upon action plans for range	Operations 100% consistent with resultant range action plans
timber and non- timber forest products and forest- based services.				42 – Damage to Range Improvements	Number of range improvements damaged by Participants' activities	Zero range improvements damaged by Participants' activities
			43 – Recreation Sites (Non - Timber)	The number of recreation sites maintained by Participants	Participants will maintain a minimum of one recreational site within the DFA	
				44 – Visual Quality Objectives	Consistency with Visual Quality Objectives (VQO's)	Pilot Participants' forest operations will be consistent with the established VQO's

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
				45 – Recreation Opportunity Spectrum	Area in primitive and semi-primitive non-motorized classifications of the Recreation Opportunity Spectrum (ROS) for the Graham, Sikanni and Crying Girl LU's	A minimum of 65,839 ha in primitive ROS area (100% of 1996 primitive ROS area) and 180,726 ha in semi primitive non-motorized ROS area (50% of the 1996 total semi primitive NM ROS area) in the combined Graham, Crying Girl and Sikanni LU's (excluding the Graham Laurier and Redfern- Keily PA's)
				46 – Actions Addressing Guides, Trappers, and Other Interests	Percentage of operations consistent with mutually agreed upon action plans for guides, trappers and other known non-timber commercial interests	100% of operations will be consistent with action plans for guides, trappers and other non- timber commercial interests
				47 – Timber processed in the DFA (Timber)	Volume of timber processed in the DFA in proportion to volume harvested in the DFA	The annual equivalent of a minimum of 70% of the DFA's harvest is primary processed in the DFA
				48 – Summer and Fall Volume Deliveries	See Indicator # 48	
			Non – Core	51 – Timber Profile - Deciduous (Timber)	The area(ha) of deciduous leading cutblocks identified in Supply Block F for harvest during the term of the SFMP	A minimum of 200 ha of deciduous leading cutblocks located in Supply Block F will be identified for harvest during the term of the new SFMP

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
				52 – Timber Profile - Coniferous (Timber)	The percentage of the total cutblock area in harvested blocks that was identified as preharvest height- class two pine inventory types	April 1, 2006 - March 31st, 2011: 8% or more of the total coniferous cutblock area harvested by managing Participants during the 5-year period will be in height- class two pine inventory types. April 1, 2011- March 31st, 2016: 8% or more of the total coniferous cutblock area harvested by managing Participants during the 5-year period will be in height-class two pine inventory types. April 1, 2016- March 31, 2022: 8% or more of the total coniferous cutblock area harvested by managing Participants during the 5-year period will be in height-class two pine inventory types. April 1, 2016- March 31, 2022: 8% or more of the total coniferous cutblock area harvested by managing Participants during the 5-year period will be in height-class two pine inventory types.
				53 – Cut Control (Timber)	Percentage of total Allowable Annual Cut (AAC) charged to licensee tenure holders or BCTS Participants during the term of the SFMP.	Jan 1 2016 - Dec 31 2021: Industry Participants: -Not to exceed 110% of the combined cumulative coniferous AAC for the 6 year period -Not to exceed 110% of the combined cumulative deciduous AAC for the 6 year period

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
						BCTS Participant: -Not to exceed 110% of the combined cumulative coniferous commitment offered for sale for the 6 year period -Not to exceed 110% of the combined cumulative deciduous commitment offered for sale for the 6 year period
			5.1.2 — Evidence of open and respectful communications with forest dependent businesses, forest users and local communities to integrate non-timber resources into forest management planning. When significant disagreement occurs, efforts towards conflict resolution are documented.	23 – Value and Total Number of contracts Awarded to First Nations 41 – Range Action Plan 46 – Actions Addressing Guides, Trappers, and Other Interests 47 – Timber	See Indicator # 23 See indicator # 41 See Indicator # 46 See Indicator # 47	
				Processed in the DFA 54 – Dollars Spent Locally on Each Woodlands Phase 55 – Direct and Indirect	See indicator # 54	
				Employment 68 – Effective Communication – Non Timber Resources	Evidence of communication and consideration of non-timber resources into	100% of non-timber resource values, identified through communication, have been responded to and

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
					forest management planning	considered and may be accommodated in forest management plans
				47 – Timber Processed in the DFA	See Indicator # 47	
Element 5.2 – Communities and Sustainability Contribute to the	Sustainable and Viable Communities	Maintain viable timber processing facilities in the DFA. No decrease in the LTHL in the DFA	5.2.1 – Level of participation and support in initiatives that contribute to community sustainability.	48 – Summer and Fall Volume Deliveries	Volume of timber (m <sup>3</sup> ) delivered annually to wood processing facilities within the Fort St. John Defined Forest Area (DFA) wood processing facilities between May 1st and November 30th	Minimum of 100,000 m <sup>3</sup> to conifer mills in the DFA, Minimum of 185,000 m <sup>3</sup> to deciduous mills in the DFA
sustainability of communities by providing diverse opportunities to derive benefits from forests and by				50 – Coordination	Percentages of SFMP's and FOS's prepared jointly by the Participants	100% of all SFMP's and FOS's will be jointly prepared by the Participants
supporting local community economies.				51 – Timber Profile - Deciduous	See indicator # 51	
				52 – Timber Profile - Coniferous	See Indicator # 52	
				54 – Dollars	Percentage of dollars spent	Woodlands Phases to be monitored:
				Spent Locally on each Woodlands	locally on each woodlands phase	Logging/hauling: minimum of 80%
				Phase	in proportion to total expenditures	Road construction and maintenance: minimum of 80%

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
						Silviculture: minimum of 5% Planning and administration: minimum of 50%
				55 – Direct and Indirect Employment	Level of direct and indirect employment	Report the current level of direct and indirect employment expressed as a factor of harvest level times employment multiplier
			Non – Core	31 – Long Term Harvest Level	See Indicator # 31	
			53 – Cut Control	See Indicator # 53		
			5.2.2 – Level of participation and support in training and skills development.	63 – Worker Training	Percentage of managing participants' employees training that is consistent with training plans	100% of managing participants' employees will have training consistent with training plans
	Fair Distribution of Benefits and Costs			12 – Forest Workers Safety	Implementation and maintenance of certified safety program	Each managing participant will implement and maintain a certified safety program
		Development of Skilled Workers		48 – Summer and Fall Volume Deliveries	See Indicator # 48	
			5.2.3 – Level of direct and indirect employment.	54 – Dollars Spent Locally on Each Woodlands Phase	See Indicator # 54	
				55 – Direct and Indirect Employment	See Indicator # 55	

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
			n 6 – Accepting Society's Re	· ·	·	
	Sustainable t		udes society's responsibility equitable, and effective fore			requirement for fair,
Element 6.1 – Fair and effective decision-making / Information for decision-making Demonstrate that SFM public participation process is designed and functioning to the satisfaction of the participants and that there is general	Opportunity	To facilitate a satisfactory public participation process. To	6.1.1 – Level of participant satisfaction	59 – Terms of Reference (TOR) for the Public Participation Process	Current Terms of reference (TOR) for the FSJPPR public participation process	Biennial review of the TOR for the FSJPPR public participation process (PAG)
	for Public Participation	develop satisfaction with the public participation process	with the public participation process.	64 – PAG Satisfaction Surveys	Level of satisfaction with the public participation process as measured by PAG surveys	At least an 80% (average score of 4 out of 5) satisfaction level as measured from PAG surveys
	Information for Decision- making	Relevant information used in the decision making process is provided to PAG, general public, and affected parties	6.1.2 – Evidence of efforts to promote capacity development and meaningful participation in general.	41 – Timber Range Action Plans	See Indicator # 41	
public awareness of the process and its progress. Provide relevant				46 – Actions Addressing Guides, Trappers, and Other Interests	See indicator # 46	
information and educational opportunities to interested parties to support their involvement in the				58 – Regulatory Public Review and comment Process	Compliance with the public review and comment process identified in the FSJ Pilot Project Regulation	100% compliance with public review and comment processes identified in the FSJ Pilot Project Regulation
public participation process, and increase knowledge of ecosystem processes and human interactions				59 – Terms of Reference (TOR) for the Public Participation Process.	See Indicator # 59	
with forest ecosystems.				60 – Public Inquiries	The percentage of timely responses to public inquiries	Respond to 100% of public inquiries regarding Participants' forestry practices, that are additional to the

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
						Pilot Public Review and Comment processes, within one month of receipt
				61 – Educational Outreach	Number of people to whom information, presentations, or field trips provided annually	Minimum of 40 people provided information, presentations, or field trips
				64 – PAG Satisfaction Surveys	See Indicator # 64	
			6.1.3 – Availability of	60 – Public Inquiries	See Indicator # 60	
			summary information on issues of concern to the public.	65 – Availability of Information on Issues of Concern	SFM Monitoring report made available to the public	SFM monitoring report made available to the public annually
Element 6.2 – Safety Demonstrate that the organization is providing and promoting safe working conditions for its employees and contractors.	Contribute to Worker and Public Safety. Communities Participate in the Use and	Provide a safe work environment for DFA forestry workers and the public. Diverse local forest	6.2.1 – Evidence of co- operation with DFA - related workers to improve and enhance safety standards, procedures, and outcomes in all DFA- related workplaces and affected communities.	12 – Forest Workers Safety	See Indicator # 12	
	the Use and Management of the Forest	employment opportunities exist in the DFA	6.2.2 – Evidence that a worker safety program has been implemented and is periodically reviewed and improved	63 – Worker Training	See Indicator # 63	

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
	L	L	CCFM Criterion 7 – A	Aboriginal Relations		
		Recognize	e and respect the unique righ	nts and values of At	ooriginal Peoples	
	Aboriginal and Treaty Rights	Recognition of Treaty 8 rights and respect of aboriginal rights through maintenance of landscape level biodiversity	7.1.1 – Evidence of a good understanding of the nature of Aboriginal title and rights.	33 – First Nations Consultation & Information Sharing	Percentage of affected First Nations invited to participate in information sessions or presentations related to the participants' practices and /or plans (SFMP, FOS, and PMP's)	100% of affected First Nations will be invited to participate in information sessions or presentations related to the participants' practices and /or plans (SFMP, FOS, and PMP's)
Element 7.1 – Aboriginal and Treaty Rights Recognize and respect Aboriginal title and rights, and				56 – Maintenance of Wildlife and Fisheries Habitat	Conformance to the SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat	Participants will conform to the identified SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat
treaty rights. Understand and comply with current legal requirements related to aboriginal title and rights, and treaty rights.			7.1.2 — Evidence of ongoing open and respectful communications with Aboriginal communities to foster meaningful engagement, and consideration of the information gained about their Aboriginal title and rights through	33 – First Nations Consultation & Information Sharing	Percentage of affected First Nations invited to participate in information sessions or presentations related to the participants' practices and /or plans (SFMP, FOS, and PMP's)	100% of affected First Nations will be invited to participate in information sessions or presentations related to the participants' practices and /or plans (SFMP, FOS, and PMP's)
			this process. Where there is communicated disagreement regarding the organization's forest management activities, this evidence would include documentation	69 – Effective Communication – Aboriginal Communities	Evidence of ongoing communication with Aboriginal communities and consideration of information gained	100% of information on aboriginal titles and rights, identified through on-going communication with Aboriginal communities, has been

CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
			of efforts towards conflict resolution.			responded to and considered and may be accommodated in forest management planning
			7.2.1 — Evidence of	23 – Value and Total Number of contracts Awarded to First Nations	Value and total number of contracts awarded annually to First Nations	Report the annual total value and number of contracts awarded to companies or groups owned or operated by First Nations
		Respect known traditional aboriginal forest values and uses. Involve First Nations in review of forest management plans, provide understanding of forest management plans. Provide opportunities for First Nations to participate in forest economy.	ional       Aboriginal individuals, communities and forest-based companies.         ve First       forest-based companies.         ns in review rest       companies.         rest       companies.         igement       7.2.2 – Evidence of understanding and use rtunities for         s. Provide rtunities for Nations to       7.2.2 – Evidence of Knowledge through the engagement of	33 – First Nations Consultation & Information Sharing	See Indicator # 33	
Element 7.2 – Respect for Aboriginal Forest Values, Knowledge and Uses				57 – Number of Known values and Uses Addressed in Operational Planning	See Indicator # 57	
Respect traditional Aboriginal forest	Aboriginal Forest Values, and Uses			60 – Public Inquiries	See Indicator # 60	
values, knowledge, and uses as identified through the Aboriginal input				33 – First Nation Consultation & Information Sharing	See Indicator # 33	
process.				57 – Number of Known values and Uses Addressed in Operational Planning	See Indicator # 57	
				62 – Brushing Program Aerial Herbicide Use	See Indicator # 62	
			7.2.3 – Level of management and/or protection of areas	33 – First Nations Consultation &	See Indicator # 33	



CCFM <sup>27</sup> Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP	Indicator	Target
			where culturally	Information		
			important practices	Sharing		
			and activities occur.	57 – Number of		
				Known values		
				and Uses	See Indicator # 57	
			Addressed in		See mulcator # 57	
				Operational		
				Planning		
				62 – Brushing Program Aerial Herbicide Use	The number of hectares removed annually from the participants' aerial herbicide plans based on input from First Nations or the public and final treatment layout	The participants will report annually, the number of hectares removed from the participants' aerial herbicide plans based on input from First Nations or the public and final treatment layout



Appendix 3: Access Management



### Table 39: Road Construction Activity – Forest Licensees April 1<sup>st</sup> 2019- March 31<sup>st</sup> 2020

ROAD_SEQ _NBR	Road Steward	Road Name	POC	РОТ	Road Length (m)	Completion Date	Season	Operating Area	Method
320001073	Canfor	08-036-00	0	1342	1,342	18-Apr-2019	Winter	Tommy Lakes	Upgrading
320004168	Canfor	08-050-00	0	6777	6,777	18-Apr-2019	Winter	Tommy Lakes	Upgrading
1000386249	Canfor	10-039-00	705	2328	1,623	24-Apr-2019	Summer	Blue Grave Creek	Subgrade
1000386249	Ministry of Forest	10-039-00	0	262	262	24-Apr-2019	Winter	Blue Grave Creek	Subgrade
1000386249	Ministry of Forest	10-039-00	262	705	443	24-Apr-2019	Winter	Blue Grave Creek	Subgrade
320011926	Louisiana- Pacific	10-023-00	0	3830	3,830	29-Apr-2019	Summer	Blue Grave Creek	Upgrading
1000386267	Canfor	10-051-00	0	1116	1,116	26-May-2019	Summer	Blue Grave Creek	Subgrade
1004311327	Canfor	10-023-07	0	1237	1,237	15-Jun-2019	Summer	Blue Grave Creek	Subgrade
1000315808	Canfor	45-085-01	0	536	536	26-Jun-2019	Summer	West Farrell Creek	Subgrade
1000315809	Canfor	45-085-02	0	307	307	26-Jun-2019	Summer	West Farrell Creek	Subgrade
1000313438	Canfor	07-100-00	0	1138	1,138	4-Jul-2019	Summer	Donnie Creek	Upgrading
1000319784	Canfor	05-090-00	0	4737	4,737	16-Jul-2019	Summer	Aikman Creek	Subgrade
1000319831	Canfor	05-090-01	0	982	982	16-Jul-2019	Summer	Aikman Creek	Subgrade
1000319783	Canfor	05-089-00	0	3240	3,240	17-Jul-2019	Summer	Aikman Creek	Surfacing
1000319783	Canfor	05-089-00	0	5540	5,540	17-Jul-2019	Summer	Aikman Creek	Subgrade
1000319787	Canfor	05-089-03	0	921	921	17-Jul-2019	Summer	Aikman Creek	Subgrade
1000319789	Canfor	05-089-05	0	516	516	17-Jul-2019	Summer	Aikman Creek	Subgrade
1000319790	Canfor	05-089-06	0	250	250	17-Jul-2019	Summer	Aikman Creek	Subgrade
1004311322	Canfor	10-023-02	0	1674	1,674	18-Jul-2019	Summer	Blue Grave Creek	Subgrade
1004311325	Canfor	10-023-05	0	456	456	18-Jul-2019	Summer	Blue Grave Creek	Subgrade
1004311326	Canfor	10-023-06	0	380	380	18-Jul-2019	Summer	Blue Grave Creek	Subgrade



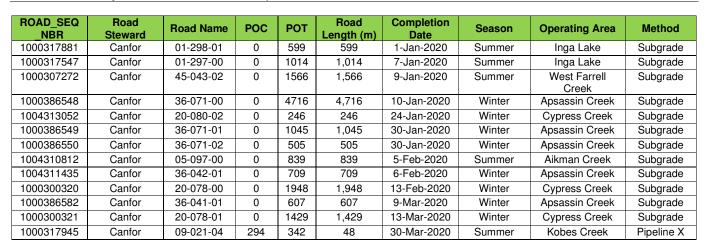
ROAD_SEQ	Road	Road Name	POC	РОТ	Road	Completion	Season	Operating Area	Method
NBR	Steward		1000	0000	Length (m)	Date		• •	
320011926	Louisiana- Pacific	10-023-00	1600	3363	1,763	18-Jul-2019	Summer	Blue Grave Creek	Upgrading
1000317361	Canfor	01-315-00	0	565	565	22-Aug-2019	Summer	Inga Lake	Subgrade
1000317362	Canfor	01-315-01	0	1057	1.057	22-Aug-2019	Summer	Inga Lake	Subgrade
1000317362	Canfor	01-315-01	0	322	322	22-Aug-2019 22-Aug-2019	Summer	Inga Lake	Subgrade
1000317364	Canfor	01-315-02	0	527	527	22-Aug-2019	Summer	Inga Lake	Subgrade
1000317384	Canfor	01-315-05	0	74	74	22-Aug-2019 22-Aug-2019	Summer	Inga Lake	Subgrade
	Canfor		-	472	472	0	Winter	0	0
1000386005		14-021-00	0			24-Aug-2019		South Fontas	Subgrade
1000386006	Canfor	14-021-01	0	1208	1,208	24-Aug-2019	Winter	South Fontas	Subgrade
1000386007	Canfor	14-021-02	0	383	383	24-Aug-2019	Winter	South Fontas	Subgrade
1000386008	Canfor	14-021-03	0	810	810	24-Aug-2019	Winter	South Fontas	Subgrade
1000386009	Canfor	14-021-04	0	830	830	24-Aug-2019	Winter	South Fontas	Subgrade
1004311182	Canfor	14-022-01	0	449	449	24-Aug-2019	Winter	South Fontas	Subgrade
1004311183	Canfor	14-022-02	0	355	355	24-Aug-2019	Winter	South Fontas	Subgrade
1000316533	Canfor	45-090-01	1841	2186	345	24-Aug-2019	Winter	West Farrell	Subgrade
								Creek	
1000316535	Canfor	45-090-03	0	853	853	24-Aug-2019	Summer	West Farrell	Subgrade
1001011001	0	10,000,01	0	0.1.1	0.1.1	00 0 0010	0	Creek	O la sus da
1004311321	Canfor	10-023-01	0	844	844	29-Aug-2019	Summer	Blue Grave Creek	Subgrade
1004311323	Canfor	10-023-03	0	736	736	29-Aug-2019	Summer	Blue Grave	Subgrade
	ouno		Ũ			10 / Mg 10 / 0	Cumie	Creek	easg.aac
1004311324	Canfor	10-023-04	0	929	929	29-Aug-2019	Summer	Blue Grave	Subgrade
						-		Creek	-
1000285151	Canfor	04-097-04	575	1569	994	4-Sep-2019	Summer	Wonowon	Subgrade
1000285152	Canfor	04-097-05	536	1320	784	4-Sep-2019	Summer	Wonowon	Subgrade
1000285154	Canfor	04-097-07	0	1024	1,024	4-Sep-2019	Summer	Wonowon	Subgrade
1000285155	Canfor	04-097-08	0	1477	1,477	4-Sep-2019	Summer	Wonowon	Subgrade
1004310605	Canfor	04-097-09	0	1383	1,383	4-Sep-2019	Summer	Wonowon	Subgrade
1004311207	Canfor	14-024-00	0	2614	2,614	4-Sep-2019	Winter	South Fontas	Subgrade
1004311211	Canfor	14-024-01	0	2986	2,986	4-Sep-2019	Winter	South Fontas	Subgrade
1004311212	Canfor	14-024-02	0	1362	1,362	4-Sep-2019	Winter	South Fontas	Subgrade



ROAD_SEQ	Road	Road Name	POC	РОТ	Road	Completion	Season	Operating Area	Method
_NBR	Steward	Road Name	FUC	POI	Length (m)	Date	Season	Operating Area	Method
1000286000	Louisiana- Pacific	04-097-01	800	1312	512	4-Sep-2019	Summer	Wonowon	Subgrade
1000285153	Louisiana- Pacific	04-097-06	0	1470	1,470	4-Sep-2019	Summer	Wonowon	Subgrade
1000285156	Louisiana- Pacific	04-097-10	0	1301	1,301	4-Sep-2019	Summer	Wonowon	Subgrade
1000300278	Canfor	20-080-00	0	1050	1,050	16-Sep-2019	Winter	Cypress Creek	Subgrade
1000315779	Canfor	45-093-02	0	376	376	18-Sep-2019	Summer	West Farrell Creek	Subgrade
1000315780	Canfor	45-093-03	0	656	656	18-Sep-2019	Summer	West Farrell Creek	Subgrade
1000317364	Canfor	01-315-03	0	527	527	19-Sep-2019	Summer	Inga Lake	Subgrade
1000315778	Canfor	45-093-01	0	3082	3,082	27-Sep-2019	Summer	West Farrell Creek	Subgrade
1000292287	Canfor	04-092-01	0	172	172	4-Oct-2019	Summer	Wonowon	Subgrade
1000292288	Canfor	04-092-02	0	352	352	4-Oct-2019	Summer	Wonowon	Subgrade
1000316432	Canfor	05-135-00	0	1021	1,021	8-Oct-2019	Summer	Aikman Creek	Subgrade
1004317356	Canfor	10-023-08	0	466	466	8-Oct-2019	Summer	Blue Grave Creek	Subgrade
320017466	Canfor	02-086-00	0	2222	2,222	15-Oct-2019	Summer	South Blueberry	Subgrade
1000301506	Canfor	06-024-09	0	1147	1,147	15-Oct-2019	Summer	Blair Creek	Subgrade
1000315781	Canfor	45-093-04	0	555	555	17-Oct-2019	Summer	West Farrell Creek	Subgrade
1000385941	Canfor	09-145-00	0	1178	1,178	23-Oct-2019	Summer	Kobes Creek	Subgrade
1000385942	Canfor	09-145-01	0	1230	1,230	23-Oct-2019	Summer	Kobes Creek	Subgrade
1000315782	Canfor	45-093-05	0	336	336	24-Oct-2019	Summer	West Farrell Creek	Subgrade
1000307282	Canfor	45-043-12	0	466	466	4-Nov-2019	Summer	West Farrell Creek	Subgrade
1000307273	Louisiana- Pacific	45-043-01	0	678	678	4-Nov-2019	Summer	West Farrell Creek	Subgrade
1000307281	Louisiana- Pacific	45-043-11	0	354	354	4-Nov-2019	Summer	West Farrell Creek	Subgrade
1000311425	Louisiana- Pacific	45-043-15	0	448	448	4-Nov-2019	Summer	West Farell Creek	Subgrade

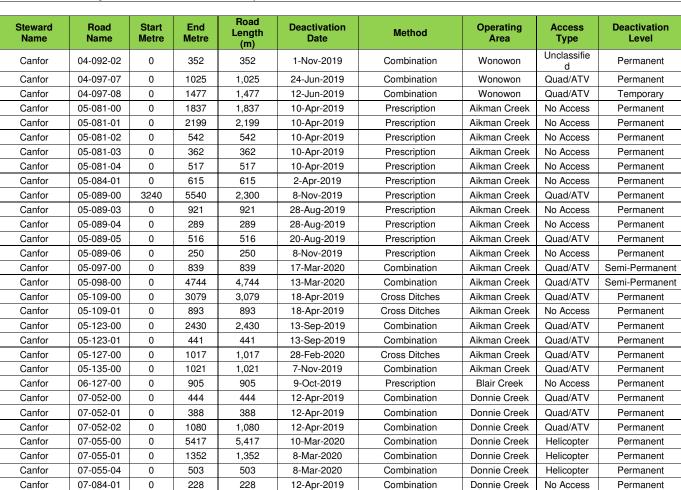


ROAD_SEQ	Road	Road Name	POC	РОТ	Road	Completion	Season	Operating Area	Method
NBR	Steward				Length (m)	Date		• •	
1000307610	Louisiana- Pacific	45-043-21	0	765	765	4-Nov-2019	Summer	West Farrell Creek	Subgrade
1000307611	Louisiana- Pacific	45-043-17	0	528	528	6-Nov-2019	Summer	West Farrell Creek	Subgrade
1000317404	Canfor	05-081-01	0	2199	2,199	15-Nov-2019	Summer	Aikman Creek	Subgrade
1000314717	Canfor	01-351-00	0	147	147	18-Nov-2019	Summer	Inga Lake	Subgrade
1000386260	Canfor	10-045-00	0	922	922	21-Nov-2019	Summer	Blue Grave Creek	Subgrade
1000314624	Canfor	01-343-00	0	526	526	22-Nov-2019	Winter	Inga Lake	Subgrade
1000314625	Canfor	01-343-01	0	381	381	22-Nov-2019	Summer	Inga Lake	Subgrade
1004313866	Canfor	09-158-00	0	1138	1,138	24-Nov-2019	Summer	Kobes Creek	Subgrade
1004315581	Canfor	09-159-00	0	793	793	24-Nov-2019	Summer	Kobes Creek	Subgrade
1000317094	Canfor	01-345-00	0	432	432	25-Nov-2019	Summer	Inga Lake	Subgrade
1000319964	Canfor	01-345-01	0	243	243	25-Nov-2019	Summer	Inga Lake	Subgrade
1000315459	Canfor	01-293-00	0	2261	2,261	29-Nov-2019	Summer	Inga Lake	Subgrade
1000313256	Canfor	01-317-00	0	100	100	3-Dec-2019	Summer	Inga Lake	Subgrade
1000313257	Canfor	01-317-01	0	99	99	4-Dec-2019	Summer	Inga Lake	Subgrade
1000385953	Canfor	09-146-00	0	347	347	6-Dec-2019	Summer	Kobes Creek	Subgrade
1000385954	Canfor	09-146-01	0	388	388	6-Dec-2019	Summer	Kobes Creek	Subgrade
1000319654	Canfor	01-338-00	0	618	618	9-Dec-2019	Summer	Inga Lake	Subgrade
1000385339	Canfor	24-047-00	0	1217	1,217	9-Dec-2019	Summer	Jedney Creek	Subgrade
1000385340	Canfor	24-047-01	0	391	391	9-Dec-2019	Summer	Jedney Creek	Subgrade
1004313051	Canfor	20-080-01	0	296	296	12-Dec-2019	Winter	Cypress Creek	Subgrade
1000317110	Canfor	01-329-01	0	1401	1,401	15-Dec-2019	Summer	Inga Lake	Subgrade
1000317111	Canfor	01-329-02	0	1236	1,236	15-Dec-2019	Summer	Inga Lake	Subgrade
1000317112	Canfor	01-329-03	0	844	844	15-Dec-2019	Summer	Inga Lake	Subgrade
1000293052	Canfor	24-267-00	0	1645	1,645	15-Dec-2019	Summer	Jedney Creek	Subgrade
1000293053	Canfor	24-267-01	0	248	248	15-Dec-2019	Summer	Jedney Creek	Subgrade
1000319447	Canfor	S24-061-01	0	466	466	15-Dec-2019	Summer	Jedney Creek	Subgrade
1000319292	Canfor	01-299-00	0	1012	1,012	17-Dec-2019	Summer	Inga Lake	Subgrade
1000319293	Canfor	01-299-01	0	484	484	18-Dec-2019	Summer	Inga Lake	Subgrade
1000317880	Canfor	01-298-00	0	1363	1,363	20-Dec-2019	Summer	Inga Lake	Subgrade



Steward Name	Road Name	Start Metre	End Metre	Road Length (m)	Deactivation Date	Method	Operating Area	Access Type	Deactivation Level
Canfor	01-188-00	0	2762	2,762	22-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-188-01	0	604	604	22-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-238-01	0	1133	1,133	21-Aug-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-238-02	0	1404	1,404	21-Aug-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-245-01	0	444	444	19-Aug-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-293-00	0	2261	2,261	14-Mar-2020	Combination	Inga Lake	Quad/ATV	Permanent
Canfor	01-300-00	0	1521	1,521	20-Oct-2019	Combination	Inga Lake	Quad/ATV	Permanent
Canfor	01-300-01	0	356	356	18-Oct-2019	Combination	Inga Lake	Quad/ATV	Permanent
Canfor	01-300-02	0	205	205	20-Oct-2019	Combination	Inga Lake	Quad/ATV	Permanent
Canfor	01-305-00	0	1996	1,996	30-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-305-01	0	543	543	28-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-305-02	0	1091	1,091	29-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-305-03	0	718	718	30-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-305-04	0	622	622	28-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-312-01	0	1190	1,190	16-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-312-02	0	695	695	16-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-312-03	0	867	867	16-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Canfor	01-329-01	0	1401	1,401	20-Mar-2020	Combination	Inga Lake	Quad/ATV	Permanent
Canfor	01-329-02	0	1236	1,236	20-Mar-2020	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor	01-329-03	0	844	844	20-Mar-2020	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor	01-329-04	0	559	559	20-Mar-2020	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor	01-338-00	0	618	618	20-Mar-2020	Cross Ditches	Inga Lake	Quad/ATV	Permanent
Canfor	02-177-00	0	1913	1,913	8-Nov-2019	Combination	South Blueberry	Quad/ATV	Semi-Permanent
Canfor	02-177-01	0	643	643	7-Nov-2019	Combination	South Blueberry	Quad/ATV	Semi-Permanent
Canfor	02-177-02	0	469	469	8-Nov-2019	Combination	South Blueberry	Quad/ATV	Semi-Permanent
Canfor	02-177-03	0	398	398	8-Nov-2019	Combination	South Blueberry	Quad/ATV	Semi-Permanent
Canfor	04-092-01	0	172	172	31-Oct-2019	Combination	Wonowon	No Access	Permanent

# Table 40: Licensee Deactivation Activities for April 1st, 2019-March 31st, 2020





Canfor

14-024-01

0

2986

2,986



13-Feb-2020

Combination

Semi-Permanent

Quad/ATV

South Fontas



Steward Name	Road Name	Start Metre	End Metre	Road Length (m)	Deactivation Date	Method	Operating Area	Access Type	Deactivation Level
Canfor	14-024-02	0	1362	1,362	12-Feb-2020	Combination	South Fontas	Quad/ATV	Semi-Permanent
Canfor	20-080-00	0	2021	2,021	30-Mar-2020	Combination	Cypress Creek	Quad/ATV	Semi-Permanent
Canfor	20-080-01	0	296	296	27-Mar-2020	Combination	Cypress Creek	Quad/ATV	Semi-Permanent
Canfor	20-080-02	0	246	246	27-Mar-2020	Combination	Cypress Creek	Quad/ATV	Semi-Permanent
Canfor	24-047-00	0	1217	1,217	28-Jan-2020	Cross Ditches	Jedney Creek	Quad/ATV	Permanent
Canfor	24-267-00	0	1645	1,645	12-Feb-2020	Cross Ditches	Jedney Creek	Quad/ATV	Permanent
Canfor	24-267-01	0	248	248	12-Feb-2020	Cross Ditches	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-00	0	1451	1,451	23-May-2019	Combination	Jedney Creek	Quad/ATV	Semi-Permanent
Canfor	24-303-01	0	389	389	15-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-02	0	179	179	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-03	0	626	626	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-04	0	647	647	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-05	0	507	507	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-06	0	221	221	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-07	0	2258	2,258	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-08	0	247	247	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-09	0	264	264	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-10	0	165	165	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-303-11	0	690	690	30-Apr-2019	Combination	Jedney Creek	Quad/ATV	Permanent
Canfor	24-311-00	0	1369	1,369	15-Apr-2019	Cross Ditches	Jedney Creek	Quad/ATV	Permanent
Canfor	24-317-00	0	4679	4,679	30-Oct-2019	Combination	Jedney Creek	Quad/ATV	Semi-Permanent
Canfor	24-317-01	0	500	500	29-Oct-2019	Combination	Jedney Creek	Quad/ATV	Semi-Permanent
Canfor	24-317-03	0	334	334	29-Oct-2019	Combination	Jedney Creek	Quad/ATV	Semi-Permanent
Canfor	24-317-04	0	376	376	30-Oct-2019	Combination	Jedney Creek	Quad/ATV	Semi-Permanent
Canfor	36-042-00	0	1030	1,030	13-Mar-2020	Cross Ditches	Apsassin Creek	Quad/ATV	Semi-Permanent
Canfor	36-042-01	0	709	709	6-Mar-2020	Cross Ditches	Apsassin Creek	Quad/ATV	Semi-Permanent
Canfor	36-071-00	0	4716	4,716	28-Feb-2020	Cross Ditches	Apsassin Creek	Quad/ATV	Semi-Permanent



Steward Name	Road Name	Start Metre	End Metre	Road Length (m)	Deactivation Date	Method	Operating Area	Access Type	Deactivation Level
Canfor	36-071-02	0	505	505	6-Mar-2020	Combination	Apsassin Creek	Walk/Trail	Permanent
Canfor	S24-061- 01	0	466	466	13-Feb-2020	Cross Ditches	Jedney Creek	Quad/ATV	Temporary
Louisiana- Pacific	01-187-00	0	1574	1,574	22-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Louisiana- Pacific	01-187-01	0	352	352	22-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Louisiana- Pacific	01-187-02	0	147	147	22-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Louisiana- Pacific	01-192-02	0	271	271	4-Sep-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent
Louisiana- Pacific	04-097-01	830	1312	482	3-Jul-2019	Combination	Wonowon	No Access	Permanent
Louisiana- Pacific	04-097-06	0	1470	1,470	7-Jun-2019	Combination	Wonowon	Quad/ATV	Permanent
Louisiana- Pacific	04-097-10	0	1301	1,301	12-Jun-2019	Combination	Wonowon	Quad/ATV	Permanent
Louisiana- Pacific	05-103-00	0	630	630	18-Apr-2019	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
Louisiana- Pacific	05-103-01	0	219	219	18-Apr-2019	Prescription	Aikman Creek	No Access	Permanent
Louisiana- Pacific	06-044-00	0	5400	5,400	18-Sep-2019	Cross Ditches	Blair Creek	Quad/ATV	Permanent
Louisiana- Pacific	06-044-01	0	939	939	18-Sep-2019	Cross Ditches	Blair Creek	Quad/ATV	Permanent
Louisiana- Pacific	10-023-00	1600	2191	591	25-Sep-2019	Cross Ditches	Blue Grave Creek	Quad/ATV	Permanent
Louisiana- Pacific	24-325-00	3975	13685	9,710	28-Oct-2019	Cross Ditches	Jedney Creek	Quad/ATV	Semi-Permanent
Louisiana- Pacific	S01-009- 00	3754	6392	2,638	22-Oct-2019	Cross Ditches	Inga Lake	Quad/ATV	Semi-Permanent

\* ATV - All-terrain vehicle



Road Name	Structure Location (m)	Installation Date	Structure Type
01-293-00	10	11/29/2019	Pipeline Xing - Single
05-135-00	70	9/15/2019	Pipeline Crossing
142 Road	307	12/17/2019	Bridge
142 Road	2689	12/21/2019	Bridge
142 Road	5330	12/29/2019	Bridge
142 Road	9241	12/27/2019	Snow Fill
24-047-00	575	12/1/2019	Pipeline Xing - Multiple

## Table 41: Licensee Access Structure Activities for April 1st, 2019-March 31st, 2020

# Table 42: Annual Report on Roads Constructed in the Fort St. John BCTS field office area for April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020

Steward Name	Road Name	Start (m)	End (m)	Length (m)	Completion Date	Season	Operating Area	Method
BCTS	A80057-20090-A	0	263	263	2020-02-01	Winter	Cypress Creek	Reactivate
BCTS	A94058-20091-01	0	402	402	2020/02/05	Winter	Cypress Creek	New Road
BCTS	A94069-04232-01	0	774	774	2019/09/02	Fall	Wonowon	New Road
BCTS	A94069-04232-02	0	479	479	2019/09/02	Fall	Wonowon	New Road
BCTS	A94069-04232-03	0	207	207	2019/09/02	Fall	Wonowon	New Road
BCTS	A94069-04232-04	0	199	199	2019/09/02	Fall	Wonowon	New Road
BCTS	A94069-04232-A	0	458	458	2019/09/02	Fall	Wonowon	New Road
BCTS	A94069-04232-A	458	1722	1274	2019/09/02	Fall	Wonowon	New Road
BCTS	A94073-23041-01	0	439	439	2020/01/20	Winter	Cameron River	New Road
BCTS	A94073-23041-A	0	1362	1362	2020/01/20	Winter	Cameron River	New Road
BCTS	A94092-23048-01	0	768	768	2020/01/20	Winter	Cameron River	New Road
BCTS	A94092-23048-02	0	2800	2800	2020/01/21	Winter	Cameron River	New Road
BCTS	A94092-23048-03	0	536	536	2020/01/21	Winter	Cameron River	New Road
BCTS	A94092-23048-A	270	592	322	2020/01/20	Winter	Cameron River	New Road
BCTS	A95185-19071-01	0	1379	1379	2020/01/02	Winter	Laprise Creek	New Road
BCTS	A95185-19071-02	0	425	425	2020/01/02	Winter	Laprise Creek	New Road
BCTS	A95185-19071-03	0	919	919	2020/01/02	Winter	Laprise Creek	New Road
BCTS	A95185-19071-03	919	1299	380	2020/01/02	Winter	Laprise Creek	New Road
BCTS	A95185-19071-04	0	393	393	2020/01/02	Winter	Laprise Creek	New Road
BCTS	A95219-10067-B	0	459	459	2020/01/10	Winter	Blue Grave Creek	New Road
BCTS	A95219-10068-03	0	709	709	2019/12/22	Winter	Blue Grave Creek	New Road
BCTS	A95219-10068-05	0	134	134	2020/01/02	Winter	Blue Grave Creek	New Road
BCTS	A95219-10068-06	0	1269	1269	2020/01/06	Winter	Blue Grave Creek	New Road
BCTS	A95219-10068-07	0	594	594	2020/01/03	Winter	Blue Grave Creek	New Road
BCTS	A95219-10068-A	400	1354	954	2019/12/17	Winter	Blue Grave Creek	New Road
BCTS	A95219-10068-B	0	713	713	2019/12/18	Winter	Blue Grave Creek	New Road
BCTS	A95219-10068-B	713	950	237	2019/12/20	Winter	Blue Grave Creek	New Road
BCTS	A95762-09107-01	0	356	356	2020/02/22	Winter	Kobes Creek	New Road
BCTS	A95762-09107-A	0	1366	1366	2020/02/22	Winter	Kobes Creek	New Road
BCTS	Blue Range et al BEG C-62- H	0	484	484	2020/02/04	Winter	Blair Creek	Reactivate
BCTS	Sundance et al Blueberry	0	1714	1714	2020/02/04	Winter	Blair Creek	Reactivate
BCTS	TA0108-05066-A	0	2307	2307	2020/03/20	Winter	Aikman Creek	New Road
BCTS	TA0108-05067-01	0	957	957	2020/03/02	Winter	Aikman Creek	New Road
BCTS	TA0109-05092-A	3095	3915	820	2020/01/01	Winter	Aikman Creek	New Road

Steward Name	Road Name	Start (m)	End (m)	Length (m)	Completion Date	Season	Operating Area	Method
BCTS	TA0110-09079-01	0	368	368	2019/10/11	Fall	Kobes Creek	New Road
BCTS	TA0110-09079-02	0	481	481	2019/10/10	Fall	Kobes Creek	New Road
BCTS	TA0110-09079-A	0	682	682	2019/10/11	Fall	Kobes Creek	New Road
BCTS	TA0113-10057-05	0	945	945	2019/04/20	Spring	Blue Grave Creek	New Road
BCTS	TA0113-10065-A	0	299	299	2019/09/01	Fall	Blue Grave Creek	New Road
BCTS	TA0113-10065-B	0	147	147	2019/09/01	Fall	Blue Grave Creek	New Road
BCTS	TA0113-10065-B	147	856	709	2019/09/01	Fall	Blue Grave Creek	New Road
BCTS	TA0115-45012-05	0	1734	1734	2019/10/04	Fall	West Farrell Creek	New Road
BCTS	TA0115-45012-A	0	1840	1840	2019/10/04	Fall	West Farrell Creek	New Road
BCTS	TA0115-45041-01	0	1850	1850	2019/10/10	Fall	West Farrell Creek	New Road
BCTS	TA0115-45041-02	0	236	236	2019/10/10	Fall	West Farrell Creek	New Road
BCTS	TA0124-21039-01	0	369	369	2019/07/15	Summer	Trutch Creek	New Road
BCTS	TA0124-21039-A	0	3148	3148	2019/07/18	Summer	Trutch Creek	New Road
BCTS	TA0124-21039-B	0	1150	1150	2019/07/17	Summer	Trutch Creek	New Road
BCTS	TA0124-21039-B	1150	2318	1168	2019/07/17	Summer	Trutch Creek	New Road
BCTS	TA1181-24216-A	0	309	309	2020/03/25	Winter	Jedney Creek	New Road
BCTS	TA1181-24216-A	309	1050	741	2020/03/25	Winter	Jedney Creek	New Road
BCTS	TA1181-24222-01	0	853	853	2020/03/25	Winter	Jedney Creek	New Road
BCTS	TA1181-24222-02	0	438	438	2020/03/31	Winter	Jedney Creek	New Road
BCTS	TA1181-24222-A	0	1140	1140	2020/03/25	Winter	Jedney Creek	New Road
BCTS	TA1181-24230-A	0	480	480	2020/03/31	Winter	Jedney Creek	New Road
BCTS	TA1181-24230-A	480	1376	896	2020/03/31	Winter	Jedney Creek	New Road
BCTS	TA1199-06061-A	0	628	628	2020/02/04	Winter	Blair Creek	New Road
BCTS	TA1199-06061-B	0	1136	1136	2020/02/04	Winter	Blair Creek	New Road
BCTS	TA1274-06055-01	0	482	482	2020/03/03	Winter	Blair Creek	New Road
BCTS	TA1274-06055-02	0	677	677	2020/03/03	Winter	Blair Creek	New Road
BCTS	TA1274-06055-03	0	422	422	2020/03/03	Winter	Blair Creek	New Road
BCTS	TA1274-06055-A	0	2323	2323	2020/03/13	Winter	Blair Creek	New Road

# Table 43: Annual Report on Roads Deactivated in the Fort St John BCTS field office area for April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020

Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type*	Level
BCTS	205-500	0	1190	1190	2019/04/09	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-01	0	100	100	2020/02/14	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-02	0	2524	2524	2020/02/25	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-03	0	405	405	2020/02/21	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-04	0	227	227	2020/02/14	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-A	0	1510	1510	2020/02/20	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-B	0	283	283	2020/02/21	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-C	0	421	421	2020/02/14	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-D	0	116	116	2020/02/14	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-E	0	136	136	2020/02/14	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-F	0	322	322	2020/02/21	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-G	0	067	067	2020/02/14	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A76796-45001-H	0	717	717	2020/02/28	Cross Ditches	West Farrell	Quad/ATV	Permanent
BCTS	A80057-20089-01	0	770	770	2019/04/10	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	A80057-20089-02	0	438	438	2019/07/10	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	A80057-20090-A	0	263	263	2020/03/16	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	A80057-20090-A	0	857	857	2019/04/08	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	A80058-20067-08	0	2511	2511	2020/01/22	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	A94058-20091-01	0	402	402	2020/03/02	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	A94063-05054-A	0	1393	1393	2019/04/12	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
BCTS	A94063-05087-01	0	525	525	2019/04/10	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
BCTS	A94063-05087-02	0	341	341	2019/04/10	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
BCTS	A94063-05087-03	0	336	336	2019/04/10	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
BCTS	A94063-05087-04	0	220	220	2019/04/10	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
BCTS	A94069-04232-01	0	774	774	2019/10/11	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A94069-04232-02	0	479	479	2019/10/11	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A94069-04232-03	0	207	207	2019/10/11	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A94069-04232-04	0	199	199	2019/10/11	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A94069-04232-A	0	458	458	2019/10/11	Cross Ditches	Wonowon	Quad/ATV	Permanent
BCTS	A94069-04232-A	458	1722	1264	2019/10/11	Cross Ditches	Wonowon	Quad/ATV	Permanent



Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type*	Level
BCTS	A94073-23041-01	0	439	439	2020/02/29	Pullback	Cameron River	Walk/Trail	Permanent
BCTS	A94073-23041-A	0	1362	1362	2020/02/29	Pullback	Cameron River	Walk/Trail	Permanent
BCTS	A94092-23048-01	0	768	768	2020/02/29	Cross Ditches	Cameron River	Quad/ATV	Permanent
BCTS	A94092-23048-02	0	2800	2800	2020/02/29	Cross Ditches	Cameron River	Quad/ATV	Permanent
BCTS	A94092-23048-03	0	536	536	2020/02/29	Cross Ditches	Cameron River	Quad/ATV	Permanent
BCTS	A95044-19021-A	0	489	489	2019/05/01	Cross Ditches	Laprise Creek	Quad/ATV	Permanent
BCTS	A95044-19022-02	0	526	526	2019/05/01	Cross Ditches	Laprise Creek	Quad/ATV	Permanent
BCTS	A95044-19022-A	0	1020	1020	2019/05/01	Cross Ditches	Laprise Creek	Quad/ATV	Permanent
BCTS	A95185-19071-01	0	200	200	2020/02/07	Pullback	Laprise Creek	Walk/Trail	Permanent
BCTS	A95185-19071-01	200	1379	1179	2020/02/07	Cross Ditches	Laprise Creek	Quad/ATV	Permanent
BCTS	A95185-19071-02	0	425	425	2020/02/07	Cross Ditches	Laprise Creek	Quad/ATV	Permanent
BCTS	A95185-19071-03	0	200	200	2020/02/07	Pullback	Laprise Creek	Walk/Trail	Permanent
BCTS	A95185-19071-03	200	1299	1099	2020/02/07	Cross Ditches	Laprise Creek	Quad/ATV	Permanent
BCTS	A95185-19071-04	0	393	393	2020/02/07	Cross Ditches	Laprise Creek	Quad/ATV	Permanent
BCTS	A95219-10068-A	0	1754	1754	2020/02/05	Cross Ditches	Blue Grave Creek	Quad/ATV	Permanent
BCTS	A95219-10068-B	0	950	950	2020/03/30	Cross Ditches	Blue Grave Creek	Quad/ATV	Permanent
BCTS	A95220-45072 Lease Rd	0	366	366	2019/12/17	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95220-45072-01	0	439	439	2019/12/17	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95220-45072-A	0	2880	2880	2019/12/17	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95220-45072-B	0	316	316	2019/12/17	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95220-45074-01	0	653	653	2019/12/11	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95220-45074-A	0	2930	2930	2019/12/11	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95220-45074-C	0	394	394	2019/12/11	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95220-45078-A	0	715	715	2019/12/11	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent



Steward	Road Name	Start Chainage (m)	End Chainage (m)	Length (m)	Deactivation Date	Method	Operating Area	Access Type*	Level
BCTS	A95220-45078-B	0	178	178	2019/12/16	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95220-45079-A	0	1667	1667	2019/12/11	Cross Ditches	West Farrell Creek	Quad/ATV	Permanent
BCTS	A95762-09124-01	0	298	298	2019/04/09	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
BCTS	A95762-09124-02	0	215	215	2019/04/09	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
BCTS	A95762-09124-03	0	108	108	2019/04/09	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
BCTS	Blue Range et al BEG C-62-H	0	484	484	2020/03/11	Maintenance	Blair Creek	4 Wheel Drive	Maintained Active
BCTS	Built Access to A95220-45079	0	2684	2684	2019/12/11	Maintenance	Kobes Creek	4 Wheel Drive	Maintained Active
BCTS	FSR10962- 01_SPRUCEMTNE 01	0	10045	10045	2020/03/23	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	Sundance et al Blueberry	555	1382	827	2020/03/11	Maintenance	Blair Creek	4 Wheel Drive	Maintained Active
BCTS	Sundance et al Blueberry	1382	1714	332	2020/03/11	Cross Ditches	Blair Creek	Quad/ATV	Permanent
BCTS	TA0109-05092-A	3095	3915	3915	2020/02/02	Cross Ditches	Aikman Creek	Quad/ATV	Permanent
BCTS	TA0110-09079-01	0	368	368	2019/12/18	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
BCTS	TA0110-09079-02	0	481	481	2019/12/27	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
BCTS	TA0110-09079-A	0	682	682	2020/01/10	Cross Ditches	Kobes Creek	Quad/ATV	Permanent
BCTS	TA0113-10065-A	0	299	299	2020/02/15	Cross Ditches	Blue Grave Creek	Quad/ATV	Permanent
BCTS	TA0124-21039-01	0	369	369	2019/10/01	Cross Ditches	Trutch Creek	Quad/ATV	Permanent
BCTS	TA0124-21039-A	0	3148	3148	2019/10/10	Cross Ditches	Trutch Creek	Quad/ATV	Permanent
BCTS	TA0124-21039-B	0	2318	2318	2019/10/04	Cross Ditches	Trutch Creek	Quad/ATV	Permanent
BCTS	TA0442-20071-A	0	3395	3395	2020/01/22	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	TA0442-20113-05	0	1195	1195	2019/04/09	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	TA0442-20113-07	0	1074	1074	2020/01/23	Cross Ditches	Cypress Creek	Quad/ATV	Permanent
BCTS	TA1199-06061-A	0	628	628	2020/03/14	Cross Ditches	Blair Creek	Quad/ATV	Permanent
BCTS	TA1199-06061-B	0	1136	1136	2020/03/11	Cross Ditches	Blair Creek	Quad/ATV	Permanent



Appendix 4: Reforestation



Harvest Date	Opening	License	Permit Bl	lock ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1*	Sp 1 %	Sp. 2*	Sp 2 %
06-Jan-16	94A 022 010	A85688	4	4046	Decid Stocking - FSJ	12-Aug-19	A	133.7	I	At	90	Ac	10
04-Feb-13	94A 071 051	A89117	0	04121	Planting(Walkthrough)	02-Aug-19	A	2.2	I	Sx	60	Ac	40
21-Nov-14	94A 054 097	A90800	0	01280	Planting(Walkthrough)	20-Jul-19	С	7.5	I	At	50	Sx	50
21-Nov-14	94A 054 097	A90800	0	01280	Planting(Walkthrough)	20-Jul-19	A	3.1	I	At	70	Sx	30
21-Nov-14	94A 054 097	A90800	0	01280	Planting(Walkthrough)	20-Jul-19	D2	1.8	I	At	70	Sx	30
21-Nov-14	94A 054 097	A90800	0	01280	Planting(Walkthrough)	20-Jul-19	D1	6.4	Ι	At	80	Pli	20
21-Nov-14	94A 054 097	A90800	0	01280	Planting(Walkthrough)	20-Jul-19	В	29.1	Ι	At	60	Sx	40
01-Nov-14	94A 054 096	A90800	0	01202	Planting(Walkthrough)	02-Aug-19	В	15.1	Ι	At	80	Sx	20
01-Nov-14	94A 054 096	A90800	0	01202	Planting(Walkthrough)	02-Aug-19	A2	3.1	Ι	At	70	Sx	30
01-Nov-14	94A 054 096	A90800	0	01202	Planting(Walkthrough)	02-Aug-19	A1	4.2	Ι	At	100		
01-Nov-14	94A 054 096	A90800	0	01202	Planting(Walkthrough)	02-Aug-19	С	4.4	I	At	80	Sx	20
11-Mar-14	94H 012 023	A90904	1	8063	Planting(Walkthrough)	18-Jun-19	1	44.5	Ι	At	70	Sx	30
11-Mar-14	94H 012 023	A90904	1	8063	Planting(Walkthrough)	18-Jun-19	3	10.2	I	At	70	Sx	30
23-Feb-16	94A 022 007	A92231	4	4057	Decid Stocking - FSJ	13-Aug-19	A	54.9	Ι	At	90	Ac	10
10-Feb-16	94A 022 006	A92237	4	4061	Decid Stocking - FSJ	16-Aug-19	A	62.5	Ι	At	90	Ac	10

Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1*	Sp 1 %	Sp. 2*	Sp 2 %
10-Feb-16	94A 022 006	A92237		44061	Decid Stocking - FSJ	16-Aug-19	В	44.3	I	At	80	Ac	20
15-Dec-16	9G 020 022	A92976		24205	Decid Stocking - FSJ	21-Aug-19	В	51.0	I	At	100		
15-Dec-16	9G 020 022	A92976		24205	2-Year Post Plant (C) - FSJ	21-Aug-19	С	14.4	Ι	At	50	Pli	50
15-Dec-16	9G 020 022	A92976		24205	2-Year Post Plant (C) - FSJ	21-Aug-19	A	79.7	Ι	At	80	Pli	20
23-Jan-18	94B 030 115	A92985		45042	Planting(Walkthrough)	26-Jul-19	A2	15.9	Ι	Ep	50	At	50
23-Jan-18	94B 030 115	A92985		45042	Planting(Walkthrough)	26-Jul-19	A1	50.2	Ι	At	50	Ep	50
23-Jan-18	94B 030 115	A92985		45042	Planting(Walkthrough)	26-Jul-19	A2	15.9	Ι	Ep	50	At	50
17-Oct-16	94B 030 113	A93052		45039	Planting(Walkthrough)	02-Aug-19	В	12.7	I	At	50	Sx	50
28-Aug-17	94B 030 114	A93055		45050	Planting(Walkthrough)	27-Jul-19	A	22.8	Ι	At	60	Sx	40
29-Sep-17	94A 021 046	A93384		45017	Planting(Walkthrough)	26-Jul-19	В	10.5	Ι	At	60	Sx	40
29-Sep-17	94A 021 046	A93384		45017	Planting(Walkthrough)	26-Jul-19	A	34.9	Ι	At	60	Sx	40
22-Jan-18	94G 017 007	A93438		37043	Planting(Walkthrough)	21-Jul-19	А	32.7	I	Sx	70	BI	30
06-Jan-17	94H 001 040	A94067		03125	Planting(Walkthrough)	06-Jun-19	1	65.2	I	At	50	Pli	50
23-Nov-16	94H 001 036	A94068		03118	Planting(Walkthrough)	19-Jun-19	1	37.6	Ι	At	70	Pli	30
23-Nov-16	94H 001 036	A94068		03118	Planting(Walkthrough)	19-Jun-19	2	41.2	Ι	At	50	Pli	50
03-Apr-18	94A 072 066	A94070		02277	Planting(Walkthrough)	20-Jun-19	В	18.3	I	Sx	90	At	10

Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1*	Sp 1 %	Sp. 2*	Sp 2 %
05-Nov-18	94H 021 054	A94080		24234	Planting(Walkthrough)	25-Jun-19	1	14.6	I	Sx	100		
19-Oct-18	94H 021 053	A94080		24058	Planting(Walkthrough)	01-Jul-19	1	36.0	I	Sx	60	Pli	40
19-Oct-18	94A 021 022	A94080		24271	Planting(Walkthrough)	22-Jul-19	Α	6.9	I	Sx	100		
27-Oct-17	94H 001 041	A94392		03123	Planting(Walkthrough)	04-Jun-19	1	12.0	I	At	60	Sx	40
27-Oct-17	94H 001 041	A94392		03123	Planting(Walkthrough)	04-Jun-19	2	101.2	I	Pli	50	At	50
23-Feb-17	94H 001 042	A94392		03111	Planting(Walkthrough)	19-Jun-19	А	62.7	I	At	80	Pli	20
23-Feb-17	94H 001 042	A94392		03111	Planting(Walkthrough)	19-Jun-19	В	84.9	I	Pli	50	At	50
27-Oct-17	94H 001 041	A94392		03123	Planting(Walkthrough)	04-Jun-19	1	12.0	I	At	60	Sx	40
27-Oct-17	94H 001 041	A94392		03123	Planting(Walkthrough)	04-Jun-19	2	101.2	I	Pli	50	At	50
12-Dec-17	94H 021 046	A94988		24298	Planting(Walkthrough)	02-Aug-19	А	37.5	I	At	50	Pli	50
12-Oct-18	94H 021 061	A95043		24067	Planting(Walkthrough)	02-Aug-19	А	77.4	I	At	50	Pli	50
30-Oct-18	94H 021 055	A95043		24362	Planting(Walkthrough)	30-Jun-19	A1	5.3	I	Sx	80	Pli	20
30-Oct-18	94H 021 055	A95043		24362	Planting(Walkthrough)	30-Jun-19	A2	15.0	I	Pli	90	Sx	10
05-Oct-18	94H 021 056	A95043		24064	Planting(Walkthrough)	27-Jun-19	А	48.9	I	Sx	60	Pli	40
12-Oct-18	94H 021 061	A95043		24067	Planting(Walkthrough)	02-Aug-19	А	77.4	I	At	50	Pli	50
05-Nov-18	94H 021 057	A95642		24063	Planting(Walkthrough)	02-Aug-19	A1	31.8	I	Sx	50	Ep	50



Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1*	Sp 1 %	Sp. 2*	Sp 2 %
05-Nov-18	94H 021 057	A95642		24063	Planting(Walkthrough)	02-Aug-19	A2	6.9836	I	Pli	90	At	10
20-Nov-18	94H 021 065	A95642		24287	Planting(Walkthrough)	02-Aug-19	A2	11.6586	I	Pli	50	Ep	40
20-Nov-18	94H 021 065	A95642		24287	Planting(Walkthrough)	02-Aug-19	A1	7.0243	I	Ер	80	Sx	20
20-Sep-18	94H 021 058	A95967		24272	Planting(Walkthrough)	30-Jun-19	1	23.8667	Ι	Sx	70	Pli	30

\* Abbreviations:

Pli – Lodgepole Pine interior

PI – Lodgepole Pine

Sx – Hybrid Spruce

Ac – Poplar

At – Trembling Aspen

Ep – Paper Birch



# Table 45: BCTS Establishment Delay Complete (Silviculture Label) 2019

Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1*	Sp 1 %	Sp. 2*	Sp 2 %
06-Jan-16	94A 022 010	A85688		44046	Decid Stocking - FSJ	12-Aug-19	А	133.7	S	At	92	AC	8
04-Feb-13	94A 071 051	A89117		04121	Planting(Walkthrough)	02-Aug-19	A	2.2	S	Sx	100		
21-Nov-14	94A 054 097	A90800		01280	Planting(Walkthrough)	20-Jul-19	С	7.5	S	Sx	100		
21-Nov-14	94A 054 097	A90800		01280	Planting(Walkthrough)	20-Jul-19	А	3.1	S	Sx	100		
21-Nov-14	94A 054 097	A90800		01280	Planting(Walkthrough)	20-Jul-19	D2	1.8	S	Sx	100		
21-Nov-14	94A 054 097	A90800		01280	Planting(Walkthrough)	20-Jul-19	D1	6.4	S	Sx	63	Pli	37
21-Nov-14	94A 054 097	A90800		01280	Planting(Walkthrough)	20-Jul-19	В	29.1	S	Sx	100		
01-Nov-14	94A 054 096	A90800		01202	Planting(Walkthrough)	02-Aug-19	В	15.1	S	Sx	100		
01-Nov-14	94A 054 096	A90800		01202	Planting(Walkthrough)	02-Aug-19	A2	3.1	S	Sx	100		
01-Nov-14	94A 054 096	A90800		01202	Planting(Walkthrough)	02-Aug-19	A1	4.2	S	At	100		
01-Nov-14	94A 054 096	A90800		01202	Planting(Walkthrough)	02-Aug-19	С	4.4	S	Sx	100		
11-Mar-14	94H 012 023	A90904		18063	Planting(Walkthrough)	18-Jun-19	1	44.5	S	Sx	99	Pli	1
11-Mar-14	94H 012 023	A90904		18063	Planting(Walkthrough)	18-Jun-19	3	10.2	S	Sx	99	Pli	1
23-Feb-16	94A 022 007	A92231		44057	Decid Stocking - FSJ	13-Aug-19	А	54.9	S	At	92	Ac	8
10-Feb-16	94A 022 006	A92237		44061	Decid Stocking - FSJ	16-Aug-19	A	62.5	S	At	92	Ac	8



Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1*	Sp 1 %	Sp. 2*	Sp 2 %
10-Feb-16	94A 022 006	A92237		44061	Decid Stocking - FSJ	16-Aug-19	В	44.3	S	At	100		
15-Dec-16	9G 020 022	A92976		24205	Decid Stocking - FSJ	21-Aug-19	В	51.0	S	At	100		
15-Dec-16	9G 020 022	A92976		24205	2-Year Post Plant (C) - FSJ	21-Aug-19	С	14.4	S	Pli	86	Sx	14
15-Dec-16	9G 020 022	A92976		24205	2-Year Post Plant (C) - FSJ	21-Aug-19	А	79.7	S	Sx	59	Pli	41
23-Jan-18	94B 030 115	A92985		45042	Planting(Walkthrough)	26-Jul-19	A2	15.9	S	Sx	100		
23-Jan-18	94B 030 115	A92985		45042	Planting(Walkthrough)	26-Jul-19	A1	50.2	S	Sx	79	Pli	21
23-Jan-18	94B 030 115	A92985		45042	Planting(Walkthrough)	26-Jul-19	A2	15.9	S	Sx	100		
17-Oct-16	94B 030 113	A93052		45039	Planting(Walkthrough)	02-Aug-19	В	12.7	S	Sx	100		
28-Aug-17	94B 030 114	A93055		45050	Planting(Walkthrough)	27-Jul-19	А	22.8	S	Sx	100		
29-Sep-17	94A 021 046	A93384		45017	Planting(Walkthrough)	26-Jul-19	В	10.5	S	Sx	100		
29-Sep-17	94A 021 046	A93384		45017	Planting(Walkthrough)	26-Jul-19	А	34.9	S	Sx	100		
22-Jan-18	94G 017 007	A93438		37043	Planting(Walkthrough)	21-Jul-19	А	32.7	S	Sx	100		
06-Jan-17	94H 001 040	A94067		03125	Planting(Walkthrough)	06-Jun-19	1	65.2	S	Pli	100		
23-Nov-16	94H 001 036	A94068		03118	Planting(Walkthrough)	19-Jun-19	1	37.6	S	Pli	51	Sx	49
23-Nov-16	94H 001 036	A94068		03118	Planting(Walkthrough)	19-Jun-19	2	41.2	S	Pli	100		
03-Apr-18	94A 072 066	A94070		02277	Planting(Walkthrough)	20-Jun-19	В	18.3	S	Sx	100		

Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1*	Sp 1 %	Sp. 2*	Sp 2 %
05-Nov-18	94H 021 054	A94080		24234	Planting(Walkthrough)	25-Jun-19	1	14.6	S	Sx	100		
19-Oct-18	94H 021 053	A94080		24058	Planting(Walkthrough)	01-Jul-19	1	36.0	S	Sx	68	Pli	32
19-Oct-18	94A 021 022	A94080		24271	Planting(Walkthrough)	22-Jul-19	A	6.9	S	Sx	100		
27-Oct-17	94H 001 041	A94392		03123	Planting(Walkthrough)	04-Jun-19	1	12.0	S	Sx	100		
27-Oct-17	94H 001 041	A94392		03123	Planting(Walkthrough)	04-Jun-19	2	101.2	S	Pli	100		
23-Feb-17	94H 001 042	A94392		03111	Planting(Walkthrough)	19-Jun-19	A	62.7	S	Pli	55	Sx	45
23-Feb-17	94H 001 042	A94392		03111	Planting(Walkthrough)	19-Jun-19	В	84.9	S	Pli	100		
27-Oct-17	94H 001 041	A94392		03123	Planting(Walkthrough)	04-Jun-19	1	12.0	S	Sx	100		
27-Oct-17	94H 001 041	A94392		03123	Planting(Walkthrough)	04-Jun-19	2	101.2	S	Pli	100		
12-Dec-17	94H 021 046	A94988		24298	Planting(Walkthrough)	02-Aug-19	A	37.5	S	Sx	55	Pli	45
12-Oct-18	94H 021 061	A95043		24067	Planting(Walkthrough)	02-Aug-19	A	77.4	S	Pli	50	Sx	50
30-Oct-18	94H 021 055	A95043		24362	Planting(Walkthrough)	30-Jun-19	A1	5.3	S	Sx	84	Pli	16
30-Oct-18	94H 021 055	A95043		24362	Planting(Walkthrough)	30-Jun-19	A2	15.0	S	Pli	100		
05-Oct-18	94H 021 056	A95043		24064	Planting(Walkthrough)	27-Jun-19	А	48.9	S	Sx	70	Pli	30
12-Oct-18	94H 021 061	A95043		24067	Planting(Walkthrough)	02-Aug-19	А	77.4	S	Pli	50	Sx	50
05-Nov-18	94H 021 057	A95642		24063	Planting(Walkthrough)	02-Aug-19	A1	31.8	S	Sx	100		

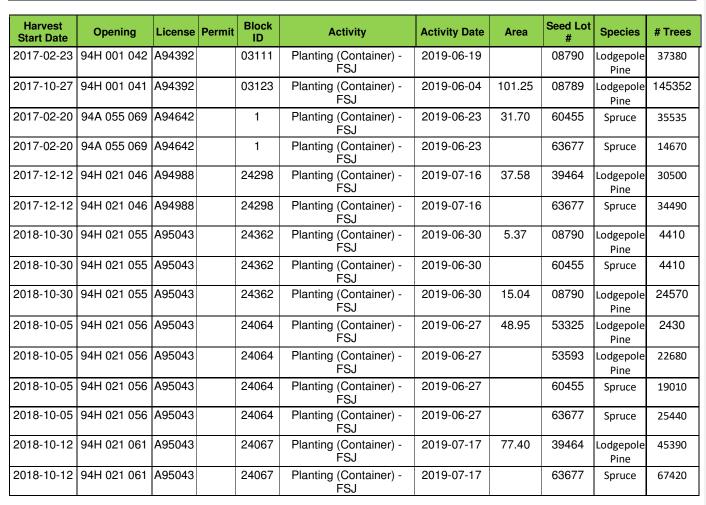
Harvest Date	Opening	License	Permit	Block ID	Activity	Regen Met Date	Stratum	Area	Layer	Sp. 1*	Sp 1 %	Sp. 2*	Sp 2 %
05-Nov-18	94H 021 057	A95642		24063	Planting(Walkthrough)	02-Aug-19	A2	6.9836	S	Pli	100		
20-Nov-18	94H 021 065	A95642		24287	Planting(Walkthrough)	02-Aug-19	A2	11.6586	S	Pli	100		
20-Nov-18	94H 021 065	A95642		24287	Planting(Walkthrough)	02-Aug-19	A1	7.0243	S	Sx	100		
20-Sep-18	94H 021 058	A95967		24272	Planting(Walkthrough)	30-Jun-19	1	23.8667	S	Sx	73	Pli	27

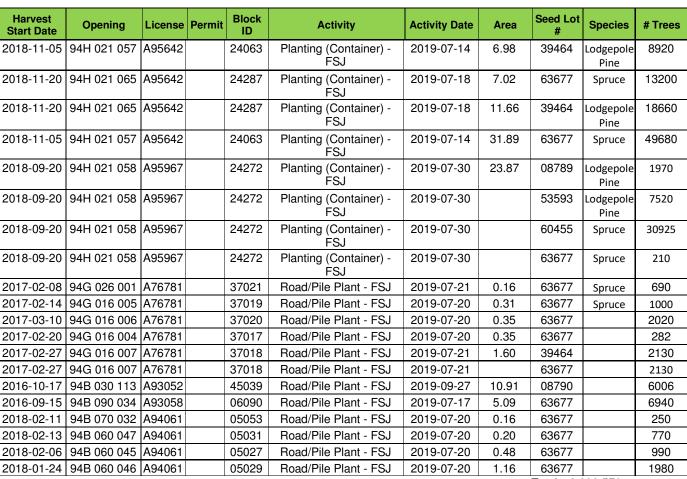
# Table 46: BCTS Planting Activities (2019)

Harvest Start Date	Opening	License	Permit	Block ID	Activity	Activity Date	Area	Seed Lot #	Species	# Trees
2015-01-19	94G 009 035	A82101		03037	Fill Plant (Container) - FSJ	2019-07-21	9.94	63677	Spruce	17050
2013-02-04	94A 071 051	A89117		04121	Fill Plant (Container) - FSJ	2019-07-18	2.27	63677	Spruce	2090
2014-11-01	94A 054 096	A90800		01202	Fill Plant (Container) - FSJ	2019-07-18	3.16	63677	Spruce	6740
2014-11-21	94A 054 097	A90800		01280	Fill Plant (Container) - FSJ	2019-07-20	4.40	63677	Spruce	7540
2015-01-13	94H 002 046	A90906		03113	Fill Plant (Container) - FSJ	2019-07-09	26.60	39464	Lodgepole Pine	42690
2015-01-22	94H 004 035	A90909		18035	Fill Plant (Container) - FSJ	2019-07-10	11.89	63677	Spruce	10626
2015-12-12	94A 061 051	A92970		04063	Fill Plant (Container) - FSJ	2019-07-10	7.23	63677	Spruce	8400



Harvest Start Date	Opening	License	Permit	Block ID	Activity	Activity Date	Area	Seed Lot #	Species	# Trees
2016-11-23	94H 001 036	A94068		03118	Planting (Container) - FSJ	2019-06-19		60455	Spruce	34815
2016-11-23	94H 001 036	A94068		03118	Planting (Container) - FSJ	2019-06-19	41.25	08789	Lodgepole Pine	57964
2016-11-23	94H 001 036	A94068		03118	Planting (Container) - FSJ	2019-06-19		53325	Lodgepole Pine	12500
2016-11-23	94H 001 036	A94068		03118	Planting (Container) - FSJ	2019-06-19		53593	Lodgepole Pine	1970
2018-03-26	94A 071 077	A94070		02260	Planting (Container) - FSJ	2019-06-20	7.91	60455	Spruce	12780
2018-04-03	94A 072 066	A94070		02277	Planting (Container) - FSJ	2019-06-20	18.35	60455	Spruce	25120
2017-12-11	94B 079 018	A94075		06038	Planting (Container) - FSJ	2019-07-21	63.42	63677	Spruce	92060
2018-10-19	94A 021 022	A94080		24271	Planting (Container) - FSJ	2019-07-22	6.96	60455	Spruce	10200
2018-11-05	94H 021 054	A94080		24234	Planting (Container) - FSJ	2019-07-25	14.68	60455	Spruce	21760
2018-10-19	94H 021 053	A94080		24058	Planting (Container) - FSJ	2019-07-01	36.04	53593	Lodgepole Pine	18440
2018-10-19	94H 021 053	A94080		24058	Planting (Container) - FSJ	2019-07-01		60455	Spruce	41430
2017-10-27	94H 001 041	A94392		03123	Planting (Container) - FSJ	2019-06-04	12.03	60455	Spruce	19215
2017-02-23	94H 001 042	A94392		03111	Planting (Container) - FSJ	2019-06-19	62.47	08789	Lodgepole Pine	62484
2017-02-23	94H 001 042	A94392		03111	Planting (Container) - FSJ	2019-06-19		60455	Spruce	53070
2017-02-23	94H 001 042	A94392		03111	Planting (Container) - FSJ	2019-06-19	84.55	08789	Lodgepole Pine	143128



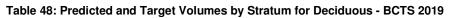


Total 2,098,576



Table 47: Predicted and Target Volumes by Stratum for Coniferous - BCTS 2019	Table 47:	Predicted and T	arget Volumes	ov Stratum for	Coniferous - BCTS 2019
--	-----------	-----------------	---------------	----------------	------------------------

Block Strata Summary	Stratum	Net Area (ha)	Mean SI	Mean EA	Mean MSQ	Mean TSS	PMV/ha	Tot PMV	Target MSQ	Target EA	TMV/ha	Total TMV	PMV % of Target
A21080-1(A)	PI/WG/15-17/1200- 1400	15.2	18.1	15.7	3.4	1,200	399.1	6,067	3.7	14.0	381.9	5,804	104.5
A61904-1(B)	Pl/WG/17-19/1000- 1200	11.5	22.5	11.9	2.8	1,000	556.3	6,397	3.5	14.0	579.4	6,663	96.0
A61904-1(A)	PI/WG/17-19/1200- 1400	19.1	22.0	11.1	3.4	1,200	568.9	10,866	3.7	14.0	563.5	10,763	101.0
A21080-1(B)	PI/WG/21-23/1200- 1400	46.4	15.9	15.5	3.4	1,200	288.7	13,395	3.7	14.0	276.6	12,832	104.4
A63456-1(B) A63459-1(B) A63459-1(C) A63504-1(A)	PISx/WG/15- 17/1200-1400	55.0	20.9	15.1	3.8	1,196	569.7	31,333	3.7	14.0	535.9	29,472	106.3
A60200-1(A)	PISx/WG/17- 19/1200-1400	45.2	21.0	18.3	3.1	1,200	560.6	25,340	3.7	14.0	542.6	24,527	103.3
A63456-1(A)	PISx/WG/21- 23/1200-1400	59.5	20.4	16.3	3.7	1,200	547.2	32,559	3.7	14.0	511.6	30,442	107.0
A63412-1(A) A63459-2(C)	Sx/SR/17-19/1200- 1400	47.6	21.2	16.0	2.8	1,200	573.8	27,311	3.7	14.0	583.1	27,757	98.4
A60203(B)	Sx/WG/15-17/1200- 1400	11.5	25.0	15.0	3.7	1,200	827.7	9,519	3.7	14.0	781.2	8,984	106.0
A60194(A) A60203(A) A60209(A) A602909(B) A63410(A) A63459-1(A) A63459-2(B)	Sx/WG/21-23/1200- 1400	263.4	25.5	15.8	3.6	1,200	858.0	225,99 3	3.7	14.0	809.6	213,23 8	106.0
	Totals	574.4	22.7	15.7	3.5	1,196	676.8	388,779	3.7	14.0	645.0	370,483	104.



Block Strata Summary	Stratum	Net Area (ha)	Mean SI	Mean EA	Mean MSQ	Mean TSS	PMV/ha	Tot PMV	Target MSQ	Target EA	TMV/ ha	Total TMV	PMV % of Target
A66542-2(A)	At/WG/15- 17/4000-4200	123.9	22.0		3.92	4,000	373.5	46,273	3.78		335.4	41,554	111.4
A66542-3(A) A66555-1(A) A66555-1(A1) A66554-1(A1) A66554-1(A2) A60198- 01042(B)	At/WG/17- 19/4000-4200	326.2	24.8		3.84	4,000	471.2	153,692	3.78		423.8	138,258	111.2
	Totals	450.1	24.0		3.86	4,000	444.3	199,965	3.78		399.5	179,812	111.2

Table 49: Predicted and Target Volumes by Conifer Stratum-Canfor 2019	
---	--

Stratum	Net Area (ha)	Mean Si (m)	Mean EA (years)	Mean MSQ (#)	Mean TSS (tr/ha)	Mean PMV (m <sup>3</sup> /ha)	Total PMV (m <sup>3</sup> )	Target MSQ (#)	Target EA (years)	Mean TMV (m <sup>3</sup> /ha)	Total TMV (m <sup>3</sup> )	PMV % of Target
PI/WG/15-17/1000-1200	178.1	15.3	15.9	3.6	1,002	265.4	47,259	3.5	14.0	247.0	43,986	107.4%
PI/WG/15-17/1200-1400	75.2	13.8	15.9	3.9	1,200	191.1	14,367	3.7	14.0	178.4	13,414	107.1%
PI/WG/17-19/1000-1200	105.0	17.2	15.0	3.9	1,119	359.3	37,731	3.6	14.0	336.2	35,299	106.9%
PI/WG/19-21/1000-1200	18.3	18.2	14.1	3.8	1,160	407.8	7,462	3.7	14.0	386.1	7,065	105.6%
PI/WG/19-21/1200-1400	164.1	19.3	13.0	3.7	1,195	457.6	75,088	3.7	14.0	437.4	71,783	104.6%
PISx/WG/15-17/1000-1200	63.6	15.9	16.4	3.7	1,110	307.4	19,549	3.6	14.0	286.5	18,220	107.3%
PISx/WG/15-17/1200-1400	14.4	17.7	18.3	4.0	1,200	412.2	5,935	3.7	14.0	378.8	5,454	108.8%
PISx/WG/15-17/800-1000	9.9	17.2	15.2	3.9	920	378.6	3,748	3.3	14.0	346.9	3,435	109.1%
PISx/WG/17-19/1200-1400	183.7	16.7	15.1	3.9	1,200	351.9	64,643	3.7	14.0	330.3	60,672	106.5%
PISx/WG/19-21/1000-1200	11.1	19.7	15.5	4.0	1,160	508.5	5,644	3.7	14.0	474.7	5,269	107.1%
PISx/WG/19-21/1200-1400	83.0	20.2	14.0	3.8	1,184	529.0	43,903	3.7	14.0	501.3	41,607	105.5%
PISx/WG/23-25/1000-1200	11.9	23.5	12.6	3.4	1,180	683.5	8,134	3.7	14.0	665.1	7,914	102.8%
PISx/WG/23-25/1200-1400	13.2	23.3	14.6	3.9	1,200	693.8	9,159	3.7	14.0	653.3	8,624	106.2%
PISx/WG/25-27/1000-1200	50.2	24.6	13.3	4.0	1,070	756.3	37,968	3.6	14.0	714.1	35,845	105.9%
Sx/WG/15-17/1000-1200	45.9	16.9	19.0	3.9	1,106	396.3	18,188	3.6	14.0	361.2	16,577	109.7%
Sx/WG/15-17/1200-1400	35.5	17.8	20.0	4.0	1,200	447.7	15,894	3.7	14.0	406.8	14,441	110.1%
Sx/WG/15-17/800-1000	86.3	17.5	20.0	3.8	877	428.3	36,965	3.3	14.0	379.2	32,723	113.0%
Sx/WG/17-19/1000-1200	447.4	21.0	17.2	3.7	1,052	619.5	277,155	3.5	14.0	571.4	255,628	108.4%
Sx/WG/17-19/1200-1400	21.8	24.4	15.8	3.4	1,200	791.7	17,259	3.7	14.0	753.7	16,430	105.0%
Sx/WG/17-19/800-1000	92.9	21.9	16.3	3.7	818	662.9	61,580	3.1	14.0	595.3	55,304	111.3%
Sx/WG/19-21/1000-1200	191.1	21.9	16.4	3.8	1,029	668.2	127,692	3.5	14.0	616.4	117,787	108.4%
Sx/WG/21-23/1200-1400	135.8	23.7	15.9	3.7	1,200	763.8	103,721	3.7	14.0	715.1	97,109	106.8%
Sx/WG/21-23/800-1000	18.3	22.6	16.7	3.8	927	707.2	12,942	3.4	14.0	644.1	11,786	109.8%
Sx/WG/23-25/1000-1200	114.1	24.7	15.6	3.4	1,030	804.7	91,819	3.5	14.0	760.7	86,791	105.8%
Sx/WG/23-25/800-1000	127.9	25.1	15.5	3.6	935	835.3	106,837	3.4	14.0	773.7	98,958	108.0%
Sx/WG/25-27/1000-1200	160.7	26.4	15.7	3.8	1,110	912.2	146,595	3.6	14.0	851.7	136,871	107.1%
Sx/WG/25-27/800-1000	72.1	26.2	16.6	3.8	826	907.7	65,444	3.1	14.0	811.8	58,533	111.8%
Sx/WG/27-29/1000-1200	107.4	27.1	17.3	3.8	1,020	964.2	103,552	3.5	14.0	883.5	94,891	109.1%
Sx/WG/27-29/800-1000	24.6	27.5	15.3	3.5	800	960.0	23,616	3.1	14.0	870.1	21,405	110.3%
Totals	2,663.5	20.9	16.0	3.7	1,066	596.9	1,589,850	3.5	14.0	553.3	1,473,822	107.9%



Table 50: Predicted and Target Volumes by	v Deciduous Stratum – Canfor 2019

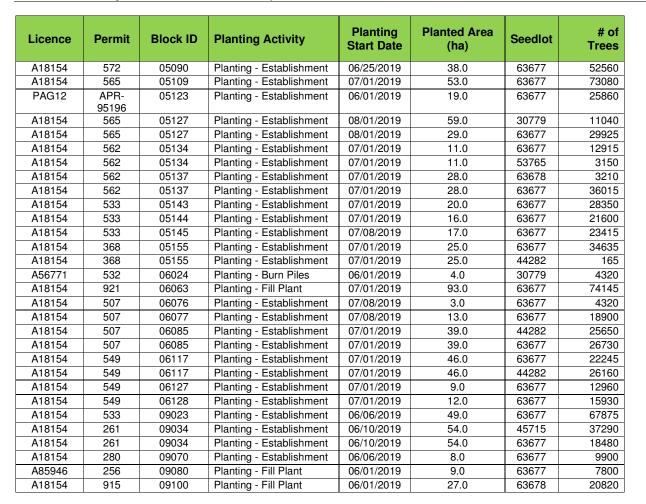
Stratum	Net Area (ha)	Mean Si (m)	Mean MSQ (#)	Mean TSS (tr/ha)	Mea n PMV (m <sup>3</sup> /h	Total PMV (m <sup>3</sup> )	Target MSQ (#)	Mean TMV (m <sup>3</sup> /ha)	Total TMV (m <sup>3</sup> )	PMV % of Target
At/WG/14-16/10000-10200	68.9	17.4	3.94	10,000	181.	12,470	3.96	162.9	11,223	111.1%
At/WG/16-18/10000-10200	78.6	16.5	3.81	10,000	146.	11,491	3.96	131.6	10,342	111.1%
At/WG/18-20/10000-10200	918.4	20.2	3.97	10,000	295.	271,076	3.96	265.6	243,954	111.1%
Totals	1,065.9	19.7	3.95	10,000	276.	295,037	3.96	249.1	265,519	111.1%

Licence	Permit	Block ID	Planting Activity	Planting Start Date			# of Trees
A59959	779	01004	Planting - Fill Plant	06/12/2019	34.0	63677	38940
A18154	795	01011	Planting - Establishment	06/03/2019	7.0	63677	9570
A18154	795	01012	Planting - Establishment	06/03/2019	7.0	63677	9240
A18154	722	01021	Planting - Establishment	06/03/2019	56.0	63677	1005
A18154	722	01021	Planting - Establishment	06/03/2019	56.0	63677	77880
A18154	767	01024	Planting - Establishment	06/01/2019	12.0	63677	16845
A18154	766	01025	Planting - Establishment	06/07/2019	3.0	63677	945
A18154	766	01025	Planting - Establishment	06/07/2019	3.0	63677	3510
A18154	754	01031	Planting - Establishment	05/30/2019	118.0	63677	167175
A18154	754	01031	Planting - Establishment	05/30/2019	118.0	63677	7095
A18154	754	01031	Planting - Establishment	05/30/2019	90.0	45715	116035
A18154	766	01043	Planting - Establishment	06/13/2019	12.0	63677	17055
PAG12	APR- 90644	01101	Planting - Fill Plant	06/15/2019	61.0	63677	47160
A59959	779	01103	Planting - Fill Plant	06/15/2019	20.0	63677	19905
A18154	447	01138	Planting - Establishment	06/11/2019	33.0	63677	47190
A18154	787	01149	Planting - Establishment	06/03/2019	99.0	63677	13950
A18154	787	01149	Planting - Establishment	06/03/2019	99.0	63677	64530
A18154	787	01149	Planting - Establishment	06/03/2019	99.0	45715	56760
A18154	787	01149	Planting - Establishment	06/03/2019	99.0	63677	1260
A18154	758	01153	Planting - Establishment	06/01/2019	6.0	63677	1260
A18154	758	01153	Planting - Establishment	06/01/2019	6.0	63677	7620
A18154	758	01154	Planting - Establishment	06/05/2019	15.0	63677	1180
A18154	758	01154	Planting - Establishment	06/05/2019	15.0	63677	18770
A18154	758	01155	Planting - Establishment	06/05/2019	5.0	63677	5185
A18154	758	01155	Planting - Establishment	06/05/2019	5.0	63677	1770
A18154	758	01156	Planting - Establishment	06/05/2019	12.0	45715	16490
PAG12	APR- 95317	01187	Planting - Establishment	06/11/2019	38.0	63677	51225

# Table 51: Licensee Participant Planting Activities 2019

Licence	Permit	Block ID	Planting Activity	Planting Start Date	Planted Area (ha)	Seedlot	# of Trees
A85946	448	01233	Planting - Establishment	06/14/2019	5.0	63677	6825
A85946	449	01235	Planting - Establishment	06/15/2019	25.0	63677	36375
A56771	453	01259	Planting - Establishment	06/18/2019	39.0	63677	56590
A56771	455	01268	Planting - Establishment	07/01/2019	129.0	63677	187110
A18154	461	01300	Planting - Establishment	07/01/2019	50.0	63677	36225
A18154	461	01300	Planting - Establishment	07/01/2019	50.0	30779	27720
A18154	539	01305	Planting - Establishment	06/17/2019	101.0	63677	2225
A18154	539	01305	Planting - Establishment	06/17/2019	101.0	63677	143495
A60972	552	01312	Planting - Establishment	06/13/2019	85.0	45715	20710
A60972	552	01312	Planting - Establishment	06/13/2019	85.0	63677	96270
A18154	445	01323	Planting - Burn Piles	06/15/2019	1.0	45715	1320
PAG12	APR- 96227	01325	Planting - Establishment	06/15/2019	12.0	63677	15345
PAG12	APR- 86665	02036	Planting - Fill Plant	07/01/2019	3.0	63677	1995
A60972	529	02066	Planting - Burn Piles	07/01/2019	1.0	63677	1890
A60972	529	02147	Planting - Establishment	07/01/2019	15.0	63677	20790
A60049	423	02192	Planting - Burn Piles	07/01/2019	1.0	63677	1260
A60049	982	02229	Planting - Establishment	07/01/2019	41.0	63677	56175
A60049	982	02231	Planting - Establishment	07/01/2019	39.0	63678	10380
A60049	982	02231	Planting - Establishment	07/01/2019	39.0	63677	27000
A60049	982	02231	Planting - Establishment	07/01/2019	39.0	63677	15750
A18154	414	02241	Planting - Establishment	07/01/2019	11.0	63677	14805
A60049	982	02242	Planting - Establishment	07/01/2019	35.0	63677	49445
A18154	965	02256	Planting - Burn Piles	06/01/2019	2.0	30779	3150
A18154	454	02274	Planting - Establishment	06/01/2019	9.0	63677	12765
A18154	454	02275	Planting - Establishment	07/01/2019	61.0	44282	28980
A18154	454	02275	Planting - Establishment	07/01/2019	61.0	63677	55410
A18154	967	02301	Planting - Burn Piles	07/01/2019	1.0	63677	1335
PAG12	APR- 96042	02309	Planting - Establishment	07/01/2019	67.0	63677	90885
A18154	426	03095	Planting - Burn Piles	06/01/2019	4.0	30779	4755

Licence	Permit	Block ID	Planting Activity	Planting Start Date	Planted Area (ha)	Seedlot	# of Trees
A18154	530	04034	Planting - Burn Piles	07/01/2019	0.0	30779	240
A56771	987	04070	Planting - Establishment	07/01/2019	48.0	63677	32695
A56771	987	04070	Planting - Establishment	07/01/2019	48.0	53765	33705
A56771	987	04071	Planting - Establishment	07/01/2019	47.0	63677	29610
A56771	987	04071	Planting - Establishment	07/01/2019	47.0	30779	34335
A56771	525	04075	Planting - Burn Piles	07/01/2019	2.0	30779	2280
A56771	525	04075	Planting - Burn Piles	07/01/2019	2.0	30779	2100
A56771	983	04076	Planting - Establishment	07/01/2019	13.0	30779	7245
A56771	983	04076	Planting - Establishment	07/01/2019	13.0	63677	11340
A56771	985	04084	Planting - Establishment	07/01/2019	21.0	63677	29895
A56771	973	04098	Planting - Burn Piles	07/01/2019	2.0	30779	1680
A18154	966	04137	Planting - Burn Piles	07/01/2019	6.0	30779	6225
A85946	995	04188	Planting - Establishment	07/01/2019	20.0	63677	28350
A56771	983	04241	Planting - Establishment	07/01/2019	16.0	63677	19170
A18154	538	04260	Planting - Establishment	07/01/2019	24.0	63677	17205
A18154	538	04260	Planting - Establishment	07/01/2019	24.0	44282	17145
A18154	545	04265	Planting - Establishment	07/01/2019	30.0	44282	14805
A18154	545	04265	Planting - Establishment	07/01/2019	30.0	63677	28695
A56771	544	04278	Planting - Establishment	07/01/2019	50.0	44282	36225
A56771	544	04278	Planting - Establishment	07/01/2019	50.0	63677	35640
A56771	561	05035	Planting - Establishment	07/01/2019	32.0	53765	22860
A56771	561	05035	Planting - Establishment	07/01/2019	32.0	63677	22995
A18154	555	05045	Planting - Establishment	07/01/2019	38.0	53765	31710
A18154	555	05045	Planting - Establishment	07/01/2019	38.0	63677	28650
A18154	556	05047	Planting - Establishment	07/01/2019	93.0	53765	67830
A18154	556	05047	Planting - Establishment	07/01/2019	93.0	63677	79950
A18154	554	05081	Planting - Establishment	07/01/2019	126.0	63677	119595
A18154	554	05081	Planting - Establishment	07/01/2019	126.0	53765	75285
A56771	559	05084	Planting - Establishment	07/01/2019	4.0	63677	6090
A18154	558	05089	Planting - Establishment	07/28/2019	241.0	30779	106435
A18154	558	05089	Planting - Establishment	07/28/2019	241.0	63677	207180

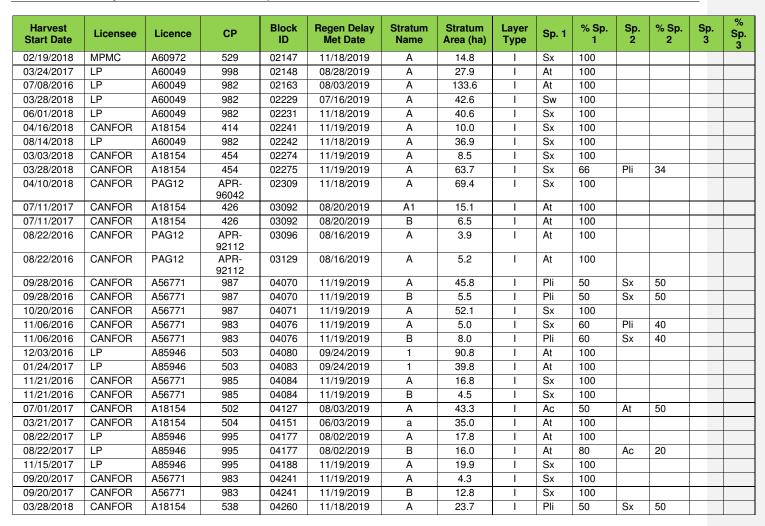


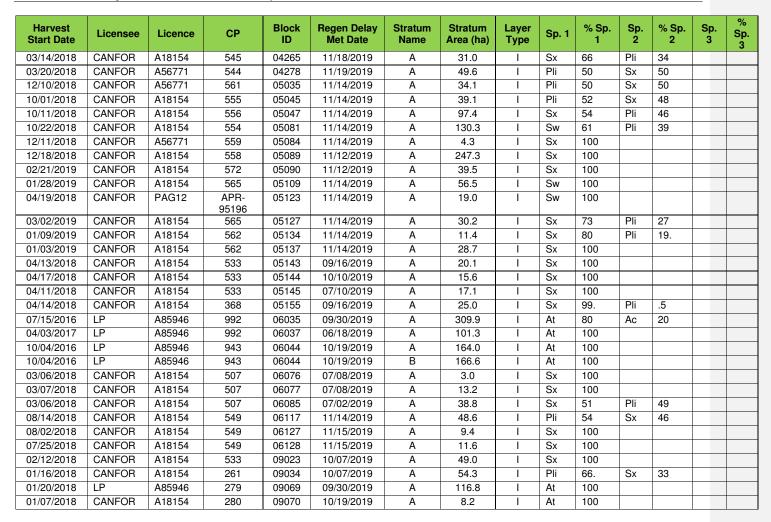
Licence	Permit	Block ID	Planting Activity	Planting Start Date	Planted Area (ha)	Seedlot	# of Trees
A18154	287	09113	Planting - Establishment	06/03/2019	62.0	63677	44220
A18154	287	09113	Planting - Establishment	06/03/2019	62.0	45715	29700
A18154	289	09115	Planting - Establishment	06/06/2019	42.0	63677	46815
A18154	288	09126	Planting - Establishment	06/09/2019	44.0	63677	58815
A18154	288	09132	Planting - Establishment	06/10/2019	65.0	63677	80865
A18154	369	10025	Planting - Establishment	06/06/2019	73.0	63677	99840
A18154	368	10028	Planting - Establishment	06/01/2019	54.0	63677	72600
A18154	368	10029	Planting - Establishment	07/08/2019	21.0	63677	28980
A18154	550	10038	Planting - Establishment	06/10/2019	56.0	63677	65670
A18154	550	10050	Planting - Establishment	07/11/2019	62.0	63677	84210
A18154	539	23046	Planting - Establishment	07/01/2019	62.0	63677	42930
A18154	539	23046	Planting - Establishment	07/01/2019	62.0	44282	43875
A60049	996	23108	Planting - Establishment	07/01/2019	123.0	63677	122925
A60049	996	23108	Planting - Establishment	07/01/2019	123.0	30779	54810
A56771	534	23115	Planting - Establishment	07/01/2019	14.0	63677	9720
A56771	534	23115	Planting - Establishment	07/01/2019	14.0	44282	9900
PAG12	APR- 83805	27003	Planting - Establishment	06/01/2019	9.0	63677	13200
A59959	751	27006	Planting - Establishment	06/11/2019	4.0	63677	4740
A59959	751	27007	Planting - Establishment	06/12/2019	2.0	63677	2190
A59959	751	27008	Planting - Establishment	06/11/2019	12.0	63677	17010
A59959	751	27010	Planting - Establishment	06/17/2019	5.0	45715	6600
A59959	751	27011	Planting - Establishment	06/17/2019	2.0	45715	2970
A59959	751	27012	Planting - Establishment	06/12/2019	12.0	63677	16515
A18154	444	27035	Planting - Establishment	06/09/2019	18.0	63677	28710
A18154	444	27049	Planting - Burn Piles	06/15/2019	1.0	63677	900
A56771	456	29109	Planting - Establishment	07/01/2019	84.0	44282	58095
A56771	456	29109	Planting - Establishment	07/01/2019	84.0	63677	57075
A85946	283	44047	Planting - Establishment	06/08/2019	30.0	63677	40485
A18154	758	S01047	Planting - Establishment	06/05/2019	6.0	63677	1855
A18154	758	S01047	Planting - Establishment	06/05/2019	6.0	63677	6170

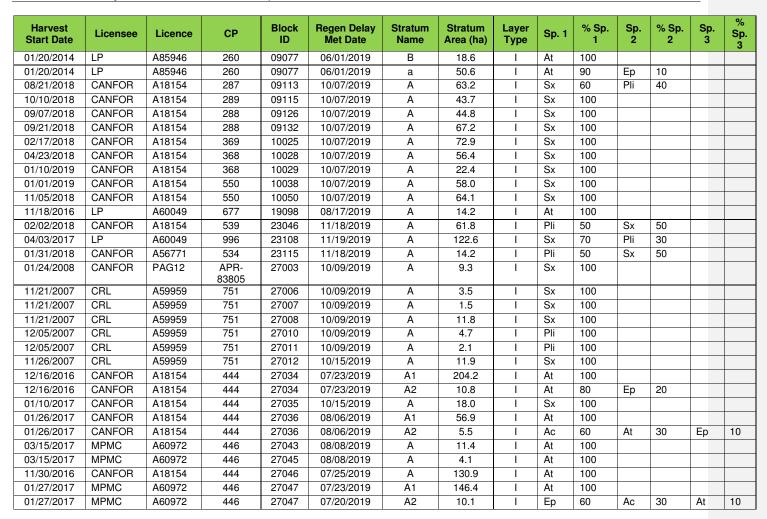


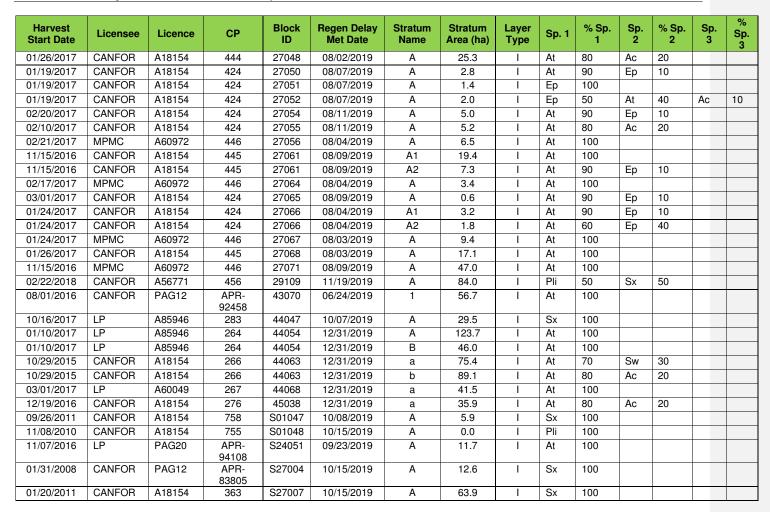
Licence	Permit	Block ID	Planting Activity	Planting Start Date	Planted Area (ha)	Seedlot	# of Trees	
A18154	755	S01048	Planting - Establishment	06/05/2019	89.0	45715	128585	
PAG12	APR- 83805	S27004	Planting - Establishment	06/15/2019	13.0	63677	18270	
A18154	363	S27007	Planting - Establishment	06/08/2019	64.0	63677	6300	
A18154	363	S27007	Planting - Establishment	06/08/2019	64.0	63677	81105	
A18154	363	S27007	Planting - Establishment	06/08/2019	64.0	63677	3765	
Total					6184.0		5143555	

Harvest Start Date	Licensee	Licence	СР	Block ID	Regen Delay Met Date	Stratum Name	Stratum Area (ha)	Layer Type	Sp. 1	% Sp. 1	Sp. 2	% Sp. 2	Sp. 3	% Sp. 3
02/26/2017	CANFOR	A18154	795	01009	08/02/2019	Α	15.9	I	Ac	60	At	40		
03/01/2017	CANFOR	A18154	795	01011	10/08/2019	Α	6.8	I	Sx	100				
03/02/2017	CANFOR	A18154	795	01012	10/08/2019	Α	6.5	I	Sx	100				
03/28/2012	CANFOR	A18154	722	01021	10/08/2019	Α	55.5	I	Sx	100				
03/06/2012	CANFOR	A18154	766	01025	10/08/2019	Α	3.1	I	Sx	100				
10/01/2010	CANFOR	A18154	754	01031	10/08/2019	Α	90.3	I	Pli	100				
10/01/2010	CANFOR	A18154	754	01031	10/08/2019	В	118.0	I	Sx	100				
12/01/2011	CANFOR	A18154	766	01043	10/08/2019	Α	12.3	I	Sx	100				
02/12/2018	CANFOR	A18154	447	01138	10/08/2019	Α	33.3	I	Sx	100				
03/01/2012	CANFOR	A18154	787	01149	10/08/2019	Α	99.2	I	Sx	58.	Pli	42		
10/12/2011	CANFOR	A18154	758	01153	10/08/2019	Α	6.3	I	Sx	100				
10/05/2011	CANFOR	A18154	758	01154	10/08/2019	Α	15.3	I	Sx	100				
10/07/2011	CANFOR	A18154	758	01155	10/08/2019	Α	5.0	I	Sx	100				
10/20/2011	CANFOR	A18154	758	01156	10/08/2019	Α	12.1	I	Pli	100				
08/12/2018	CANFOR	PAG12	APR- 95317	01187	10/09/2019	A	40.0	I	Sx	100				
08/09/2015	LP	A60049	980	01210	08/06/2019	Α	81.5	I	At	80	Ac	10	Sw	10
03/20/2018	LP	A85946	448	01233	10/09/2019	Α	4.8	I	Sx	100				
11/16/2017	LP	A85946	449	01235	10/09/2019	Α	25.4	I	Sx	100				
03/08/2017	LP	A85946	449	01248	08/02/2019	A1	19.4	I	At	80	Ac	20		
03/08/2017	LP	A85946	449	01248	08/04/2019	A2	35.8	I	At	100				
01/29/2018	CANFOR	A56771	453	01259	10/09/2019	Α	39.3	I	Sx	100				
02/01/2018	LP	A85946	452	01260	08/02/2019	Α	33.8	I	Ac	50	At	50		
02/01/2018	LP	A85946	452	01260	08/02/2019	В	25.9	I	Ac	50	At	50		
02/26/2018	CANFOR	A56771	455	01268	11/19/2019	Α	129.3	I	Sx	100				
08/28/2018	CANFOR	A18154	461	01300	11/19/2019	Α	51.2	I	Sx	57	Pli	43		
02/16/2018	CANFOR	A18154	539	01305	10/09/2019	А	103.6	I	Sx	100				
09/12/2018	MPMC	A60972	552	01312	10/09/2019	А	87.5	I	Sx	82.	Pli	17.		
01/11/2017	CANFOR	A18154	445	01321	08/28/2019	А	12.7	I	At	60	Ac	30	Ep	10
08/27/2018	CANFOR	PAG12	APR- 96227	01325	10/09/2019	b	12.9	I	Sx	100				
01/19/2017	CANFOR	A18154	445	01334	08/07/2019	A	2.9	I	At	100				









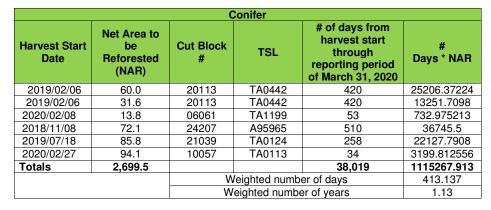


# Table 53: BCTS Establishment Delay Calculation for Reporting Period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020

Conifer								
Harvest Start Date	Net Area to be Reforested (NAR)	Cut Block #	TSL	# of days from harvest start through reporting period of March 31, 2020	# Days * NAR			
2018/01/31	117.6	20065	A80057	791	93001.8163			
2019/01/14	14.6	20089	A80057	443	6445.65			
2019/01/14	67.4	20089	A80057	443	29867.06			
2019/02/07	2.4	20090	A80057	419	1009.79			
2018/02/22	25.9	20067	A80058	769	19934.33175			
2018/02/22	8.7	20067	A80058	769	6713.944443			
2018/02/02	31.5	20068	A80058	789	24835.63388			
2017/12/12	6.3	20069	A80058	841	5298.3			
2017/12/12	18.2	20069	A80058	841	15289.38			
2018/01/04	39.8	20070	A80058	818	32540.04			
2018/01/04	23.9	20070	A80058	818	19574.74			
2019/02/13	12.3	45064	A92236	413	5071.64			
2019/02/13	16.0	45064	A92236	413	6608			
2017/12/18	47.6	24255	A92977	835	39762.7			
2017/12/18	22.4	24255	A92977	835	18695.65			
2017/10/16	45.6	45028	A92984	898	40921.86			
2020/02/05	13.9	20091	A94058	56	776.02504			
2020/02/05	2.2	20091	A94058	56	122.531136			
2018/12/03	23.1	05054	A94063	485	11217.46606			
2018/12/03	22.6	05087	A94063	485	10975.55			
2019/01/24	112.8	24253	A94065	433	48861.46109			
2019/09/06	54.2	04232	A94069	208	11277.76			
2020/01/22	37.6	23041	A94073	70	2634.8			
2020/01/21	46.9	23048	A94092	71	3327.375169			
2020/01/21	62.3	23048	A94092	71	4422.673922			
2020/01/21	17.3	23048	A94092	71	1230.886104			
2018/10/04	21.7	24246	A94166	545	11799.25			
2018/03/12	38.0	24247	A94166	751	28568.04			
2018/10/02	5.5	24260	A94166	547	2986.62			
2018/10/02	9.4	24260	A94166	547	5136.33			
2018/09/25	29.6	24262	A94166	554	16370.7			
2018/01/29	16.2	24263	A94166	793	12878.32			
2018/01/29	6.7	24263	A94166	793	5328.96			
2018/01/05	8.3	24280	A94557	817	6789.27			
2018/01/05	8.2	24280	A94557	817	6674.89			
2018/01/05	13.3	24281	A94557	817	10857.93			
2018/01/05	3.4	24281	A94557	817	2794.14			
2018/12/07	19.5	19021	A95044	481	9393.93			

Conifer									
Harvest Start Date	Net Area to be Reforested (NAR)	be Cut Block Reforested #		# of days from harvest start through reporting period of March 31, 2020	# Days * NAR				
2018/12/10	41.6	19022	A95044	478	19880.02				
2018/11/30	8.8	24196	A95046	488	4294.4				
2019/02/26	54.5	24357	A95046	400	21796				
2019/03/04	16.0	24358	A95046	394	6284.3				
2019/02/05	25.3	38005	A95065	421	10643.20628				
2019/02/06	12.8	38006	A95065	420	5363.01906				
2019/02/21	11.4	38007	A95068	405	4618.53576				
2019/02/28	8.0	38010	A95068	398	3190.981716				
2019/02/27	8.1	38011	A95068	399	3219.10806				
2018/12/25	11.9	38014	A95068	463	5519.84896				
2020/01/06	57.3	19071	A95068	86	4925.350118				
2018/11/06	112.1	09141	A95068	512	57400.32				
2019/11/15	32.1	10068	A95185	138	4434.253122				
2019/11/15	65.9	10068	A95218	138	9095.263428				
2019/01/17	90.6	45072	A95219	440	39872.26716				
2019/01/17	113.6	45074	A95219	440	49970.8				
2019/02/12	21.0	45078	A95220	414	8694				
2019/02/25	17.8	45079	A95220	401	7129.78				
2019/03/04	68.7	10052	A95220	394	27063.86				
2020/01/27	63.1	19101	A95220	65	4101.35908				
2020/01/27	61.3	19101	A95526	65	3983.585125				
2020/02/24	19.9	09107	A95648	37	735.19				
2019/03/25	14.1	09124	A95648	373	5251.84				
2019/03/25	1.2	09124	A95762	373	447.6				
2019/03/25	11.6	09124	A95762	373	4334.26				
2019/04/02	11.6	09147	A95762	365	4215.75				
2018/12/13	32.4	24238	A95762	475	15394.75				
2018/12/21	5.6	24239	A95762	467	2615.2				
2019/01/03	27.6	24245	A95966	454	12540.2627				
2019/01/11	27.9	24273	A95966	446	12421.1				
2018/09/03	31.8	24059	A95966	576	18305.28				
2018/09/20	11.7	24272	A95966	559	6561.548149				
2018/09/10	6.9	24297	A95967	569	3920.41				
2020/01/05	30.1	05092	A95967	87	2620.422861				
2020/01/05	7.4	05092	A95967	87	641.070027				
2018/11/30	8.8	24196	TA0109	488	4294.4				
2019/02/26	54.5	24357	TA0109	400	21796				
2019/09/21	18.0	09079	TA0110	193	3477.882388				
2019/11/04	14.5	09117	TA0110	149	2161.391765				
2019/09/05	13.2	10065	TA0113	209	2749.908304				
2019/03/12	21.5	20071	TA0442	386	8279.7				
2019/03/13	37.2	20112	TA0442	385	14317.52361				





		De	ciduous		
Harvest Start Date	Net Area to be Reforested (NAR)	Cut Block #	TSL	# of days from harvest start through reporting period of March 31, 2020	# days * NAR
2019/02/05	42.2	45001	A76796	421	17751.41448
2018/03/26	7.9	02260	A94070	737	5831.557457
2017/02/20	19.6	1	A94642	1,136	22305.85075
2017/02/27	19.5	27004	A94642	1,129	22060.66
2020/02/08	19.6	06061	TA1199	53	1037.21
2019/12/20	8.1	01226	TA0250	103	838.798628
2017/08/28	10.6	45050	A93055	947	10073.55056
2016/09/15	87.3	06090	A93058	1,294	112979.14
2019/12/20	11.5	01226	TA0250	103	1188.695602
2017/11/08	11.4	06043	A92983	875	9957.5
2017/10/16	10.0	45028	A92984	898	8971.02
2017/11/19	30.3	06040	A92983	864	26205.12
Totals	278.2			8,560.0	239,200.5
			eighted numb		859.955
			eighted numb	er of years	2.36
		Mix	cedwood	- 1	1
Harvest Start Date	Net Area to be Reforested (NAR)	Cut Block #	TSL	# of days from harvest start through reporting period of March 31, 2020	# days * NAR
2017/11/08	11.4	06043	A92983	875	9957.5
2017/10/16	10.0	45028	A92984	898	8971.02
2017/11/19	30.3	06040	A92983	864	18,928.5
Totals	51.7			2,637	37857.04
			leighted numb		732.24
		W	eighted numb	er of years	2.00



## Table 54: Licensee Participants Conifer Establishment Delay Calculation for Reporting Period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020

License	Permit	Cut Block	SU ID	Current Declaration	Harvest Start Date	SU NAR	Regen Met	Regen Days
A18154	236	04038	Α	С	11/26/2015	13.4	Ν	1587
A18154	236	04044	Α	С	11/03/2015	9.3	Ν	1610
A18154	291	45090	Α	С	02/15/2019	67.2	Ν	410
A18154	291	45090	В	С	02/15/2019	5.9	Ν	410
A18154	292	45095	Α	С	03/25/2020	82	Ν	6
A18154	370	10045	Α	С	10/15/2019	14.6	N	168
A18154	370	10051	Α	С	03/12/2019	16.4	Ν	385
A18154	398	20078	Α	С	12/30/2019	54.9	N	92
A18154	424	01318	Α	С	02/09/2017	13.6	N	1146
A18154	424	01331	Α	С	02/01/2017	2.8	N	1154
A18154	440	18041	Α	С	11/15/2015	157.6	N	1598
A18154	440	18041	В	С	11/15/2015	77.6	N	1598
A18154	454	02275	Α	С	03/28/2018	64.2	N	734
A18154	462	01293	Α	С	10/29/2019	40.1	N	154
A18154	462	01297	Α	С	01/06/2020	9.9	N	85
A18154	462	01298	В	С	12/17/2019	15.6	N	105
A18154	462	01299	Α	С	12/09/2019	18.2	N	113
A18154	465	14022	Α	С	02/14/2019	29.8	N	411
A18154	465	14024	Α	С	01/22/2019	129.6	N	434
A18154	472	01344	Α	С	09/09/2019	1.7	N	204
A18154	472	01351	Α	С	11/15/2019	3.8	N	137
A18154	507	06076	Α	С	03/06/2018	3	N	756
A18154	507	06085	Α	С	03/06/2018	38.8	N	756
A18154	507	20080	Α	С	08/09/2019	24	N	235
A18154	523	02024	A	С	03/15/2017	35.1	N	1112
A18154	533	05143	Α	С	04/13/2018	20.1	N	718
A18154	533	05144	Α	С	04/17/2018	15.6	N	714
A18154	533	05145	Α	С	04/11/2018	17.1	N	720
A18154	536	19100	Α	С	01/17/2018	6.7	N	804
A18154	537	24303	Α	С	02/01/2019	142.2	N	424
A18154	543	19039	Α	С	06/13/2018	98.7	N	657
A18154	551	07052	Α	С	11/12/2018	50.3	N	505
A18154	557	01329	A	С	12/03/2019	53.2	N	119
A18154	557	01329	В	С	12/03/2019	13	N	119
A18154	557	01338	Α	С	11/20/2019	19.5	Ν	132
A18154	562	05137	Α	С	01/03/2019	28.7	Ν	453
A18154	563	09021	Α	С	03/02/2020	72.6	Ν	29
A18154	564	45085	Α	С	04/01/2019	22.1	Ν	365
A18154	564	45093	Α	С	03/15/2019	142.5	Ν	382
A18154	565	05095	А	С	01/27/2020	19	Ν	64
A18154	565	05095	В	С	01/27/2020	33.4	Ν	64
A18154	565	05096	А	С	02/17/2020	3.3	Ν	43



License	Permit	Cut Block	SU ID	Current Declaration	Harvest Start Date	SU NAR	Regen Met	Regen Days
A18154	565	05098	Α	С	02/19/2020	4	N	41
A18154	565	05109	Α	C	01/28/2019	46.6	N	428
A18154	565	05109	В	C	01/28/2019	9.9	N	428
A18154	565	05127	Α	C	03/02/2019	30.2	N	395
A18154	568	09145	Α	C	10/17/2019	40	N	166
A18154	575	05135	Α	C	09/11/2019	28	N	202
A18154	663	24282	А	С	12/08/2015	34.2	N	1575
A18154	663	24282	В	С	12/08/2015	31	N	1575
A18154	678	19036	А	С	01/03/2018	2	N	818
A18154	678	19036	В	С	01/03/2018	4.6	N	818
A18154	679	07084	Α	С	10/18/2018	38	N	530
A18154	679	07085	Α	С	11/02/2018	14.6	N	515
A18154	680	24267	Α	С	12/09/2019	27.7	N	113
A18154	681	24311	Α	С	12/18/2018	18.5	N	469
A18154	683	24037	Α	С	12/11/2017	54.3	N	841
A18154	683	24037	В	С	12/11/2017	39.9	N	841
A18154	687	07089	Α	С	11/14/2018	28.7	N	503
A18154	687	07100	Α	С	01/09/2019	5.5	N	447
A18154	687	07101	Α	С	01/04/2019	28.5	N	452
A18154	687	07139	Α	С	01/03/2019	3.9	N	453
A18154	688	07086	Α	С	11/01/2018	28	N	516
A18154	688	07136	Α	С	12/03/2018	2.9	N	484
A18154	688	07140	Α	С	01/18/2019	9.9	N	438
A18154	690	08047	Α	С	01/04/2019	204.2	N	452
A18154	690	08050	A	С	01/21/2019	101.5	N	435
A18154	690	08050	В	С	01/21/2019	14.5	N	435
A18154	692	07047	Α	С	11/28/2018	41.9	N	489
A18154	692	07055	Α	С	12/06/2018	97	N	481
A18154	692	07135	Α	С	11/10/2018	41.8	N	507
A18154	693	24047	Α	С	11/07/2019	36.5	N	145
A18154	693	24268	Α	С	12/19/2019	8.2	N	103
A18154	693	S24061	Α	С	12/19/2019	7	N	103
A18154	696	36040	A	С	03/25/2020	117.7	N	6
A18154	696	36041	A	С	03/03/2020	38.6	N	28
A18154	696	36042	A	С	02/06/2020	48.3	N	54
A18154	722	01021	A	С	03/28/2012	125	N	2925
A18154	795	01012	A	С	03/02/2017	6.5	Ν	1125
A18154	810	36067	A	С	01/16/2020	4.3	Ν	75
A18154	812	36071	A	С	12/09/2019	42	Ν	113
A18154	961	04037	Α	С	11/24/2015	59.5	N	1589
A18154	961	04042	Α	С	11/10/2015	59.6	N	1603
A18154	966	04137	Α	С	10/15/2016	94.9	Ν	1263
A18154	968	03041	Α	С	08/15/2016	23.6	Ν	1324
A18154	968	03041	В	С	08/15/2016	2.1	N	1324
A56771	330	12018	A	С	01/23/2016	92.6	Ν	1529



License	Permit	Cut Block	SU ID	Current Declaration	Harvest Start Date	SU NAR	Regen Met	Regen Days
A56771	399	10023	Α	С	03/20/2019	112.8	N	377
A56771	399	10053	Α	С	11/07/2019	33.6	N	145
A56771	399	10053	В	С	11/07/2019	35.5	N	145
A56771	560	05036	Α	С	12/19/2018	3.6	N	468
A56771	567	05097	Α	С	02/21/2020	3.3	N	39
A56771	666	24065	Α	С	12/18/2017	14.1	N	834
A56771	666	24066	Α	С	01/04/2018	9.7	N	817
A56771	983	04076	Α	С	11/06/2016	5	N	1241
A56771	983	04076	В	С	11/06/2016	8	N	1241
A59959	939	03119	В	С	10/02/2015	11.9	Ν	1642
A60049	259	45035	С	С	01/30/2014	136.7	N	2252
A60972	460	01343	Α	С	09/09/2019	8	N	204
A60972	460	01347	Α	С	11/15/2019	0.3	N	137
A60972	460	01348	Α	С	11/19/2019	4.6	N	133
A60972	460	01350	Α	С	09/11/2019	2.2	N	202
A60972	460	02344	Α	С	10/02/2019	13.8	Ν	181
A60972	463	14021	Α	С	12/19/2018	64.4	Ν	468
A60972	470	01345	Α	С	11/22/2019	13.5	Ν	130
A60972	470	01345	В	С	11/22/2019	2.6	N	130
A60972	471	14023	Α	С	02/27/2019	8.6	N	398
A60972	689	07088	Α	С	11/10/2018	19.3	N	507
A60972	951	18052	В	С	09/29/2017	3.8	N	914
A60972	951	18056	Α	С	01/26/2018	39.2	N	795
A60972	951	18057	Α	С	12/18/2017	99.8	N	834
PAG12	APR- 95196	05123	В	С	04/19/2018	19	Ν	712
PAG12	APR- 96227	01325	В	С	08/27/2018	12.9	Ν	582
PAG12	APR- 96292	07138	А	С	11/09/2018	3.2	Ν	508



## Table 55: Licensee Participants Deciduous Establishment Delay Calculation for Reporting Period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020

License	Permit	Cut Block	SU ID	Current Declaration	Harvest Start Date	SU NAR	Regen Met	Regen Days
A18154	269	09086	Α	D	03/07/2018	49.3	N	755
A18154	287	09113	В	D	08/21/2018	27.4	Ν	588
A18154	288	09126	В	D	09/07/2018	52.4	N	571
A18154	288	09132	С	D	09/21/2018	22.4	N	557
A18154	401	27033	Α	D	11/11/2014	14.3	N	1967
A18154	424	27050	Α	D	01/19/2017	2.8	N	1167
A18154	424	27053	Α	D	02/20/2017	1.1	N	1135
A18154	444	27034	Α	D	12/16/2016	215	N	1201
A18154	444	27035	Α	D	01/10/2017	65.5	N	1176
A18154	444	27046	Α	D	11/30/2016	131	Ν	1217
A18154	444	27048	Α	D	01/26/2017	25.3	N	1160
A18154	445	27068	Α	D	01/26/2017	17.1	N	1160
A18154	454	02274	В	D	03/03/2018	1.3	N	759
A18154	461	01317	Α	D	11/26/2019	5.4	Ν	126
A18154	462	01298	Α	D	12/17/2019	7.4	N	105
A18154	462	01299	В	D	12/09/2019	6.4	N	113
A18154	530	04211	Α	D	01/20/2018	156.7	N	801
A18154	538	04260	В	D	03/28/2018	69.2	N	734
A18154	546	02177	Α	D	04/05/2018	88.8	N	726
A18154	549	06127	Α	D	08/02/2018	20.5	N	607
A18154	549	06128	В	D	07/25/2018	7	N	615
A18154	555	05045	В	D	10/01/2018	11.5	N	547
A18154	557	01315	Α	D	06/11/2019	68.7	N	294
A18154	678	19036	С	D	01/03/2018	3.2	N	818
A18154	929	25037	Α	D	11/11/2013	202.2	N	2332
A18154	965	02256	В	D	08/29/2017	21.8	N	945
A56771	453	01257	В	D	01/14/2018	26.3	N	807
A56771	559	05084	В	D	12/11/2018	2.4	N	476
A56771	560	05036	В	D	12/19/2018	7	N	468
A60049	270	44048	Α	D	07/25/2018	16.4	N	615
A60049	270	44048	В	D	07/25/2018	5.3	N	615
A60049	423	02188	Α	D	09/11/2017	15.1	N	932
A60049	505	04092	Α	D	03/20/2019	18.8	N	377
A60049	566	05103	Α	D	02/19/2019	39.5	N	406
A60049	677	19098	Α	D	11/18/2016	14.2	N	1229
A60049	718	43054	Α	D	02/06/2018	16.7	N	784
A60049	736	43053	Α	D	01/01/2018	6.3	N	820
A60049	736	43055	Α	D	01/09/2018	160.9	N	812
A60049	736	43056	Α	D	12/13/2017	59.2	N	839
A60049	794	05025	Α	D	02/15/2013	215.9	N	2601
A60049	808	23034	Α	D	03/23/2018	1.5	Ν	739
A60049	942	06062	А	D	10/16/2017	83	Ν	897



License	Permit	Cut Block	SU ID	Current Declaration	Harvest Start Date	SU NAR	Regen Met	Regen Days
A60049	942	06062	В	D	10/16/2017	44	N	897
A60049	944	06073	А	A D		22.6	Ν	867
A60049	944	06073	В	D	11/15/2017	20.2	Ν	867
A60049	982	02233	А	D	04/16/2018	19	Ν	715
A60049	996	23089	А	D	02/22/2018	2.6	Ν	768
A60049	996	23091	А	D	02/23/2018	7	Ν	767
A60049	996	23092	А	D	02/20/2018	6	Ν	770
A60049	996	23094	А	D	02/20/2018	14.5	Ν	770
A60049	998	02174	А	D	07/02/2018	24.3	Ν	638
A60972	446	27043	А	D	03/15/2017	11.4	Ν	1112
A60972	446	27045	А	D	03/15/2017	4.1	Ν	1112
A60972	446	27056	А	D	02/21/2017	6.5	Ν	1134
A60972	529	02147	В	D	02/19/2018	8.3	Ν	771
A60972	952	18055	В	D	09/08/2017	70.1	Ν	935
A85946	264	44062	Α	D	04/01/2015	76.3	Ν	1826
A85946	282	44050	В	D	02/01/2018	31.2	Ν	789
A85946	283	44047	Α	D	10/16/2017	59.7	N	897
A85946	283	44064	А	D	02/02/2018	121.6	Ν	788
A85946	283	45044	А	D	11/15/2017	218.7	Ν	867
A85946	283	45054	А	D	11/02/2017	59.8	N	880
A85946	284	45045	А	D	08/02/2018	75.6	N	607
A85946	448	01192	А	D	03/06/2018	24.4	Ν	756
A85946	448	01228	А	D	07/26/2018	19	Ν	614
A85946	448	01228	В	D	07/26/2018	15.6	Ν	614
A85946	448	01231	Α	D	07/27/2017	16.9	Ν	978
A85946	448	01232	Α	D	03/20/2018	13.2	Ν	742
A85946	448	01233	Α	D	03/20/2018	9.7	N	742
A85946	448	01238	А	D	06/19/2017	47.9	Ν	1016
A85946	448	01245	Α	D	03/24/2018	16.7	Ν	738
A85946	449	01235	Α	D	11/16/2017	88.8	N	866
A85946	449	01248	Α	D	03/08/2017	55.2	N	1119
A85946	452	01252	Α	D	10/05/2018	49	Ν	543
A85946	452	01254	Α	D	10/05/2018	2.5	N	543
A85946	500	06092	Α	D	10/01/2016	120.3	N	1277
A85946	503	04078	Α	D	12/07/2017	6.8	N	845
A85946	503	04082	Α	D	01/23/2017	13.3	N	1163
A85946	972	04100	A	D	09/15/2015	36.1	N	1659
A85946	972	04103	A	D	07/27/2017	161.9	N	978
A85946	972	04103	В	D	07/27/2017	11.9	Ν	978
A85946	978	01230	A	D	11/09/2017	22.8	Ν	873
A85946	991	04097	A	D	11/13/2018	230.9	Ν	504
A85946	992	06035	A	D	07/15/2016	455.7	Ν	1355
A85946	992	06035	В	D	07/15/2016	52.5	Ν	1355
A85946	993	06045	A	D	12/14/2017	20.1	Ν	838
A85946	995	04185	A	D	11/24/2017	24.5	N	858



License	Permit	Cut Block	SU ID	Current Declaration	Harvest Start Date	SU NAR	Regen Met	Regen Days
PAG12	APR-92458	43067	Α	D	03/14/2018	35.2	N	748
PAG12	APR-92458	43068	Α	D	03/14/2018	44.8	Ν	748
PAG12	APR-92458	43069	Α	D	03/19/2018	8.6	Ν	743
PAG12	APR-95141	25040	Α	D	03/16/2017	19.6	Ν	1111
PAG12	APR-95184	02149	Α	D	03/09/2018	21.7	N	753
PAG12	APR-95184	02157	Α	D	02/28/2018	9.4	N	762
PAG12	APR-95196	05123	Α	D	04/19/2018	23.2	N	712
PAG12	APR-95317	01119	Α	D	02/27/2018	46.4	N	763
PAG12	APR-95317	01188	Α	D	08/12/2018	65.6	N	597
PAG12	APR-96042	02309	Α	D	04/10/2018	69.3	Ν	721
PAG12	APR-96053	01270	Α	D	03/19/2018	3.1	Ν	743
PAG12	APR-96090	43051	Α	D	10/10/2018	32.6	N	538
PAG12	APR-96227	01325	Α	D	08/27/2018	112.8	N	582
PAG12	APR-96392	05044	Α	D	10/25/2018	2	N	523
PAG12	APR-96392	05046	А	D	11/13/2018	19.6	Ν	504



## Table 56: Licensee Participants Mixedwood Establishment Delay Calculation for Reporting Period of April 1<sup>st</sup>, 2019 to March 31<sup>st</sup>, 2020

License	Permit	Cut Block	SU ID	Current Declaration	Harvest Start Date	SU NAR	Regen Met	Regen Days
A18154	276	45038	А	CD	12/19/2016	35.9	N	1198
A18154	280	09067	Α	CD	02/23/2016	33.6	Ν	1498
A18154	370	10039	Α	CD	03/19/2019	21.0	N	378
A18154	407	02168	А	CD	03/22/2017	29.9	Ν	1105
A18154	413	02170	А	CD	02/10/2017	29.5	Ν	1145
A18154	414	02241	Α	CD	04/16/2018	10.0	Ν	715
A18154	424	27039	Α	CD	01/12/2017	12.5	Ν	1174
A18154	426	03092	Α	CD	07/11/2017	34.6	Ν	994
A18154	507	06077	Α	CD	03/07/2018	13.2	Ν	755
A56771	112	01196	Α	CD	07/24/2015	38.5	N	1712
A56771	453	01257	А	CD	01/14/2018	36.0	Ν	807
A60049	808	23090	А	DC	02/26/2018	5.3	Ν	764
A60049	998	02148	А	DC	03/24/2017	27.9	Ν	1103
A85946	282	44050	А	CD	02/01/2018	30.3	Ν	789
A85946	449	01216	А	DC	03/06/2019	181.2	Ν	391
A85946	995	04177	А	DC	08/22/2017	17.8	Ν	952
PAG12	APR-91509	01118	А	DC	03/08/2015	71.3	Ν	1850



Appendix 5: Compliance

## Table 57: Licensee Participant Contraventions Reported to Agencies - April 1<sup>st</sup>, 2019 - March 31<sup>st</sup>, 2020

Incident ID	Occurrence Date	Tenure	Location	Date Reported	Agency	Status	Issue Description

\*There are no compliance infractions to report during the reporting period.

## Table 58: BCTS Contraventions Reported to Agencies - April 1<sup>st</sup>, 2019 - March 31<sup>st</sup>, 2020

Incident ID	Occurrence Date	Tenure	Location	Date Reported	Agency	Status	Issue Description
ITS-BCTS Peace Liard Business Area-2018- 0283	Jan – March 2019	Spruce Mtn East FSR - 10962	Cypress Crek	April 16, 2019	MOF	Closed	As a result of a records file check on the Spruce Mtn East FSR for the purposes of determining who had been assigned the primary maintainer, it was discovered that one of the holders of a BC Timber Sales tenure utilizing the FSR had not previously submitted a road use permit application. This is a possible contravention of Section 22.1(1) of the Forest Range and Practices Act. Issue was reported to C&E and no further action taken. Licensee was advised to apply for the road use permit in advance of road use during the upcoming hauling season.



Appendix 6: Acronym Listing & Definitions

# 

#### Fort St. John Pilot Project 2019 -2020 SFMP Annual Report

#### Table 59: Acroymn Listing and Definitions

Acronym	Definition					
AAC	Annual Allowable Cut					
AIA	Archaeological Impact Assessments					
AOA	Archaeological Overview Assessments					
AOP	Areas Of (archaeological) Potential					
ATV	All-Terrain Vehicle					
BCTS	British Columbia Timber Sales					
BEC	Biogeoclimatic Ecosystem Classification					
BM	Boreal Foothills Mountain					
BPU	Boreal Plains Uplands Natural Disturbance Unit					
BRFN	Blueberry River First Nations					
BV	Boreal Foothills Valley					
CANFOR (Canfor)	Canadian Forest Products Ltd.					
CCFM	Canadian Council of Forest Ministers					
CCRES	Clear Cut with Reserves					
CD	Conifer Leading Mixtures					
CFLB	Crown Forested Land Base					
CFSSU	Chief Foresters Standard for Seed Use					
CMI	Change Monitoring Inventory					
COFI	Council of Forest Industries					
CRL	Cameron River Logging					
CSA	Canadian Standards Association					
CWD	Coarse Woody Debris					
DC	Deciduous Leading Mixtures					
DFA	Defined Forest Area					
DRFN	Doig River First Nation					
DTFN	Dene Tha First Nation					
DZ	Dunne-za LP					
EA	Effective Age					
FIT	Forester-In-Training					
FL	Forest Licence					
FOS	Forest Operations Schedule					
FPC	Forest Practices Code					
FRPA	Forest & Range Practices Act					
FSJ	Fort St. John					
FSJPPR	Fort St. John Pilot Project Regulation					
FSR	Forest Service Road					
GIS	Geographic Information System					
GRIMP	Graham Resource Integrated Management Plan					

IRM

ITS

LB

LLS

LP

LU

MOF

NIT

OM

OV

PA

PAG

PAS

PFI PFR

PMP

PMV

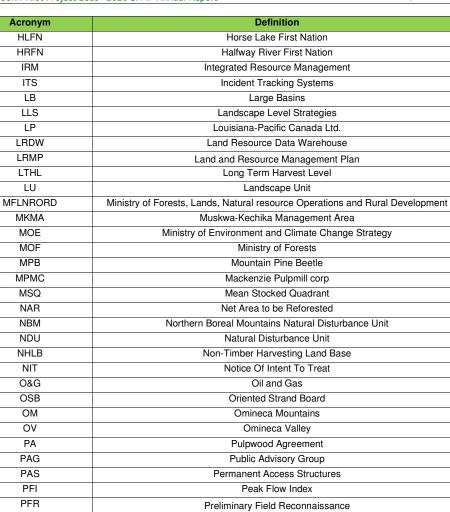
POC

POT

PRFN

**PVOSB** 

RESULTS



Pest Management Plan

Predicted Merchantable Volume

Point of Commencement

Point of Termination

Prophet River First Nation

Peace Valley OSB

Reporting Silviculture Updates and Land Status Tracking System

230

Acronym	Definition
RMZ	Resource Management Zone
ROS	Recreation Opportunity Spectrum
RPF	Registered Professional Forester
RRZ	Riparian Reserve Zone
RUA	Road Use Agreement
S.A.F.E.	Safety Accord Forestry Enterprise
SFM	Sustainable Forest Management
SFMP	Sustainable Forest Management Plan
SFN	Saulteau First Nations
SI	Site Index
SLMG	Stand Level Management Guidelines
SLP	Site Level Plan
SMZ	Special Management Zone
SQCI	Stream Quality Crossing Index
TASS	Tree and Stand Simulator
TFT	Trainee Forest Technologists
TMV	Target Merchantable Volume
TOR	Terms Of Reference
TRAP	Timber and Range Action Plan
TRIMC	Timber and Range Impact Mitigation Committee
TSA	Timber Supply Area
TSL	Timber Supply License
TSR	Timber Supply Review
TSS	Target Stocking Standard
UWR	Ungulate Winter Ranges
VQO	Visual Quality Objective
VRI	Vegetation Resources Inventory
WHA	Wildlife Habitat Areas
WMFN	West Moberly First Natio
WQCR	Water Quality Concern Rating
WQEE	Water Quality Effectiveness Evaluation
WTP	Wildlife Tree Patch



Appendix 7: Contact Information



For More Information regarding this report please contact:

**BCTS** Stephanie Smith, Operations Manager, RPF

Mailing Address: 9000 -17<sup>th</sup> Street Dawson Creek, BC V1G 4A4

Telephone: 250 784-1209

Email: Stephanie.Smith@gov.bc.ca

Canfor John Rowe, Woodlands Manager, RPF

Mailing Address: RR#1, Site 13, Compartment 2 Fort St John, BC V1J 4M6

Telephone: 250 787-3680

Email: John.Rowe@canfor.com

A copy of this report can be found at the Fort St John Pilot Project website:

http://www.fsjpilotproject.com/