

Forest Management Plan Amendment

**Mountain Pine Beetle Addendum
Approval Decision**

West Fraser Mills Ltd. (Hinton)

**Forest Management Agreement
#8800025**

**Date: August 18, 2010
Effective: May 1, 2010**

Original Signed by
Approved by: _____
**Robert W. Stokes, RPF
Acting Executive Director
Forest Management Branch
Forestry Division**

Executive Summary

The West Fraser Mills Ltd. (Hinton) (WFM) Forest Management Plan (FMP) Mountain Pine Beetle (MPB) amendment dated April 30, 2010 is approved subject to the satisfactory completion of the Approval Conditions contained in this document.

The MPB amendment has been validated¹ by a Regulated Forestry Professional (RFP). The department recognizes RFP validated work as complete, accurate and prepared with professional due diligence. The MPB amendment has been reviewed and approved by government RFP's.

Approval Decision Conditions Timeline Summary

<i>Condition</i>	<i>Page #</i>	<i>Requirement</i>	<i>Approval Authority</i>	<i>Date</i>
<i>4.1 (i)</i>	<i>3</i>	<i>Habitat for Species of Special Concern (Grizzly Bear)</i>	<i>Senior Manager, Forest Planning Section</i>	<i>September 30, 2010</i>
<i>8.1 (i-vi)</i>	<i>4</i>	<i>Spatial Harvest Sequence</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>9.1 (i, ii)</i>	<i>5</i>	<i>Public Consultation</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>9.2 (i, ii)</i>	<i>5</i>	<i>First Nations Consultation</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>10.1 (i, ii)</i>	<i>5</i>	<i>Alberta Regeneration Information System Validation</i>	<i>Senior Manager Reforestation Section</i>	<i>December 31, 2010</i>
<i>11.1 (i)</i>	<i>6</i>	<i>Silviculture Strategy</i>	<i>Senior Manager, Reforestation Section</i>	<i>March 1, 2011</i>
<i>11.2 (i)</i>	<i>6</i>	<i>Seed Source Analysis</i>	<i>Senior Manager, Reforestation Section</i>	<i>November 1, 2010</i>
<i>13.1 (i-iii)</i>	<i>6</i>	<i>Industrial Salvage</i>	<i>Senior Manager, Timber Production, Auditing and Revenue Section</i>	<i>September 30, 2010</i>
<i>14.1 (i)</i>	<i>7</i>	<i>Structure Retention</i>	<i>Senior Manager, Forest Planning Section</i>	<i>September 1, 2010</i>
<i>15.1 (i)</i>	<i>7</i>	<i>AVI Update Plan</i>	<i>Senior Manager, Resource Analysis Section</i>	<i>November 30, 2010</i>
<i>16.1 (i)</i>	<i>8</i>	<i>Long Run Sustained Yield Average (LRSYA) Documentation</i>	<i>Senior Manager, Resource Analysis Section</i>	<i>September 30, 2010</i>
<i>16.2 (i)</i>	<i>8</i>	<i>Forest Structure Forecast</i>	<i>Senior Manager, Forest Planning Section</i>	<i>September 30, 2010</i>
<i>17.1 (i)</i>	<i>8</i>	<i>Technical issues for the 2014 FMP</i>	<i>Senior Manager, Forest Planning Section</i>	<i>May 1, 2011</i>

¹ Refer to the Alberta Forest Management Planning Standard, Annex 2 for professional validation requirements.

17.2 (i)	8	<i>Management Issues for the 2014 FMP – Long Term Access Plan</i>	<i>Senior Manager, Forest Planning Section</i>	<i>September 30, 2010</i>
17.2 (ii)	8	<i>Management Issues for the 2014 FMP – Species Conservation Strategies</i>	<i>Senior Manager, Forest Planning Section</i>	<i>September 30, 2010</i>
17.2 (iii)	8	<i>Management Issues for the 2014 FMP – Interim Reporting</i>	<i>Senior Manager, Forest Planning Section</i>	<i>End of each calendar year.</i>
17.2 (iv)	8	<i>Management Issues for the 2014 FMP – Annual Allowable Cut (AAC) Calculations</i>	<i>Senior Manager, Forest Planning Section</i>	<i>September 30, 2014</i>
18.1(i)	9	<i>Road Corridor Planning</i>	<i>Senior Manager, Forest Planning Section</i>	<i>September 30, 2010</i>
19.1 (i, ii)	9	<i>Growth and Yield Program</i>	<i>Senior Manager, Resource Analysis Section</i>	<i>June 30, 2011</i>

Approved Annual Allowable Cuts

<i>Timber Type</i>	<i>FMA Total AAC²</i>
<i>Coniferous</i>	<i>1,766,576 m³</i>
<i>Deciduous</i>	<i>249,832 m³</i>
<i>Total</i>	<i>2,016,407 m³</i>

Structure retention target is a minimum 1% of merchantable timber within openings on an FMA –wide basis. Industrial salvage volumes shall be monitored and reported as AAC drain by the FMA Company.

Refer to Tables 1 and 6 for the Historical Allocations, Tables 2 and 7 for the Approved Annual Allowable Cuts and Tables 3 and 8 for the Quadrant Allowable Cuts.

Authorization

The Spatial Harvest Sequence (SHS) contained in this MPB amendment is effective beginning May 1, 2010.

The AACs are effective beginning May 1, 2010.

The next FMP is due by September 30, 2014.

² The approved AACs include structure retention volumes.

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1.0 Introduction

Alberta is continuing to experience a significant outbreak of mountain pine beetle (MPB) and is applying control treatments and strategies to prevent future outbreaks³. Alberta is also implementing initiatives that will mitigate the impacts of the current outbreak on future timber supplies and forest-dependent communities. West Fraser Mills Ltd. (Hinton) (WFM) addendum to its approved Forest Management Plan (FMP) meets the requirements established by Alberta for such amendments⁴. This Decision documents the rationale for approval and direction for ongoing work.

It is important to note the implementation of this plan is not intended to control the current MPB outbreak, but rather to take actions over the next twenty years to create a forest that is more resistant to such outbreaks by dramatically reducing the overall susceptibility of the pine forest (Pine Strategy). This is a prudent and necessary strategy to avoid the types of catastrophic changes being seen in British Columbia's pine forests. However, if the current outbreak in Alberta expands as rapidly as the British Columbia outbreak, the strategies in this plan will have to be modified to address that reality.

Alberta has directed⁵ that key outcomes of four scenarios (the current management plan or status quo, the Pine Strategy, the MPB outbreak, and the preferred scenario) be assessed. The department believes given the MPB outbreak in Alberta, the current management plans do not present likely scenarios and considering today's circumstances, comparison of the Pine Strategy and the MPB outbreak scenarios are the pertinent analyses.

Alberta's goal is to mitigate the effects of MPB on the social, environmental and economic values of Alberta's forests. To achieve this goal, Alberta must make trade-offs which involve achieving a desired result, generally at the complete or partial expense of something else. Stakeholders are often interested in only one value and are not prepared to consider trade-offs, whereas Alberta must make trade-off decisions in order to reasonably meet its goal for the overall benefit of Albertans.

2.0 Forest Management Planning Area

The area under consideration is the Forest Management Agreement (FMA) area of WFM. FMA #8800025 was allocated to WFM via legislative Order-in-Council (O.C. 565/2007), dated January 14, 2008.

In December 2008, the Alberta Land Use Framework (LUF) was released establishing a formal regional planning system to implement provincial policy, to set land-use management objectives and determine land-use trade-offs. Seven LUF regions were identified of which FMA #8800025 is located within the Upper Athabasca Planning Region.

Where strategic land use plans are approved after a FMP has been approved, Alberta and the Organization shall discuss implementation of the strategic land use plan and Alberta may require the FMP to be amended⁶.

³ See the Mountain Pine Beetle Action Plan for Alberta and the Interpretive Bulletin – Planning Mountain Pine Beetle Response Operations on the department of Sustainable Resource Development (SRD website).

⁴ See the Interpretive Bulletin – Planning Mountain Pine Beetle Response Operations (SRD website).

⁵ See the Interpretive Bulletin – Planning Mountain Pine Beetle Response Operations (SRD website).

⁶ See the Alberta Forest Management Planning Standard, Section 1 – Interpretation of CSA Z809-02 Standards, CSA – 4.0 Sustainable Forest Management

3.0 Forest Management Plans and Priority of MPB Control Strategies

The approved FMP amendment results in a new timber supply analysis and spatial harvest sequence (SHS). Commitments in the balance of the existing FMP remain in effect until they are replaced by a new FMP. The status of the MPB outbreak will be apparent in time for the preparation of the new FMP, which will then be better able to address trade-offs between key outcomes.

Due to in-flights from other regions in 2009, the number of trees infested by MPB in the WFM FMA is higher than in recent years. The extent of the impact is unknown until aerial surveys are completed during the summer of 2010. This latest dispersal will not change Alberta's strategy for managing MPB infestations. Alberta's priorities continue to be to limit the spread of MPB infestations along the eastern slopes of the Rocky Mountains and to prevent MPB from spreading eastward into the boreal forest. The department expects activities over the next few years to be a combination of control (Level 1 and 2) where possible, and the implementation of the Healthy Pine Strategy (prevention). This combination of actions will contribute to short and long-term MPB population control on WFM FMA. The operational changes necessary to accomplish these activities will be addressed through annual operating plans.

4.0 Habitat for Species of Special Concern (Grizzly Bear and Woodland Caribou Habitat)

Grizzly Bear

On June 3, 2010 the Alberta government designated grizzly bear as a threatened species in an effort to better protect the bears and sustain the provincial population. The designation is based on cutting-edge population research and habitat data, as well as a recommendation from the Endangered Species Conservation Committee (ESCC), a group of stakeholders including ranchers, industry, academics, wildlife managers and conservation interests.

Alberta's Grizzly Bear Recovery Plan (GBRP) recognizes that reduced grizzly bear survival and reproductive success is linked to human activity in priority habitats. Access development increases this activity. The department is developing an implementation plan for the GBRP. When this is published the Company shall address these requirements in its operational plans.

SRD used the Foothills Research Institute Grizzly Bear Model to assess the impact of the FMP amendment on grizzly bear habitat. The model has identified core units G50 and Y53 and secondary units G28 and G31 as units where the mortality risk has increased to a level where mitigation options should be considered. Operational planning can mitigate many of the impacts of timber harvesting. The Company can act to make roads impassable and to quickly reclaim access into completed compartments. During the implementation of this plan WFM will work closely with the forest planning section to develop and implement additional mitigation. WFM is encouraged to ensure its structure retention targets meet or exceed the 1% minimum currently identified within the MPB amendment. WFM is further encouraged to practice integrated land management with respect to access with the oil and gas industry to minimize the associated negative effects on grizzly bear habitat.

Approval Condition 4.1 – Habitat for Species of Special Concern (Grizzly Bear)

- i. By September 30, 2010 WFM shall create a Geographic Information System (GIS) road corridor data layer (see approval condition 18.1). The department will complete the Grizzly Bear analysis based on the updated data layer. The results will be assessed and discussed with the company to design plans for mitigation as necessary.

Woodland Caribou

The department recognizes WFM efforts to address caribou habitat management while implementing a healthy pine strategy. WFM agreement to defer harvesting in the Woodland Caribou special management area for the term of the current spatial harvest sequence implements an effective MPB control strategy that maintains suitable habitat conditions for caribou. I recognize this is a short term solution, but one that allows future options to be exercised. Once provincial caribou habitat management guidelines are released by the department, any strategies developed shall be revised to align with those guidelines.

5.0 Water Yield

SRD assessed the impact of the 10 year harvest sequence on the watersheds in the FMA. The analysis was based on third order watersheds (5,000 - 10,000 hectare drainage areas) and identified two watersheds for which the predicted water yield increases exceed 15%. These two watersheds straddle the FMA boundary with the portions of their drainage areas in the FMA being approximately 20 – 25%. The water yield increases identified by the analysis are not significant due to small drainage areas in the FMA.

6.0 Long Term Fibre Sustainability

The MPB amendment increases the sustainable harvest level for both coniferous and deciduous timber. Both harvest levels are acceptable. An increase in coniferous harvest from 1,535,000 m³/yr to 1,766,576 m³/yr is planned for a 20 year period from 2008 to 2027, followed by a reduction to 1,399,724 m³/yr for the remainder of the planning horizon. The coniferous harvest level reduces the area of MPB susceptible pine in the FMA by focusing harvesting efforts in areas of susceptible pine stands. The deciduous harvest level increases from 169,449 m³/yr to 249,832 m³/yr.

Coniferous and deciduous reconciliation volumes were incorporated into the timber supply analysis (TSA) completed by the Company. Reconciliation volume is included in the Periodic Allowable Cut (PAC) and Quadrant Authorized Allowable Cut (QAAC) tables.

7.0 Pine Strategy Implementation

The department recognizes that uncertain economic conditions may limit the Company's ability to fully implement the Pine Strategy. The Company has developed a rational and feasible FMP amendment that achieves a significant reduction in MPB susceptible pine on its management area. On-going and timely communication with local government staff is essential to manage the issues identified, and those yet to

be identified.

The implementation of the Pine Strategy does not guarantee the prevention of outbreaks in the near term; however, it will create a forest that is more resistant to such outbreaks in the future. In the Hinton area, ongoing monitoring will determine the priority and timing of timber salvage and forest renewal operations. Alberta will work with the Company to ensure the strategies address the outbreak and minimize the socio-economic and environmental impacts.

8.0 Spatial Harvest Sequence

The mapped SHS is the most important output of the FMP amendment as it implements the strategies the companies must follow to achieve the predicted future forest condition. While dependent on many factors, the future forest condition is strongly influenced by harvest patterns, intensity and schedules. It presents spatially and temporally how the integration of environmental, economic and social values will be achieved on the FMA. Adherence to a properly planned harvest sequence is imperative to achieving the predicted future forest. WFM commits to following the SHS and monitoring and reporting variance.

Berland 22 and Berland 30 SHS compartments do not address the current MBP infestation. Active MPB infestations have been confirmed in both compartments and annual operating plans have been approved to address MPB control. The department acknowledges control efforts are necessary and that operations are acceptable variances from the SHS. Approval Condition 8.1 and more specifically 8.1 iv relates to this and similar future situations.

Alberta requires companies to prepare a 20-year SHS, with stands identified by operator for the first 10 years. WFM produced a 10-year SHS, understanding a new FMP will be developed by 2014 that will include a 20 year SHS. The SHS is effective May 1, 2010.

Approval Condition 8.1 – Spatial Harvest Sequence

- i. WFM shall follow the mapped 10-year harvest sequence as presented in the MPB amendment.
- ii. To address operational planning concerns, all timber disposition holders are authorized to modify the SHS by deleting no more than 20% of the total sequenced area in each compartment by decade, while harvesting no more than 100% of the total area within the SHS by compartment, by decade.
- iii. Where WFM exceeds the variance described in (ii), the Area Manager may require the completion of a compartment assessment and the Senior Manager, Forest Planning Section may recommend the adjustment of the approved AAC to reflect the impact of the variance.
- iv. In instances where planned variance from the approved SHS by compartment, by decade is exceeded due to MPB control efforts, WFM shall complete a compartment review of the SHS to identify and schedule infested and highly susceptible pine stands and delete non-infested, and low infestation risk scheduled stands to manage the SHS variance within an acceptable range. This initial review of Berland 22 and Berland 30 will be completed by October 1, 2010 through an exercise acceptable to the Senior Manager, Forest Planning Section.

- v. The department requires the variance from the SHS to be reported annually, and the 5-year Stewardship Report to analyze the variance from the SHS.
- vi. The department will generally not request a modification of the approved harvest sequence unless required by a change in legislation or a policy approved by the Minister.

9.0 Public and First Nations Consultation

WFM is encouraged to continue its efforts to conduct meaningful public, stakeholder, and First Nations involvement and keep them advised of its operational plans and accomplishments in addressing the MPB situation throughout the implementation of the MPB amendment.

Approval Condition 9.1 Public Consultation

- i. WFM shall conduct meaningful public consultation at key points in the FMP implementation; and
- ii. keep written documentation of all issues and comments raised during operational plan consultation, as well as responses and actions taken to address the concerns.

Approval Condition 9.2 First Nations Consultation

- i. WFM shall conduct meaningful First Nations consultation and meet the requirements of *Alberta's First Nations Consultation Guidelines on Land Management and Resource Development* for operational plan development and approvals; and
- ii. keep written documentation of all issues and comments raised during operational plan consultation, as well as responses and actions taken to address the concerns.

10.0 Alberta Regeneration Information System (ARIS)

Making reliable forecasts for forest management plans is contingent on using accurate input data. Therefore, the department requires all timber disposition holders demonstrate the data used in the managed landbase is consistent with the records of the Alberta Regeneration Information System (ARIS).

Approval Condition 10.1 Alberta Regeneration Information System Validation

- i. As identified in WFM Net Land Base and Yield Curve Agreement-in-Principle letter dated April 8, 2010, harvest areas shall be reconciled and ARIS records adjusted accordingly by December 31, 2010.
- ii. If the changes to the land base are greater than 2.5%, WFM shall submit an updated Net Land Base document and digital files by December 31, 2010 that is acceptable to the Senior Manager, Resource Analysis Section

11.0 Silviculture Strategies

Defining the silvicultural practices that will be used to establish managed stands is important. Forest Management Plans must describe the reforestation strategies that will be implemented to achieve the projected timber yields from regenerating stands. Silvicultural practices must be appropriate for the local range of conditions.

Approval Condition 11.1 Silviculture Strategy

- i. By March 1, 2011 WFM shall work with the department to prepare a silviculture strategy acceptable to the Senior Manager, Reforestation Section.

Approval Condition 11.2 Seed Source Analysis

- i. By November 1, 2010 WFM shall produce a table demonstrating there is sufficient seed in each seed zone to adequately reforest all areas scheduled for harvest in the 10 year SHS. Where insufficient seed supply exists, a seed collection plan to ensure seed supply sufficiency acceptable to the Senior Manager, Reforestation Section shall be prepared.

12.0 Performance Monitoring and Reporting

The effective implementation of the Pine Strategy throughout Alberta is very important, and timely information is vital to ensuring the best decisions are made and the most appropriate management strategies are developed. Considering this, the department requires Pine Strategy progress reports to be prepared to keep the department, other agencies and the public knowledgeable and current on the work completed. The department will publish these requirements at a later date.

13.0 Industrial Timber Salvage

Accounting for all sources of timber volume drain is critical to ensuring the approved AACs are sustainable. In Alberta, non-forestry industrial operations contribute to this drain and must be included in the total.

Approval Condition 13.1 – Industrial Timber Salvage

- i. All timber depleted (salvaged and non-salvaged merchantable timber) by non-forestry operations shall be reported as production for cut control purposes, except for low impact seismic programs where the average line width is less than 2.5 meters and Timber Damage Assessment compensation is not required.
- ii. The volumes used shall be those from the published Timber Damage Assessment tables or as otherwise agreed by the Senior Manager, Timber production, Auditing and revenue Section.
- iii. By September 30, 2010, WFM shall develop, document and submit a salvage timber volume and reporting system that is acceptable to the Senior Manager, Timber Production, Auditing and Revenue Section.

14.0 Structure Retention

The Company proposes to develop stand level management strategies to mitigate the impacts of forestry practices on biological diversity and wildlife habitat. These are designed to ensure that key biodiversity indicators are maintained within a natural range of variability, in specific stand types across the FMA.

Throughout the Province, forest industries practice merchantable green tree retention within harvested areas to create residual (post harvest) stand structure. The department has approved detailed forest management plans that propose structure retention targets between 1% and 15% of merchantable volume. WFM is consistent with this approach as it proposes a minimum retention target of 1% merchantable timber within openings on an FMA-wide basis.

Approval Condition 14.1 – Structure Retention

- i. By September 1, 2010, WFM shall design an effective and practical field assessment program for structure retention monitoring and reporting. This volume shall be chargeable as AAC production and shall be reconciled at the end of the year after the year of harvest, as acceptable to the Senior Manager, Forest Planning Section.

15.0 Alberta Vegetation Inventory (AVI) Update

Maintaining current forest inventory information is critical to making reliable forecasts for forest management plans. The Alberta Vegetation Inventory (AVI) for the WFM FMA must be updated and approved by the department prior to commencing work on the 2024 FMP.

Approval Condition 15.1 – AVI Update Plan

- i. By November 30, 2010 WFM shall submit an AVI update plan for the FMA that is acceptable to the Senior Manager, Resource Analysis Section. This plan shall outline the procedure the company will use to update forest cover and anthropogenic disturbance information and shall include timelines for completion. The AVI update plan and associated procedures shall be approved by the Senior Manager, Forest Planning prior to any work commencing.

16.0 2010 MPB FMP Amendment Technical Issues

The department identified a number of issues during the review of the 2010 MPB FMP Amendment technical documents (Net Land Base, Yield Curves and Timber Supply Analysis). The details of each are documented in the following approval conditions.

Approval Condition 16.1 - Long Run Sustained Yield Average (LRSYA) Documentation

- i. By September 30, 2010 the LRSYA tables shall be revised to provide additional information to enable replication of the calculations. WFM shall discuss requirements with the Senior Manager, Resource Analysis Section.

Approval Condition 16.2 – Forest Structure Forecast

- i. By September 30, 2010 WFM shall submit a description of the forest structure forecast along with supporting documentation identifying age class, opening size and cover type distribution as acceptable to the Senior Manager, Forest Planning Section.

17.0 Development of the 2014 FMP

WFM 2010 MPB FMP amendment used the existing FMP to implement a healthy pine strategy. Although considered an amendment to the FMP, several key inputs have been updated. A new net landbase, yield curves and a healthy pine strategy for mountain pine beetle susceptibility have been developed. Several items remain to be addressed in the 2014 FMP. The list is provided under separate cover.

Approval Condition 17.1 – Technical Issues for the 2014 FMP

- i. By May 1, 2011, WFM shall develop an action plan to address the technical issues identified during the Net Land Base, Yield Curve and Timber Supply Analysis review. This action plan shall be acceptable to the Senior Manager, Forest Planning Section.

Approval Condition 17.2 – Management Issues for the 2014 FMP

- i. By September 30, 2010, WFM shall provide the Senior Manager, Forest Planning Section with current versions of long-term access plans and associated spatial component.
- ii. The department recognizes the efforts of WFM in developing species conservation strategies. The 2014 FMP will be greatly enhanced by this work. By September 30, 2010 WFM shall prepare a schedule for completing this work (species conservation strategies) as acceptable to the Senior Manager, Forest Planning Section.
- iii. By December 31 annually WFM shall submit reports to the Senior Manager, Forest Planning Section for the activities of the previous timber year. The Senior Manager, Forest Planning shall communicate the reporting requirements by September 30, 2010.
- iv. WFM 2014 FMP will calculate a separate AAC for each Forest Management Unit (FMU) within the FMA.

18.0 Road Corridor Planning

A road corridor plan outlining the location of the permanent road network needed to access the total net landbase and implement the spatial harvest sequence is required for the FMP amendment. The road corridor plan shall outline the most probable locations for road corridors that will enable access to each subunit on the FMA.

Approval Condition 18.1 – Road Corridor Planning

- i. By September 30, 2010 WFM shall submit a detailed road corridor plan, with detailed maps and a digital road corridor layer which show access to each subunit on the FMA. The plan must be acceptable to the Senior Manager, Forest Planning Section.

19.0 Growth and Yield Program

WFM AACs are approved, and include post harvest yield assumptions based on Growth and Yield Projection System (GYPSY) projections. Modelled projections must be validated through a growth and yield program acceptable to Alberta.

Approval Condition 19.1 – Growth and Yield Program

- i. By June 30, 2011 WFM shall develop a comprehensive growth and yield program that includes the installation and measurement of permanent and temporary sample plots, acceptable to the Senior Manager, Resource Analysis Section.
- ii. Failure to implement and maintain the program as approved will result in a re-assessment of the timber supply analysis based on natural stand yields for managed stands.

20.0 Authorization

The FMP amendment for FMA #8800025 effective May 1, 2010 is approved as per the AACs presented in Tables 2 and 7.

The AACs are effective beginning May 1, 2010.

The next FMP shall be received by the department by September 30, 2014.

Table 1. Historical Coniferous Allocations and Annual Allowable Cuts

FMU	Company Name	Disposition Number	Landbase Management Type	Source	Cover Group / Species	Primary Coniferous AAC (m³) 10+/8/15 cm	Total Approved AAC (m³)
<i>E1/E3/E4/E5/E6/E7/E11</i>	<i>West Fraser Mills Ltd. (Hinton)</i>	<i>FMA8800025</i>	<i>Single Combined</i>	<i>FMA-Only</i>	<i>C, CD, DC, D</i>	<i>1,927,629</i>	<i>1,927,629</i>
<i>E1/E3/E4/E5/E6/E7/E11</i>		<i>Local Use</i>	<i>Single Combined</i>	<i>FMA-Only</i>	<i>C, CD, DC, D</i>	<i>8,500</i>	<i>8,500</i>
<i>E1/E3/E4/E5/E6/E7/E11</i>	<i>FMA AAC Subtotal</i>	<i>FMA8800025</i>	<i>Single Combined</i>	<i>FMA-Only</i>	<i>C, CD, DC, D</i>	<i>1,936,129</i>	<i>1,936,129</i>
FMU E1/E3/E4/E5/E6/E7/E11 Total						1,936,129	1,936,129

Notes:
Effective June 15, 1998

Effective October 5, 2006 an operational adjustment to the Annual Allowable Cut (AAC) was applied to reflect a change in utilization from a standard of 10/8/15 cm to 15/10/15 cm. The adjusted coniferous AAC was calculated and approved at 1,535,000 m³.

Table 2. Approved Coniferous Allocations and Annual Allowable Cuts

Effective Date: May 1, 2010

FMU	Company Name	Disposition Number	Landbase Management Type	Source	Cover Group / Species	Primary Coniferous AAC (m ³) 15+/11/15 cm	Total Approved AAC (m ³)
E1/E3/E4/E5/E6/E7/E11	West Fraser Mills Ltd. (Hinton)	FMA8800025	Single Combined	FMA-Only	C, CD, DC, D	1,758,076	1,758,076
E1/E3/E4/E5/E6/E7/E11		Local Use	Single Combined	FMA-Only	C, CD, DC, D	8,500	8,500
E1/E3/E4/E5/E6/E7/E11	FMA AAC Subtotal	FMA8800025	Single Combined	FMA-Only	C, CD, DC, D	1,766,576	1,766,576
FMU E1/E3/E4/E5/E6/E7/E11 Total						1,766,576	1,766,576

Table 3. Coniferous Periodic Allowable and Quadrant Authorized Allowable Cuts

3.1	E1/E3/E4/E5/E6/E7/E11	West Fraser Mills Ltd. (Hinton)	Disposition: FMA8800025						
			Period Start: 1-May-08	Period End: 30-Apr-13					
			Period Segment Start Date	Period Segment End Date	Years in Period Segment	Primary Approved Harvest Level (m³/yr)	Primary PAC Contribution (m³)	Total PAC Contribution (m³)	Notes
		1	1-May-08	30-Apr-10	2.0000000000	1,535,000	3,070,000.0000	3,070,000.0000	2008-2010 PAC calculated at 15/10/15 cm operational utilization
		2	1-May-10	30-Apr-13	3.0000000000	1,766,576	5,299,728.0000	5,299,728.0000	2010-2013 PAC calculated at 15/11/15 cm utilization
			Periodic Reconciliation Volume (m ³)				0	0	
			PAC Total				8,369,728	8,369,728	

Table 4. West Fraser Mills Ltd. (Hinton) FMA Coniferous Chargeability
Effective Date: May 1, 2010

FMU	Company Name	Disposition Number	Coniferous Species Used in AAC	Species NOT Chargeable to AAC	Rights to Species NOT Chargeable to AAC	Structure Retention (%)	Structure Retention (%) Accounted for in AAC	Net Landbase Deletions and Deferrals	Net Landbase Deletions and Deferrals: Rights to Timber	Industrial Salvage Chargeability Strategy
E1/E3/E4/E5/E6/E7/E11	West Fraser Mills Ltd. (Hinton)	FMA8800025	Pl, Sw, Sb, Se, Fb, Fa	Lt	Hinton Wood Products is the only operator on the FMA.	1	Structure Retention not accounted for in AAC. Retention is tracked, measured and reported at the end of the year after the year of harvest.	As per section 3.1	Hinton Wood Products is the only operator on the FMA.	Each disposition will be charged against the AAC upon consent.

Table 5. West Fraser Mills Ltd. (Hinton) FMA Coniferous Utilization
Effective Date: May 1, 2010

FMU	Company Name	Disposition Number	AAC Type	Cover Group / Species	Utilization used to determine Harvest Level in PFMS				Operational Utilization				
					Top Diameter (cm)	Stump Diameter (cm)	Minimum Length (m)	Stump Height (cm)	Top Diameter (cm)	Stump Diameter (cm)	Minimum Length (m)	Stump Height (cm)	Coniferous Harvest Level (m ³ /yr) based on Operational Utilization
E1/E3/E4/E5/E6/E7/E11	West Fraser Mills Ltd. (Hinton)	FMA8800025	All	Pl, Sw, Sb, Se, Fb, Fa	11	15	3.76	15					

Table 6. Historical Deciduous Allocations and Annual Allowable Cuts

FMU	Company Name	Disposition Number	Landbase Management Type	Source	Cover Group / Species	Primary Deciduous AAC (m³) 10+/8/15 cm	Total Approved AAC (m³)
<i>E1/E3/E4/E5/E6/E7/E11</i>	<i>West Fraser Mills Ltd. (Hinton)</i>	<i>FMA8800025</i>	<i>Single Combined</i>	<i>FMA-Only</i>	<i>C, CD, DC, D</i>	<i>167,949</i>	<i>167,949</i>
<i>E1/E3/E4/E5/E6/E7/E11</i>		<i>Local Use</i>	<i>Single Combined</i>	<i>FMA-Only</i>	<i>C, CD, DC, D</i>	<i>1,500</i>	<i>1,500</i>
<i>E1/E3/E4/E5/E6/E7/E11</i>	<i>FMA AAC Subtotal</i>	<i>FMA8800025</i>	<i>Single Combined</i>	<i>FMA-Only</i>	<i>C, CD, DC, D</i>	<i>169,449</i>	<i>169,449</i>
FMU E1/E3/E4/E5/E6/E7/E11 Total						169,449	169,449

Notes:
Effective June 15, 1998

Table 7. Approved Deciduous Allocations and Annual Allowable Cuts

Effective Date: May 1, 2010

FMU	Company Name	Disposition Number	Landbase Management Type	Source	Cover Group / Species	Primary Deciduous AAC (m ³) 15+/10/15 cm	Total Approved AAC (m ³)
E1/E3/E4/E5/E6/E7/E11	West Fraser Mills Ltd. (Hinton)	FMA8800025	Single Combined	FMA-Only	C, CD, DC, D	248,332	248,332
E1/E3/E4/E5/E6/E7/E11		Local Use	Single Combined	FMA-Only	C, CD, DC, D	1,500	1,500
E1/E3/E4/E5/E6/E7/E11	FMA AAC Subtotal	FMA8800025	Single Combined	FMA-Only	C, CD, DC, D	249,832	249,832
FMU E1/E3/E4/E5/E6/E7/E11 Total						249,832	249,832

Table 8. Deciduous Periodic Allowable and Quadrant Authorized Allowable Cuts

8.1	E1/E3/E4/E5/E6/E7/E11		West Fraser Mills Ltd. (Hinton)		Disposition: FMA880025		
	Period Start: 1-May-08		Period End: 30-Apr-13				
	Period Segment Start Date	Period Segment End Date	Years in Period Segment	Primary Approved Harvest Level (m ³ /yr)	Primary PAC Contribution (m ³)	Total PAC Contribution (m ³)	Notes
1	1-May-08	30-Apr-10	2.0000000000	169,449	338,898.0000	338,898.0000	2008-2010 PAC calculated based on 10/8/15 cm utilization
2	01-May-10	30-Apr-13	3.0000000000	249,832	749,496.0000	749,496.0000	2010-2013 PAC calculated based on 15/10/15 cm utilization.
Periodic Reconciliation Volume (m ³)					0	0	
PAC Total					1,088,394	1,088,394	

Table 9. West Fraser Mills Ltd. (Hinton) FMA Deciduous Chargeability
Effective Date: May 1, 2010

FMU	Company Name	Disposition Number	Deciduous Species Used in AAC	Species NOT Chargeable to AAC	Rights to Species NOT Chargeable to AAC	Structure Retention (%)	Structure Retention (%) Accounted for in AAC	Net Landbase Deletions and Deferrals	Net Landbase Deletions and Deferrals: Rights to Timber	Industrial Salvage Chargeability Strategy
E1/E3/E4/E5/E6/E7/E11	West Fraser Mills Ltd. (Hinton)	FMA8800025	Aw, Pb	Bw	Hinton Wood Products is the only operator on the FMA.	1	Structure Retention not accounted for in AAC. Retention is tracked, measured and reported at the end of the year after the year of harvest.	As per section 3.1	Hinton Wood Products is the only operator on the FMA.	Each disposition will be charged against the AAC upon consent.

Table 10. West Fraser Mills Ltd. (Hinton) FMA Deciduous Utilization

Effective Date: May 1, 2010

FMU	Company Name	Disposition Number	AAC Type	Cover Group / Species	Utilization used to determine Harvest Level in PFMS				Operational Utilization				
					Top Diameter (cm)	Stump Diameter (cm)	Minimum Length (m)	Stump Height (cm)	Top Diameter (cm)	Stump Diameter (cm)	Minimum Length (m)	Stump Height (cm)	Deciduous Harvest Level (m ³ /yr) based on Operational Utilization
E1/E3/E4/E5/E6/E7/E11	West Fraser Mills Ltd. (Hinton)	FMA8800025	All	Aw, Pb	10	15	1.78	15					

Table 11. Fiber Transfer Agreements within the West Fraser Mills Ltd. (Hinton) FMA Area

Source Company	Source Dispositon Number	Transfer Type	Company Directed To	Species Group	Volume (m³/yr)	Comments
No Fiber Transfer Agreements						