

Western Montana RAC
Timber Subgroup
Report And Suggested Proposal To The RAC
Mountain Pine Beetle Infestation Treatment

INTRODUCTION

The Western Montana BLM Resource Advisory Council (RAC) formed a sub-group to explore the possibility of responding to the Mountain Pine Beetle infestation in Lodgepole Pine and Ponderosa Pine timber stands within the Western District. The Mountain Pine Beetle (MPB) infestation has killed over 4 million acres of pine trees on private, state and federal land in Montana, primarily in Southwestern Montana, during the past four years. There are no known treatments that are economically practical or effective in stemming the beetle infestation. Spraying and pheromone treatments are useful in small woodlots or on high value ornamental trees but are very expensive and impractical in a forest setting. Thinning trees to 18-20 foot spacing increases the temperature within the timber stand and increases tree vigor. The MPB prefers cool stand conditions and healthier trees are able to “pitch out” beetles when they bore into the tree. Thinning is marginally effective in moderate to light populations of MPB but is not successful in the heavy populations of beetles that we are currently experiencing. The only natural control is one we have not seen for a number of years. A cold winter, with temperatures in the minus 40 degree range for several weeks, would effectively reduce the MPB population. With the climate on a warming trend, it is unlikely we will experience these types of temperatures into the foreseeable future.

So, what are we left with? We are left with a truly catastrophic situation, with 95% mortality of Lodgepole Pine, Ponderosa Pine, Limber Pine and Whitebark Pine that have diameters over 6” at breast height across all of Montana where these tree species occur. As the MPB works its way across the landscape it leaves behind acres and acres of standing dead trees. This changes the potential and dynamics of wild fire. Fire behavior studies in Canada (they have over 35 million acres of MPB killed timber) revealed drastically increased fire spread and intensity from dead timber stands.

The MPB emerges from the host tree from late June to mid-July, depending upon temperature and moisture. The adult bores into new trees and lays eggs that hatch into larvae in a few weeks. Infested trees start to fade by fall and by the following summer the needles have turned red. In Lodgepole Pine, as the tree dries out it begins to crack open. These “checks” reduce the usability of the tree for lumber production. Through the “red needle” stage the tree is as useable for lumber as a green tree. After the needles fall off the tree enters the “gray” stage and its usefulness (merchantability) for lumber production declines rapidly over the next few years as most of the moisture in the tree escapes. The merchantability of the tree declines at a slower rate after the initial drying occurs. Depending on local environmental conditions, it is possible to recover lumber from a tree that has been dead seven to ten years, although the quality and quantity of lumber recovery declines along with the value.

CURRENT APPROACH

With this introductory information in hand, the sub-group was charged with exploring management options with the BLM Western District. The sub-group met with Scott Haight, David Abrams and Rich Torquemada and his staff at the Missoula Field Office and would like to thank them for a very informative and open meeting. At the meeting BLM personnel explained the Ecosystem Analysis at the Watershed Scale (EWAS) system. Basically the Field Office area is divided into watersheds or some

other logical division for that particular Field Office. An analysis is performed on the watershed (EWAS) that addresses all of the resource issues existing in the watershed. This includes fisheries and wildlife, recreation, timber, transportation, grazing, etc. One of the advantages of the EWAS approach is its comprehensiveness. By addressing all of the resources in a watershed, improvement projects can be better coordinated and their interaction with one another managed more effectively. The Public is also more comfortable with this approach, knowing that the entire area is being addressed. Out of this analysis projects are identified, to be completed within the next five years, which address resource issues revealed by the EWAS. A further Environmental Analysis (EA) is performed on each of these proposed projects. The EWAS are extensive, large-landscape analysis and take up to two years to complete. This analysis, then, is effective for 8-10 years or until a major disturbance or other change occurs that effects the assumptions in the EWAS. The EA's that are performed for each project take up to a year to complete. It can take three years or more to initiate a project from the start of an EWAS.

PROPOSAL

Although the EWAS approach to the Management of BLM lands works well under normal conditions, the current MPB infestation has resulted in an abnormal situation. The discussion the sub-group had with the BLM included altering the EWAS approach to better address the MPB infestation.

The Missoula Field Office is working on the last Landscape Analysis in its area-The Chamberlain EWAS. The Dillon and Butte Field Offices are less far along with this work but do have a number of Landscape Analysis completed. In total there are many areas in the District with the underlying NEPA work (EWAS) completed. The proposal is to ask the BLM to focus on areas within the Western District that have current, effective EWAS documentation and to address the MPB infested timber stands in these areas. Some of the issues generated by this proposal are as follows:

- There is little chance for additional funding or personnel to help with this effort so this would have to be accomplished by existing staff.
- These would be projects that specifically address infested timber stands and would not necessarily include activities that address other resource issues.
- This proposal would involve not only the timber staff, but would include input from other specialists in completing the Environmental Analysis. Other projects may have to be delayed in order to concentrate efforts on MPB areas.
- With increased timber management activity there may be increased public awareness and involvement in the process.
- An aggressive program would address fire hazard concerns, support local industry and recover products from areas that would otherwise be prohibitively expensive to treat.