

**Detailed Forest Management Plan Amendment  
Approval Decision  
for the  
Mountain Pine Beetle Pine Strategy Plan**

**ANC Timber Ltd.  
Whitecourt, Alberta**

**Forest Management Agreement  
#8900026**

**Date: March 30, 2007  
Effective: May 1, 2006**

Approved by: Original Signed  
**D. (Doug) Sklar, RPF  
Executive Director  
Forest Management Branch  
Forestry Division**

## 1.0 Introduction

Alberta is experiencing a significant outbreak of mountain pine beetle (MPB) and is implementing control strategies with respect to this outbreak and strategies to prevent future outbreaks<sup>1</sup>. ANC Timber Ltd (ANC) has submitted an amendment to their existing Forest Management Plan (FMP) that meets the requirements established by Alberta for such amendments<sup>2</sup>. This decision provides the rationale for approval and direction for ongoing work.

It is important to note that 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 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, if the extent of the current outbreak is limited. 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 directed<sup>3</sup> that the key outcomes of three scenarios (the current management plan or status quo, the Pine Strategy and a MPB outbreak) be presented. I believe, given MPB outbreak in Alberta, that the current management plans are not a likely scenario under current circumstances and comparison of the Pine Strategy and MPB outbreak scenario is the pertinent analysis.

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 Alberta.

## 2.0 Forest Management Plans (FMP) and Priority of MPB Control Strategies

The approval of this amendment results in a new spatial sequence and timber supply. Commitments in the balance of the existing FMP remain in effect. ANC is to complete a full update of its current FMP in time for approval by May 1, 2010. The status of the MPB outbreak will likely be clearly apparent in time for the preparation of the update which will then be able to better address the trade-offs between key outcomes.

It is crucial to take all appropriate steps to limit the extent of the current outbreak which means that execution of control activities (Level 1 and 2<sup>4</sup>) takes priority over the spatial sequence in this amendment, subject to comments elsewhere in this decision. It is most likely that activities over the next few years will be a combination of control and prevention, and changes to the sequence necessary to do both will be handled through the annual operating plan.

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<sup>1</sup> See the Mountain Pine Beetle Action Plan for Alberta (AP) and the Interpretive Bulletin Planning Mountain Pine Beetle Response Operations (IP) on the Department of Sustainable Resource Development (SRD) website

<sup>2</sup> See the Interpretive bulletin Planning Mountain Beetle Response Operations on SRD website.

<sup>3</sup> See IP

<sup>4</sup> See AP for definitions

### 3.0 Decision Rationale

#### 3.1 Habitat for Species of Special Management Concern

ANC had been asked to evaluate the effects of each scenario on the habitat for two species; grizzly bear and woodland caribou. Research conducted by the Foothills Model Forest <sup>5</sup> leads to the conclusion that grizzly bear habitat is most effectively dealt with through managing access and further analysis was not deemed necessary in this amendment.

In considering the projections of caribou habitat presented in the plan, it is important to note that continuing the status quo scenario is no longer viable, given the MPB outbreak in Alberta. ANC was asked to use a simple metric (area less than 40 years of age, and area over 80 years of age for each scenario) to quantify caribou habitat for the next 100 years. It is recognized that these simple metrics do not address the full complexity of the issue<sup>6</sup> but do serve to provide a practical comparison. The Pine Strategy generates much less unfavourable habitat (i.e. stands less than 40 years of age) 50 years into the future (see Figure 3-11 on page 30 of the amendment). The quality of the caribou habitat created in scenarios considered in this FMP amendment is uncertain. Due to this uncertainty, the department suggests that consideration of a variety of harvest and silvicultural strategies in the development of spatial harvest plans will assist in caribou management while allowing the company to effectively implement the Pine Strategy. Without implementation of the Pine Strategy, the forest under a MPB outbreak situation would be at a much higher risk of large wildfires that would essentially eliminate caribou habitat over large areas.

Concerns have been raised over the spatial sequence in the amendment, which proposes limited harvesting for the first decade in the caribou zone followed by more intensive harvesting in the second decade. One viewpoint is that there should be no harvesting in the caribou zone to maintain the current level of habitat suitable for caribou, while another viewpoint is that there should be more harvesting in the first decade to reduce the risk of MPB getting established in the area. Since the caribou zone is viewed as being the most susceptible to MPB infestation, I believe the latter viewpoint is most prudent, however, caution is in order. Until such time as an updated FMP can provide more analysis regarding the potential impacts on caribou habitat, operations in the caribou zone should continue in areas with currently approved and active harvest plans (Compartment 1-04, 1-13, 7-02, 7-03, 7-06, and 7-09). In addition, the area known as the “Highway 40” project (primarily compartment 7-14) should be scheduled in the first five year period (i.e. 2006 to 2011). The harvest sequence in the remainder of the caribou zone will need to be resolved in the updated FMP, which will rely on advice from the Alberta Caribou Committee, on how to evaluate trade-offs between MPB risk reduction and caribou habitat.

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<sup>5</sup> See Foothills Model Forest website

<sup>6</sup> The process being executed by the Alberta Caribou Committee is expected to provide practical, timely advice on more comprehensive mechanisms to evaluate the quantity and quality of caribou habitat

## **Approval Condition 1- Habitat for Species of Special Management Concern**

By May 1, 2010, ANC shall, utilizing advice provided by the department, devise a harvest sequence in the caribou zone for the FMP update which more rapidly reduces the area of susceptible pine in a manner which maintains as much caribou habitat as is practical and feasible. An initial target is to reduce the amount of susceptible pine in the caribou zone, during the first decade from the present time, to half of the amount projected in this amendment.

### **3.2 Access**

Although the review and approval of access is beyond the mandate of a FMP amendment, it is required to assess changes to access that may be required to implement the amendment. The area of primary concern at this time is the caribou zone and access management in this area is guided by work of the Caribou Landscape Management Association as approved by Area Managers. There is no difference in the total amount of permanent road that would be required to implement each scenario in the amendment and the total amount of permanent road required is below a currently recommended threshold for grizzly bear habitat ( $0.3\text{km}/\text{km}^2$ ). Total access is not a factor that would cause one scenario to be viewed differently than the others, however the timing of construction and management of use are important issues to be addressed through disposition approvals and annual operating plans.

### **3.3 Watersheds**

The predicted change in water yield for the MPB outbreak scenario is 15-20% in the next 20-30 years whereas the increase for the Pine Strategy proposed in this amendment is less than 5% for the same period. The rule-of-thumb used in FMP's in Alberta is that an increase over 15 % is potentially problematic depending on the watershed under consideration. The Pine Strategy will have less impact on watershed values than a MPB outbreak.

### **3.4 Timber Supplies**

The Pine Strategy proposes an increase from the current Annual Allowable Cut (AAC) of  $613,000\text{ m}^3$  to  $1,170,000\text{ m}^3$  for a period of twenty years (a 90% increase), falling to  $551,700\text{ m}^3$  ( a 10% reduction from the current AAC). In contrast, the MPB outbreak scenario predicts a decrease in twenty years to  $316,000\text{ m}^3$  (a 49% reduction from the current AAC). This magnitude of decrease (49%) is very serious and it is deemed an acceptable trade-off to accept a 10% reduction in an attempt to preclude a 49% reduction. Additionally, since the watershed impact of the Pine Strategy is predicted to be less problematic than that predicted from a MPB outbreak, and, since the caribou habitat impacts of the Pine Strategy are at least no worse than those of an MPB outbreak, the Pine Strategy is therefore the most reasonable choice. The reduction in twenty years (from  $1,170,000$  to  $551,700\text{ m}^3$ ) is a significant and abrupt change that needs to be reduced .

### **Approval Condition 2 – Timber Supplies**

Include mechanisms in the FMP scheduled to be updated by May 1, 2010 to mitigate the timber supply fall down projected at year 20.

### **3.5 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 will require 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.

### **Approval Condition 3 – Performance Monitoring and Reporting**

ANC Timber shall prepare Pine Strategy progress reports and provide the supporting data to the Senior Manager, Forest Planning Section in accordance with the department's published requirements.

### **3.6 FMU Administration**

The timber supply and forest management strategy has been developed using a single forest management unit approach. The ANC Timber FMA is comprised of four forest management units E7, W1, W8 and W10. The creation of forest management units is the responsibility of the Minister and this administrative function must be completed to facilitate timber production control and record-keeping. ANC Timber has communicated this to the timber operators on the FMA and asked them for their agreement with this approach. The FMP amendment does not address this agreement and therefore confirmation of this is required.

### **Approval Condition 4 – FMU Administration**

By April 30, 2007, ANC Timber will provide to the Senior Manager, Forest Planning Section, written confirmation from each timber operator of their agreement and acceptance of the forest management units E7, W1, W8 and W10 being amalgamated into a single forest management unit.

### **3.7 Authorization**

The Detailed Forest Management Plan Amendment for the ANC Timber Inc. FMA dated February 5, 2007 is approved subject to the Approval Conditions being met, and the annual allowable cuts presented in the attached Table 1. The annual allowable cuts are effective beginning May 1, 2006.

The next forest management plan shall be received by the department in time for approval by May 1, 2010.

**Table 1. Approved Annual Allowable Cuts**

<b><u>Coniferous Allocations</u></b>														
		<b>Current</b>					<b>Amalgamated using previously approved AACs</b>				<b>Approved AAC</b>			
CCTP/Company Name	Disposition # or type of allocation	FMU	% Allocation (if applicable)	AAC Volume (m3)	Source Stand type (pure or mixed wood)	Utilization Standard	Proposed FMU	% Allocation (if applicable)	Proposed Harvest level Volume (AAC) (m3)	Utilization Standard	Proposed FMU	% Allocation (if applicable)	Proposed Harvest level Volume (AAC) (m3)	Utilization Standard
ANC Timber	FMA8900026	W1, W8, W10	N/A	391,325	mixed wood, pure	15/10	W15	N/A	391,325	15/10	W15	N/A	746,904	15/10
Blue Ridge Lumber	CTQW010004	W1	34.27%	122,344	mixed wood, pure	15/10	W15	19.96%	122,344	15/10	W15	19.96%	233,511	15/10
Mostowich Lumber	CTQW010007	W1	16.00%	57,120	mixed wood, pure	15/10	W15	9.32%	57,120	15/10	W15	9.32%	109,022	15/10
Millar Western	CTQW010002	W1	6.88%	24,562	mixed wood, pure	15/10	W15	4.01%	24,562	15/10	W15	4.01%	46,880	15/10
Millar Western	CTQW080001	W8	18.14%	13,696	mixed wood, pure	15/10	W15	2.23%	13,696	15/10	W15	2.23%	26,140	15/10
CCTP/Local use	Local use	W1, W8, W10	1%*	3953*	mixed wood, pure	15/10	W15	1%*	3953*	15/10	W15	1%*	7544*	15/10
<b>Totals</b>				<b>613,000</b>					<b>613,000</b>				<b>1,170,000</b>	

\* 1% of FMA Holder's AAC available for local use

Table 1 (continued)

<b><u>Deciduous Allocations</u></b>															
		<b>Current</b>					<b>Amalgamated using previously approved AACs</b>				<b>Approved AAC</b>				
CCTP/Company Name	Disposition # or type of allocation	FMU	% Allocation (if applicable)	AAC Volume (m3)	Source Stand type (pure or mixed wood)	Utilization Standard	Proposed FMU	% Allocation (if applicable)	Proposed Harvest level Volume (AAC) (m3)	Utilization Standard	Proposed FMU	% Allocation (if applicable)	Proposed Harvest level Volume (AAC) (m3)	Utilization Standard	
ANC Timber Ltd.	FMA8900026	W1, W8, W10	N/A	71,032	Pure and mixed wood	15/10	W15	N/A	71,032	15/10	W15	N/A	96,525	15/10	
CCTP/Local use	Local use	W1, W8, W10	1%*	718*	Pure and mixed wood	15/10	W15	1%*	718*	15/10	W15	1%*	975*	15/10	
<b>Totals</b>				<b>71,750</b>					<b>71,750</b>				<b>97,500</b>		

\* 1% of FMA Holder's AAC available for local use