Tim Malseed Short Cut Road Eltham 3095 timalseed@gmail.com

Dear Tim

Thank you for the opportunity to comment on your email about the Premier of Tasmania's response on the issue of community protection from disaster bushfires ("Response" 24/6/15 10.40am).

This is a serious issue for Tasmania.

With a cool climate, Tasmania is particularly prone to bushfire disaster as shown in the extreme fires of 1854, 1896, 1933, 1967 and 2013.

I agree with the contents of your email and have taken the opportunity to provide comments that are relevant to the current dangerous bushfire strategic situation throughout southern Australia.

David Packham OAM, MAppSci

Extreme Bushfire

Comments on Premier Hodgman's letter Belinda Clarkson (Of 16 June 2015)

David Packham OAM MAppSci¹ 30 June 2015

Bushfires are considered a natural hazard in Australia but significant damage to human and natural environment in Southern Australia comes from infrequent (about one in thirty years) *extreme* bushfires, which have developed in Australia since European settlement.

The trend in damage to life, property, water assets and the environment seems to be increasing as disregard for Aborigine stewardship and resultant "unnatural" build-up of fuels continues (see Bill Gammage²). There is also a determination of fire agencies to build greater but less effective fire control empires and extreme environmentalists continue to oppose appropriate application of controlled fire.

1 <u>holleyhill@bigpond.com</u>

Advice to Government has a lack of understanding of "extreme" bushfire. The proliferation of Government funded councils and committees is the mechanism for this bureaucratic lack of understanding. These processes mislead Governments and the community will suffer large-scale death and trauma sometime over the next three decades. The death rates in extreme bushfires are marching out of the tens through the hundreds and without change, will escalate to the thousands.

The two most dangerous myths that are being presented as official solutions to the threat from extreme bushfires are:

- 1. That we can prevent large scale loss of life, property and environmental damage by the generous application of systems, budgets, aircraft, national conferences, commissioners, modelling and talk only of "strategic fuel management".
- 2. That Governments have met their obligation to the community by developing centralised warning systems, based upon modelling, whilst ignoring highly reputable scientific disaster sociology (Leornard, VBRC³).

A manifestation of these dangerous myths is the confusion over rate of spread in extreme bushfire events. This dangerous myth is demonstrated by the Clarkson letters to the nation's Governments. While 9 kilometres per hour (km/h) or 24 km/h is a matter of definition, in the context of human and natural environment damage, the answer is clearly 24 km/h. The appropriate definition of fire spread in this case, is the definition defined by Clarkson. That is the distance and time applicable at the stage of fire spread at which deaths are occurring. A point I would define as the Byram Line Fire Intensity Index exceeding 10 mega watt per metre when survival in the open is unlikely.

The failure of the Victorian Government to accept the 24km/h estimate for community safety purposes will render the Victorian warning system ineffective.

The 9km/h modelled output may be appropriate for calculations of Byram fire intensity if in fact a fire front can be defined, or even exists, under extreme bushfire conditions. There is no definitive proof that a definable fire front actually exists under "extreme" conditions. Making forecasts for an entity that may not even exists is not scientifically robust or safe.

The 9 km/h modelled estimate is also inappropriate for forecasting energy input to the atmosphere for purposes of fire/weather interactions.

With the exception of meso-meteorological coupled fire models⁴, fire models are even less reliable than climate and economic models, and for the same reasons.

- 2 Gammage (2011) "The Biggest Estate on Earth: How Aborigines made Australia" Allen and Unwin
- 3 Victorian Bushfires Royal Commission Exhibit EXP.3031.001.0018
- 4 For an insight to this interaction see Clarke, Jenkins, Coen and Packham (1996) "A coupled-Fire model: Convective feedback on Fire-Line Dynamics" Journal of Applied Meteorology, 35, 875-901.

This is a dangerous nation wide problem. The existing bureaucratic control of constrained and dependant research will ensure that the escalation of death rates from extreme bushfires will continue.

An insightful statement of the current manipulations of facts to suit individual and political ambitions is given by the Noble Laureate Richard Feynman, when investigating the Challenger disaster "…reality must take precedence over public relations, for nature cannot be fooled". A truism previously noted by Galileo in 1615, to be ignored by Australian Governments at devastating cost to ordinary Australians.