

# **Forest Management Plan Amendment**

# Mountain Pine Beetle Addendum Forest Management Units E1, E2, W5, W6 Approval Decision

Weyerhaeuser Company Ltd.
Pembina Forestlands
Edson, Alberta

Forest Management Agreement #9700035

Date: June 27, 2008\* Effective: May 1, 2007

Approved by: <u>Original Signed by</u>

D. (Doug) Sklar, RPF Executive Director

**Forest Management Branch** 

**Forestry Division** 

<sup>\*</sup> Tables revised September 15, 2008 with existing approval conditions

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#### 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>. Weyerhaeuser Company Ltd. (Weverhaeuser) addendum to its recently approved Forest Management Plan (FMP) 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 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, 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 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 Plans (FMP) and Priority of MPB Control Strategies

The approval of the FMP amendment results in a new spatial harvest sequence and timber supply. Commitments in the balance of the existing FMP remain in effect until they are replaced by a new FMP expected by April 1, 2016. The status of the MPB outbreak will likely be apparent in time for the preparation of the new FMP which will then be able to better address the trade-offs between key outcomes.

The major MPB infestation in British Columbia has spread into Alberta: specifically the Eastern Slopes of the Rocky Mountains, Banff and Jasper National Parks, the Bow Corridor in Kananaskis Country, the Crowsnest Pass, the Grande Prairie region, and east to Slave Lake. MPB infestations are located to the north, south and west of the Weyerhaeuser Edson FMA. In the event of an outbreak in the forest management unit (FMU), it will be crucial to take all appropriate steps to control the infestation by executing control activities (Level 1 and Level 2<sup>4</sup>) which will take priority over the spatial sequence in this amendment. I expect activities over

<sup>&</sup>lt;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

See the Interpretive Bulletin - Planning Mountain Beetle Response Operations on SRD website.

<sup>&</sup>lt;sup>4</sup> See AP for definitions

the next few years to be a combination of control (Level 1 and Level 2) and prevention (Pine Strategy), and operational changes necessary to accomplish both will be handled through annual operating plans.

## 3.0 Habitat for Species of Special Concern (Grizzly Bear Habitat)

Resource selection function maps for grizzly bear indicate the area of high-suitability grizzly bear habitat in the FMA is small. For this reason the department agreed assessing the impact of this plan amendment on habitat was not required. Operational planning can mitigate many of the impacts of timber harvest and should be used where conditions dictate.

Alberta's Grizzly Bear Recovery Plan (GBRP) has been accepted by the Minister of Sustainable Resource Development. The GBRP recognizes that reduced grizzly bear survival and reproductive success are linked to human activity in priority habitats. Access development increases this activity. The department is developing an implementation plan for the GBRP in the near term. When this is published the Company shall address these requirements in its operational plans and the next forest management plan will address this issue further.

#### 4.0 Access

A Road Corridor Plan is presented outlining access to operating compartments. Access is essential to the management of MPB and the impacts will be mitigated with Weyerhaeuser's continued good planning, effective construction, timely reclamation, and reforestation. The company can act to make roads impassable and to quickly reclaim access into completed compartments. Access is difficult to restrict once routes are built and the government must take a solid stance on this issue in priority habitats. The plan is reasonable and implements the MPB Strategy efficiently.

#### 5.0 Water Yield

Weyerhaeuser assessed the impact of the Pine Strategy Plan on the watersheds in the FMA. Maximum annual water yield increases range between 0.06 % and 21.17%. Three watersheds (Granada (21.17%), Chevron (19.9%) and Cynthia (16.39%) exceeded a 15% increase although the Carrot Tower, West Eta and Mason approached that level. The peaks are forecast to occur after 20 years. The results are not unexpected and are acceptable outcomes from the planned operations to address MPB susceptible pine reduction.

#### **6.0 Long Term Fibre Sustainability**

The fibre flow proposed in the MPB Preferred Scenario is acceptable for the four forest management units. The increase (from 384,363 m³ to 514,856 m³) is planned for 17 years followed by a reduction to 326,095 m³ after year 17.

# 7.0 Pine Strategy Implementation

The department recognizes that uncertain economic conditions may limit the company's ability to fully implement the Pine Strategy amendment. The company has developed a rational and feasible FMP 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. Weyerhaeuser is encouraged to continue its efforts to keep the public and stakeholders advised of its operational plans and accomplishments in addressing the MPB situation.

The implementation of the Pine Strategy does not guarantee prevention of an outbreak in the near future, but in twenty years, will create a forest that is very resistant to such outbreaks. Should it occur, salvage strategies will address the outbreak to minimize the socio-economic and environmental impacts.

#### **8.0 Embedded Timber Operators**

Weyerhaeuser Company Ltd. has reached agreement with the embedded timber operators and the department regarding operational sequencing and annual allowable cut (AAC) sharing. Table 2 presents the approved AACs for each forest management unit and operator.

### 9.0 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 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.

#### 10.0 Authorization

The Forest Management Plan Amendment for Forest Management Agreement 9700035 dated March 20, 2008 is approved as per the annual allowable cuts presented in Table 2.

The annual allowable cuts are effective beginning May 1, 2007.

The next forest management plan shall be received by the department in time for approval by April 1, 2016.

**Table 1: Historical Allocations** 

Company Name	Disposition #	FMU		Coni	ferous Timbe	er				Deciduous Timb	er	
			% Coniferous Allocation	AAC (m³/yr)	Incidental %	Incidental  AAC	Utilization Standard	% Deciduous Allocation	AAC (m <sup>3</sup> /yr)	Incidental %	Incidental  AAC	Utilization Standard
						$(m^3/yr)$					(m <sup>3</sup> /yr)	
Weyerhaeuser*	FMA9700035	E1	N/A	62,188	100.00%	24,549	15/11	N/A	22,102	N/A	11,728	15/10
Edson Timber Products	CTQE01F001	E1	4.70%	3,069			15/11					
Weyerhaeuser	DTA/CTQ Grazing	E1	0.058%	38		14		N/A	38	N/A	5	15/10
FMU Total			100.00%	65,295	100.00%	24,563		100.00%	22,140	100.00%	11,733	
Weyerhaeuser*	FMA9700035	E2	N/A	5,538	20.00%	6,734	15/11	N/A	71,119	N/A	4,773	15/10
EDFOR Co-Op Ltd.	CTQE020002	E2	78.60%	31,318	80.00%	30,414	15/11					
СТРР	СТРР	E2	6.49%	2,586			15/11			Fixed	1,500	15/10
Weyerhaeuser	DTA/CTQ Grazing	E2	1.011%	403		870		N/A	11,111	N/A	598	15/10
FMU Total			100.00%	39,845	100.00%	38,018		100.00%	82,230	100.00%	6,871	
Weyerhaeuser*	FMA9700035	W5						N/A	23,914			15/10
CCTP	CCTP	W5	100.00%	22,116	100.00%	7,878	15/11	Fixed	4,000	100.00%	11,324	15/10
Weyerhaeuser	DTA/CTQ Grazing	W5						N/A	10,193			15/10
FMU Total			100.00%	22,116	100.00%	7,878		100.00%	38,107	100.00%	11,324	
Weyerhaeuser*	FMA9700035	W6	N/A	31,220	N/A	25,991	15/11	N/A	81,473	N/A	43,008	15/10
Millar Western	CTQW060002	W6	0.70%	1,120			15/11					
Blue Ridge Lumber	CTQW060010	W6	18.87%	30,190			15/11					
ANC Timber	CTQW060011	W6	43.14%	69,021			15/11					
Cold Creek Timber	CTQW060012	W6	6.25%**	10,000			15/11					
ССТР	ССТР	W6	Fixed	18,252			15/11			Fixed	17,591	15/10
Weyerhaeuser	DTA/CTQ Grazing	W6	0.118%	189	N/A	665		N/A	2,416	N/A	547	15/10
FMU Total			100.00%	159,992	100.00%	26,656		100.00%	83,889	100.00%	61,146	

<sup>\*</sup> Up to 1% of the Weyerhaeuser FMA coniferous aac(1,562 m<sup>3 at 15/11</sup>) and deciduous aac(2,581m<sup>3 at 15/10</sup>) allocation is available for local timber use permits

<sup>\*\*</sup>Percentage will be revised with future AAC calculations

**Table 2: Allocations and Approved Annual Allowable Cuts** 

Company Name	Disposition #	FMU		Con	iferous Timb	er			D	eciduous Tin	nber	
			% Coniferous Allocation	AAC (m³/yr)	Incidental %	Incidental AAC (m³/yr)	Utilization Standard	% Deciduous Allocation	AAC (m³/yr)	Incidental %	Incidental AAC (m³/yr)	Utilization Standard
Weyerhaeuser	FMA9700035	E1	N/A	120,412	100.00%	15,633	15/11	N/A	22,083	100.00%	18,052	15/10
Edson Timber Products	CTQE010005	E1	4.70%	5,940			15/11					
Weyerhaeuser	DTA/CTQ Grazing	E1	0.030%	38		14			38		5	15/10
FMU Total			100.00%	126,390	100.00%	15,647		100.00%	22,121	100.00%	18,057	
Weyerhaeuser	FMA9700035	E2	N/A	8,745	20.00%	6,313	15/11	N/A	70,442	N/A	6,911	15/10
EDFOR Co-Op Ltd.	CTQE020002	E2	78.60%	48,223	80.00%	28,732	15/11					
CTPP	СТРР	E2	6.49%	3,981			15/11			Fixed	1,500	15/10
Weyerhaeuser	DTA/CTQ Grazing	E2	0.657%	403		870			11,121	N/A	598	15/10
FMU Total			100.00%	61,352	100.00%	35,916		100.00%	81,563	100.00%	9,009	
Weyerhaeuser	FMA9700035	W5						N/A	24,200			
CCTP	CCTP	W5	100.00%	22,264	100.00%	7,905	15/11	Fixed	4,000	100.00%	8,051	15/10
Weyerhaeuser	DTA/CTQ Grazing	W5							10,135			15/10
FMU Total			100.00%	22,264	100.00%	7,905		100.00%	38,335	100.00%	8,051	
Weyerhaeuser	FMA9700035	W6	N/A	55,297	N/A	20,039	15/11	N/A	80,112	N/A	50,579	15/10
Millar Western	CTQW060002	W6	0.70%	1,573			15/11					
Blue Ridge Lumber	CTQW060010	W6	18.87%	42,397			15/11					
ANC Timber	CTQW060011	W6	43.14%	96,926			15/11					
Cold Creek Timber	CTQW060012	W6	6.25%**	10,000			15/11					
CCTP	CCTP	W6	Fixed	18,252			15/11			Fixed	17,591	15/10
Weyerhaeuser	DTA/CTQ Grazing	W6	0.118%	233	N/A	665		N/A	2,875	N/A	371	15/10
FMU Total			100.00%	224,678	100.00%	20,704		100.00%	82,987	100.00%	68,541	

Footnotes: See page 6

## **Table 2 Allocations and Approved Annual Allowable Cuts – Footnotes**

FMU E01: Conifer (1,204 m<sup>3</sup> pure and 156 m<sup>3</sup> incidental at 15/11/15 cm utilization)

Deciduous (221 m<sup>3</sup> pure and 181 m<sup>3</sup> incidental at 15/10/15 cm utilization)

FMU E02: Conifer (87 m<sup>3</sup> pure and 63 m<sup>3</sup> incidental at 15/11/15 cm utilization)

Deciduous (704 m<sup>3</sup> pure and 69 m<sup>3</sup> incidental at 15/10/15 cm utilization)

FMU W05: Conifer (0.0 m<sup>3</sup> pure and 0.0 m<sup>3</sup> incidental at 15/11/15 cm utilization)

Deciduous (242 m<sup>3</sup> pure and 0.0 m<sup>3</sup> incidental at 15/10/15 cm utilization)

FMU W06: Conifer (553 m<sup>3</sup> pure and 200 m<sup>3</sup> incidental at 15/11/15 cm utilization)

Deciduous (801 m<sup>3</sup> pure and 506 m<sup>3</sup> incidental at 15/10/15 cm utilization)

<sup>\*</sup>CTQ/DTA volumes from Table 7.19 of TSA documentation

<sup>\*\*</sup>Percentage will be revised with future AAC calculations

<sup>\*\*\*</sup>Pursuant to clause 8 (2) (c) of Weyerhaeuser Company Ltd.'s Forest Management Agreement (O.C. 521/2007) up to 1% of the Weyerhaeuser FMA Annual Allowable Cut will be made available to the Minister to issue timber dispositions for local use. The annual volume of timber available for local timber use permits that will be available will not exceed:

**Table 3: Utilization and Operational Volume Adjustments** 

Company			n used in FMU Calculations	JAAC	Operational Utilization						
	Disposition Number	Top Diameter (cm)	Butt Diameter (cm)	Stump Height (cm)	Top Diameter (cm)	Butt Diameter (cm)	Stump Height (cm)	Coniferous AAC (m3) based on Operational Utilization			
Weyerhaeuser <sup>1</sup>	FMA9700035	11	15	15	13	15	15	175,231			
ANC Timber <sup>2</sup>	CTQW060011	11	15	15	10	15	15	99,525			
Millar Western <sup>2</sup>	CTQW060002	11	15	15	10	15	15	1,620			

<sup>&</sup>lt;sup>1</sup>Coniferous conversion factor of 5% decrease in AAC from 15/11/15 cm to 15/13/15 cm

 $<sup>^2</sup> Coniferous$  conversion factor of 2.99% increase in AAC from 15/11/15 cm to 15/10/15 cm

Table 4. Weyerhaeuser Company Ltd. (Edson) - Periodic and Quadrant Allowable Cuts

Company Name	Disposition Number	FMU	Quadrant Period	Coni Reconcilia	d Quadrant iferous tion Volume m <sup>3</sup> )	Dec Reconcilia	d Quadrant ciduous ation Volume (m³)	Primary Deciduous Quadrant Allowable Cut (m³)	Secondary Deciduous Quadrant Allowable Cut (m³)	Primary Coniferous Quadrant Allowable Cut <sup>1</sup> (m <sup>3</sup> )	Secondary Coniferous Quadrant Allowable Cut (m³)	Comments
				Pure	Incidental	Pure	Incidental					
Weyerhaeuser Company Ltd.	FMA9700035	E01	July 1, 2002 to June 30, 2007	1,431	0	63,115	0	228,061	14,744	368,371	26,523	Assuming ((3.8329 yrs. x 36,305 m3/yr. at 15/10/30 cm) + (1 yr. x 22,102 m3/yr. at 15/10/15 cm) + (0.1671 yrs. x 22,083 m3/yr. at 15/10/15 cm) primary deciduous) + ((1 yr. x 11,728 m3/yr. at 15/10/15 cm) + (0.1671 yrs. x 18,052 m3/yr. at 15/10/15 cm) secondary deciduous) + (63,115 m3 primary deciduous at 15/10/30 cm reconciliation volume from 1997-2002. Assuming ((3.8329 yrs x 74,858 m3/yr. at 15/11/30) + (0.5863 yrs. x 62,188 m3 at 15/11/15 cm) + (0.4137 yrs. x 59,079 m3 at 15/13/15cm) + (0.1671 yrs x 114,391 m3 at 15/13/15cm) primary coniferous) + ((0.5863 yrs. x 24,549 m3 at 15/11/15 cm) + (0.4137 yrs. x 23,322 m3 at 15/13/15 cm) + (0.1671 yrs x 14,851 m3 at 15/13/15 cm) secondary coniferous) + 1,431 m3 primary coniferous at 15/11/30 cm reconciliation volume from 1997-2002.
Weyerhaeuser Company Ltd.	FMA9700035	E01	July 1, 2007 to April 30, 2012	-28,384	16,931	24,091	4,569	130,816	91,813	524,458	88,706	Assuming ((4.8329 yrs. x 22,083 m3/yr. primary deciduous at 15/10/15 cm) + (4.8329 yrs. x 18,052 m3/yr. secondary deciduous at 15/10/15 cm) + (24,091 m3 primary deciduous at 15/10/15 cm reconciliation volume from 2002-2007) + 4569 m3 secondary deciduous reconciliation volume from 2002-2007)). Assuming ((4.8329 yrs. x 114,391 m3/yr. primary coniferous at 15/13/15 cm) + (4.8329 yrs. x 14,851 m3/yr. secondary coniferous at 15/13/15 cm) - (28,384 m3 primary coniferous at 15/13/15 reconciliation volume from 2002-2007) + (16,931 m3 secondary coniferous at 15/13/15 reconciliation volume)).
Weyerhaeuser Company Ltd.	DTAE910001	E01	May 1, 2002-April 30, 2007	0	0	0	0	258	5	0	0	Assuming (4 yrs. x 55 m3/yr. primary deciduous at 15/10/30 cm) + (1 yr. x 38 m3/yr. primary deciduous at 15/10/15 cm) + (1 yr. x 5 m3/yr. secondary deciduous at 15/10/15 cm). DTA issued for deciduous AAC found in grazing leases within FMU E01. DTA was cancelled effective April 30, 2007 and volume re-issued as a FMU E01DTP.
Weyerhaeuser Company Ltd.	DTPE01000X	E01	May 1, 2007-April 30, 2012	0	0	0	0	190	25	0	0	<b>Assuming</b> (5 yrs. x 38 m3/yr. primary deciduous at 15/10/15 cm) +( 5 yrs. x 5 m3/yr. secondary deciduous at 15/10/15 cm). Five year DTP issued for deciduous AAC found within grazing leases with the FMU E01.
Weyerhaeuser Company Ltd.	CTPE01000X	E01	May 1, 2007-April 30, 2012	0	0	0	0	0	0	181	67	<b>Assuming</b> (5 yrs. x 36.2 m3/yr. primary coniferous at 15/13/15 cm) +( 5 yrs. x 13.4 m3/yr. secondary coniferous at 15/13/15). Five year CTP issued for coniferous AAC found within grazing leases with the FMU E01.
Edson Timber Products Ltd.	CTQE01F001	E01	May 1, 2002-April 30, 2007	-235	0	0	0	0	0	13,410	0	Assuming (4 yrs. x 2,644 m3/yr. primary coniferous at 15/11/30 cm) + (1 yr. x 3,069 m3/yr. primary coniferous at 15/11/15 cm) - (235 m3 reconciliation from 1997-2002).
Edson Timber Products Ltd.	CTQE01F001	E01	May 1, 2007-April 30, 2012	-824	0	0	0	0	0	28,876	0	<b>Assuming</b> (5 yr. x 5,940 m3/yr. primary coniferous at 15/11/15 cm) - (824 m3 overcut from 1997-2002).

Company Name	Disposition Number	FMU	Quadrant Period	Coniferous	d Quadrant Reconciliation me (m³)	Deciduous	ed Quadrant Reconciliation nme (m³)	Primary Deciduous Quadrant Allowable Cut (m³)	Secondary Deciduous Quadrant Allowable Cut(m³)	Primary Coniferous Quadrant Allowable Cut <sup>1</sup> (m <sup>3</sup> )	Secondary Coniferous Quadrant Allowable Cut(m³)	Comments
				Pure	Incidental	Pure	Incidental					
Weyerhaeuser Company Ltd.	FMA9700035	E02	July 1, 2002 to June 30, 2007	117	0	94,673	0	384,762	5,928	32,111	7,597	Assuming ((3.8329 yrs. x 54,058 m3/yr. at 15/10/30 cm) + (1 yr. x 71,119 m3/yr. at 15/10/15 cm) + (0.1671 yrs. x 70,442 m3/yr. at 15/10/15 cm) primary deciduous)) + ((1 yr. x 4,773 m3/yr. at 15/10/15 cm) + (0.1671 yrs. x 6,911 m3/yr. at 15/10/15 cm) secondary deciduous) + (94,673 m3 primary deciduous at 15/10/15 cm AAC reconciliation volume from 1997-2002)). Assuming ((3.8329 yrs. x 6,570 m3/yr. at 15/11/30 cm) + (0.5863 yrs. x 5,538 m3/yr. at 15/11/15 cm) + (0.4137 yrs. x 5,261 m3/yr. at 15/13/15 cm) + (0.1671 yrs. x 8,308 m3/yr. at 15/13/15 cm) primary coniferous) + ((0.5863 yrs. x 6,734 m3/yr. at 15/11/15 cm) + (0.4137 yrs. x 6,397 m3/yr. at 15/13/15 cm) + (0.1671 yrs. x 5,997 m3/yr. at 15/13/15 cm) secondary coniferous).+ (117 m3 primary coniferous at 15/11/15 cm) reconciliation volume from 2002-2007)).
Weyerhaeuser Company Ltd.	FMA9700035	E02	July 1, 2007 to April 30, 2012	26,273	-912	-78,367	5,927	262,072	39,327	66,424	28,073	Assuming ((4.8329 yrs. x 70,442 m3/yr. primary deciduous at 15/10/15 cm) + (4.8329 yrs. x 6,911 m3/yr. secondary deciduous at 15/10/15) - (78,367m3 primary deciduous at 15/10/15 reconciliation volume from 2002-2007) + 5,927 m3 secondary deciduous at 15/10/15 reconciliation volume from 2002-2007)). Assuming ((4.8329 yrs. x 8308 m3/yr. primary coniferous at 15/13/15 cm) + (4.8329 yrs. x 5,997 m3/yr. secondary coniferous at 15/13/15 cm) + (26,273 m3 primary coniferous at 15/13/15 cm reconciliation volume from 2002-2007) - (912 m3 secondary coniferous at 15/13/15 reconciliation volume from 2002-2007)).
Weyerhaeuser Company Ltd.	DTAE910001	E02	May 1, 2002 - April 30, 2007	0	0	0	0	48,075	598	0	0	Assuming (4 yrs. x 9,241 m3/yr. at 15/10/30 cm primary deciduous) + (1 yr. x 11,111 m3/yr. at 15/10/15 primary deciduous) + (1 yr. x 598 m3/yr. at 15/10/15 secondary deciduous). DTA issued for deciduous AAC found within grazing leases within FMU E02. DTA was cancelled effective April 30, 2007 and rolled into DTAE020002.
Weyerhaeuser Company Ltd.	DTAE020002	E02	May 1, 2007 - April 30, 2012	0	0	0	0	55,605	2,990	0	0	Assuming (5 yrs. x 11,121 m3/yr. at 15/10/15 cm pure deciduous) + (5 yrs. x 598 m3/yr. secondary deciduous at 15/10/15 cm). DTA was issued for the deciduous AAC found within grazing leases with the FMU.
Weyerhaeuser Company Ltd.	CTQE020003	E02	May 1, 2007 - April 30, 2012	0	0	0	0	0	0	1,914	4,133	Assuming (5 yrs. x 383 m3/yr. pure coniferous at 15/13/15 cm) + (5 yrs. x 827 m3/yr. incidental coniferous at 15/13/15 cm). CTQ issued for coniferous AAC found within grazing leases with the FMU E02
EDFOR Cooperative Ltd.	CTQE020002	E02	May 1, 2005 - April 30, 2007	0	0	0	0	0	0	65,958	30,414	<b>Assuming</b> (1 yr. x 34,640 m3/yr. pure coniferous at 15/11/30 cm) + (1 yr. x 31,318 m3/yr. pure coniferous at 15/11/15 cm) + (1 yr. x 30,414 m3/yr. secondary coniferous at 15/11/15 cm).
EDFOR Cooperative Ltd.	CTQE020002	E02	May 1, 2007 - April 30, 2012	-8,706	8,093	0	0	0	0	232,409	151,753	Assuming (5 yrs. x 48,223 m3/yr. pure coniferous at 15/11/15 cm) - (8,706 m3 overcut volume at 15/11/15 from 2005-2007) + (5 yrs. x 28,732 m3/yr. secondary coniferous at 15/11/15 cm) + (conifer reconciliation volume of 8,093 secondary volume at 15/11/15 cm from 2005-2007).
E02 CTPP	CTP	E02	May 1, 2001 - April 30, 2007	-5,488	0	0	0	0	9,000	149,958	0	Assuming (5 yrs. x 1,500 m3/yr. secondary deciduous at 15/10/30 cm) + (1 year 1500 m3/yr. secondary deciduous at 15/10/15 cm).  Assuming (4 yrs. x 37,500 m3/yr. primary conifer at 15/11/30 cm) + (1 yr. x 2,860 m3/yr. primary conifer at 15/11/15 cm) + (1 yr. x 2586 m3/yr. primary coniferous at 15/11/15cm) - (5488 m3 primary coniferous overcut at 15/11/30 cm from 1997-2002).
E02 CTPP	СТР	E02	May 1, 2007 - April 30, 2012	5,072	0	0	0	0	7,500	24,977	0	Assuming (5 yrs. x 1,500 m3/yr. secondary deciduous at 15/10/15 cm). Assuming (5 yrs. x 3,981 m3/yr. primary coniferous at 15/11/15 cm) + (5,072 m3 primary coniferous at 15/11/15 cm reconciliation volume from 2001-2007).

Company Name	Disposition Number	FMU	Quadrant Period	Coniferous	d Quadrant Reconciliation me (m³)	Deciduous	ed Quadrant Reconciliation Ime (m³)	Primary Deciduous Quadrant Allowable Cut (m³)	Secondary Deciduous Quadrant Allowable Cut(m³)	Primary Coniferous Quadrant Allowable Cut <sup>1</sup> (m³)	Secondary Coniferous Quadrant Allowable Cut(m³)	Comments
				Pure	Incidental	Pure	Incidental					
Weyerhaeuser Company Ltd.	FMA9700035	W05	July 1, 2002 to June 30, 2007	0	0.000	28,051	0	118,815	0	0	0	<b>Assuming</b> (3.8329 yrs. x 16,386 m3/yr. at 15/10/30 cm) + (1 yr. x 23,914 m3/yr. at 15/10/15 cm)+ (.01671 yrs. x 24,200 m3/yr. at 15/10/15 cm) primary deciduous) + (28,051 m3 at 15/10/30 cm reconciliation volume from 1997-2002).
Weyerhaeuser Company Ltd.	FMA9700035	W05	July 1, 2007 to April 30, 2012	0	0	-16,613	0	100,343	0	0	0	<b>Assuming</b> (4.8329 yrs. x 24,200 m3/yr. primary deciduous at 15/10/15 cm) - (16,613 m3 at 15/10/15 overcut from 2002-2007).
Weyerhaeuser Company Ltd.	DTAE910001	W05	May 1, 2002 to April 30, 2007	0	0	0	0	35,709	0	0	0	Assuming (4 yrs. x 6,379 m3/yr. primary deciduous at 15/10/30 cm) + (1 yr. x 10,193 m3/yr. primary deciduous at 15/10/15 cm). DTA issued for deciduous from grazing leases within FMU W05. DTA was cancelled April 30, 2007 and re-issued as DTAW050001.
Weyerhaeuser Company Ltd.	DTAW050003	W05	May 1, 2007 to April 30, 2012	0	0	0	0	50,675	0	0	0	<b>Assuming</b> 5 yrs. x 10,135 m3/yr. primary deciduous at 15/10/15 cm. DTA was issued for the deciduous AAC found within grazing leases with the FMU W05.
W05 CTPP	СТР	W05	May 1, 2001 to April 30, 2007	29,875	0	0	0	24,000	11,324	137,056	7,878	Assuming ((5 yrs. x 4,000 m3/yr. primary deciduous at 15/10/30 cm) + (1 year x 4000 m3/yr. primary deciduous at 15/10/15 cm) + (1 yr. x 11,324 m3/yr. secondary deciduous at 15/10/15 cm)). Assuming ((5 yrs. x 17,013 m3/yr. primary coniferous at 15/11/30 cm) + (1 yr. x 22,116 m3/yr. primary coniferous at 15/11/15 cm) + (1 yr. x 7,878 m3/yr. secondary conifrous at 15/11/15 cm) + (29,875 m3 primary coniferous at 15/11/30 cm reconciliation volume from 1996-2001)).
W05 CTPP	СТР	W05	May 1, 2007 to April 30, 2012	14,585	7,878	0	0	20,000	40,255	125,905	47,403	Assuming ((5 yrs. x 4,000 m3/yr. primary deciduous at 15/10/15 cm) + (5 yrs. x 8051 m3/yr. secondary deciduous at 15/10/15 cm).  Assuming ((5 yrs. x 22,264 m3/yr. primary coniferous at 15/11/15 cm) + (5 yrs. x 7905 m3/yr. secondary coniferous at 15/11/15 cm) + (14,585 m3 of primary conifer reconciliation volume at 15/11/15 from 2001-07) + (7,878 m3 secondary coniferous reconciliation volume at 15/11/15 from 2001-07 reconciliation volume from 2001-2007).

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Company Name	Disposition Number	FMU	Quadrant Period	Coni Reconcilia	d Quadrant iferous tion Volume m <sup>3</sup> )	Dec Reconcilia	d Quadrant iduous ation Volume (m³)	Primary Deciduous Quadrant Allowable Cut (m³)	Secondary Deciduous Quadrant Allowable Cut (m³)	Primary Coniferous Quadrant Allowable Cut <sup>1</sup> (m <sup>3</sup> )	Secondary Coniferous Quadrant Allowable Cut (m³)	Comments
				Pure Incidental Pure Inci	Incidental							
Weyerhaeuser Company Ltd.	FMA9700035	W06	July 1, 2007 to April 30, 2012	-51,341	-146	207,679	13,512	594,852	257,955	202,459	91,858	Assuming ((4.8329 yrs. x 80,112 m3/yr. primary deciduous at 15/10/15 cm) + (4.8329 yrs. x 50,579 m3/yr. secondary deciduous at 15/10/15 cm) + (207,679 m3 primary deciduous at 15/10/15 cm reconciliation volume from 2002-2007)+ (13,512 secondary deciduous at 15/10/15 reconciliation from 2002-2007). Assuming (4.8329 yrs. x 52,515 m3/yr. primary coniferous at 15/13/15 cm)+ (4.8329 yrs. x 19,037 m3/yr. secondary coniferous at 15/13/15 cm) - (51341 m3 primary coniferous at 15/13/15 cm reconciliation volume) (146 m secondary coniferous at 15/11/15 cm reconciliation from 2002-2007)
Weyerhaeuser Company Ltd.	DTAE910001	W06	May 1, 2002 to April 30, 2007	0	0	0	0	11,056	547	0	0	Assuming (4 yr. x 2,160 m3/yr. primary deciduous at 15/10/30 cm) + (1 yr. x 2,416 m3/yr primary deciduous at 15/10/15 cm) + (1 yr. x 547 m3/yr. secondary deciduous at 15/10/15 cm). DTA issued for deciduous AAC found within grazing leases with the FMU W06. DTA was cancelled effective April 30, 2007 and rolled into DTAW060010.
Weyerhaeuser Company Ltd.	DTAW060010	W06	May 1, 2007 to April 30, 2012	0	0	0	0	14,375	1,855	0	0	<b>Assuming</b> (5 yrs. x 2,875 m3/yr. primary deciduous at 15/10/15 cm) + (5 yrs. x 371 m3/yr. secondary deciduous at 15/10/15 cm). The DTA issued for deciduous AAC found within grazing leases with the FMU W06.
Weyerhaeuser Company Ltd.	CTQW060013	W06	May 1, 2007 to April 30, 2012	0	0	0	0	0	0	1,107	3,159	<b>Assuming</b> (5 yrs. x 222 m3/yr. primary coniferous at 15/13/15 cm) + (5 yrs. x 632 m3/yr. secondary coniferous at 15/13/15 cm). CTQ issued for coniferous AAC found within grazing leases with the FMU W06.
Millar Western Forest Products Ltd.	CTQW60002	W06	May 1, 2006 - April 30, 2011	1255*	0	0	0	0	0	7,634	0	Assuming (1 yr. x 1,153 m3/yr. primary coniferous at 15/10/15 cm) + (4 yrs. x 1620 at 15/10/15 cm) + 1,255* m3 reconciliation volume from 2001-2006. *Carryover of 1,219 m3 at 15/11 converted to 1,255 m3 at 15/10 (2.99% difference). *The quota holder has chosen not to harvest their coniferous AAC reconciliation volume.
Blue Ridge Lumber Inc.	CTQW060010	W06	May 1, 2006 - April 30, 2011	-5,491	0	0	0	0	0	194,287	0	<b>Assuming</b> (1 yr. at 30,190 m3/yr. primary coniferous at 15/11/15 cm) + (4 yrs at 42,397 m3/yr. primary conifer at 15/11/15 cm) - (5,491 m3 at 15/11/15 cm reconciliation from 2001-2006).
ANC Timber Ltd.	CTQW060011	W06	May 1, 2006 - April 30, 2011	126,425	0	0	0	0	0	596,806	0	<b>Assuming</b> (1 yr. x 71,085 m3 coniferous at 15/10/15 cm utilization) + (4 yrs. x 99,824 m3/yr. conifer at 15/10/15 cm) - (7,532 m3 coniferous reconciliation at 15/10/15 cm from 2001-2006) + (133,957 m³ coniferous reconciliation volume at 15/10/15 cm from CTP W060103 and CTQW060204 for period 1994-2002).

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Company Name	Disposition Number	FMU	Quadrant Period	Con Reconcilia	d Quadrant iferous ition Volume m <sup>3</sup> )	Dec Reconcili	ed Quadrant ciduous ation Volume (m³)	Primary Deciduous Quadrant Allowable Cut (m³)	Secondary Deciduous Quadrant Allowable Cut (m³)	Primary Coniferous Quadrant Allowable Cut <sup>1</sup> (m <sup>3</sup> )	Secondary Coniferous Quadrant Allowable Cut (m³)	Comments
				Pure	Incidental	Pure	Incidental					
Cold Creek Timber Ltd.	CTQW0600012	W06	May 1, 2004 - April 30, 2009	13,393	0	0	0	0	0	63,393	0	<b>Assuming</b> (2 yrs. x 10,000 m3/yr. primary coniferous at 15/11/30 cm) + (3 yrs. x 10,000 m3/yr. primary coniferous at 15/11/15 cm) + (13,393 m3 reconciliation volume at 15/11/15 cm from 2001-2004).
W06 CTPP	СТРР	W06	May 1, 2001 to April 30, 2007	24,439	0	0	26,631	0	132,177	163,951	0	<b>Assuming</b> (5 yrs. x 17,591 m3/yr. secondary deciduous at 15/10/30 cm) + (1 yrs. x 17,591 m3/yr. secondary deciduous at 15/10/15 cm) + (26,631 m3 secondary deciduous reconciliation volume at 15/10/30 cm from 2001-2007). <b>Assuming</b> ((3 yrs. x 28,252 m3/yr at 15/11/30 cm). + (2 yrs. x 18,252 m3/yr. at 15/11/30 cm) + (1 yrs. x 18,252 m3/yr. at 15/11/15 cm) primary coniferous) + 24,439 m3 coniferous reconciliation volume at 15/11/30 cm from 1996-2001)
W06 CTPP	СТРР	W06	May 1, 2007 - April 30, 2012	31,405	0	0	17,463	0	105,418	122,665	0	<b>Assuming</b> (5 yrs. x 17,591 m3/yr. secondary deciduous at 15/10/15 cm) + 17,463 m3/yr. secondary deciduous reconciliation volume at 15/10/15 cm from 2001-2007. <b>Assuming</b> (5 yrs. x 18,252 m3/yr. primary coniferous at 15/11/15 cm) + (31,405 m3 primary coniferous reconciliation volume at 15/11/15 cm from 2001-2007).