

# Forest Management Plan for the C5 Forest Management Unit Milestone Information Package Number 3

Crowsnest Forest Products (CFP), a subsidiary of West Fraser Mills Ltd. (West Fraser)<sup>1</sup>, is in the process of completing the 2026-2036 C5 Forest Management Plan (FMP). The new C5 Forest Management Plan will replace the 2006-2026 FMP and will contain specifics for when, where, and how timber will be managed to balance social, economic, and environmental objectives for the Defined Forest Area (DFA).

The FMP has been developed in accordance with all applicable acts, regulations, policies, and ground rules. The primary documents guiding forest management are the *Forests Act*, the Timber Management Regulation, and the Alberta Forest Management Planning Standard (Version 4.1 April 2006). Forest management plans fit into a defined scope. They must abide by higher level plans and processes that have been developed in order to sustainably operate on Crown land. The FMP area is located within the South Saskatchewan Land-Use Framework Region and aligns with the South Saskatchewan Regional Plan (SSRP) and the Livingstone Porcupine Hills Land Footprint Management Plan (LPH-LFMP). Figure 1 illustrates the forest management planning hierarchy, including the operational plans and Timber Harvest Planning and Operating Ground Rules required by the Alberta government.

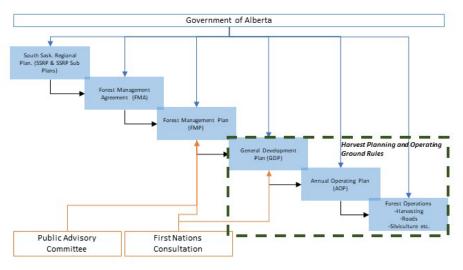


Figure 1. Forest Management Planning Hierarchy

Completing a forest management plan, from data collection and analysis to mapping and consultation with the public and indigenous communities, typically takes between two and five years. After the FMP is submitted, it can take between five months to over a year to be reviewed, revised, and approved by the Government of Alberta. The Forest Management Agreement (FMA) states that CFP shall submit a new forest management plan in accordance with the forest planning standards for the Minister's

<sup>&</sup>lt;sup>1</sup> West Fraser acquired Spray Lake Sawmills and its subsidiary Crowsnest Forest Products Ltd. in November 2023.



approval on or before May 1, 2025. An extension was granted for plan submission to on or before November 1, 2025.

The development of a forest management plan is a dynamic process, incorporating knowledge from research, policies and legislation that regulate the forest industry, and ongoing review of performance from previous plans and operations. This information package provides an overview of key elements in the draft FMP, including the Values, Objectives, Indicators, and Targets (VOITs), the draft Spatial Harvest Sequence (SHS), and the Preferred Forest Management Scenario (PFMS). Once finalized and approved, these components will guide harvesting activities and track the performance within the C5 DFA (see Figure 2) over the next ten years.

# **Managing Alberta's Timber Resources**

Timber resources in Alberta are allocated through the forest tenure system. This provides a mechanism to manage timber resources in the province, but land and resource ownership is retained by the Crown (public land model). CFP is a forest tenure holder in the province of Alberta. CFP's key roles and responsibilities as a tenure holder are reflected in documents such as the *Forests Act*, regulations issued pursuant to the *Forests Act* (including Timber Management Regulation and the Forest (Ministerial) Regulation), forest tenure documents, forest policy directives, forest management plans, and the Timber Harvesting Planning and Operating Ground Rules. Pursuant to these agreements and dispositions, operational forest management activities undertaken become the responsibility of tenure holders but the Government of Alberta (GoA) retains control of these activities through review and approval of Forest Management Plans, General Development Plans, and Annual Operating Plans. An FMA is still subject to following higher level acts, regulations and plans for the region, the province, and the country (see useful links and key acts on at the end of this document).

Forest Management Agreements provide the right to establish, grow, harvest and remove timber (FMA clause 2(1)) in the FMA area. An FMA does not provide authority over other companies or land use or non-timber resource users, nor does an FMA provide authority for cumulative effects management. The level of authority provided through an FMA are specifically prohibited from restricting access or constraining Alberta's right to manage other resources, including the allocation of land for other industrial uses. The FMA specifies the need for a Forest Management Plan, following the forest planning standards. The main objective of a Forest Management Plan is to manage forest vegetation while minimizing the potential impact of forest operations on other values and uses. CFP's FMP will be a twenty-year plan, which is renewed every ten years, and guides operations and activities for the duration.

### **VOITs Development**

Values, Objectives, Indicators, and Targets (VOITs) form the basis of the FMP performance monitoring program. The VOITs establish linkages between social, economic and ecological values identified for the FMP area and their application in forest management activities. Values and objectives represent broad



landscape-level items, with indicators and targets being specific variables to monitor and measure. Below is the Alberta Forest Management Planning Standard definition of a VOIT:

- Value A characteristic, component or quality considered by an interested party to be
  important in relation to a Canadian Standards Association (CSA) Sustainable Forest Management
  (SFM) element or other locally identified element (see list of useful acronyms at end of
  document).
- Objective A broad statement describing a desired future state or condition of values.
- Indicator A variable that measures or describes the state of condition of a value.
- **Target** A specific statement describing a desired future state of condition of an indicator. Targets should be clearly defined, time-limited, and quantified, if possible.

The VOITs development process was initiated by CFP in November 2022. The GoA provided an updated list of draft VOITs in March 2023 that incorporated the SSRP and the LPH-LFMP. With government approval, the FMA holder can modify or add to these VOITS to address values and objectives specific to their operating area. Beginning in the fall of 2022, CFP engaged in FMP/VOITs informational gathering to seek input from interested parties. Initiation involved the planning hierarchy, the FMP process, and values and objectives development. Input from stakeholders and Indigenous communities was sought. This input was incorporated and any new VOITs that were suggested were explored through review and consultation processes. The VOITs were developed to align with higher level regional and sub-regional plans such as the South Saskatchewan Regional Plan and the Livingstone Porcupine Hills -Land Footprint Management Plan.

CFP is now initiating the final review process for the 2025 draft FMP. Any specific areas of concern will be carefully evaluated and feedback may be incorporated into the final plan. Concerns related to operational practices (silvicultural strategies, access plans, harvest operations, etc.) will also be considered and could contribute to strategies for operational implementation of the FMP. Table 1 provides the current VOITs for inclusion in the 2025 FMP.

# **FMP Progress to Date**

- Approval of the FMP Public Participation Program, available on our website (<u>West Fraser Cochrane</u> | <u>West Fraser Timber Co.</u>).
- Completed consultation for Milestone 1 and 2 and are now consulting on Milestone 3.
- Completed a FMP/VOIT open house to gather stakeholder and public input.
- Completed 100% of our forest growth field sampling program.
- Completed the net landbase and yield curve technical requirements. This analysis indicates where forestry will likely take place as well as the forest growth calculations.
- Completed the Draft Visual Quality Strategy.
- Completed a preliminary timber supply analysis (TSA). This analysis indicates the amount of timber to be sustainably harvested in consideration of the VOITs known as the annual allowable cut (AAC).



- Completed a preliminary non-timber assessment (NTA) analysis. This is how harvest levels are aligned with VOIT trade-offs.
- Completed the preliminary spatial harvest sequence (SHS). The SHS areas indicate where harvesting is likely to occur over the next 20 years (see pages 7-8).
- Conducted six public advisory committee FMP update meetings covering the planning process, public participation plans, VOITs, net landbase, visual quality, timber supply analysis, spatial harvest sequence, non-timber assessments, and the spatial harvest sequence.
- Conducted 16 Planning Development Team (PDT) Meetings with the subject matter experts at the government of Alberta

# **Milestone 3 Consultation Items**

• The Draft 2025 Forest Management Plan document.

# **Future Consultation Opportunities**

The draft FMP document was posted on the corporate website on June 11, 2025. The draft FMP open house will be held on June 24, 2025. The Open House will be an excellent opportunity to review and provide comment on the final draft of the plan. Interested parties are also invited to send email questions and input.

The West Fraser Cochrane website contains the following information for interested parties to review and provide input:

- The draft FMP document.
- The Milestone 3 Information Package.
- The Public Participation Program document.
- News events and consultation opportunities.
- A mechanism to email the company with input.
- The Forest Management Agreement document.
- The Timber Harvest Planning and Operating Ground Rules document.



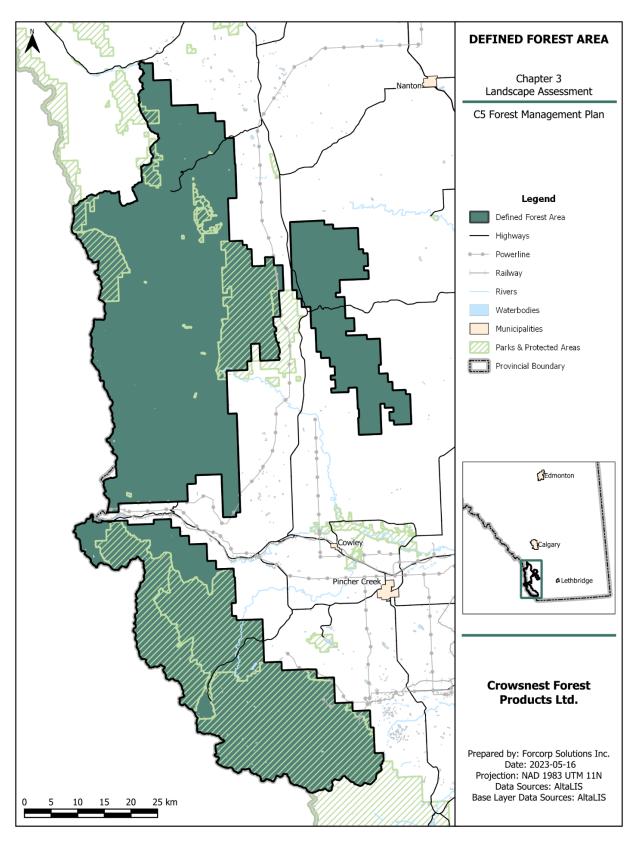


Figure 2. Crowsnest Forest Product's Defined Forest Area (DFA).



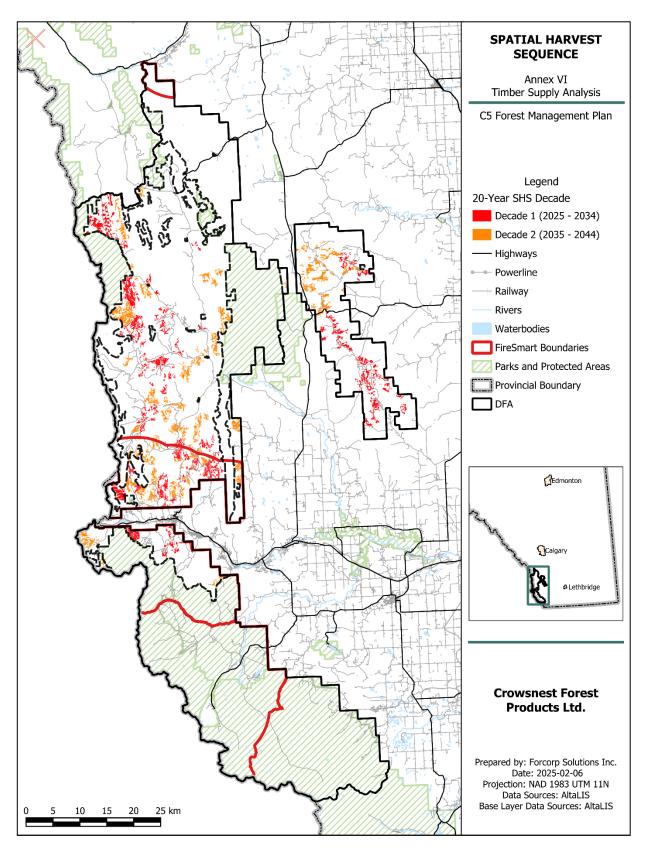


Figure 3. Preliminary Spatial Harvest Sequence for C5, by decade.



VOIT	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
1	Landscape scale biodiversity	biodiversity by retaining the full	young forest in the Forest Management Agreement (FMA) area by cover class <sup>2</sup> .	Over the 200 year planning horizon:  a) Gross landbase: greater than 25% old forest, greater than 31% mature plus old forest, less than 13% young forest; and  b) Net landbase: greater than 13% old forest, greater than 23% mature plus old forest, less than 20% young forest  Note: Old forest retention shall include the full natural range of ages	definitions shall be based on sound science, ecological considerations, wildlife zones, and disturbance regimes. Target shall ensure representation of natural range of	Stewardship Act (ALSA), South Saskatchewan Regional Plan (SSRP) and Livingstone- Porcupine Hills Land	Minimize variance by developing and implementing an operationalized Spatial Harvest Sequence (SHS)	inventory Planning and submission of a General	10, 50, 100 and 200 years. Maps of indicators at 0, 10 and 50 years  Performance: 5 year - Stewardship Report  10 year - Stewardship Report [Compare time 0 of 2025 FMP to Classified Landbase (CLB) of new FMP]	old and mature	Management
2	Landscape scale	biodiversity by	· • •	A distribution of harvest area sizes that will result in a patch size pattern over the 200-year planning horizon that is increasing in patch size.	Targets shall be based on sound science, ecological considerations, wildlife zones, and disturbance regimes. Target shall ensure representation of natural range of ecosystem attributes (e.g. productivity class)	ALSA, SSRP, LPH-LFMP	targets are set for forest patches less	Regular updates to forest inventory  Planning and submission of a GDP, adherence to SHS, track and report variance	forest in each patch size class by subunit at 0, 10, and 50 years (or end of first rotation). Maps of patch size classes at 0, 10, and 50 years, (or end of first rotation)  Performance: 5 year - Stewardship Report	distribution is achieved; or demonstrated progress to achieving target in one rotation where the pattern has	strategies in



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3	· ·		the FMA by cover class.	b) Area of old interior forest will not be less than 11% of PI stands, 31% of SW stands, 13% of FD stands, 2% of MIX stands, over the next 200 years.	Targets shall be based on sound science, ecological considerations, wildlife zones, and disturbance regimes. Target shall ensure representation of natural range of ecosystem attributes (e.g., productivity class)		Spatial and temporal harvest planning  Minimize variance by developing and implementing an operationalized SHS	Regular updates to forest inventory Planning and submission of a GDP, adherence to SHS, track and report variance	years	achieved for at least 80%	Adjust strategies in subsequent FMP
4-1	Landscape	biodiversity by minimizing access	a) Open permanent forestry road (Department Licence of Occupation - DLO) density outside the LPH-LFMP area.	a) Less than 0.00 km/km2	Targets shall be based on sound science, ecological considerations, harvest planning, wildlife zones, and social values	ALSA, SSRP, Public Lands Act	Develop a strategy that coordinates access with other resource users, spatial/temporal sequencing of harvest, road construction and reclamation. (SHS and long-term corridor access plan)	Regular updates to forest inventory and Digital Integrated Dispositions (DIDs).	FMP: Table of road density outside LPH-LFMP area at 0 and 10 years. Map of existing and proposed open and closed forestry roads. Report forestry roads and total (all users) roads  Performance: Stewardship Reports - table and map of permanent open forestry road densities (km/km2) outside LPH-LFMP area.	not exceeding +/-20% must be achieved	_
4-2	Landscape	biodiversity by	b) Open seasonal/temporary forestry road length outside LPH-LFMP area.	a) Less than 18 km for the FMA area outside the LPH -LFMP area			reclamation	Road planning OGR	FMP: Table and map of existing open seasonal/temporary forestry roads at time zero.  Performance: Stewardship Reports - table open seasonal / temporary forestry roads for each timber year for outside LFH-LFMP.	not exceeding +/-20% must be achieved	_



VOIT	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
5-1	1.1.1 Landscape scale biodiversity		a) Open motorized access by Footprint Planning Zone	a) Less than 0.04 km/km2 in Zone 2 and less then 0.14 km/km2 in Zone 3	reclamation data, targets	Planning Standard, ALSA, SSRP, LPH-LFMP, Public Lands Act, OGRs, SDD	maintenance and	(Operating Ground Rules (OGR))	FMP: Current open motorized access density by zone (open forestry Department Licence of Occupation (DLOs)).  Performance: Stewardship Reports  Road density and km by zone per year for Open Motorized Access (open forestry DLOs).	None	Removal of open motorized access when appropriate Adjust strategies in subsequent FMPs



VOIT	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
5-2	1.1.1 Landscape scale biodiversity		access by Footprint	b) Less 0.09 km/km <sup>2</sup> in Zone 2 & 3	construction and reclamation data, targets	Planning Standard, ALSA, SSRP, LPH-LFMP, Public Lands Act, OGRs, SDD	Road construction, maintenance and reclamation activities  Government of Alberta Decision Support Tool  Develop a strategy to coordinate access with other resource users, spatial/temporal sequencing of harvest, road construction and reclamation (SHS and long-term corridor access plan)  All temporary forestry roads will be managed as Restricted Motorized Access per LFH-LFMP,	Regular updates to forest inventory  Government of Alberta Decision Support Tool	FMP: Current restricted motorized access density by zone. (Forestry Access roads and DLOs)  Performance: Stewardship Reports  Restricted motorized access density by zone per year	None	Adjust timing of road reclamation program Adjust strategies in subsequent FMPs
5-3	scale	minimizing access	c) Near stream motorized access disturbance limit (within 100 m of a stream on erodible soils	c) <0.01 km/km² in each analysis unit	construction and reclamation data,	Planning Standard, ALSA, SSRP, LPH-LFMP, Public Lands Act, OGRs, SDD	Develop a strategy that coordinates access with other resource users, spatial/temporal sequencing of harvest, road construction and reclamation (SHS and long-term corridor access plan)	Regular updates to forest inventory Government of Alberta Decision Support Tool	FMP: Current near stream motorized access density by analysis unit (Forestry Access roads and DLOs)  Performance: Stewardship Reports  Near stream motorized density by analysis unit per year	None	Adjust timing of road reclamation program Adjust strategies in subsequent FMPs.



VOIT ID	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
6	1.1.1 Landscape scale biodiversity	·	, ,	Conserve uncommon plant communities for 100% of known encountered occurrences.	Geographic Information System (GIS) analysis, Alberta Vegetation Inventory (AVI), ecosite phases, Alberta Conservation Information Management System (ACIMS), plant community classification and tracking list. Predict and identify occurrence of uncommon plant community	Planning Standard	Coordinating with other resource users, spatial planning of harvest and road construction, OGRs Apply operational procedures	Annual ACIMS database updates, regular updates to inventory.	displaying known locations of uncommon plant	the 10-year FMP term the	strategies in
	1.1.1 Landscape scale biodiversity		a) Area of unsalvaged burned forest	-	Targets based on Fire Salvage Planning and Operations - Directive No. 2007-01. Ensure consistency with FireSmart objectives	Fire Salvage Planning and Operations - Directive No. 2007-01	Salvage planning	Organization reports, air photo interpretation, ground surveys, post-harvest assessments, General Development Plan (GDP).	wildfire events within the last 10 years showing area (ha) and proportion (%) of salvaged and unsalvaged	FMP term the target is achieved or exceeded	strategies in
	1.1.1 Landscape scale biodiversity		b) Area of unsalvaged blowdown	In areas of significant blowdown (>= 100 ha) greater than 10% will be left unsalvaged	Targets are to be based on sound science, ecological considerations and disturbance regimes	Planning Standard	Salvage planning	Inventory updates, GDP.	blowdown event within the last 10 years showing area (ha) and proportion (%) of salvaged and unsalvaged.	FMP term the target is	strategies in



VOI	- Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
9	1.1.1 Landscape scale biodiversity		Protection of aquatic and riparian areas	Consistent with OGRs	OGRs	Federal Fisheries Act, Timber Management Regulation (TMR), Forests Act, Grazing and Timber Integration Manual, ALSA, SSRP	Planning and operations, Timber Supply Analysis (TSA), OGRs	FOMP reports, Company monitoring/audits, tracking of OGR deviation requests, and non-standard submissions	Performance: Stewardship Reports  Number of FOMP variances related to specific OGRs  Number of Company self- reports  Number of OGR deviations requested under applicable OGRs		Demonstrate that aquatic and riparian ecosystem objectives are being met through an effective monitoring program based on aquatic and riparian function in areas of concern.
10	1.1.2 Local/stand scale biodiversity	level structure	(both living and dead), within a harvest area, as outlined in CFPs structure retention strategy by FMA	3% of the Lodgepole pine/other non-Douglas fir Forest and; 15-20% of the Douglas fir forest. Structure retention is by area, to be within the contributing landbase, internal to each harvest area (individual openings), and representative of the pre-harvest stand composition. Note: A wide range in variability in harvest area level retention within the FMA is desired as long as the target level is achieved	vegetation screens, recreational values,	Occupational Health and Safety Act, Forest and Prairie Protection Act Planning Standard, ALSA, SSRP, LPH- LFMP, OGRS	Implement CFP structure retention strategy and OGRs	Organization reports, cutover photography, air photo interpretation, ground surveys, post-harvest assessments	FMP: None  Performance: Stewardship Reports - Table of the percent of structure retention by year for the FMA.	FMP term the	strategies in
11	1.1.2 Local/stand scale biodiversity	level structure	area within the FMA with	b) 75% of harvest areas having downed woody debris retained on site	Recording utilization of downed woody debris post-harvest.	Planning Standard ALSA and SSRP	Organization developed standards	Organization developed during FMP planning	FMP: None  Performance: Stewardship Reports - table showing percent of harvest areas by year that have not received treatments that reduces downed woody debris (e.g. brush raking and prescribed burns)		Adjust strategies in subsequent FMP.



VOI <sup>-</sup>	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
12	scale biodiversity	integrity of sensitive sites	Sensitive sites (e.g. mineral licks, major game trails) by FMA	Strategies to maintain consistent with provincial guidelines / OGRs	through local knowledge, public consultation, Indigenous consultation, ACIMS, ABMI, GDPs, FWMIS, OGRs		Organization developed standards for sensitive site protection.	Organization reports, air photo interpretation, ground surveys	FMP: None  Performance: Stewardship Reports - summary of identified sites and action taken.		Adjust strategies in subsequent FMPs
13	scale biodiversity	by minimizing impacts of watercourse crossings	a) Permanent forestry watercourse crossings in compliance with Code of Practice for Watercourse Crossings b) Temporary forestry watercourse crossings in compliance with OGRs	a) Permanent forestry watercourse crossing designs meet standards of the Code of Practice for Watercourse Crossings b) Temporary forestry watercourse crossings meet standards in the OGRs	Watercourse Crossings b) OGRs	a) Water Act, Water (Ministerial Regulation) and Code of Practice for Watercourse Crossings b) Forests Act, TMR and OGRs	Road and watercourse planning, construction, monitoring, maintenance and reclamation activities	Directive  OGRs  Company watercourse crossing monitoring program	Performance: Stewardship Reports  Report on all company watercourse crossing monitoring results  Number of FOMP variances related to relevant OGRs  Number of Company self-reports related to relevant OGRs	None	Based on stewardship reporting results, a causal factor review and the frequency and severity of reported incidences a third-party review of watercourse crossing monitoring programs and operations standards may be required



14 1.2.1 Viable	1.2.1.1 Maintain	a) Number of hectares of	a) Maintain or increase the number	Habitat models (provided	Recovery plans for	Harvesting plans,	Undates to vegetat	FMP: a) Table and maps of	At the end of	Adiust
populations		primary and secondary	of hectares of primary and secondary	**	species at risk, Federal	road construction,		current (time zero) and		strategies in
of identified		habitat from the fRI Grizzly		·	Species at Risk Act	· ·		future (10 and 20 years)	FMP term the	_
		-	•	Alberta (GOA)).	Species at Nisk Act		inodening.	, , ,		FMP.
plant and	economically		model, as measured at time 0;	Based on sound science,		implementation,		landscape conditions for	target is	FIVIP.
animal	valuable, socially	time 0 (1 May 2023) by FMA;	b) Maximum 15% reduction in the	ecological			Planning and	core and secondary habitat		
species	valuable, species at	b) Percent change in the	breeding pairs indicator over the 200	considerations, wildlife		provincial wildlife	00.0	zones, core and secondary	exceeded.	
	risk, species of	Barred owl potential		zones, Committee on the		guidelines.	obi , danici cinec to	sink zones, non-critical		
	management	· ·	l, , ,	Status of Endangered			SHS, track and	habitat and road density;		
	concern)	Selection Function (RSF)	the 200 year planning horizon;	Wildlife in Canada		Minimize variance	report variance.	b) Tables of breeding pairs		
		value from (1 May 2023) by	line 200 year planning nonzon,	(COSEWIC) list,		by developing and	· .	and RSF at 0, 10, 20, 50,		
			c) Maximum 15% reduction in the	provincially listed		implementing an		100 and 200 years and		
		FMA;	indicator over the 200 year planning	-		operationalized				
		c) Percent change in	horizon; and	species, ABMI, ACIMS,		SHS.		maps of RSF value and		
		American marten habitat	d) Mariana 450/ and heating in the	Recovery plans,		5115.		breeding pairs at 0, 10, 20		
		suitability index from (1 May	d) Maximum 15% reduction in the	government priorities,		Can Milaitalaani, an d		and 50 years;		
		2023) by FMA; and	indicator over the 200 year planning	public consultation,		For Whitebark and		c) Tables of habitat		
			horizon.	habitat suitability		Limber pine, ensure		suitability at 0, 10, 20, 50,		
		d) Percent change in relative		analysis, literature		protection of trees,		100 and 200 years and		
		abundance value of three	all known Whitebark and Limber Pine			saplings, and seedlings		maps of habitat suitability		
		songbird species (Brown	trees, saplings, and seedlings.	local and traditional		through careful		at 0, 10, 20 and 50 years;		
		Creeper, Ovenbird and Varied				operational planning of				
		Thrush) from May 1, 2023 by	100% protection of GoA long term	knowledge.		roads and harvest		and		
		FMA;	monitoring installations,	Fan Milettalaani, an d		areas.		d) Tables of relative		
		e) Maintain identified	research/restoration and plus tree	For Whitebark and		Maintain consistency		abundance at 0, 10, 20, 50,		
		'	sites.	Limber pine, use AVI in		with current approved		100 and 200 years and		
		Whitebark and Limber Pine		combination with				maps of relative		
		trees, saplings, and seedlings.		company and GoA long		Alberta Whitebark and		abundance at 0, 10, 20 and		
				term monitoring		Limber Pine Recovery		50 years.		
				installations, research		Plan and best		•		
				/restoration and plus		management practices.		e) Map of Whitebark and		
				trees sites data.		Operational guidance		Limber Pine distribution		
				Consult with WPEFC for		on Pa/Pf content from		(contributing/non-		
				most current spatial data		subjective deletions		contributing), long term		
				· ·		process in classified		monitoring installations,		
				identifying presence and absence of Whitebark		landbase.		research/restoration and		
								plus tree sites.		
				and Limber Pine trees,		Collaboration with		Performance:		
				saplings, and seedlings.		Whitebark Pine		Items a-d		
						Ecosystem		Fugar Chausadahia		
						Foundation of		5 year - Stewardship		
						Canada (WPEFC)		Report		
						for support,		10 year - Stewardship		
						mitigation and		Report		
						expertise as		•		
						needed.		Compare time 0 of		
								previous FMP to CLB of		
						Clark's nutcracker.		new FMP)		
						Modelling				
						ivioueiiiiig				



VOIT Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
								Item e – 5 and 10 year Stewardship Reports		
								Number of Whitebark and Limber pine trees, saplings and seedlings that have been damaged and/or destroyed.		



VOIT ID	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
	5.2.1 Viable populations of identified plant and animal species	recovery of native trout species that are federally listed as species at risk under the Species at Risk Act.	a) ECA in bull and Westslope cutthroat trout watersheds b) Roads in Westslope cutthroat trout and bull trout watersheds i.Road density ii.Stream crossings c) Habitat Conservation Strategy	<ul> <li>a) Target ECA in trout watersheds is &lt;30%. If ECA is &gt;30%, alter timber harvest scenario with strategic mitigations until ECA is &lt;30%. If existing disturbance, at year 0, already exceeds 30%, then ECA values must demonstrate a downwards trend or will not exceed 30% ECA in modelled years 0-20.</li> <li>b) Report on all permanent and temporary forestry road densities, in bull trout and Westslope cutthroat trout watersheds (HUC8) to limit access. Report on number of crossings in all watersheds (HUC8) and in critical habitat to understand cumulative footprint.</li> <li>c) Develop Habitat Conservation Strategy for native trout species, including BMPs, operational mitigations, and commitments to fish recovery.</li> </ul>	Government of Alberta.  Internal and other forestry operators data (remote sensing, planned blocks, site assessments, etc). Government data for HUC watersheds and respective species Critical Habitat.  Literature review, recovery plans.	· ·	- ECA modelling - Harvesting plans, road construction, OGR, planning and implementation - Adherence to provincial wildlife guidelines - Adhere to SHS - Adhere to Habitat Conservation Strategy	Tracking ECA's, roadensities, and crossings. Progress on commitments in Habitat Conservati Strategy.	Performance: Stewardship Reports  a) Tables showing the		Adjust strategy as required
15	integrity of natural tree populations	forest populations"	and area (ha) of in situ genetic conservation areas	as per requirements set forth in the Alberta Forest Genetic Resource	Gaps and needs as identified in GCP and requirements set for forth in FGRMS	to meet this TMR are provided by Alberta Forest Genetic Resource Management and Conservation Standards (FGRMS).	Cooperatives.  Identified	Stewardship Reporting and FGRMS mandatory reports	FMP: If applicable, table showing number and status of gene conservation areas and number provided in the DFA. If applicable, map showing locations of gene conservation areas.  Performance: Stewardship Reports - report progress towards target.	the 10-year FMP term the target is achieved or exceeded. No variance	per Forest Health and



VO ID	l Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
16	integrity of natural tree	forest genetic resources through <i>ex</i> <i>situ</i> conservation	amount of genetic materials conserved ex situ as field trials, experiments, clonal banks, arboretum, and longterm seed storage	Wild forest genetic resources through ex situ conservation are retained as per requirements set forth in FGRMS and as guided by the Ex situ Conservation Plan for Forest Genetic Resources in Alberta (Ex situ CP)  Targets to be determined in accordance with FGRMS	identified in Ex situ CP and requirements set	TMR 144.2(1). Requirements to meet this TMR are provided by FGRMS	FGRMS and GoA/Industry Tree Genetics Cooperatives.	Needs for ex situ gene conservation will be continuously identified as provincial forest management priorities and environmental challenges arise	of provenances, genotypes and seedlots and their origin within the DFA  Performance: Stewardship Reports not applicable until a controlled parentage program becomes active.	gene conservation is set up, no variance from targets as set by FGRMS is	
17	with minimal human	1.4.1.1 Integrate trans-boundary values and objectives into forest management		Ongoing consultation with relevant protected area agencies	Link to consultation objective in Planning Standard or other existing consultation processes	Planning Standard	Management planning and operational planning.	Documentation of consultation processes	FMP: None.  Performance: Stewardship Reports - summary of consultation with relevant protected area agencies.		Adjust strategies in subsequent FMP



VOIT	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
18		harvested areas	· -	The sum of Indicators a, b and c = 100% of openings	Direction from Government of Alberta (GoA)	TMR 141.6(1) and 141.6(2); RSA	Implementation of silviculture strategies that ensure the target stocking and species composition is achieved for the opening	RSA establishment survey protocols	Performance: ARIS - updates to Alberta Regeneration Information System (ARIS) tables.  Stewardship Reports - tables summarizing indicators a, b, and c		Adjust silviculture strategies
19	Reforested harvest areas	exceed the C and D Mean Annual Increment (MAI)	Summed difference between target and actual C MAIs and D MAIs for openings surveyed in a five year quadrant, as reported to ARIS		Direction from GoA	TMR 141.7(1) and 141.7(2);RSA	Implementation of silviculture strategies that ensure the target productivity is achieved for the population of openings	RSA performance survey protocols		exceed the target C and D MAI for the FMA	Adjust silviculture strategies



VO	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
20	Maintenance of forest		Amount of change in forest landbase		Forest inventory and land use data	Planning Standard	Maintain current forest cover inventory and land use updates. Promote the minimization of non-forested impacts to the landbase.	Inventory and land use systems	Performance: Stewardship Reports - number of dispositions and area of disposition withdrawn from the landbase, number of dispositions returned, and area of dispositions returned to the landbase, net change to landbase area.		Adjust net landbase projections in next TSA
21	Maintenance of forest	2.1.2.2 Recognize lands affected by insects, disease or natural calamities		Area (ha) affected by significant forest disturbances such as insect infestations, fire, windthrow or other disturbance event.	health surveys, inventory		Maintain up-to- date information	GoA annual forest health surveys and Company detections		Report actuals	Event specific
22		2.1.3.1 Control invasive plants	Invasive plant program	program	Monitoring, controlling and reporting on infestations	Weed Management in Forestry Operations Directive 2001-06	Plant Program	Adherence to OGRs, Field inventories	FMP: None Performance: Stewardship Reports Invasive plant inspections summarized in Stewardship report	actuals	Continually Improve invasive plant program
23	productivity	landings and bared areas in forest operations	Compliance with OGRs directing both decompaction where necessary as well as compliance with the FMP Reforestation Strategy Table.		Direction from GoA	OGRs and Soils Guidelines	Effective planning and supervision of operations	Field inspection reports and audits	FMP: None  Performance: Summary of total area of roads, landings and bared areas that were not reforested with a rationale as to why.		Immediate remedial action to correct



VOIT ID	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
24		3.1.1.2 Minimize incidence of soil erosion and slumping	Incidence of soil erosion and slumping	Complete compliance with OGRs	Direction from GoA  OGRs related to soils and erosion control	OGRs and other guidelines for soil erosion and sediment control	Effective planning and supervision of operations and adherence to relevant OGRs	Field inspection reports and audits	Performance: Stewardship Report: Report on all company monitoring results  Number of FOMP variances related to relevant OGRs  Number of Company self-reports related to relevant OGRs		Immediate remedial action to correct and review of causal factors associated with erosion or slumping events.
	quantity	timber harvesting on	harvesting (over 200 years) on water yield.	a) Snow sensitive zones will have ECA's multiplied by 1.5 b) Mean annual water yield increase < = 15% or Equivalent clearcut area (ECA) < = 30% in approved watersheds	a) Identifying high runoff areas during peak streamflow on the Eastern Slopes of the southern Canadian Rocky Mountains <sup>7</sup> b) ECA and hydrological modelling using approved watersheds Watershed sensitive values assessment Direction from Alberta	ALSA, SSRP and LPH- LFMP	Minimize variance by developing and implementing an operationalized SHS  Incorporate knowledge from hydrological modelling and watershed research  Direction from Alberta	SHS area variance as per OGRs.	FMP: Table showing ECA at 0, 10, 50, 100 and 200 years and maps showing ECA at year 0, 10 and 50 years  Performance: 5 year - Stewardship Report 5 year - If SHS variance exceeds 20% in compartments that fall within a watershed, ECA must be remodelled.  10 year - Stewardship Report Table comparing ECA values at year 0 from 2025 FMP to year 10 of new FMP by approved watershed	SHS variance	



VOIT ID	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
26	riparian habitats	3.2.2.1 Minimize impact of operations in riparian areas	Aquatic and riparian management areas maintained as outlined in OGRs	Compliance with relevant OGR sections pertaining to aquatic and riparian protection	OGRs	Federal Fisheries Act, TMR, Forests Act, ALSA, SSRP, LPH-LFMP, OGRs	supervision of operations and adherence to relevant OGRs.	Company monitoring/audits,	Performance: Stewardship Reports - Number of FOMP variances related to relevant OGRs  Number of Company self- reports for relevant OGR contraventions  Number of relevant OGR deviation requests in operational plans		Response will be determined by the frequency and severity of reported incidence at the discretion of Alberta  Demonstrate that aquatic and riparian habitat objectives are being met through an effective monitoring program based on aquatic and riparian function
27	Sustainable	5.1.1.1 Establish appropriate Annual Allowable Cuts (AACs)	Process described in Annex 1 is followed and standards are met	1	Consultation in planning process	Forests Act and TMR	Effective implementation of planning process	Multiple means: Forest Revenue Scaling and Tenure System (FOREST), ARIS, AOPs, Stewardship Reports, filed inspection	5 year - Stewardship		Adjust AAC using most current and relevant information



VOIT ID	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
	communities and landscape values from wildfire is low.	GoA in reducing wildfire threat potential by reducing fire behavior, fire occurrence, threats to values at risk and enhancing fire suppression capability	Risk Indicator (WRI) classes (Risk Reduction, Continuous Improvement, and Intolerable) (ha) within the	a) Harvest 30% of the area in WRI classes within the CFP FMA Community Zones over 20 years b) Harvest 10% of the area in WRI classes within the CFP FMA Landscape Zone over 20 years.	Annex 3 Report, data and recommendations provided to FMA Holder  FMA Holder assessment of the SHS developed using recommendations from Annex 3 Report	Planning Standard, ALSA, SSRP, LPH-LFMP	SHS, thinning, partial harvest techniques, FireSmart Treatments.	AOPs, Compartment Assessments	FMP: Maps of WRI, Fuel Grid, Historical Wildfires and Natural Subregions.  Performance: Stewardship Reports - Report harvest area and percent by year for a) and b) from time zero of the 2025 FMP	Issue specific	Adjust harvest sequence
	opportunities to derive	5.2.2.1 Integrate other uses and timber management activities		Integrate designated and Provincial trails as indicated in the Timber Harvest Planning and Operating Ground Rules.	'	Planning Standard, OGRs, Trails Act, applicable Ministerial Order	Effective implementation of plans.	Consultation Tracking.	FMP: None  Performance: Stewardship Report - report length (m) of trail protected that overlaps harvested areas	Issue specific	Adjust activities
_	5.1.2 Scenic values	forestry supports	, ,	The SHS will not include more than 12% of the identified high scenic values in the first two decades.	Assessment,	ALSA, LPH-LFMP, Livingstone-Porcupine Hills Recreation Management Plan	Effective implementation of plans, Visual Quality Strategy.	As-built harvest area boundaries	FMP: Map of areas identified with high scenic value and how much SHS area (ha) is scheduled in the first two decades.  Performance: Stewardship reports Report actual percent harvested within the high scenic value areas	variance	Adjust strategies in subsequent FMP



VOIT Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
29-3 5.2.2 Provide opportunitie to derive benefits and participate ir use and managemen	encroachment onto grasslands	successional transitional areas	a) Reduce forest encroachment onto grasslands by the inclusion of 125 ha of successional transition areas in each of the first decade of the SHS (79 ha of contributing & 46 ha of noncontributing landbase).  b) Slow the transition from grassland to forest in harvested successional transition areas by implementing alternative silviculture strategies.	process, GoA provided recommendations in the document titled,	AFMPS		AOPs, Reforestation Standard of Alberta, Reforestation survey audit results, AVI	FMP: Map showing identified successional transition areas planned for treatment on the contributing (planned SHS) and non-contributing landbases in the first decades.  Performance: 5 year – Stewardship Report a) Report harvested successional transition areas in the contributing (actual SHS) and non-contributing landbases (Map and table indicating the harvest areas and what alternative silviculture strategy was implemented in each).  10 year – Stewardship Report a) Report harvested successional transition areas in the contributing (actual SHS) and non-contributing landbases (Map and table indicating the harvest areas and what alternative silviculture strategy was implemented in each), and b) Report outcomes of each alternative silviculture strategy implemented to slow the transition from grassland to forest in successional transition areas.		Adjust in subsequent FMP



	OIT ID	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
2	opp to d ber par use	derive	Acknowledgment	permit holders with operational planning (GDP).	holders b) Grazing/timber integration	a) Consultation with grazing permit holders b) Stipulations identified in the GTA's	Forest Reserve Act, Forest Act, AFMPS, OGR's, Grazing and Timber Integration Manual	Adherence to GTA stipulations	Adherence to GTA monitoring stipulations	Performance: 5 year – Stewardship Report a) Report number of completed GTA's.  10 year – Stewardship Report a) Report number of completed GTA's		Consultation with grazing permit holders make Adjust in subsequent FMP
	-	oductivity	Long Run Sustained	,	No net decrease from the natural stand productivity	FMP TSA	Planning Standard	Effective implementation of plans	Future FMP RSA (MAI).	FMP: TSA  Performance:  5 year - Stewardship  Report  10 year - Stewardship  Report (Compare time 0 of previous FMP to CLB of new FMP)		Adjust AAC using most current and relevant information
	wit gov reg	mpliance th	Indigenous		the community level with designated		Planning Standard, GoA Indigenous Consultation Policy and Guidelines		GoA FMP and GDP consultation adequacy letters  CFP Indigenous communication database	FMP: Summary of input provided during Indigenous consultation, how it was incorporated into the FMP and if it wasn't, provide an explanation why.  Performance: Stewardship Reports Summary of Indigenous consultation with input and responses during FMP implementation.		Adjust activities



VOIT ID	Value	Objective	Indicator	Target	Means to Identify Target	Legal / Policy Requirements	Means of achieving Objective and Target <sup>1</sup>	Monitoring and Measurement	Reporting	Acceptable Variance	Response
32	6.2.1	6.2.1.1 Implement	Meet expectations of	Implementation of Crowsnest Forest	CFP public	Planning Standard	Effective	CFP public	FMP: Summary of public	None	Adjust
	Meaningful	Public Participation	Section 5 of CSA Z809-02	Products' (CFP) Public Participation	participation		implementation	communication	input, how it was		activities
	public	Process		Program.	program.		of Public	database.	incorporated into the FMP		
	participation						Participation		and if it wasn't, provide an		
	is achieved			Annual opportunity for public input			Process		explanation why.		
				on harvest plans.					Performance: Stewardship		
									Reports Update on the		
									revised Terms of Reference		
									for the Public Advisory		
									Committee and the Public		
									Participation Program.		
									Summary of Public		
									Participation Program		
									activities and input from		
									the Public Advisory		
									Committee, public and		
									interest groups into harvest		
									plans		

<sup>[1]</sup> Items noted under the "Means to Identify Targets" and "Means of Achieving Objectives and Targets" are intended as suggestions and not meant to limit potential approaches. The list is not comprehensive or mandatory.

[7] FRIAA/FRIP report EOI FFI-17-15 (March 2020)

#### Acronyms:

Actoriyins.				
AAC - Annual Allowable Cut	ABMI - Alberta Biodiversity Monitoring Institute	AFMPS - Alberta Forest Management Planning Standards	ALSA - Alberta Land Stewardship Act	CFP - Crowsnest Forest Products
CLB - Classified Landbase	DID - Digital Integrated Dispositions	DLO - Department Licence of Occupation	ECA - Equivalent Clearcut Area	FGRMS - Forest Genetic Resource Management and Conservation Standard
FMA - Forest Management Agreement	FMP - Forest Management Plan	FOREST - Forest Revenue Scaling and Tenure System	GCP - Gene Conservation Plan	GDP - General Development Plan
GoA - Government of Alberta	HA - Hectare	HUC - Hydrologic Unit Code	LPH-LFMP - Livingstone Hills Land Footprint Management Plan	MAI - Mean Annual Increment
OGR - Operating Ground Rules	RSF - Resource Selection Function	SHS - Spatial Harvest Sequence	SSRP - South Saskatchewan Regional Plan	TMR - Timber Management Regulations
TSA - Timber Supply Analysis	WRI - Wildfire Risk Indicator			

<sup>[2]</sup> Cover-classes: definition will be developed through FMP planning. In general, cover-class is a coarser grouping than the cover type (AVI stand label) but provides finer resolution than the cover groups (C, CD, DC, D) and will reflect leading species and mixedwood types.

<sup>[3]</sup> Patch: a stand of forest in the same seral stage, and not split by a linear feature greater than 8m wide. Linear features in this definition include roads, pipelines, power lines, and rivers, but does not include seismic lines.

<sup>[4]</sup> Old Interior Forest: Old interior forest patches are defined as any patch greater than 120 ha that is composed of stands greater than 120 years old, using an 8m adjacency distance.

<sup>[5]</sup> Downed woody debris: wood lying at an angle of less than 45 degrees from the ground and having a diameter greater than 7.5 cm.

<sup>[6]</sup> Wild: genetic materials of native species originating from natural regeneration (FGRMS).



#### ADDITIONAL USEFUL LINKS

Regional planning in Alberta including the South Saskatchewan Regional Plan <a href="https://www.alberta.ca/regional-plans-and-recreation.aspx">https://www.alberta.ca/regional-plans-and-recreation.aspx</a>

C5 Forest Management Plan 2006-2026

https://open.alberta.ca/publications/0778545458

**Provincial Operating Ground Rules and Addendums** 

https://www.alberta.ca/forest-management-manuals-and-guidelines

#### **ACTS**

*Provincial -* All Provincial acts are available at the King's Printer - <a href="https://www.alberta.ca/alberta-kings-printer">https://www.alberta.ca/alberta-kings-printer</a>

**Forests and Prairie Protection Act** – Establishes the provision of wildfire management activities, programs, and wildfire-related enforcement.

Forests Reserves Act and regulation – Provides for the establishment of forest reserves.

**Provincial Parks Act** and **Wilderness Areas, Ecological Reserve, Natural Areas and Heritage Rangelands Act** – Plays an important role in protecting natural diversity and intact habitat for supporting biodiversity, in addition to ensuring a wide range of recreation opportunities and tourism experiences.

**Public Lands Act and Public Lands Administration Regulation** – Provides for the settling of land disturbance standards and land conservation tools in support of biodiversity management.

*Water Act* – Provides for the allocation and use of Alberta's water resources and the protection of rivers, streams, lakes, wetlands and aquifers.

*Wildlife Act* – Provides for the designation and recovery of species at risk.

**Regulated Forestry Professionals Act** – Outlines mandatory registration for forestry practitioners & the means to define a Code of Ethics as well as the ability to enforce it.

# Federal

**Species at Risk Act (SARA)** – Designates a committee to report to the federal Minister of the Environment on threatened species and assess their conservation status as well as recommendations to recover threatened habitats.

**Navigation Protection Act** - Provides a schedule which clearly lists the major waterways for which regulatory approval is required prior to the placement of construction of a work.

**Federal Fisheries Act** – Protection of fish and fish habitat, through HADD (harmful alteration, disruption or destruction of fish habitat) and outlines when Fisheries and Oceans Canada (DFO) requires contact.

**Migratory Birds Convention Act** – Outlines the responsibility of Environment Canada to develop and implement policies and regulations to ensure the protection of migratory birds, their eggs and their nests.



#### **STANDARDS**

## Alberta Forest Management Planning Standard Version 4.1. – April 2006

The Alberta Forest Management Planning Standard and its annexes, interpretive bulletins, and updates comprise the standard for preparing and implementing Forest Management Plans in Alberta.

https://www.alberta.ca/forest-management-manuals-and-guidelines.aspx

## **SSRP** AND SUB-PLAN INFORMATION

South Saskatchewan Regional Planning

https://www.alberta.ca/south-saskatchewan-regional-planning.aspx

Livingstone Porcupine Hills Land Footprint Management Plan & Recreation Management Plan https://www.alberta.ca/south-saskatchewan-subregional-planning.aspx

## **USEFUL ACRONYMS**

AAC Annual Allowable Cut

ALSA Alberta Land Stewardship Act

CCFM Canadian Council of Forest Ministers

CFP Crowsnest Forest Products

CSA Canadian Standards Association

DFA Defined Forest Area

FMA Forest Management Agreement

FMP Forest Management Plan
GoA Government of Alberta

LPH-LFMP Livingstone-Porcupine Hills Land Footprint Management Plan

NTAs Non-Timber Assessments

OGRs Timber Harvest Planning and Operational Ground Rules

PDT Plan Development Team

PFMS Preferred Forest Management Scenario

SFM Sustainable Forest Management

SHS Spatial Harvest Sequence

SSRP South Saskatchewan Regional Plan

TSA Timber Supply Analysis

VOITs Values, Objectives, Indicators & Targets