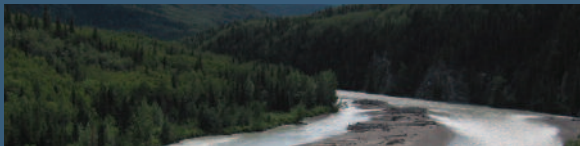


Impacts of Infestation

Mountain Pine Beetle



Under low or normal population numbers, mountain pine beetle (MPB) acts as a forest renewal agent by killing weak trees to open up spots in the canopy for new growth. Under high or abnormal population levels, MPB can kill up to 80 percent or more pine trees in a given stand. Severe infestations cause a wide variety of impacts to forest values.

Mountain pine beetle may threaten valuable watersheds and cause:

- a change in water tables
- an increase in stream-flow
- earlier run-off patterns

Mountain pine beetle may impact Albertans' recreation opportunities:

- popular recreation trails may be closed due to the extensive risk of dead, falling trees
- scenic landscapes are highly valued by both residents and visitors to Alberta's forests. Red, grey and dying trees may diminish the experience and enjoyment of nature
- highly impacted recreation areas may temporarily close due to increased wildfire risk

Mountain pine beetle may affect community sustainability and commercial timber supplies:

- the value of Alberta's pure pine stands is estimated at more than \$8 billion, not including mixed pine stands
- on average, each year the forest industry contributes \$836 million in taxes and \$44 million in stumpage payments to the province
- over 18,000 Albertans and 50 Alberta communities depend on the forest industry for their livelihood (direct and indirect jobs)

Mountain pine beetle may increase the likelihood and intensity of wildfires:

- fires in MPB killed stands burn more intensely than in unaffected pine
- extremely intense fires and fire behaviour make wildfires very difficult to suppress and put Alberta's forested communities at greater risk

A mountain pine beetle infestation may have major ecological impacts:

- significant reduction in the forest's ability to store carbon and regenerate naturally to pine
- new and potentially harmful disturbance to boreal forest

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