## Climate change versus bushfires: killer flaws in an unhelpful and dangerous argument

## by Roger Underwood 2020

A group of former "fire chiefs" are blaming the current bushfires across Australia on climate change, and demanding that Prime Minister Morrison takes urgent action to fix the climate. This, they claim, will fix the bushfire threat.

This position is not just unhelpful, it is dangerous. *Even if* we could change the climate (cooler summers, saturating winter rains, light breezes, no more droughts), it would not influence the current weather patterns or stop the fierce bushfires coming up the driveway. *Even if* we knew exactly how to change the climate, anything we do in Australia will have to be replicated globally (especially in China and India) to make any difference, and *even if* these climate-changing measures were applied globally tomorrow, the desired new climate might not cut in for many years.

The "climate-change-is-causing-bushfires" position has two killer flaws.

- First, it takes no account of fuels;, and second,
- It prescribes no practical actions that will help with the immediate bushfire threat.

Ignoring fuel is an error of astonishing magnitude and seriously undermines the credibility of the fire chiefs. It is almost as if they never studied elementary bushfire science. In Bushfire 101 we learned about The Fire Triangle. This illustrates a fundamental reality: a bushfire (in fact any fire) can only occur if three things are co-present: oxygen (in the air), fuel (to burn) and heat (a source of ignition to get the fire started).

If any one of the three is missing the result is no fire.

Unfortunately, nothing can be done to remove the air and the oxygen it contains. Unhappily, nothing can be done to stop bushfires starting. They will either be lit by Mother Nature in the form of lightning strikes, or will be started by humans, either deliberately or accidentally.

But bushfire fuel can be removed, or at least the quantity of fuel around a house or in the bush can be reduced to a point where a fire will burn at a relatively low intensity, allowing firefighters to deal with it relatively comfortably.

On the other hand, if fuel is allowed to build up, as happens in long-unburned eucalypt bushland, the eventual fire will be of high intensity. If a crown fire results, generating a downwind ember storm, the fire will be impossible to control and damaging, no matter how many thousands of firefighters and water bombers you throw at it.

Blaming climate change for the current spate of bushfires ignores the fact that these bushfires have proven almost impossible to control once they got going. This is because they are burning in heavy fuels dried out by drought. Ignoring fuels is the ultimate cop-out. It absolves the authorities of any responsibility the incubation of this fire epidemic, and especially it absolves the former "fire chiefs" for not doing their job over the years, allowing dangerous levels of fuel to accumulate in the nation's bushlands.

But what of the solutions proposed by the "fire chiefs"? I have yet to see any, other than the usual suggestions to curtail CO2 emissions, shut down coal-fired power plants, no coal mines, switch to electric cars, use trains instead of aircraft and so on. But what will these measures actually achieve? There is no agreement. And when will the their impact on the climate become significant? There is no agreement on this either, other than vague statements about 2030 or 2040.

As far as I can see the "fire chiefs" have offered nothing of any practical or immediate value in terms of bushfire management.

I am in full agreement with the "fire chiefs" over one thing: something *does* need to be done to fix the bushfire crisis in Australia. A good start would be for governments and bureaucrats first to acknowledge the three great truths about bushfire occurrence and severity in this country:

- Australia is naturally bushfire-prone. This is because of our hot, dry summers, periodic droughts, flammable vegetation and abundant sources of ignition.
- Bushfires cannot be prevented; but bushfire severity and bushfire damage can be minimised if an effective management approach is adopted.
- The effective approach is well-understood and field-tested: (i) you must harden-up rural and semi-rural communities to increase their resilience in the expectation of fire; (ii) you must reduce the fuels in the bush; and (iii) you need to have in place an efficient fire fighting force. It won't work with only one of the three, you must have them all, properly integrated.

One of the biggest problems with the current approach is that the nation as a whole does not understand or agree upon these key points. There is a confusion about priorities. Thus we see "fire chiefs" focusing on climate change, environmentalists focus on protecting biodiversity, the fire services focus on firefighting, the aviation industry (supported by the media) is pushing for more and bigger water bombers. Meanwhile politicians are scrambling to please everyone ... but pleasing nobody. The leadership vacuum is devastating, and nothing will change for the better until this vacuum is filled.

But while I agree with "the fire chiefs" that something needs to be done, I deplore their focus on climate change as the solution. Because it ignores the influence of fuel on bushfire severity, it is a flawed argument; and because they prescribe nothing of practical or immediate benefit, they offer nothing of value. If the government was to adopt their position, ignoring the need to make communities more resilient and ignoring bushland fuel build-up, the result would only be a worsening of the current bushfire crisis.

I conclude that what we are seeing from the "fire chiefs" is a political exercise, based on a different agenda (the 'take-action-on-climate-change' agenda). The bushfire situation is being used as a vehicle for this political agenda. Until the "fire chiefs" start advocating a practical approach to remediating the immediate bushfire threat, they must be regarded simply as climate activists, and as therefore as a distraction in the business of stopping bushfire damage. There is nothing wrong with being a climate activist, *per se*, but advocating policies that distract the authorities from dealing with the immediate bushfire threat can only be described as irresponsible.