## SUBMISSION TO NSW BUSHFIRE INQUIRY.

A copy of the submission is below for your records.

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I am making this submission as	Resident
<b>Submission type</b>	Personal
Organisation making the submission (if applicable)	
Your position in the organisation (if applicable)	
Consent to make submission public	Public
Your story	I survived the January 4th 2020 "Border Fire" and was able to save out 130 year old weatherboard house using a sprinkler system. Because we had very little water, it was imperative that I stayed to turn the sprinklers on at the optimum time. I was able to stay safely thanks to a bushfire bunker, constructed in response to the 2009 "Back Saturday" fires. I have attached an essay on the experience: "How Science, Diligence and Luck saved our Home."
1.1 Causes and contributing factors	Drought. 2019 at "Heartwood" Kiah was a severely dry year, following on from 2 dry years. For calendar 2019 we had 505 mm of rain, and the average for the 3 years was 640mm, compared to a long term average of between 900 and 1000mm per annum. Higher than usual temperatures and a series of violent wind storms increased evapotranspiration losses. Climate Change. While regional rainfall variations have been difficult to model with current climate models, an earlier CSIRO prediction that there would be an increase in very large storm events and a

decrease in smaller rainfall events between these with a doubling of atmospheric CO2 seems to have been borne-out so far. Leaving changes rainfall aside, the higher average and extreme temperatures have resulted in increased evapotranspiration losses. Moreover, increased energy in the earth's climate system seems to have resulted in an increase in the frequency and intensity of wind storms.

Fuel loads.

I have recently reviewed my notes on a CSIRO/SFNSW seminar held in Eden in 1992 following the development of a prescribed burning guide for regrowth forest. (See attached supporting document). The fire risk posed by intensive woodchip logging was an issue of controversy in the review of woodchip export licensing. It is clear that the damage to the regrowth forests of Eden in the January 4th 2020 "Border Fire" has been catastrophic.

## 1.2 Preparation and planning

Land managers such as SFNSW and NSWNPWS have quite ambitious policies and plans for fuels management by prescribed burning. However, the execution of these plans has been limited by the cutbacks to staffing levels and the limited window of opportunity for safe prescribed burning.

Escapes from approved burns have proven costly. The Yankey's Gap Road fire of spring 2018 stared as an escape from an approved private land burn which flared up on a bad day because it had not been completely blacked out. This fire burnt a vast area of the Brogo Wilderness but 16 months later much of the same area bunt again in the Badja Forest Road Fire. This shows that burning provides limited protection and carries its own risks.

In the immediate winter before the "Border Fire", an extensive prescribed burn was carried out by SFNSW staff in an area of regrowth bounded by the Edrom Road, Shelley's Forest Road and Ash Road. Some of this forest had been unburnt for 40 years since logging. In spite of dry conditions and a little crown scorch due to wind, the burn was quite successful. This area of regrowth by and large did not sustain damaging crown fire on the night of January 4th 2020. However, it did not stop the fire either and about 40 houses in Kiah were lost.

## 1.3 Response to bushfires

I have heard that federal funding for the deployment of aerial assets is only available once fires become a threat to property and lives. Is this true? One would have thought that, following the Canberra fires of 2003, the importance of suppressing lightning strikes in remote areas during the bushfire danger season would attract all available assets. When flare up conditions subsequently arise, it's not possible to do much suppression and evacuation and property protection are the only options.

On the issue of equipment, I personally found the use of a respirator mask with dual filter canisters ("Protector" brand) was of great value in enabling me to continue putting out small fires throughout the night, in spite of appalling smoke hazard. My partner was unable to obtain one small enough to fit her face tightly.

## 1.4 Any other matters

I refer to my essay on surviving the fire at Kiah, in particular the value of a sprinkler system and attention to the detail of how houses catch alight and what can be done to reduce this risk. One product we fitted to our cottage was "Bird Scallop". This is lightweight tin cut on one edge to fit corrugations in standard iron roofing. It can be bent to fit tightly to a verandah roof set at the usual angle (say 15 degrees). We obtained the bird scallop from Heilmore in Heidelberg Road, Fairfield Victoria. They have since been taken over by Strammit, who no longer make the product and do not offer anything that would do the job. This is an example of market failure.

A means of safely blocking and filling guttering without ascending a ladder would be a useful thing for older people.