NSW Independent Bushfire Inquiry

Submission from Harriett Swift, Dr George Mountain Road, via Bega NSW 2550

My submission primarily addresses the first of the Terms of Reference, that is:

The causes of, and factors contributing to, the frequency, intensity, timing and location of, bushfires in NSW in the 2019-20 bushfire season, including consideration of any role of weather, drought, climate change, fuel loads and human activity.

It is based on experiences, information and observations, particularly during the bushfires of summer 2019-20. I have 3 major points to make:

fires.

Severe drought was a significant precursor to the fires and climate change was clearly a contributing factor in that.

Rather than diminishing the level of risk, logging, burning and indiscriminate "mechanical fuel load reduction" have actually made the fires worse. By hastening climate change and changing the nature of the forests they have ensured more catastrophic outcomes when the more frequent fires do occur.

1. Recommendation The long history of intensive logging has hastened climate change and made the forests of the far South Coast more fire prone.

Intensive logging to supply the woodchipping industry started in 1969. It brought an unprecedented scale and intensity of logging, with native forests supplying more than 42 million tonnes of trees for woodchipping.

Woodchips are used for paper manufacturer and seldom store carbon for more than about 3 years.

The forests were effectively clear felled, with a very small number – usually 4 to 6 - trees per hectare – being retained for regeneration or as habitat for any surviving wildlife.

Regrowth forests which replaced the old, moist, multi-aged forests are drier, denser, smaller, younger trees and of uniform age and crown height. Scientific evidence¹ has been clear in demonstrating that wildfire burns more quickly through such forests.

The Forestry Corporation itself effectively acknowledged that the history of logging in the region has been a factor in the summer fires. In a statement on its website about

¹ https://www.abc.net.au/news/2020-01-29/logging-bushfire-affected-areas-australia-increases-fire-risk/11903662?fbclid=lwAR2g4-XvtWxt5xtte4RRqlvezgTx4Afk11qJKtmJw5ssWEZohU5R7tdTsd4

the amount State Forest burnt on the South Coast it says: "the region is characterised by even-age regrowth forests".²

The Border Fire, which travelled from the Victorian border to Twofold Bay in a single day burnt through some of the most heavily logged forest in Australia. It had been subjected to decades of "integrated harvesting" to supply the Eden chipmill. The area of forest was more heavily logged than many others because it was cheaper to do so, being closer to the chipmill.

Its decades long history of logging, including many post logging burns did not stop the fire, slow it down or make it possible to control.

By 3 February 2020 the Border fire had destroyed much of the Eden chipmill, 78 dwellings,³ community buildings, burnt almost 200,000 hectares⁴ and was still out of control.

There is also substantial, well documented evidence that forests are associated with higher localised rainfall and reforestation can help prevent drought.⁵

2. So-called "hazard reduction" burning and mechanical fuel load reduction on a landscape wide scale are not effective ways to reduce fire hazards.

Like many south coast residents, I observed that there were areas which burned on more than one occasion during January and February 2020.

Areas of forest which had undergone "hazard reduction" in the previous 2 years were burnt again.

A good example was the Badja Forest Road fire which included the Yankees Gap area, near Bemboka. A major bushfire at Yankees⁶ Gap had burnt for several weeks during late winter and spring in 2018. The area was severely burnt again in January 2020.⁷ The previous burn did not stop or slow down this year's fire.

Similarly, when the Border fire approached Eden, even the area immediately around the Eden chipmill burnt. This had undergone frequent "hazard reduction" burns as well as the intensive logging that so much of the rest of the area had undergone. When it came to the crunch – regular and recent "hazard reduction" burns or mechanical fuel load reduction could not stop or slow down the fire.

² https://www.forestrycorporation.com.au/operations/fire-management/fire-impact-of-2019-20?fbclid=IwAR0p-TMfRKbarSbqBRAhRJiKsZnMzV2pJ cMuZdePuMdEvBYyfDwg4weV6M

 $^{^3}$ <u>https://www.begadistrictnews.com.au/story/6678238/waiting-and-waiting-lives-in-limbo-on-the-border-after-bushfire-disaster/?cs=511</u>

⁴ https://www.begadistrictnews.com.au/story/6611581/border-fire-elevated-to-watch-and-act-status-on-monday/

⁵ https://www.abc.net.au/news/science/2018-09-15/trees-make-rain-ease-drought/10236572

⁶ https://aboutregional.com.au/yankees-gap-fire-contained-and-under-control-on-day-44/

 $^{^{7} \, \}underline{\text{https://www.batemansbaypost.com.au/story/6566372/kiah-church-gutted-south-of-eden-too-late-to-leave-burragate-towamba/?cs=229}$

While there may be a place for both of these methods in limited, well targeted small-scale circumstances, in broad scale application, they simply do not work and indeed, can make the end result even more destructive.

Power lines through forested areas

A particular issue in the Bega Valley and other shires with large forested areas is the bush fire hazard posed by power lines going through forest and bush. It is high time that power companies followed the lead of Horizon Energy in WA which has recently⁸ begun supporting some of its customers to go completely off-grid. Power lines cause bush fires, as they did at Reedy Swamp/ Tathra in 2018 and Cobargo in 2019. Power systems which depend on grid connection are also increasingly vulnerable and unreliable in bushfire prone areas. Micro grids or stand-alone power systems should be the encouraged in such areas.

4. Conclusion

It seems almost inevitable that at times of catastrophic bushfires and other natural disasters, nature becomes the enemy. On closer analysis however, solutions such as "mechanical fuel load reduction" or logging and more frequent burning can exacerbate the damage already done and are rarely effective solutions. Further, with an increasingly narrow window of safety to undertake planned burns, they cannot and should not be applied on a large scale and seldom work anyway.

5. Recommendation

Long term destruction of the natural native forests over many years has been a major contributing factor to the severity of the recent fires

Native forest logging should end. This will mitigate climate change and make the far south coast region safer. Allowing forests to grow back to their original state can bring beneficial local changes to weather patterns, increasing rainfall which will help avoid drought and bushfires.

The catastrophic bushfires of summer 2019-20 in part reflect the price we are now paying for 50 years of intensive logging for woodchipping.

Hazard reduction burns and mechanical fuel load reduction do not work as a landscape-based solution to bushfires.

Power lines through forest and bush should not be built.

⁸ https://horizonpower.com.au/our-community/news-events/news/horizon-power-delivers-australia-s-first-off-grid-renewable-solution/