



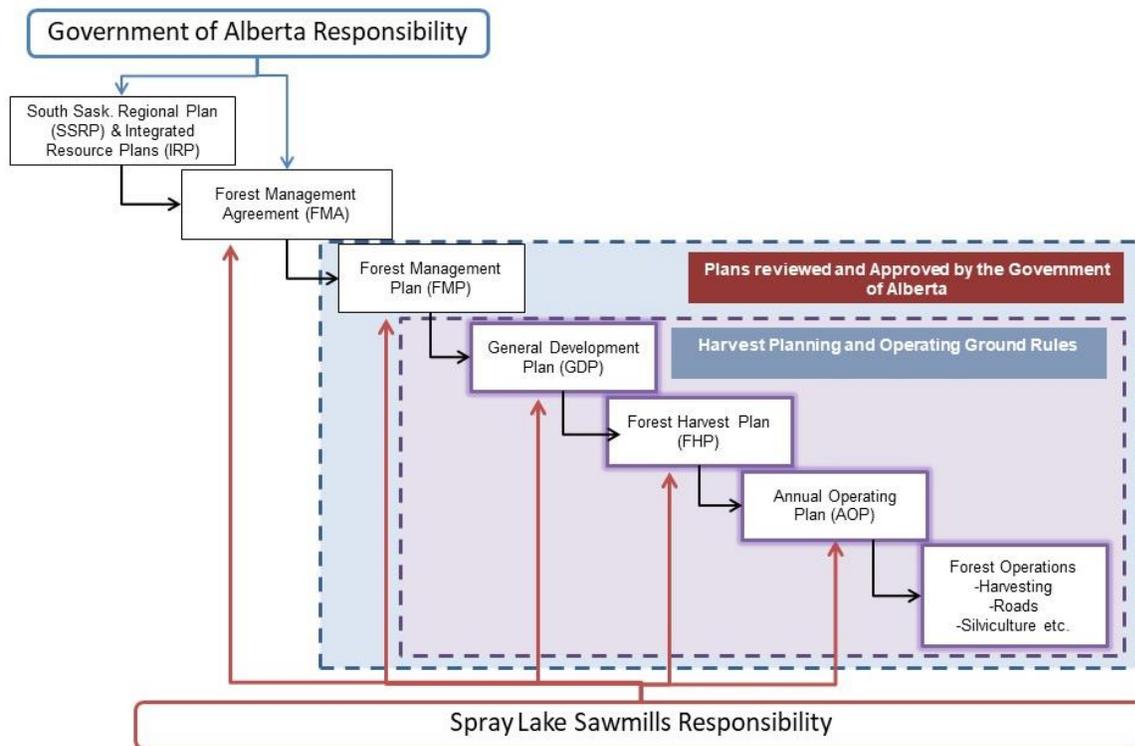
## Forest Management Plan Update

### What is a Forest Management Plan?

Forest management plans (FMP) are a provincial regulatory requirement that must be completed every 10 years. The FMP details where, when and how trees on Alberta Crown land are harvested and sustainably managed.

Figure 1-1 illustrates how the forest management planning process is inextricably linked to Alberta's Crown land management policy. Boxes with a purple outline are additionally required regulatory plans that flow out of the FMP.

Figure 1-1: Forest Management Planning Hierarchy



## FMP Timelines

We have been in the process of renewing our forest management plan since 2015. Completing the FMP document, along with all of the data collection, analysis, mapping, public engagement, and revisions, typically takes between two and five years.

After the FMP is submitted, it can take between five months or over a year to be reviewed and approved. On December 1, 2017 the 2018 FMP was extended to be completed from September 1, 2018 to on or before September 30, 2020. The FMP timeline was extended as the company experienced delays with acquiring a new Alberta Vegetation Inventory (AVI). Presently we are on track to submitting the plan by September 30, 2020.

## Managing Alberta's Timber Resources

Timber resources in Alberta are allocated through the forest tenure system. Spray Lake Sawmills is a forest tenure holder in the Province of Alberta through our Forest Management Agreement (see map on page 5).

Within Spray Lake's Forest Management Agreement is the requirement to establish a forest management plan. The FMP is a twenty-year, strategic level plan, that guides where sustainable harvesting activities will occur for ten years. Even though the FMP is a twenty-year plan a new FMP is required every ten years.

Spray Lake Sawmills' is regulated as a tenure holder under the *Forests Act*, regulations issued pursuant to the *Forests Act*, (including Timber Management Regulation and Scaling Regulation), forest tenure documents, forest policy directives, forest management plans and timber harvesting and operating ground rules.

Forest management activities are the responsibility of the tenure holder while the Government of Alberta (GoA) retains regulatory control, as the FMP and operating plans are subject to GOA approval. An FMA is also subject to provincial and federal environmental legislation and regulations.

Forest Management Agreements provide the right to establish, grow, harvest and remove timber (FMA clause 2(1)) in the Defined Forest Area (DFA). An FMA does not provide authority over other companies or non-timber resource users, nor does an FMA provide authority to set cumulative impacts for the area; rather that is the responsibility of higher level plans (such as the South and North Saskatchewan Regional Plans) and/or Integrated Resources Plans.

The level of authority provided through an FMA are specifically prohibited from restricting access or constraining Alberta's right to manage other resources or allocate land for other industrial uses. The FMA and the Forest Management Plan only manage forest vegetation and mitigate the impact of forest operations on other values and uses.

## Values Objectives Indicators and Targets (VOITS)

Beginning in 2015, Spray Lake Sawmills engaged in a series of FMP/VOIT informational workshops to seek input from interested parties. The workshops introduced the planning hierarchy, the FMP process and values and objective development. Since the workshops, an interdisciplinary plan development team (PDT), has formed and is now meeting on a regular basis. Additional updated FMP/VOIT informational workshops were held in the Fall of 2018.

An updated list of VOITS has been provided by Alberta Agriculture and Forestry (Table 1 on page 7) and SLS has been aligning the public consultation input with the updated GoA VOITS.

VOITs form the basis of the FMP performance monitoring program and VOITS are defined by the Alberta Forest Management Planning Standard as follows:

- Value – A DFA characteristic, component or quality considered by an interested party to be important in relation to the Canadian Standards Association (CSA) Sustainable Forest Management (SFM) element or other locally identified element.
- 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.

## FMP Progress to date:

- Completed six FMP/VOIT informational workshops to gather stakeholder and public input
- Added an email subscribe notification to keep interested parties up to date with FMP public consultation opportunities and updates.
- Conducted three public advisory committee meetings
- Updated the FMP Public Participation Program, available on our website <https://www.spraylakesawmills.com/woodlands/forest-management-planning/>
- Completed Milestone 1 for the First Nations and Public Consultation Plans
- Captured new color imagery of the DFA
- Completed approximately 95% of the new AVI inventory
- Completed approximately 95% of our forest growth field sampling program
- Completed a High Resolution LiDAR Based inventory

## Upcoming 2019 Public Consultation Opportunities

Spray Lake Sawmills will be hosting an open house in the Spring of 2019. The open house will be an excellent opportunity for the public to provide input into the planning process.

The open house will provide participants with a review of:

- The FMP progress to date, including a review of the draft landbase
- Values, Objectives, Indicators and Targets
- Visual Quality Sensitivity Inventory
- The Alberta Agriculture and Forestry planning process
- Next steps and future public consultation opportunities

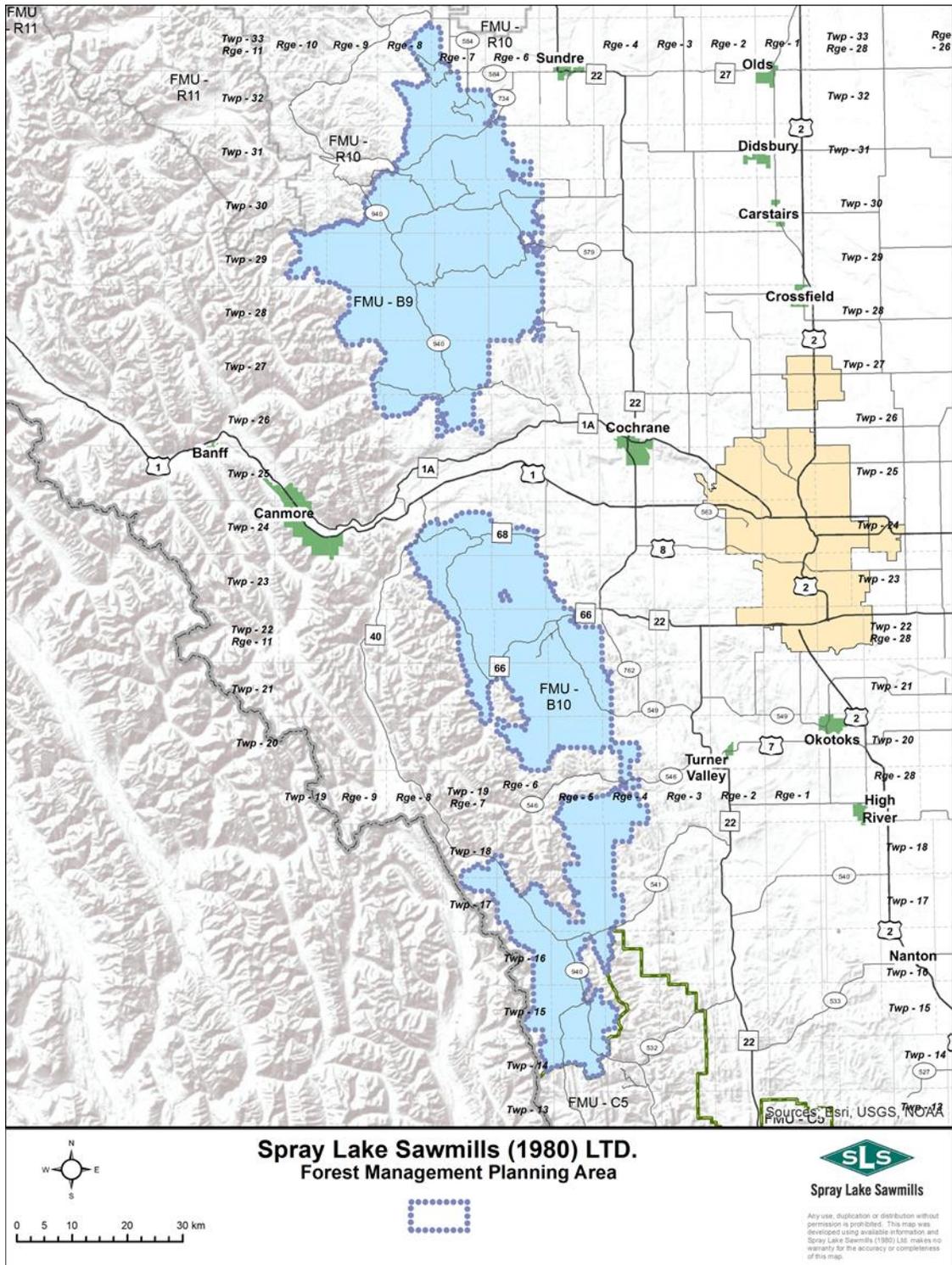
To be emailed FMP updates, please subscribe to News and Events on our website.

<https://www.spraylakesawmills.com/woodlands/subscribe/>

The Spray Lake Sawmills website contains the following information for interested parties to review and provide input:

- The FMP information package that describes the FMP development process
- The Public Participation Program document
- News Events and Consultation opportunities
- A mechanism to email the company with input
- Informational videos covering: forest management planning, FMA planning, the FMA planning hierarchy, and an FMA overview.
- Public Advisory Committee terms of reference, current members and meeting minutes
- The Forest Management Agreement document
- The Detailed Forest Management Plan document
- The Five Year Stewardship Report document
- The Operating Ground Rules document

# Map of Spray Lake Sawmills Forest Management Planning Area



### **ADDITIONAL USEFUL LINKS**

South Saskatchewan Regional Plan and process

<https://www.landuse.alberta.ca/RegionalPlans/SouthSaskatchewanRegion/SSRPConsultation/Pages/default.aspx>

Spray Lake Sawmills Previous DFMP & 5 Year Stewardship Report

<http://www.spraylakesawmills.com/woodlands/forest-management-planning/detailed-forest-management-plan/>

Spray Lake Sawmills Operating Ground Rules

<http://www.spraylakesawmills.com/woodlands/forest-management-planning/operating-ground-rules/>

### **USEFUL ACRONYMS**

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ALSA	Alberta Land Stewardship Act
AAF	Alberta Agriculture and Forestry
CSA	Canadian Standards Association
DFA	Defined forest area
FMA	Forest Management Agreement
FMP	Forest Management Plan
DFMP	Detailed Forest Management Plan
GoA	Government of Alberta
SFM	Sustainable Forest Management
SLS	Spray Lake Sawmills
SSRP	South Saskatchewan Regional Plans
VOIT	Value Objective Indicators & Targets

Table 1: GoA VOIT working version (received March 2018)

VOIT ID	Value	Objective	Indicator	Target <sup>1</sup>
<b>CCFM Criterion 1. Biological Diversity</b>				
<b>CSA SFM Element 1.1 Ecosystem Diversity: Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that occur naturally in the Defined Forest Area (DFA)</b>				
1	1.1.1 Landscape scale biodiversity	1.1.1.1 Maintain biodiversity by retaining the full range of cover types and seral stages <sup>3</sup>	Area of old, mature, and young forest in the Defined Forest Area (DFA) <sup>4</sup> by cover class <sup>5</sup>	Over the 200 year planning horizon; a) Gross landbase: greater than X% old forest, greater than Y% mature plus old forest, less than Z% young forest; and  b) Net landbase: greater than X% old forest, greater than Y% mature plus old forest, less than Z% young forest  <b>Note:</b> Old forest retention shall include the full natural range of ages. Targets will be informed by the large amount of regional protected areas within and adjacent to the DFA <sup>6-1</sup>
2	1.1.1 Landscape scale biodiversity	1.1.1.2 Maintain biodiversity by avoiding landscape fragmentation	a) Range of patch <sup>6</sup> sizes for forest that is 20 years of age and less for the DFA	a) 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
3	1.1.1 Landscape scale biodiversity	1.1.1.2 Maintain biodiversity by avoiding landscape fragmentation	b) Area of old interior forest <sup>7</sup> of each cover class for the DFA	b) Area of old interior forest will not be less than X% of each cover class over the next 200 years  <b>Note:</b> Target will be informed by the large amount of regional protected areas functioning within and adjacent to the DFA <sup>6-1</sup>
4	1.1.1 Landscape scale biodiversity	1.1.1.3 Maintain biodiversity by minimizing access	a) Open all-weather forestry road (DLO) density for the DFA	a) Less than X km/km <sup>2</sup> at the time of the next FMP
5	1.1.1 Landscape scale biodiversity	1.1.1.3 Maintain biodiversity by minimizing access	b) Open seasonal / temporary forestry road length by DFA	b) Less than X km for the DFA
6	1.1.1 Landscape scale biodiversity	1.1.1.4 Maintain plant communities uncommon in DFA or province	Area or occurrence of each uncommon plant community within DFA	Apply operational procedures to conserve uncommon plant communities for 100% of known and encountered occurrences
7	1.1.1 Landscape scale biodiversity	1.1.1.5 Maintain unique habitats provided by wildfire and blowdown events	a) Area of unsalvaged burned forest	a) Live trees: Retain unburned trees in green islands and retain patches recognizing timber condition, access, non-timber needs according to the directive "Fire Salvage Planning and Operations - Directive No. 2007-01"
8	1.1.1 Landscape scale biodiversity	1.1.1.5 Maintain unique habitats provided by wildfire and blowdown events	b) Area of unsalvaged blowdown	b) In areas of significant blowdown (>= 100ha) that is salvagable, a minimum of 10% will be left unsalvaged
9	1.1.1 Landscape scale biodiversity	1.1.1.6 Retain ecological values and functions associated with riparian zones	Compliance with OGR	100% protection of watercourse buffers
10	1.1.2 Local/stand scale biodiversity	1.1.2.1 Retain stand level structure	a) X % of harvested area that is representative of the pre harvest component stands, and retained as structure (both live and dead), within harvest areas.	a) DFA structure retention target will be X% of the total area harvested during a rolling five-year period.  <b>Note:</b> A wide range in variability in harvest area- level retention within a subunit is desired as long as the target level is achieved, will be informed by the large amount of regional protected areas within and adjacent to the DFA
11	1.1.2 Local/stand scale biodiversity	1.1.2.1 Retain stand level structure	b) Percentage of harvested area for the DFA with downed woody debris <sup>8</sup> equivalent to preharvest conditions	b) 75% of harvest areas having downed woody debris retained on site

VOIT ID	Value	Objective	Indicator	Target <sup>1</sup>
12	1.1.2 Local/stand scale biodiversity	1.1.2.2 Maintain integrity of sensitive sites	Sensitive sites (e.g. mineral licks, major game trails) as per the Operating Ground Rules that are protected in the DFA	Strategies to maintain consistent with provincial guidelines / OGR
13	1.1.2 Local/stand scale biodiversity	1.1.2.3 Maintain aquatic biodiversity by minimizing impacts of water crossings	Forestry water crossings in compliance with Code of Practice for Water Course Crossings within the DFA	Designs meet standards of the Code of Practice for Water Course Crossings and OGRs
<b>CCFM Criterion 1. Biological Diversity</b>				
<b>CSA SFM Element 1.2 Species Diversity: Conserve species diversity by ensuring that habitats for the native species found in the DFA are maintained throughout time</b>				
14	1.2.1 Viable populations of identified plant and animal species	1.2.1.1 Maintain habitat for identified high value species (i.e., economically valuable, socially valuable, species at risk, species of management concern)	<p>a) Number of hectares of primary and secondary habitat from the fRI Research (fRI) Grizzly Bear model, as measured at time 0 (CLB effective date) by DFA;</p> <p>b) Percent change in the Barred owl potential breeding pairs (habitat) and Resource Selection Function (RSF) value from (CLB effective date) by DFA;</p> <p>c) Percent change in American marten habitat suitability index from (CLB effective date) by DFA;</p> <p>d) Percent change in relative abundance value of three songbird species (Brown Creeper, Ovenbird and Varied Thrush from (CLB effective date) by DFA; and</p> <p>e) Cold Water Fish</p> <p>f) Maintain identified Whitebark and Limber Pine trees, saplings and seedlings</p>	<p>a) Maintain or increase the number of hectares of primary and secondary habitat from the fRI Grizzly Bear model, as measured at time 0;</p> <p>b) Maximum 15% reduction in the breeding pairs indicator over the 200 year planning horizon and 15% reduction in the RSF indicators over the 200 year planning horizon;</p> <p>c) Maximum 15% reduction in the indicator over the 200 year planning horizon;</p> <p>d) Maximum 15% reduction in the indicator over the 200 year planning horizon; and</p> <p>e) TBD</p> <p>f) 95% protection of Whitebark and Limber Pine trees, saplings and seedlings.</p> <p>100% protection of GoA long term monitoring installations</p>
<b>CCFM Criterion 1. Biological Diversity</b>				
<b>CSA SFM Element 1.3 Genetic Diversity: Conserve genetic diversity by maintaining the variation of genes within species</b>				
15	1.3.1 Genetic integrity of natural tree populations	1.3.1.1 Retain "wild forest populations" for each native tree species in each seed zone through establishment of in-situ reserves by Alberta and timber disposition holders	Number and area (ha) of in-situ seed reserve areas	<p>Number (X) of required genetic reserve areas identified in the provincial conservation plan for each seed zone, occurring within the forest region</p> <p>Spray Lake Sawmills will coordinate work with the GoA to identify the number of required in-situ genetic reserve conservation areas, some of which may not necessarily be within the DFA, with priority given to protected areas and the passive landbase</p>
16	1.3.1 Genetic integrity of natural tree populations	1.3.1.2 Retain wild forest genetic resources through <i>ex-situ</i> conservation	Number and composition of forest tree seed populations established in seedbanks, clone banks or trials that are satisfactory to GoA	Active conservation program for all Controlled Parentage Program plan species and other species in cooperation with Alberta To be established by GoA based on adequate representation of native tree species in conservation efforts to genetic loss within and among seed zones
<b>CCFM Criterion 1. Biological Diversity</b>				
<b>CSA SFM Element 1.4 Protected Areas: Respect protected areas identified through government processes</b>				

VOIT ID	Value	Objective	Indicator	Target <sup>1</sup>
17	1.4.1 Areas with minimal human disturbances within managed landscapes	1.4.1.1 Integrate trans boundary values and objectives into forest management	Consultation with relevant stakeholders	Ongoing consultation with relevant protected area agencies
<b>CCFM Criterion 2. Ecosystem Productivity</b>				
<b>CSA SFM Element 2.1 Ecosystem resilience</b>				
18	2.1.1 Reforested harvest areas	2.1.1.1 Reforest all harvested areas	Annual % of openings that: a) meet or exceed the Reforestation Standard of Alberta (RSA) establishment survey minimum stocking and species composition standards for the declared regenerated yield stratum;  b) meet or exceed the RSA establishment survey minimum stocking and species composition standards for an alternate regenerated yield stratum; and  c) do not achieve the RSA establishment survey minimum stocking and/or species composition standards for any regenerated yield strata and are re-treated within one year.  Indicators a, b and c are to be reported separately	The sum of Indicators a, b and c = 100% of openings
19	2.1.1 Reforested harvest areas	2.1.1.2 Meet or exceed the C and D Mean Annual Increment (MAI) standard for the population of openings surveyed in a given quadrant	Summed difference between target and actual C and D MAIs for openings surveyed in a five year quadrant, as reported to ARIS	100% of target
20	2.1.2 Maintenance of forest landbase	2.1.2.1 Limit conversion of productive forest landbase to other uses	Amount of change in forest landbase	Net change of the gross forested landbase area within the DFA
21	2.1.2 Maintenance of forest landbase	2.1.2.2 Recognize lands affected by insects, disease or natural calamities	Amount of area affected	Area (ha) affected by significant forest disturbances such as insect infestations, fire, windthrow or other disturbance event
22	2.1.3 Control invasive species	2.1.3.1 Control invasive plants	Invasive plant program	Invasive plant program in place and implemented
<b>CCFM Criterion 3. Soil and water</b>				
<b>CSA SFM Element 3.1 Soil quantity and quality</b>				
23	3.1.1 Soil productivity	3.1.1.1 Minimize impact of roading and bared areas in forest operations	Compliance with OGRs	Less than 5%
24	3.1.1 Soil productivity	3.1.1.2 Minimize incidence of soil erosion and slumping	Incidence of soil erosion and slumping	Complete compliance

VOIT ID	Value	Objective	Indicator	Target <sup>1</sup>
<b>CCFM Criterion 3. Soil and water</b>				
<b>CSA SFM Element 3.2 Water quantity and quality</b>				
25	3.2.1 Water quantity	3.2.1.1 Limit impact of timber harvesting on water yield	Forecasted changes in water yield by watersheds resulting from the approved SHS derived from the Equivalent Clearcut Area (ECA)	All watershed basins to be within acceptable impact thresholds
26	3.2.2 Effective riparian habitats	3.2.2.1 Minimize impact of operations in riparian areas	Riparian buffers maintained as outlined in OGRs	No variance from approved OGR buffer and/or approved variances
<b>CCFM Criterion 5. Multiple Benefits to Society</b>				
<b>CSA SFM Element 5.1 Timber and non-timber benefits</b>				
27	5.1.1 Sustainable timber supplies	5.1.1.1 Establish appropriate Annual Allowable Cut (AACs)	Process described in Annex 1 is followed and standards are met	Complete compliance
<b>CCFM Criterion 5. Multiple Benefits to Society</b>				
<b>CSA SFM Element 5.2 Communities and Sustainability</b>				
28	5.2.1 Risk to communities and landscape values from wildfire is low.	5.2.1.1 To assist the GoA in reducing wildfire threat potential by reducing fire behaviour, fire occurrence, threats to values at risk and enhancing fire suppression capability	a) Percentage reduction in Fire Behaviour Potential area (ha) within the FireSmart Community Zone b) Percentage reduction in Fire Behaviour Potential area (ha) across the DFA now and over the planning horizon	a) Reduce the area (ha) in the high and very high Fire Behaviour Potential rating within FireSmart Community Zones b) Reduce the area (ha) in the high and very high Fire Behaviour Potential rating across the DFA
29	5.2.2 Provide opportunities to derive benefits and participate in use and management	5.2.2.1 Integrate other uses and timber management activities	Extent of various uses	Annual opportunity for public input on harvest plans
30	5.2.3 Forest Productivity	5.2.3.1 Maintain Long Run Sustained Yield Average (LRSYA)	Regenerated stand yield compared to natural stand yield	No net decrease from the natural stand productivity
<b>CCFM Criterion 6. Accepting society's responsibility for sustainable development</b>				
<b>CSA SFM Element 6.1 Aboriginal and treaty rights and aboriginal forest values</b>				
31	6.1.1 Compliance with government regulations and policies	6.1.1.1 Implement Indigenous Consultation Plan	Meet Alberta's current expectations for Indigenous consultation	Consult at the community level with designated representatives of affected Indigenous communities
<b>CCFM Criterion 6. Accepting society's responsibility for sustainable development</b>				
<b>CSA SFM Element 6.2 Public participation and information for decision-making</b>				
32	6.2.1 Meaningful public participation is achieved	6.2.1.1 Implement Public Participation Process	Meet expectations of Section 5 of CSA Z809-02	Implementation of Spray Lake Sawmills' (SLS) Public Participation Program
<b>Footnotes:</b>				

VOIT ID	Value	Objective	Indicator	Target <sup>1</sup>
<p>Footnotes:</p> <p>[1] "X" variable in target description to be determined by the FMP planning process.</p> <p>[2] Items noted under the "Means to Identify Target" and "Means of Achieving Objective and Target" are intended as suggestions and not meant to limit potential approaches. The list is not comprehensive or mandatory.</p> <p>[3] Seral Stage: Seral stage definitions should include the following categories: Initiation, Establishment, Aggradation (stem exclusion), Mature, and Old (Song 2002, Ecological Basis for Stand Management in Alberta). Old forest is defined as stands 40 years older than MAI culmination age.</p> <p>[4] Subunit: any acceptable stratification of the DFA. Delineation of planning "subunits" for the DFA will be made during FMP planning. However, delineation should reflect ecological considerations. Planning subunits may correspond to planning compartments.</p> <p>[5] 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.</p> <p>[6] 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 includes roads, pipelines, powerlines, and rivers, but does not include seismic lines.</p> <p>[7] Interior forest: a forested area greater than 100 hectares in size located beyond an edge effect buffer zone [7.2] along the forest edge [7.1]. For interior forest objective, use a common age definition for all cover classes to prevent breaking up forest patches that have a common origin date. [7.1] Forest edge: any of the following: a) a linear disruption in forest cover greater than 8m in width, or, b) the line along which forest seral stage class changes.</p> <p>[7.2] Edge effect buffer zone: 60 m where adjacent area is non-forested or less than 40 years old; 30 m where adjacent forest stand is &gt;= 40 years and less than mature forest; 0 m where adjacent stand is mature forest.</p> <p>[8] 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.</p> <p>[9] Wild: genetic materials of native species originating from natural regeneration (FGRMS).</p> <p>[6-1] Protected Area Representation GAP Analysis - Spray Lake Sawmills FMA/B9 Areas - July, 2013</p>				