

## Your details

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**Title**

Mr

**First name**

John

**Last name**

Stein

## Submission details

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**I am making this submission as**

A resident in a bushfire-affected area

**Submission type**

I am making a personal submission

**Consent to make submission public**

I give my consent for this submission to be made public

## Share your experience or tell your story

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**Your story**

Firstly, I would like to offer deep thanks to all in the RFS and relevant government agencies for their selfless efforts in extraordinarily difficult times. Leadership of the RFS was superb, and government responses adjusted appropriately. Any criticisms of mine are only meant to be constructive, in the interests of future improvements.

I am a retired landscape ecologist who majored in forestry and has research experience with fire in the landscape. My wife and I have a property located in the Yaouk district. It was sandwiched between two wildfires, the Adaminaby Complex to the south and the Orroral Fire to the north. It escaped direct impact from these wildfires, but about half the property was severely impacted by back-burning, and was also subjected to a dozer track. Both were unwanted and occurred when there was no State of Emergency, and in both cases there was no communication with us before, during, or after the events, even though we had been contacted in the early phase of the wildfires. The back-burn was apparently conducted by aerial incendiary drops as widespread rain was

approaching the location. Presumably that is why only half our property burned.

In addition, the wetlands on our property were severely degraded as a direct consequence of another back-burn, on Yaouk Nature Reserve and surrounds. Following rainfall, sheet erosion from the steep burnt hillside resulted in massive sediment dumps downstream that choked these wetlands.

## Terms of Reference (optional)

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The Inquiry welcomes submissions that address the particular matters identified in its [Terms of Reference](#).

### 1.1 Causes and contributing factors

1. The fundamental cause was undoubtedly extreme drought, exacerbated by record high temperatures, both most likely influenced by climate change. Pre-fire conditions were the worst I'd seen in our district in living memory (the past 40 years). Permanent creeks had stopped running. Vegetation was dead, dying, or extremely dry.

2. Prescribed burning could have been a contributing factor. Widespread attempts to reduce fuel loads over recent years may actually have been perversely increasing fuel hazard. There is emerging evidence that indicates highest fuel hazard occurs when early successional forests are maintained through regular burning and lowest fuel hazard occurs in long-unburnt forest. (Dixon KM, Cary GJ, Worboys GL, Seddon J and Gibbons P, (2018), 'A comparison of fuel hazard in recently burned and long-unburned forests and woodlands', International Journal of Wildland Fire, 27, 609–622, CSIRO Publishing) (<https://doi.org/10.1071/WF18037>)

3. Intervention by the military to a location where no fire existed was a direct cause locally. Ignition of the major Orroral wildfire reportedly happened through the attempted construction of a helipad.

### 1.2 Preparation and planning

1. There has been patchy preparation in the immediate vicinity of houses. Here the vegetative fuel load does seem to make a difference. The most comprehensive analysis of house loss following the Victorian Black Saturday wildfires of 2009 revealed that vegetation management within 40 metres of a dwelling is very significant, whereas distant landscape management of vegetation is very marginal (Gibbons P, van Bommel L, Gill AM, Cary GJ, Driscoll DA, et al. (2012), 'Land Management Practices Associated with House Loss in Wildfires', PLoS ONE 7(1): e29212. doi:10.1371/journal.pone.0029212 )

2. There may have been misguided preparation in remote country by conducting prescribed burns. Counter-intuitively, at best, little benefit would have been achieved (Gibbons et al, 2012), and at worst, fuel hazard may have been increased (Dickson et al, 2018).

3. Very poor planning allowed a helicopter to land in tinder dry grass. Authorities should have been aware of such a potential ignition source during a total fire ban. Heat lamps, sparking machinery, catalytic converters, etc, are not unknown ignition sources. This event did occur in the ACT but impacted NSW. It quite possibly related to a perceived need to do something in preparation.

### 1.3 Response to bushfires

There were excellent communications from the State Government and the RFS to the public, including provision of mapped data, but thought needs to be given to improvements where advice requires rapid updating. For example, current advice was often being provided by tweet or facebook at the same time as old, occasionally inappropriate advice still remained on web sites that were presumed current. Even ABC radio broadcasts sometimes made this error. The potential consequences for the public could be disastrous.

The back-burning technique has been over-used, often inappropriately. It can be a valuable tool but should be used judiciously, not indiscriminately. Over the summer its ubiquitous use often introduced more dangerous fire into the landscape (eg. Yaouk Nature Reserve), which sometimes escalated into damaging new wildfire (eg. Bilpin). Furthermore it can remove unburnt patches from the landscape, vital to wildlife recovery.

Heavy plant has also been over-used, often with environmentally damaging consequences. Many dozer tracks have been pushed into the landscape in useless locations that could not perform as break lines in intense fire. Some, at best, may have partially achieved a mineral break in trickle fires, but that would not really seem the most appropriate response to containing out-of-control wildfire in forest, especially at the expense of damage to sensitive ecological areas. Our property provides some evidence. This activity should be reviewed, and as with back-burning, used more thoughtfully.

There was amazing commitment by volunteers, but an over-reliance of them. In part this was a consequence of budget cuts to agencies that used to have more professional fire-fighters. Cuts of 10 percent per annum to NPWS, for example, have been mentioned. Problems were not only apparent in the level of training, such as with elite remote area response crews, and the fundamental understanding of fire behaviour and ecology, but also in the manpower required to sustain efforts over such a protracted period.

#### **1.4 Any other matters**

Post-fire recovery needs to be considered. Authorities should be very wary of prescribed burning too soon (if at all in remote country) after wildfire. As a former researcher I was able to observe the ecological impact of the first prescribed burn (2009) at Collins Creek in the ACT after an extremely hot wildfire (2003) in the Cotter Valley. It was a classic cool burn in appropriate weather, a trickle fire not much higher than knee height, but it brought down many mature trees that had survived the wildfire but hadn't recovered sufficiently to withstand smouldering at the base.

### **Supporting documents or images**

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#### **Attach files**

- Backburn Damage.jpg
- Dozer Damage.jpg
- Wetland Damage.jpg







