

NSW Independent Bushfire Enquiry

**Submission- Jamie Shaw
17-21 Mogareeka Ave, Mogareeka 2550**

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Thank you for the opportunity to submit a submission to the NSW Independent Bushfire Inquiry.

Background

I am a resident of Tathra NSW and have lived in the area for 15 years. I have a Vegetation and Wildlife Management Degree from University of Canberra (1994) and worked as a Ranger and Bushfire Management Officer for the NSW NPWS for over ten years.

As a Bushfire Management Officer, I undertook ecological and assets protection planning for National Parks and Reserves in both the Northern Tablelands and in the Northern Sydney area. This included bushfire behavior research into the causes and impacts of the 1994 Sydney bushfires, fuel load assessments, development of bushfire management plans for reserves and urban interface areas, prescribed burn planning and implementation as well as bushfire fighting and strategic planning.

As a resident of the far south coast I was impacted by the Tathra Bushfire of 2018 and by the recent Badja Bushfire and was forced to evacuate my home on three occasions. Whilst my property and home was not directly impacted by the most recent fires, my community has been severely impacted by both these fires.

My own and my community's experiences over the last two years have highlighted the unprecedented threat we now face in coming years. Increasingly, with the growing impacts of climate change on temperatures, humidity and bushfire fuel moisture levels, our existing strategies for fuel reduction are being challenged and in many cases, are being shown to be outdated and obsolete.

Land Clearing and Hazard reduction.

The experience of the bushfires on the far south coast between late December 2019 and February 2020 show that the increasing intensity and severity of bushfires, due to extended severe droughts, high temperatures and extremely low humidity over prolonged periods, are making these fires far larger in scale, more protracted and more difficult to control.

The increasingly severe bushfire intensity, combined with adverse weather conditions, meant that the Far South Coast fires burnt for prolonged periods and impacted dwellings, towns and infrastructure that were, in the case of Quaama and Cobargo, surrounded predominantly by open farming country, in the case of Bemboka, had been impacted by fires only 18 months before, or had extensive hazard reduction measures undertaken relatively recently. This behavior indicates that our old strategies of extensive prescribed burning to reduce fuels and

land clearing are becoming increasingly ineffective in reduce bushfire damage to life and property as climate change impacts become more severe.

The experience of the Tathra bushfire in March 2017 on the other hand, indicates that we are increasingly seeing the success of our strengthened building codes as our only real way to protect life and property during the increasing intense bushfire behavior. During the Tathra bushfire, of the 70 houses lost, only one dwelling was destroyed that had been built after 2009, the year that bushfire protection measures in building construction were strengthened. This indicates that structural design rather than fuel reduction on a broad-scale is the key mitigating factor in limiting infrastructure losses during severe bushfire events.

Native vegetation disturbance is also increasingly being shown to increase bushfire severity. In many areas of the Far South Coast we are now seeing large areas of extremely high fuels due to historic land clearing and native forest logging regrowth. This is shown most starkly in the Murrah Flora Reserve near Tathra and Bermagui, where one of the most difficult management dilemmas for the new reserve is 2000 hectares of extremely dense logging regrowth that is difficult to manage and presents a severe threat to both the reserves highly threatened Koala population and the reserves many neighbours.

Severe disturbances to native forest and other vegetation communities often creates extremely dense shrub and tree regrowth of the medium and long term. This dense regrowth creates ladder fuels which in severe weather condition can in-turn create extensive and prolonged canopy fire in forested area and increase spotting of bushfires over great distances. In contrast, many native vegetation communities particularly forests, if left undisturbed, over time develop much clearer understory communities that have decreased fuel levels.

The above factors show quite clearly where our future focus should lie in preparing for severe bushfires.

1. We must increase our ability to build or retrofit dwellings and infrastructure to withstand the impacts of severe bushfire and ember and flame attack,
2. we must reduce large scale land clearing and forestry logging operations that create large areas of high fuel loads and dense regrowth vegetation, and reduces carbon sequestration by mature forests and native vegetation, which exacerbates climate change
3. most importantly refocus our recourses away from simplistic overall hectare driven large hazard reduction burns and overzealous land clearing to a more strategic approach to fuel reduction that includes cultural burning programs in priority areas not t risk from fires, and
4. we must reduce urban edge and remote subdivision approvals in isolated bushland areas, particularly on exposed ridgelines.