Sale: **Mill Salvage**
District: **Grindstone Ranger District**
Forest: **Mendocino National Forest**
Sale #: **85331**

Mill Salvage Determination of Deterioration

Description:

The Mill Salvage Project area is located west of Stonyford, CA in the area that burned in the Mill Fire in 2012. It is within all or parts of T17N, R7W, Sections 19, 21, 28-32; T17N, R8W, Sections 13, 24, 25, 36; T16N, R7W, Section 6; and T16N, R8W, Section 1 MDM.

Findings:

The Mill Salvage Timber Sale was cruised March 2013 and was found to have a total standing live and dead volume of 1,134,810 cubic feet (CF) of timber. Due to the heavy component of standing dead material on the sale, the additional rates of defect were needed to be applied to the sale to account for damage to the timber due to wood boring insects. On Thursday, February 28, 2013, Jean Bystry and Dennis Lorenzo, members of Region 5's Quality Control Group (QCG) did an inspection on the rate of deterioration that could be found within the sale area. What they found was that the beetles had stayed active throughout the winter season due to unseasonably warm temperatures and had begun boring into the wood after the material in the cambium was consumed. The QCG determined that the rates of deterioration they were seeing was similar to what could typically be found occurring in trees that had been dead for 1-2 years. Since the sale is not expected to be sold until or after May of 2013 and not expected to be completed until 2014, maximum rates of deterioration were applied to the standing dead volume. These rates are established in the Forest Service Manual (FSM) 2409.12 Chapter 20.

On March 24 & 25, 2013, Chad Atwood, Brian McCrory and myself, Tucker Sierzega, felled and bucked additional green trees for the purposes of determining insect damage in the material to be removed in the timber sale. These trees are to be removed because they have fire damage severe enough that they are predicted to die as a result of their injuries. The trees that were felled were found to have very dense insect galleries within the cambium as well as wood boring insects as far as 1 inch into the sapwood of the tree. Additional deterioration typically found in material that had been dead 1-2 years was needed to be applied to the green volume as a result of these findings.

Results:

The Rates of deterioration vary by both tree species and diameter. After separating the trees by species their Quadratic Mean Diameter (QMD) the rates of deterioration found in the FSM Chapter 20 were applied. These rates adjusted the volume of the timber that can be sold as from 1,134,810 CF to 589,148.39 CF, a 48% overall reduction in the sale volume.

Tucker Sierzega 3/29/2013
Prepared by:
Forester

Approved by: