



Appendix 2: Sustainable Forest Management Indicator Matrix



55 CSA Matrix⁴¹ Fort St. John Pilot Project SFM Matrix

The SFM Performance Requirements: CCFM Criteria and CSA SFM Elements

The organization, in conformance with the public participation process requirements set out in Section 5, will identify DFA-specific values, objectives, indicators and targets for each of the CSA SFM Elements described in Clauses 6.1-6.6, as well as any other values associated with DFA.

CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator	Target
CCFM Criterion 1 – Conservation of Biological Diversity					
Conserve biological diversity by maintaining integrity, function and diversity of living organisms and the complexes of which they are part, including ecological elements that contribute to cultural values					
Element 1.1 – Ecosystem Diversity Conserve ecosystem diversity at the stand and landscape level by maintaining the variety of communities and ecosystems that naturally occur in the DFA. Establish forest plantations only in afforestation projects.	Ecosystem Diversity	Maintain the diversity and pattern of 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
				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)

⁴¹ matrix number reflects the PAG meeting at which it was approved.



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
			1.1.3 – Forest Area by seral stage or age class.	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
				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
			1.1.4 – Degree of within-stand structural retention.	5 – Snags / cavity Sites	Number of snags and/or live trees (>23 cm dbh) per ha on prescribed areas	Retain annually an average of at least 6 snags and/or live trees (>23cm dbh) per hectare on prescribed areas
				9 – Wildlife Tree Patches	Cumulative Wildlife Tree Patch percentage in blocks harvested under the FSJPPR in each Landscape Unit	Cumulative Wildlife Tree Patch % will meet or exceed the minimum target in each LU (Blueberry 9%, Halfway 6%, Kahntah 5%, Kobes 8%, Lower Beaton 3%, Milligan 4%, Tommy Lakes 8%, Trutch 5%, Sikanni 4%, Graham 4%, Crying Girl 3%)
Element 1.2 – Species Diversity Conserve species diversity by ensuring that habitats and forest conditions for the native species found in the DFA are maintained through time, including	Species Richness	Suitable habitat elements for indicator species. Maintain habitats for species at risk	1.2.1 – Degree of habitat protection for selected focal species, including species at risk. ----- ---- 1.2.2 – Degree of suitable habitat in the long term for selected focal species, including	5 – Snags / Cavity Sites	See indicator # 5	
				6 – Coarse Woody Debris Volume	Average retention level of Coarse Woody Debris volume/ (m ³ /ha) on blocks logged in the DFA between December 1, 2008 2016 and	Average retention level over the DFA will be at least 46 m ³ /ha (50% of average pre-harvest volume) on harvested blocks assessed between December 1, 2016 and November 30,



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
habitats for known occurrences of species at risk.			species at risk.		November 30, 2016 2022	2022
				7 – Riparian Reserves	The number of non-compliances to riparian reserve zone standards	No non-compliances to riparian reserve zone standards
				8 – Shrubs	The proportion of shrub habitat (%) by Landscape Unit	Each landscape unit will meet or exceed the baseline target (%) proportion of shrub habitat
				9 – Wildlife Tree patches	See indicator # 9	
				11 – Species at Risk Stand Level Management Guidelines	The percentage of SLP's prepared annually for 'effected' cutblocks that incorporate one or more stand level species at risk management guidelines	100% of SLPs prepared annually for effected cutblocks will incorporate one or more species at risk management guidelines
				16 – Ungulate Winter Ranges, Wildlife Habitat Areas & MKMA	Proportion of activities consistent with the objectives of the Muskwa-Kechika Management Area (MKMA), and general wildlife measures for Ungulate Winter	All pilot Participant activities will be consistent with the objectives of the MKMA, and general wildlife measures for Ungulate Winter Ranges and Wildlife Habitat Areas



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
				17 – Representative Examples of Ecosystems	See indicator # 17	
				10 – Invasive Plants / Noxious Weeds	The % prohibited and primary noxious weeds, and known invasive weed species of concern, in seed mix analysis	Seed mix analyses will have 0% content of prohibited and primary noxious weeds and known invasive plants, as identified in the most current publication of: “Listing of Invasive Plants”, available from the Peace River Regional District
				13 – Coniferous Seeds	The percentage of seedlings and vegetative material used and planted in accordance with the Chief Forester’s Standards for Seed Use (Nov.20, 2004) as amended from time to time	100% of seedlings and vegetative material will be used and planted in accordance with the Chief Forester’s Standards for Seed Use (Nov.20, 2004), as amended from time to time
				14 – Aspen Regeneration	% natural regeneration of deciduous	100% natural regeneration for deciduous
Element 1.3 – Genetic Diversity Conserve genetic diversity by maintaining the variation of genes within species and ensuring that reforestation	Genetic Diversity	Conserve genetic diversity of tree stock	Non-Core	13 – Coniferous Seeds	See indicator # 13	
				14 – Aspen Regeneration	See indicator # 14	



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
programs are free of genetically engineered trees						
<p>Element 1.4 – Protected areas and sites of special biological, geological, heritage 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 sites of special biological, geological, heritage, or cultural significance within the DFA, and implement management strategies appropriate to their long-term</p>	<p>Protect areas and Conservation Emphasis areas, for example Special Management Zones, Ecological Reserves, etc</p>	<p>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.</p> <p>Management strategies address important values in SMZ areas</p>	<p>1.4.1 –Protection of sites of special significance. ----- 1.4.2 – Proportion of identified sites with implemented management strategies.</p>	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
				16 – Ungulate Winter Ranges, Wildlife Habitat Areas & MKMA	See indicator # 16	
				17 – Representative Examples of Ecosystems	See indicator # 17	
				18 – Graham Harvest Timing	The number of clusters in the Graham IRM Plan area where active operational harvesting is concurrently occurring	Operational harvesting within the Graham IRM Plan area will be constrained to no more than 1 ‘cluster’ of cutblocks at any one time



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
maintenance.				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
				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



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



CCFM 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
			Non-Core	2 – Seral Stage	See indicator # 2	
				9 – Wildlife Tree Patches	See indicator # 9	
				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)



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
				49 – Forest Health FOS Planning	Percentage of new conifer-leading harvest blocks in the 2017 FOS that are pine-leading	A minimum of 50% of new conifer-leading harvest blocks in the 2017 FOS will be pine-leading
			2.1.2 – Proportion of regeneration comprised of native species.	13 – Coniferous Seeds	See indicator #13	
				14 – Aspen Regeneration	See indicator #14	
				28 – Species Composition	See indicator #28	
			2.1.3 – Additions and deletions to the forest area.	24 – Permanent Access Structures	See indicator # 24	
				40 – Coordinated Developments	Number of coordinated developments	Report annually the number of proposed coordinated developments that occurred
				66 – Deletions to Forest Area	Percentage of gross crown forest landbased 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 the calculated long-term sustainable harvest level that is actually harvested.	25 – Forest Health	See indicator # 25
			31 – Long Term Harvest Level		Long-term harvest level (LTHL) as measured in cubic metres per year (m ³ /yr)	We will propose an Allowable Annual Cut (AAC) that sustains the LTHL of the Defined Forest Area (DFA)



CCFM 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 2010- Dec 31 2016: Industry Participants: -Not to exceed 110% of the combined cumulative coniferous AAC for the 6 year period, -Not to exceed 110% of the combined cumulative deciduous AAC for the 6 year period. BCTS Participant: -Not to exceed 110% of the combined cumulative coniferous commitment offered for sale for the 6 year period, -Not to exceed 110% of the combined cumulative deciduous commitment offered for sale for the 6 year period



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator	Target	
CCFM Criterion 3 – Conservation of Soil and Water Resources						
Conserve soil and water resources by maintaining their quantity and quality in forest ecosystems.						
Element 3.1 – Soil Quality and Quantity Conserve soil resources by maintaining soil quality and quantity	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	
			32 – Site Index	See indicator # 32	Zero blocks will have non conformances to soil disturbance limits	
			3.1.2 – Level of downed woody material.	6 – Coarse Woody Debris Volume	See indicator # 6	
Element 3.2 – Water Quality and Quantity Conserve water resources by maintaining water quality and quantity	Water Quantity	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	
		Maintenance of water quality	3.2.2 – Proportion of forest management activities, consistent with prescriptions to protect identified water features.	7 – Riparian Reserves	See indicator # 7	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
				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 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 Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator	Target	
CCFM Criterion 4 – Forest Ecosystem Contributions to Global Ecological Cycles						
Maintain forest conditions and management activities that contribute to the health of global ecological cycles.						
Element 4.1 – Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems.	Carbon Uptake and Storage	Maintenance of the processes for carbon uptake and storage	4.1.1 – Net Carbon Uptake.	24 – Permanent Access Structures	See indicator # 24	
				29 – Reforestation Assessment	See indicator # 29	
				30 – Establishment Delay	See indicator # 30	
				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
				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 Core 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 # 24, 40, 55 (related to CSA z809-08 Core Indicator 2.2.1 above)		



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator	Target	
CCFM Criterion 5 – Multiple Benefits to Society						
Sustain flows of forest benefits for current and future generations by providing multiple goods and services.						
Element 5.1 – Timber and Non-Timber Benefits Manage the forest sustainably to produce a mix of timber and non-timber benefits. Support a diversity of timber and non-timber forest products and forest-based services.	Timber and Non-Timber Multi-use Benefits	Provide opportunities for a feasible mix of timber, recreational 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.	18 – Graham Harvest Timing	See indicator # 18	
				19 – Graham Merch Area	See indicator # 19	
				21 – MKMA harvest	See indicator # 21	
				31 – Long Term harvest Level (Timber)	See indicator # 31	
				41 – Range Action Plan	Percent consistency with mutually agreed upon action plans for range	Operations 100% consistent with resultant range action plans
				42 – Damage to Range Improvements	Number of range improvements damaged by Participants' activities	Zero range improvements damaged by Participants' activities
				43 – Recreation Sites (Non - Timber)	The number of recreation sites maintained by Participants	Participants will maintain a minimum of one recreational site within the DFA
				44 – Visual Quality Objectives	Consistency with Visual Quality Objectives (VQO's)	Pilot Participants' forest operations will be consistent with the established VQO's



CCFM 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	



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
			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
				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.
				53 – Cut Control (Timber)	Percentage of total Allowable Annual Cut (AAC) charged to licensee tenure holders or BCTS	Jan 1 2016 - Dec 31 2021: <u>Industry Participants:</u> -Not to exceed 110% of the combined



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
					Participants during the term of the SFMP.	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
			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	See Indicator # 23	
				41 – Range Action Plan	See indicator # 41	
				46 – Actions Addressing Guides, Trappers, and Other Interests	See Indicator # 46	
				47 – Timber Processed in the DFA	See Indicator # 47	
				54 – Dollars Spent Locally on Each	See indicator # 54	



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator	Target				
<p>Element 5.2 – Communities and Sustainability Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and by supporting local community economies.</p>	<p>Sustainable and Viable Communities</p>	<p>Maintain viable timber processing facilities in the DFA. No decrease in the LTHL in the DFA</p>		Woodlands Phase					
				55 – Direct and Indirect Employment	See Indicator # 55				
				68 – Effective Communication – Non Timber Resources	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			
						<p>5.2.1 – Level of participation and support in initiatives that contribute to community sustainability.</p>	47 – Timber Processed in the DFA	See Indicator # 47	
					48 – Summer and Fall Volume Deliveries		Volume of timber (m ³) delivered annually to wood processing facilities within the Fort St. John Defined Forest Area (DFA) wood processing facilities between May 1st and November 30th	Minimum of 100,000 m ³ to conifer mills in the DFA, Minimum of 185,000 m ³ to deciduous mills in the DFA	
					50 – Coordination		Percentages of SFMP's and FOS's prepared jointly by the Participants	100% of all SFMP's and FOS's will be jointly prepared by the Participants	
					51 – Timber Profile - Deciduous		See indicator # 51		



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
				52 – Timber Profile - Coniferous	See Indicator # 52	
				54 – Dollars Spent Locally on each Woodlands Phase	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 and maintenance: minimum of 80%
						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	
			Fair Distribution of Benefits and Costs	Development of Skilled Workers	5.2.2 – Level of participation and support in training and skills development.	63 – Worker Training
12 – Forest Workers Safety	Implementation and maintenance of certified safety	Each managing participant will implement and maintain				



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
					program	a certified safety program
			5.2.3 – Level of direct and indirect employment.	48 – Summer and Fall Volume Deliveries	See Indicator # 48	
				54 – Dollars Spent Locally on Each Woodlands Phase	See Indicator # 54	
				55 – Direct and Indirect Employment	See Indicator # 55	



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
CCFM Criterion 6 – Accepting Society’s Responsibility for Sustainable Development						
Sustainable forest management includes society’s responsibility for worker and community safety, and the requirement for fair, equitable, and effective forest management decisions.						
<p>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 public awareness of the process and its progress.</p> <p>Provide relevant information and educational opportunities to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems.</p>	<p>Opportunity for Public Participation</p>	<p>To facilitate a satisfactory public participation process. To develop satisfaction with the public participation process</p>	<p>6.1.1 – Level of participant satisfaction with the public participation process.</p>	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)
				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
	<p>Information for Decision-making</p>	<p>Relevant information used in the decision making process is provided to PAG, general public, and affected parties</p>	<p>6.1.2 – Evidence of efforts to promote capacity development and meaningful participation in general.</p>	41 – Timber Range Action Plans	See Indicator # 41	
				46 – Actions Addressing Guides, Trappers, and Other Interests	See indicator # 46	
				58 – Regulatory Public Review and comment Process	Compliance with the public review and comment process identified in the FSJ Pilot Project Regulation	100% compliance with public review and comment processes identified in the FSJ Pilot Project Regulation
				59 – Terms of Reference (TOR) for the Public Participation Process.	See Indicator # 59	
				60 – Public Inquiries	The percentage of timely responses to	Respond to 100% of public inquiries



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
					public inquiries	regarding Participants' forestry practices, that are additional to the Pilot Public Review and Comment processes, within one month of receipt
				61 – Educational Outreach	Number of people to whom information, presentations, or field trips provided annually	Minimum of 40 people provided information, presentations, or field trips
				64 – PAG Satisfaction Surveys	See Indicator # 64	
			6.1.3 – Availability of summary information on issues of concern to the public.	60 – Public Inquiries	See Indicator # 60	
				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 Management of the Forest	Provide a safe work environment for DFA forestry workers and the public. Diverse local forest employment opportunities exist in the DFA	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	
			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 Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator	Target	
CCFM Criterion 7 – Aboriginal Relations						
Recognize and respect the unique rights and values of Aboriginal Peoples						
<p>Element 7.1 – Aboriginal and Treaty Rights Recognize and respect Aboriginal title and rights, and treaty rights. Understand and comply with current legal requirements related to aboriginal title and rights, and treaty rights.</p>	<p>Aboriginal and Treaty Rights</p>	<p>Recognition of Treaty 8 rights and respect of aboriginal rights through maintenance of landscape level biodiversity</p>	<p>7.1.1 – Evidence of a good understanding of the nature of Aboriginal title and rights.</p>	<p>33 – First Nations Consultation & Information Sharing</p>	<p>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)</p>	
			<p>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 this process. Where there is communicated disagreement regarding the organization's forest</p>	<p>56 – Maintenance of Wildlife and Fisheries Habitat</p>	<p>Conformance to the SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat</p>	<p>Participants will conform to the identified SFMP indicators and targets pertinent to the maintenance of wildlife and fisheries habitat</p>
				<p>33 – First Nations Consultation & Information Sharing</p>	<p>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)</p>	<p>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)</p>
				<p>69 – Effective Communication – Aboriginal Communities</p>	<p>Evidence of ongoing communication with Aboriginal communities and</p>	<p>100% of information on aboriginal titles and rights, identified through on-going communication with</p>



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
			management activities, this evidence would include documentation of efforts towards conflict resolution.		consideration of information gained	Aboriginal communities, has been responded to and considered and may be accommodated in forest management planning
Element 7.2 – Respect for Aboriginal Forest Values, Knowledge and Uses Respect traditional Aboriginal forest values, knowledge, and uses as identified through the Aboriginal input process.	Aboriginal Forest Values, and Uses	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.	7.2.1 – Evidence of efforts to promote capacity development and meaningful participation for Aboriginal individuals, communities and forest-based companies.	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
				33 – First Nations Consultation & Information Sharing	See Indicator # 33	
				57 – Number of Known values and Uses Addressed in Operational Planning	See Indicator # 57	
				60 – Public Inquiries	See Indicator # 60	
			7.2.2 – Evidence of understanding and use of Aboriginal Knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values.	33 – First Nation Consultation & Information Sharing	See Indicator # 33	
				57 – Number of Known values and Uses Addressed in Operational Planning	See Indicator # 57	
				62 – Brushing Program Aerial Herbicide Use	See Indicator # 62	



CCFM Criteria & CSA SFM Elements	Value	Objective	CSA core Indicator (reference only)	SFMP Indicator		Target
			7.2.3 – Level of management and/or protection of areas where culturally important practices and activities occur.	33 – First Nations Consultation & Information Sharing	See Indicator # 33	
				57 – Number of Known values and Uses Addressed in Operational Planning	See Indicator # 57	
				62 – Brushing Program Aerial Herbicide Use	The number of hectares removed annually from the participants' aerial herbicide plans based on input from First Nations or the public and final treatment layout	The participants will report annually, the number of hectares removed from the participants' aerial herbicide plans based on input from First Nations or the public and final treatment layout

List of CSA Matrix Revisions

SFMP #3 – February 7, 2018

- New Indicators #68 & #69 added to SFMP, becomes effective April 1, 2018 for monitoring purposes.

