

Supplementary question to Professor Gibbons

As mentioned on page 30 of the transcript, you stated that “...in a recent study I did I talked to the person who does their modelling because I was asked for some information on the growth models for New South Wales timber species. He was pretty up-front about some of the problems with that modelling.” Could you elaborate on what you understand to be the problems with the Forestry Corporation modelling used in the Sustainable Yield review?

Forestry Corporation of NSW (FCNSW) calculate the sustainable yield from NSW forests using a wood supply model called the Forest Resource and Management Evaluation System (FRAMES). It is a large and complex task to predict changes in wood volumes for different forest products over such a large and diverse area and with a prospect of unforeseen events (e.g., wildfire) so there are many sources of error when making these predictions. FCNSW discount predictions from FRAMES by a safety margin of 10% to account for unforeseen constraints on wood supply. However, it is not clear if this safety margin is sufficient to account for unforeseen events and inherent uncertainty in the predictions from FRAMES. For example, the preliminary sustainable yield review after the 2019/20 fires predicted a reduction in high-quality sawlogs of up to 30%. If the forests of NSW are to be sustainably managed it is important that any safety margins applied to predictions from FRAMES are sufficient to maintain a sustainable supply of wood from NSW forests given: (a) inherent errors in the predictions from FRAMES; (b) the likelihood of increasing frequency and extent of fires in NSW forests with climate change; and (c) in order to adapt to improved information about environmental assets in NSW such as threatened species. A thorough analysis of the safety margin required to account for all of these should be undertaken.

The Hon. SAM FARRAWAY: Whilst I think I still have some time, to the other two professors, do you have a view on that question I posed to Dr Lindenmayer around DPI and the statistical analysis, and have you been able to do any equivalent research using that analysis to what DPI have done?

Professor GIBBONS: No, I have not done any analysis of that type. I would direct you to a very recently published paper on the 2019-20 fires by David Bowman and others that also looked at severity. I have only glanced at that paper, so I would just direct you to it perhaps.

This paper by Bowman et al. is attached.