

## EXECUTIVE SUMMARY

Slave Lake Pulp Corporation (SLP) and the quota holders have prepared a Mountain Pine Beetle Action Plan for Forest Management Unit (FMU) S20. This plan was developed in response to the Government of Alberta's directive to reduce the amount of Mountain Pine Beetle susceptible stands by 75% over 20 years. This plan is an amendment to the currently approved 2002 plan and adheres to the approved Terms of Reference.

This plan provides a statement of objectives, completed analyses and describes the effects on harvest levels and non-timber values addressed in the Mountain Pine Beetle (MPB) Prevention Strategy.

Methods of analysis include a revision of land base and completion of timber supply analysis scenarios as outlined in the Mountain Pine Beetle Action Plan for Alberta and the associated interpretive bulletin.

A Preferred Forest Management Scenario (PFMS) is also presented. This will be the basis for future operations within the S20 FMU, and provides analysis of non-timber values (Grizzly Bear, water yield impacts and seral stage distribution).

Results of the land base revision show a slight increase in net land base of approximately .74% as compared to the 2002 approved land base. Based on the risk, as defined by ASRD MPB ranking and the timber supply analysis, a theoretical FMU harvest level of 755,171 m<sup>3</sup> is required to reduce the amount of MPB susceptible stands to 25% after 20 years.

Results of the disaster scenario indicate an increase in both the coniferous and deciduous AAC's of approximately 15.1% and 2.8% respectively.

A modeled coniferous harvest volume of 836,816 m<sup>3</sup> and 562,111 m<sup>3</sup> deciduous harvest volume was achieved in the PFMS, based on constraints that were imposed on a 15 year surge, even flow deciduous, compartment sequencing, volume flow from compartments SL41, SL50 and SL55, and ending growing stock. This harvest level will reduce the amount of Rank 1 and 2 stands by 74% of the current level.

Results of the non-timber value analyses indicate that the maximum water yield increases that can be expected are generally between 1% and 5%. The Freeman River watershed will realize the greatest water yield increase of approximately 38.1%. The East Arcadia Creek and Lower Moosehorn watersheds will see water yield increases of 10.9% and 10.4% respectively. Each of these watersheds are located in different major basins and the Freeman River and East Arcadia Creek watersheds are only partially located within the S20 FMU. The Grizzly Bear analysis indicates a minimal effect on habitat, mortality risk and safe harbour over a 20 year projection of harvest.

Slave Lake Pulp Corporation and the quota holders are committed to continuous validation and monitoring of the plan to ensure that the objectives have been met. The best information available was used in the development of the plan. Communication with stakeholders, regarding the plan implementation, will be ongoing.

In light of the analysis around a 15 year surge, we are requesting a 15 year approval with resubmission in 2023. A Stewardship Report will be provided in 2013, to ensure that the Plan is on track and effectively achieving the stated objectives.