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SECTION 4

PINE MANAGEMENT STRATEGY



4 PINE MANAGEMENT STRATEGY

4.1 Scenario Review and Selection

As indicated in the scenario comparative analysis, the MPB outbreak has the potential to seriously impact both timber and non-timber values on the ANC FMA area. With the imminent threat from MPB populations moving east from B.C., ANC has selected a new Preferred Forest Management Strategy as part of its Pine Management Strategy that will address the MPB threat while mitigating the impacts to other values on the FMA area while maintaining long term sustainability to within 10% of current levels. This selected scenario and resulting strategy is referred to as the MPB Preferred Forest Management Strategy (MPB PFMS).

4.2 MPB Preferred Forest Management Strategy

The following scenario represents the selected MPB PFMS, it is essentially built off of Scenario 3 as defined in Section 3.4.2.3. Additional updates relative to the Scenario 3 have been incorporated into this strategy and are as follows:

- 1) Additional ANC harvest area updates to 2006 (these harvest areas are transitioned to ‘fully stocked’);
- 2) Planned harvest areas;
- 3) Forest stand age determination has been updated to use 2006 as the base year. In the DFMP and previous scenarios stand age was calculated using ‘1999-stand origin’. For this analysis, stand age is calculated as ‘2006-stand origin’. This will generate a 20 year spatial harvest sequence effective from 2006 to 2026.

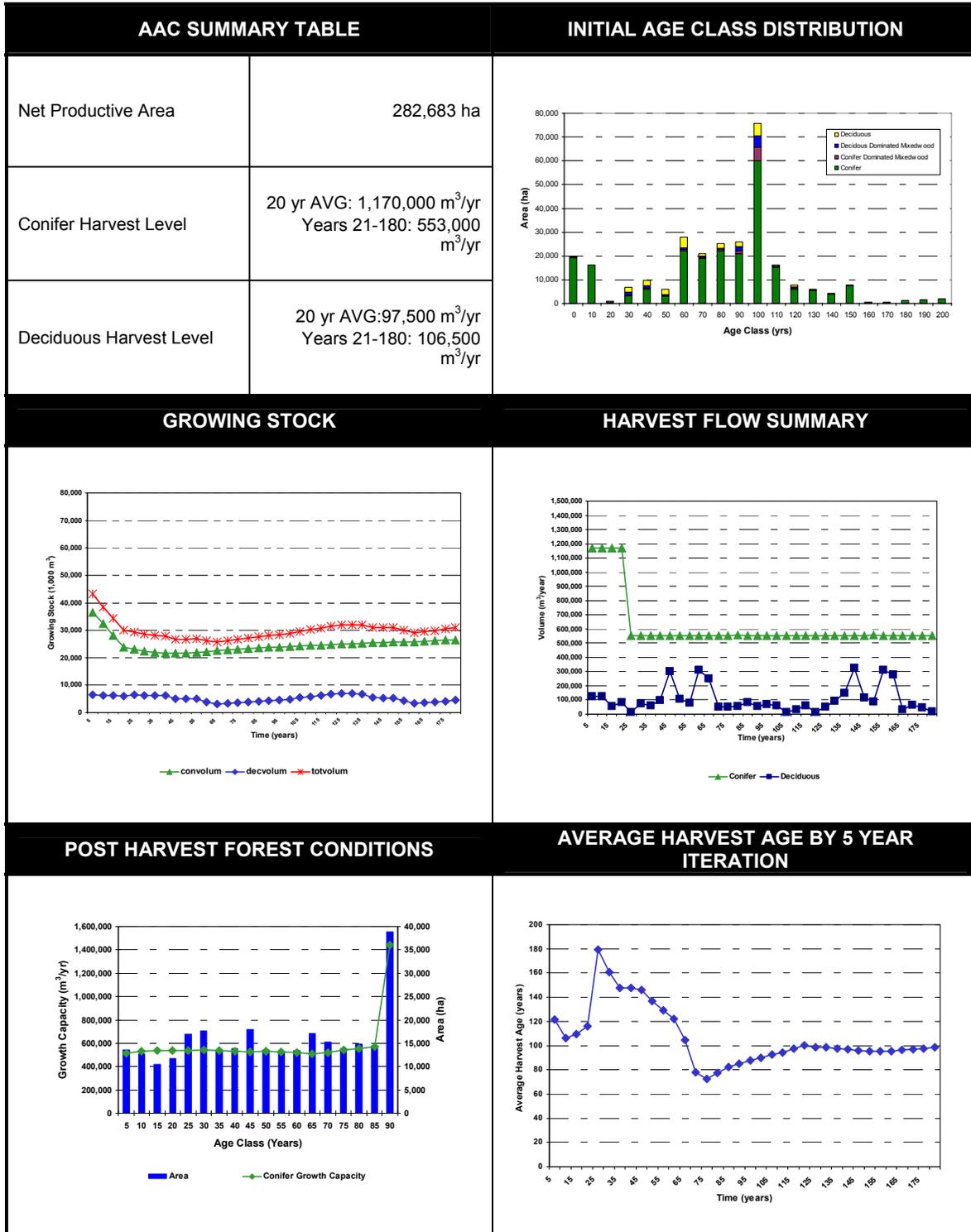


Table 4-1: Harvest Simulation Control Parameters – Scenario 5: MPB PFMS Scenario

ANC FMA SCENARIO 5:	
Control Parameter	Parameter Setting
Effective Date ¹	2006
Harvest unit:	ANC FMA Area
Planning horizon:	180 yrs
Targeted average harvest age at the end of the planning horizon:	90 yrs \pm 5 yrs
Minimum harvest age:	70 yrs
Landbase:	Net productive landbase
Sorting rules:	1) Planned blocks first 2) Highest Pine Stand Ranking first 3) Oldest first 4) Maximize conifer harvest
Harvest flow constraint:	Conifer Even Flow
Yield curves:	DFMP Yield Curves
Cull Deductions:	Applied (Variable 0 to 1.5% Conifer and 10% Deciduous)
Regeneration transition:	25% LFS PSP (W8 - Tree Improvement)
Regeneration lag:	Not Applied
Introduce harvest plans:	Applied
Spatial stand adjacency:	Not Applied
Adjacency – Time Horizon	Not Applied
Adjacency - Green-up:	Not Applied
Adjacency - Accumulate adjacent stands:	Not Applied
Age Normalization Factor:	Not Applied
Compartment sequencing:	Applied
Number of compartments open simultaneously:	Not tracked
MPB Infestation:	Not Applied

¹ Landbase updated for harvesting activities to 2006.

Figure 4-1: Harvest Simulation Results – MPB PFMS Scenario



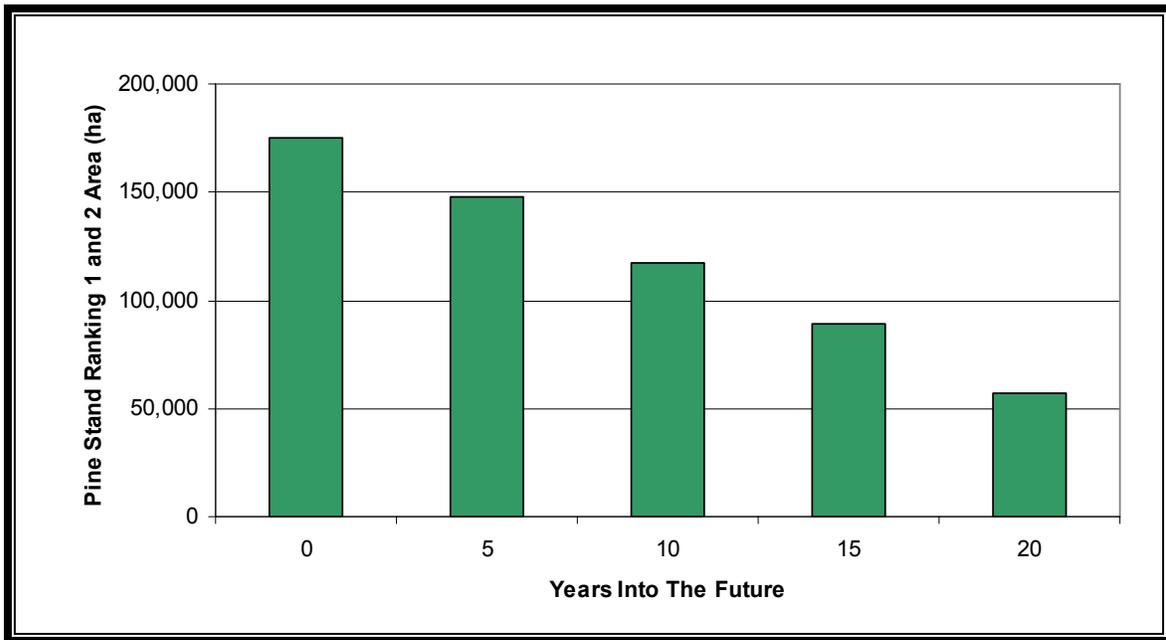
4.2.1 MPB PFMS Analysis

Analysis of the effects of the Pine Strategy (MPB PFMS) on pine stand ranking, watersheds and caribou habitat has been completed. The results differ from the comparative analysis of these values that was completed in Section 3.5 because the landbase has been updated to an effective date of 2006 (Pine Stand Rank is updated to '0' for all cutblock updates).

4.2.1.1 Pine Stand Ranking

The FMA area classified as Rank 1 and Rank 2 is illustrated over time in Figure 4-2. The MPB PFMS is effective in significantly reducing the area of Rank 1 and Rank 2 stands by 68% from its current level of 175,462 ha to 56,662 ha at year 20.

Figure 4-2: 20 Year Time Series of Pine Stand Ranking 1 and 2 Area under the MPB PFMS¹



¹ 2006 Effective Date

4.2.1.2 *Woodland Caribou*

A summary of the forested area within the Caribou Zone under the MPB PFMS is illustrated in Figures 4-4 and 4-5.

Figure 4-4: Forested Area Less Than 40 Years within the Caribou Zone Under the MPB PFMS¹

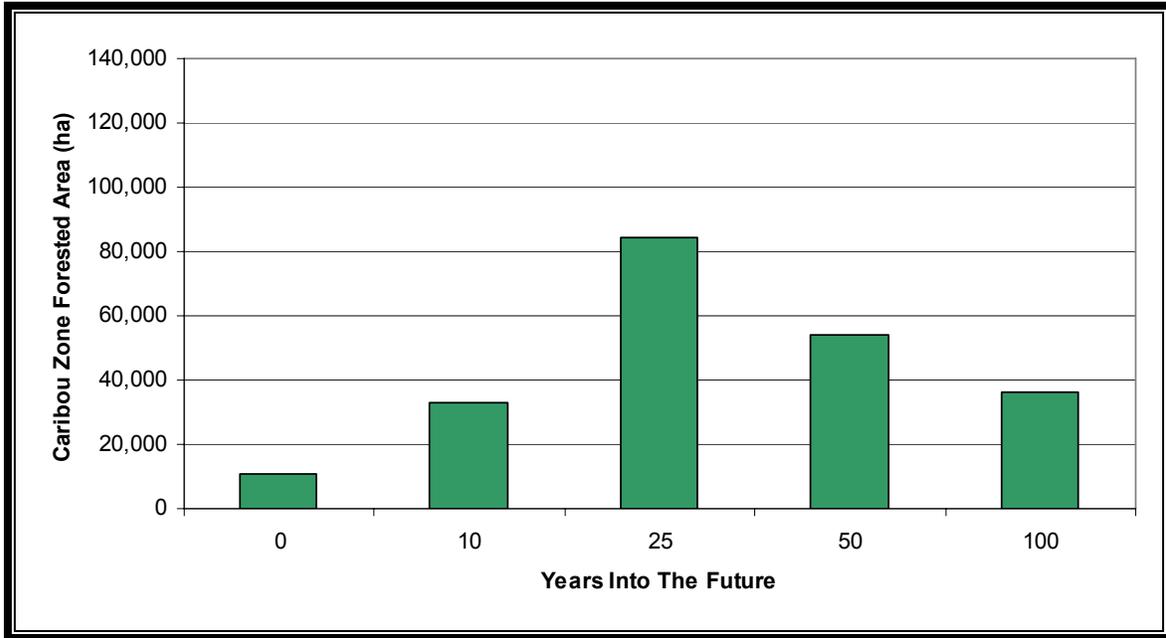
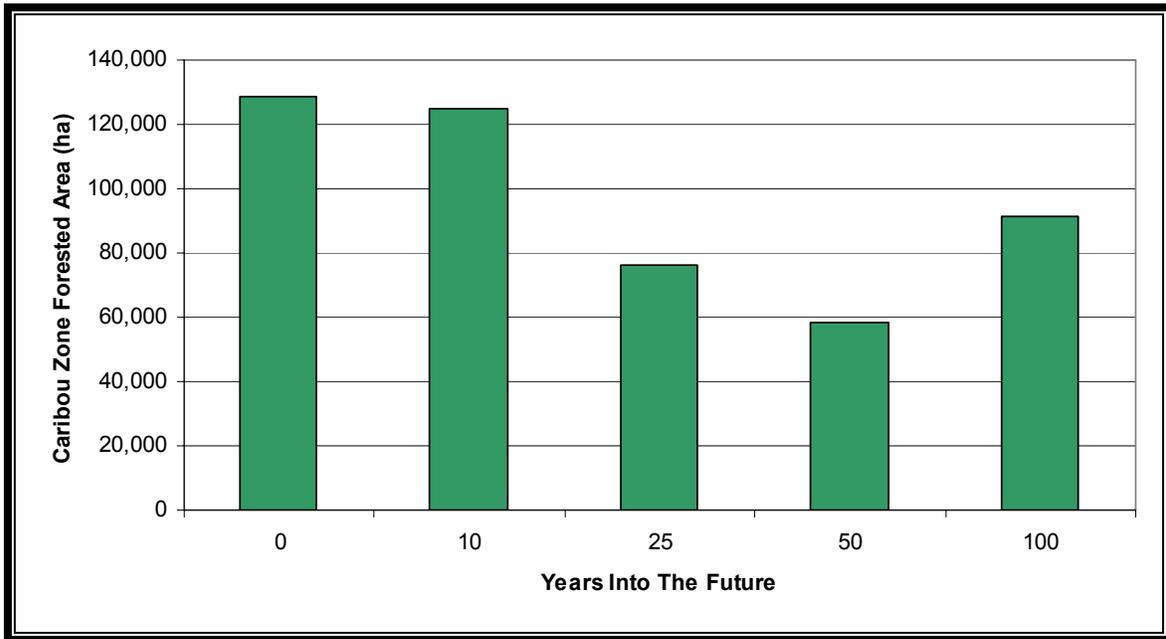


Figure 4-5: Forested Area Greater Than or equal to 80 Years within the Caribou Zone Under the MPB PFMS



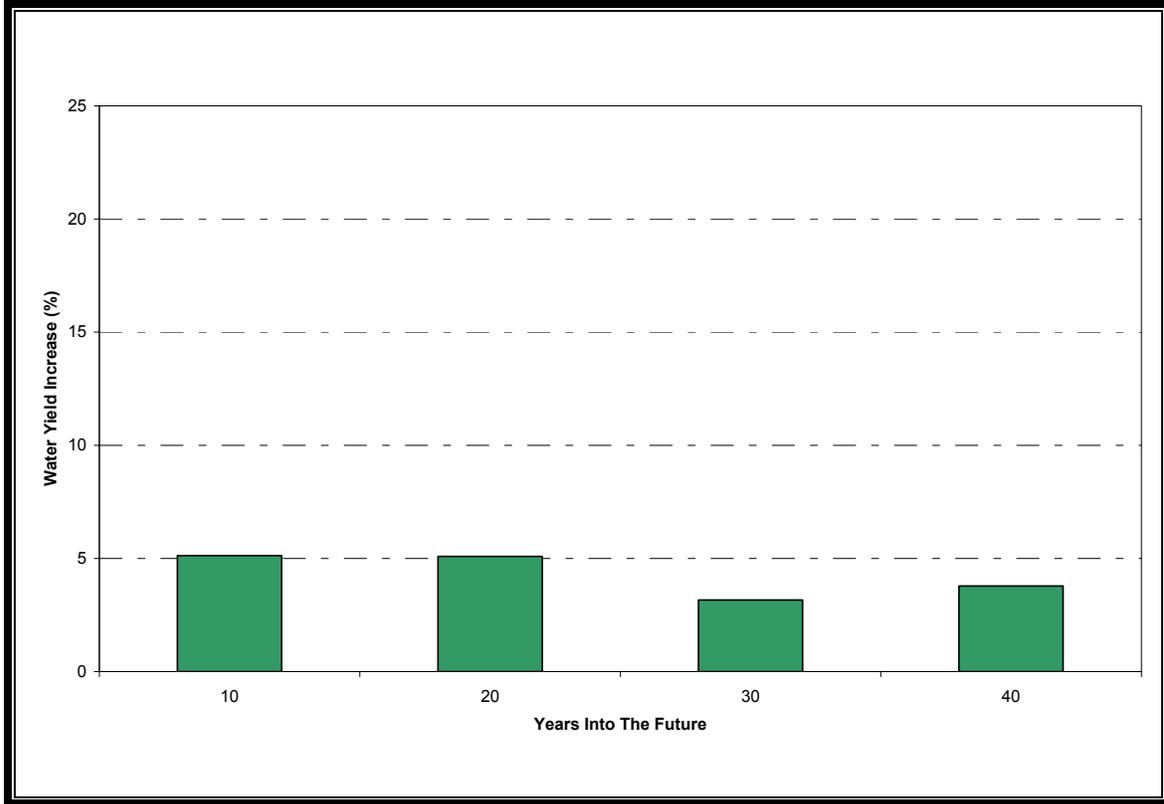
¹ 2006 Effective Date



4.2.1.3 Watersheds

The long term water yield increases that are forecasted to result under the Pine Strategy (MPB PFMS) indicates an increase of 5 % that peaks at years 10 and 20 (Figure 4-3).

Figure 4-3: Long Term Average Yield Increases under the MPB PFMS¹²



NOTE: Please refer to Section 3 regarding details on the water yield modeling.

¹ 2006 Effective Date

² Harvest years for Post DFMP cutblock updates are not confirmed. Assuming equal area is harvested each year, this area has been divided equally into 2003, 2004, 2005 and 2006 harvest years.



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SECTION 5

CONCLUSION



5 CONCLUSION

An extensive amount of mature pine exists on the ANC landscape resulting in an increased risk to fire and insect/disease outbreaks such as MPB. As a result, ANC is concerned about the long-term forest sustainability of their FMA. This DFMP Amendment is intended to address the MPB threat and the impacts that could result from management activities and/or a MPB infestation.

ANC's next DFMP is due in 2010 and will investigate long term mitigating measures to manage for MPB and other variables capable of large scale disturbance such as insects, disease and fire. The DFMP will also re-evaluate post-MPB mitigating strategies and alternatives for reducing the impact to long term fibre sustainability following a MPB infestation. An increased knowledge of the ecology surrounding MPB will be utilized in the 2010 DFMP and continued improvements towards pine management in general will be made. In the interim, this DFMP Amendment will bridge the short gap between the present and the new 2010 DFMP already under development.