

To: AFAC.Review@dpfem.tas.gov.au

from
Simon Roberts

To the Review Panel:

Thank you for the opportunity to make a submission to the *Review of the Management of Bushfires During the 2018-19 Fire Season*. With respect to the published terms of reference, I submit the following:

TOR 1. The causes, chronology and response of the 2018-19 bushfires in Tasmania on and following 28 December 2018. & TOR 8. Any other matter that the Review team identifies in the course of its activities as warranting discussion.

The storms of 15th January 2019 resulted in approximately 2,400 lightning strikes and caused over 60 new fires. The fires which started to the west of the Picton River on Parks and Wildlife Service managed land, merged with other fires to become the 16th January Riveaux Road fire which continued to burn through until the end of March/early April 2019 (11 weeks).

The initial path of the Riveaux Road Fire was in an easterly direction from the confluence of the Cracroft and Huon rivers following the Huon River valley until it reached the Picton River. There is a clear difference between the rate of the fire spread while it was within the World Heritage Area and when it crossed into the production forests between the Tahune airwalk and the Huon Estuary. Once the fire was within the production forests it rapidly spread laterally north and south as well as continuing in a generally easterly direction.

A common perception of the community is that fires originating in reserve areas are more dangerous as there is a reluctance to perform sufficient managed burns to reduce the flammability of these forests due to effects on biodiversity. In fact there is now considerable evidence that forests that are managed using clear felling are more flammable for 10-30 years after establishment than older stands of trees (Taylor *etal* 2014). Based on the Google Earth imagery a large proportion of the Riveaux Road area impacted after the fire crossed the Picton River is regenerating production forest that would be in the 10-30 year age range. This area would also have required the bulk of the fire fighting effort as it had the greatest potential for impact on private and public property.

A primary consideration of the inquiry should be relative flammability of reserved versus production forests and whether a better mix of early stage (0-50 year) and older (+50 year) production forest would reduce the rate of spread and level of risk to adjacent private property or infrastructure. Would a better mix of high and moderate flammability production forest have allowed the fire to be controlled earlier or for more resources to be deployed to protect fire sensitive communities in the reserve estate?

Another key consideration is the level of resources that were deployed to protect forest reserves such as tall tree reserves (Hickey *etal* 2000) many of which were scattered through the production forest estate. As it stands a significant number of trees of around 300 years of age were lost in the present fire. These tall trees are protected for their aesthetic qualities of majestic stature, grandeur and age (Hickey *etal* 2000) and are rare survivors of historic logging practices. Their loss is an indication of the relative importance that protection of these reserves received.

TOR 4. The impact and effectiveness of fuel management programs in the fire affected areas on the management and containment of the fires.

As detailed above (TOR 1 & 8) the use of fuel management programs is generally considered in the context of fuel reduction burns. In many of the production forests this is not a management option and would in most circumstances be counter to the production values of the forest. There is however a broader issue of the relative flammability of different forest types of different age classes. The forest practice code has a system of reservation of riparian and threatened vegetation types based on protection of biodiversity and water quality. I am unaware of any consideration of the mix of flammability on a landscape scale. Having travelled through the fire affected area from Geeveston to the Arve Rd/Hartz Road turnoff it is clear that there are different levels of impact of the fire on the native forest and plantation estate. In a number of places riparian areas remained unburned in the midst of scorched production forest areas. Could the rate of spread of the fire and fire suppression effort been reduced had a greater area or more strategic retention of these lower flammability areas been considered?

A current fire management topic under consideration is the establishment of "Green firebreaks" for the protection of urban areas on or close to a forest interface.

<https://livestream.com/UniversityofTasmania/events/8616771>

As much of the fire fighting effort was focussed on asset protection on the margin between production forest and private property a key consideration could be whether a similar system of protection would be feasible within and on the periphery of production forests.

Thank you
Simon Roberts

3/5/2019

Bibliography

Hickey, J.E, Kostoglou, P, and Sargison.G.L. (2000) Tasmania's tall trees. *Tasforests* 12:105-121.

Taylor, C, McCarthy, M.A. and Lindenmayer, D.B. (2014) Nonlinear effects of stand age on fire severity. *Conservation Letters* 7(4):355-370.

Attachment One: Hodgman Email

Subject: Letter from the Premier, Hon Will Hodgman MP
Date: Mon, 18 Mar 2019 05:17:10 +0000
From: The Premier (DPaC) <premier@dpac.tas.gov.au>

Dear Mr Haynes

Thank you for your email of 10 February 2019. I apologise for the delay in responding. The Tasmanian Government recognises that climate change is a serious issue that requires local, national and international action.

As you note, in January 2019 Tasmania experienced a significant bushfire event. This followed previous bushfires in 2013 and 2016 which caused extensive damage to the Tasmanian Wilderness World Heritage Area (TWWHA). The TWWHA Bushfire and Climate Change Research Project confirmed that Tasmania is likely to experience increasing bushfire risk in the future as a result of a changing climate, including more frequent extreme weather events and a longer, more intense fire season.

Tasmania's firefighting agencies have the Government's full support to suppress the fires as quickly as possible. The Tasmanian Fire Service (TFS) has called on the support of more than 100 professionals from interstate and overseas with a large number of aerial assets here helping to support our efforts too. The TFS continues to be actively involved with the Bushfire and Natural Hazard Cooperative Research Centre, Australian Fire and Emergency Management Conference, National Aerial Firefighting Centre and other national research and development forums relevant to the emergency services sector.

The Government is committed to protecting the TWWHA, with \$4million in current funding allocated for bushfire management in the TWWHA, this supports broad-scale fire mitigation activities, primarily fuel reduction burning, to reduce the risk of fires impacting on TWWHA values. It also assists in protecting critical electricity generation and transmission infrastructure inside and adjacent to the TWWHA.

In addition, the Government has committed \$55 million to a dedicated fuel reduction burning program across the State, which is ongoing. This program has already resulted in a number of planned fuel reduction burns that have increased our ability to protect life and assets, our natural and cultural values and wilderness areas.

Thank you again for writing to me.
Yours sincerely

Hon Will Hodgman MP

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