

Submission to the Australian Senate Inquiry into the Operation and Effectiveness of the Environmental Protection and Biodiversity Conservation [EPBC] Act 1999 and the ‘effectiveness of Regional Forest Agreements [RFA’s] in protecting forest species and forest habitats where the EPBC Act does not apply’.

I am a resident of East Warburton in Victoria, where I am surrounded by native bush and abundant wildlife. I wish to see the natural beauty and biodiversity of nature protected in this area.

I am very aware of the logging in local water catchments which has been taking place recently and am very concerned about this, as are many other local residents who I speak to.

The recent logging in the Armstrong catchment and the proposed logging in the Cement Creek (East Warburton) area are of particular concern. Some examples of these concerns are listed as follows:

- 1) The logging in catchments contravenes the stated aim of the RFA's to protect threatened species.
- 2) Logging in the Mountain Ash forests robs the environment of carbon stores.
- 3) Clear-fell logging in catchments reduces the quantity and quality of water supply (including to Melbourne).
- 4) Logging in Melbourne's water catchments opposes the wishes of 15 councils that have voted against such logging practices.
- 5) The passing through tourist towns of fully laden logging trucks negatively effects business and tourism.
- 6) The continual passing through regional towns of logging trucks, often beginning in the early hours of the morning effects the mental and emotional health of the local population, as well as being a significant road safety issue.
- 7) The tabling of a petition in State Parliament opposing logging in catchments.

This clear-fell logging (referred to as “forest harvesting” – which appears to be an attempt to sanitise what is in fact a very aggressive and violent approach to removing all trees and other plants and animals in a given area) threatens the local flora and fauna, especially endangered species like the Leadbeater Possum. According to a recent report produced by Hannah Nichols currently serving as an intern to Tammy Lobato MP, relating to the endangered Leadbeater's Possum:

The current rate of logging exceeds the time it takes for sufficient tree hollows to develop. As a result, there is a current critical shortage of nest sites, a shortage that will continue for the next 100 to 300 years given current logging practices. According to Lindenmayer and Ough, as a result of clearfelling, “hollow-bearing trees and their dependent fauna

are significantly reduced in abundance. An 80-year clearfelling rotation will render large areas of forest unsuitable for cavity dependent animals." This will directly impact the population of the Leadbeater's Possum [Nichols 2008.]

A study, conducted by Brendan Mackey, Heather Keith, Sandra Berry and David Lindenmayer [2008] reveals some remarkable facts about the capacity of Mountain Ash to store carbon. **The scientists have found that Mountain Ash have the capacity to store 10 times more carbon than other native forests in Australia.** It was found in studying Australia's forests that the highest biomass carbon stocks are in the mountain ash forests of the Central Highlands of Victoria and in Tasmania. These forests store an average of more than 1200 tonnes biomass carbon, and a maximum of over 2000 tonnes of biomass carbon per hectare of forest. This is the forest that is currently reserved for Melbourne's water catchments and which is being logged to supply the logging and woodchip industry **(85% of logged Mountain Ash forest goes to pulp)** [Mackey et al 2008.]

ANU scientists have calculated that the average amount of carbon stored in unlogged natural eucalypt forests is about 640 tonnes per hectare. According to the leading worldwide climate change scientific body, the Intergovernmental Panel on Climate Change, the average carbon stock in temperate forests is only 217 tonnes of carbon per hectare. The research found that around 9.3 billion tonnes of carbon can be stored in the 14.5 million hectares of natural eucalypt forests in south-east Australia **if they are left undisturbed. The carbon currently stored in these forests is equivalent to "avoided emissions" of 460 million tonnes of CO2 per year for the next 100 years [ibid.]**

This only reinforces the stance of the **Yarra Ranges Council and the other 14 councils to oppose logging of Melbourne's water catchments.**

In November 2007, a motion was moved to oppose logging which received **unanimous support from councillors.** At that time the argument was based on the threat to water supplies, which is still very real, but compound that with what has been revealed about carbon in native forests it is even more imperative that logging in our forests stops now.

It makes no sense to create pipelines and desalination plants to help maintain Victoria's water supply into the future and then allow clearfell logging in water catchments. The summation within Hannah Nichols Parliamentary Internship Report states:

'The Kuczera curve illustrates a generalised relationship between logging and water yield. These results are relative to logging of old growth Mountain Ash forest. Where regenerated forest is logged, the Kuczera curve still detects a reduction in water yield, although it is not as significant as that of old growth forest'.

The forest in the Yarra tributaries is comprised of both regenerated and old growth forest.

The Macaque hydrological model also suggests that logging reduces water yield (see Watson and Vertessy). However, these results have greater relevance as they are derived incorporating catchment variation, such as topography, climate and vegetation. Hydrological studies have applied the Macaque model to assess water yield in the Thomson (where logging takes place) and the Maroondah catchments (where logging does not take place).

The initial results of *The Wood and Water Project* confirm the findings of previous research, in that logging causes a decrease in water yield over the long term. These results are significant as they are derived according to the specific catchment characteristics of the Yarra tributaries.

Therefore, despite slight variations in the methodologies of hydrological studies, it is possible to conclude that logging in the Yarra tributaries reduces water yield.

A growing number of local shire councils are joining Yarra Ranges Shire in opposing all logging in Victoria's water catchments; 15 at the time of writing. This represents close to 2 million residents.

Surely the senate inquiry should not ignore such an expanding groundswell of opinion from local communities.

There is strong anecdotal evidence that the vast majority of residents of the Upper Yarra are opposed to logging in our catchments. During logging season fully laden logging trucks continuously roll through the picturesque tourist towns of Warburton, Marysville and Healesville. This is a hazard to local traffic and pedestrians. It also blights the aesthetic value of the area.

I hope that these observations contribute to the case that there are no justifiable reasons to continue logging in water catchments.

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References:

Mackey B, Keith H, Berry S and Lindenmayer D. Green Carbon Report - The role of natural forests in carbon storage. Part 1. A green carbon account of Australia's south-eastern Eucalypt forests, and policy implications. ANU. August 2008

Nichols H. Monash University...Victorian Parliamentary Internship Report. June 2008.

Watson F, Vertessy R. Forest Hydrology Program. June 1998.
<http://www.catchment.crc.org.au/projects/projects9799/F05.pdf>
This is a CRC project applying the Macaque model to the Maroondah and Thomson water catchments.

The Wood And Water Project. DSE (Department of Sustainability and Environment). April 2008.
http://www.ourwater.vic.gov.au/_data/assets/pdf_file/0018/12744/Summary_of_Research_Results.pdf