



## COMMUNICATIONS BRANCH

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# Media statement

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## **New acoustic technology helps increase sustainable timber production**

Financial returns and productivity from fire-damaged pine plantations at Pinjar and Yanchep have been maximised thanks to new acoustic tools now in use by the Forest Products Commission (FPC).

Around the world acoustics are now being used to achieve increased environmental and economic benefits by maximising the amount of timber that plantations can produce and by segregating the timber on the basis of quality basis.

By efficiently fulfilling the demand for timber, the area of plantation harvested is minimised. At the same time, early segregation of timber in the forest to meet the quality requirements of a processor not only saves money in processing but also minimises the carbon footprint of transportation.

Since severe bushfires hit the FPC's Pinjar and Yanchep plantations in January the newly available acoustic tools have been trialled to identify trees most at risk of degradation using non-destructive, in-field testing techniques.

The new technology will also improve the efficient use of fire-affected trees for maximum environmental, social and economic benefits.

Acoustic measurement tools can determine wood quality by measuring the speed at which sound travels through each tree. Data gathered from the soundwaves is used to determine key properties of each tree such as the modulus of elasticity (stiffness).

Research being carried out in WA by the FPC has shown that the technology also enables the rate of post-fire degradation in timber to be measured.

Research Scientist Andrew Lyon said the FPC had been using the new acoustic technology in cooperation with Neerabup-based company, Wesbeam, a manufacturer of engineered timber products (Laminated Veneer Lumber - LVL) from Western Australia's sustainably grown and managed pinaster and radiata pine plantations.

"The acoustic testing we've undertaken has not only minimised the loss of timber through degradation before harvesting occurs, but also maximised the recovery of timber from fire damaged plantations. This work has led to an extra 10,000 m<sup>3</sup> of sustainable timber being delivered to Wesbeam in the past few months," Mr Lyon said.

Data gathered from testing, gave resource managers instant information for planning and decision-making, enabling harvesting plans to be adjusted as necessary to maintain a flow of quality timber to local companies and increase plantation productivity.

Wood can be segregated and sent directly to the most appropriate sawmill for processing, increasing the efficiency of our state's sustainable \$1.1billion, 5,500 employee strong timber industry while at the same time reducing the miles which timber travels to a processing facility.

Use of these technologies also delivers positive environmental benefits by maximising the utilisation of the harvested timber and retaining carbon already sequestered within the tree rather than it being released back into the atmosphere.

"This is the first time these tools have been applied to fire damaged timbers in this way, and results to date are very encouraging," Mr Lyon said.

Mr Lyon said that as the trials near completion the results would be integrated into future plans for managing sustainable timber recovery from fire damaged plantations.

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**Photo captions:**

Picture 1: Research plot in Yanchep plantation

Picture 2: Technician Byron Yeo using the HM200 acoustic log tool