Project Note
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FPInnovations
Wildfire Operations Research
1176 Switzer Drive
Hinton, AB T7V 1V3

Comparison of understory burning and mechanical site preparation to regenerate lodgepole pine stands killed by Mountain Pine Beetle

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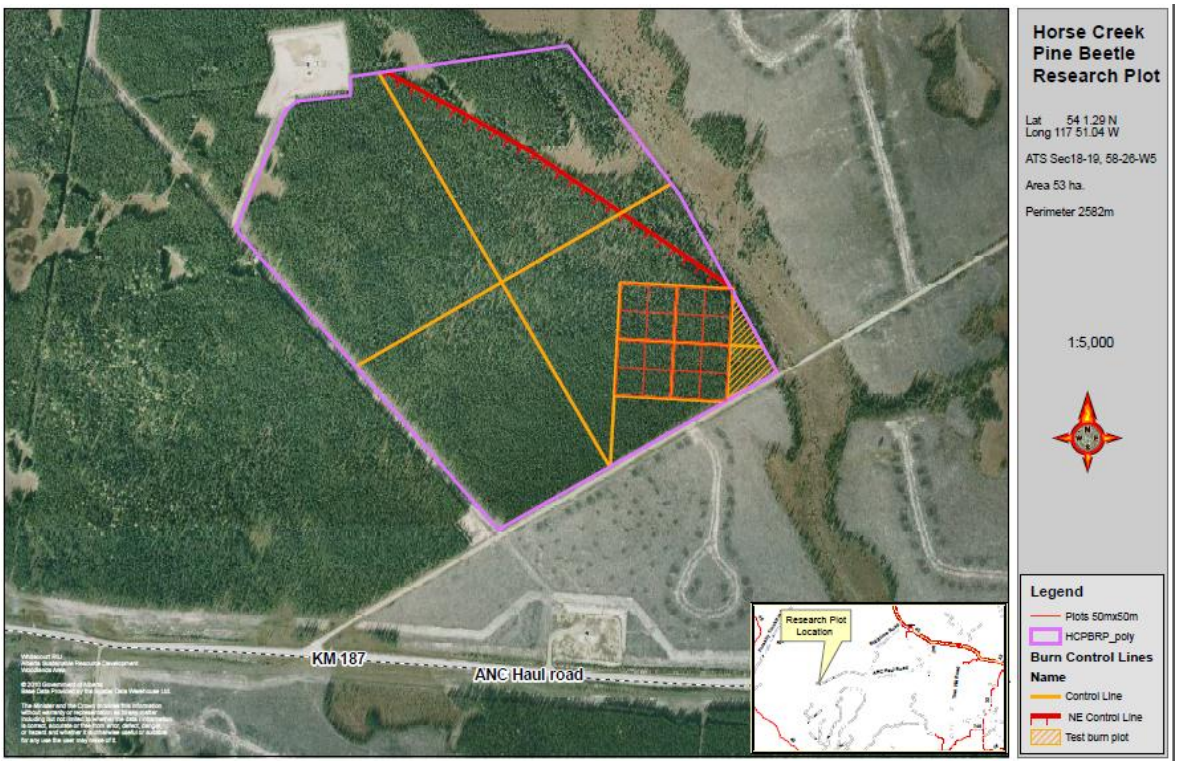
Project Summary

This is a University of Alberta research project and is in collaboration with FPInnovations, Weyerhauser and Alberta Sustainable Resource Development. The project will study the use of wildfire and mechanical site preparation as regeneration tools for MPB-killed stands.

> "*The area of inadequately restocked or reforested land is larger than at any point in the history of forest management in the province and is estimated to be around none million hectares with about half attributable to the mountain pine beetle infestation*." VANCOUVER SUN, FEB 3 2011

The research site is located near Horse Creek, AB halfway between Whitecourt and Hinton along the ANC haul road.



Research Objectives

1. Determine the efficacy of burning to regenerate lodgepole pine stands killed by MPB.
2. Determine if burning is superior to mechanical site preparation as a tool for renewal of these stands.
3. Collect baseline data to verify or adjust the Fire Weather Index System to link weather data with fuel moisture content in lodgepole pine stand-killed by MPB.

Burn Objectives

1. Reduce duff layer (Feathermoss and Labrador tea).
2. Conduct two fire treatments with differing intensities to compare amounts of duff consumption.
3. Limit fire behavior to active surface fire with flame lengths less than that of critical surface fire.

Field Timeline

Snow-free	- mid-May
Test burns	- 1st week of June
Prescription burn	- mid-June

FPInnovations' Role

FPInnovations researchers will coordinate and handle the data collection from the burn trials. Researchers will set-up fire data collection equipment including in-fire cameras, data-loggers, and hand-held video cameras. Data will be downloaded and provided to University of Alberta researchers for use in their analysis.