

Submission to: NSW Independent Bushfire Inquiry

By: Rex Graham

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About this submission

The author of this submission is a member of the Uniting Eco Group (UEG) which is a grass-roots environmental group within the Uniting Church, NSW & ACT.

UEG encourages its members and others in the Uniting Church to ecological action and reflection. This action and reflection include – quoting from the group's Terms of Reference – the following:

Participating prophetically in Australian political processes, especially with like-minded pressure groups and victims of ecological destruction, to expose and undermine societal structures, conventions, and business/economic and governmental systems and narratives that are complicit in the destruction of the environment

Some content of this submission has been contributed by members of UEG, still other parts have been reviewed by members.

This submission is structured using numbering and key ideas taken from the NSW Independent Bushfire Inquiry's own Terms of Reference. I have been selective as to which of the Inquiry's ToR is addressed, based on a number of factors. These include: my personal knowledge and experience accumulated over many years of activism in the environment space; the particular relevance of social justice and Christian theology to each ToR item and, keeping the submission brief and to the point.

1. **The causes of, and factors contributing to, the frequency and intensity 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.**

The primary, clear and unequivocal contributing factor to the unprecedented *number* and *intensity* of bushfires in NSW during our 2019-20 bushfire season is humanity's failure to mitigate climate change by reducing green-house gas (GHG) emissions, mainly carbon dioxide. Anyone with a cursory understanding of climate science knows this.

I do not propose in this submission to detail how unmitigated climate change results in more frequent and more intense bushfires, as it is inconceivable that the NSW Government (or any government in Australia) could remain unaware of this fact. The

correlation between rising GHG emissions and severe weather events such as ferocious bushfires has been well known and documented for decades. To give but one example amongst hundreds: Professor Ross Garnaut, 12 years ago in 2008 in his landmark The Garnaut Climate Change Review – Final Report, in Section 2 entitled “Understanding Climate Science”, subsection “Changes to the climate system” (refer p.118 of the Report) lists amongst the “severe weather events” caused by climate change:

- “hot days and nights (including heatwaves)”
- “droughts”,
- “bushfires” and “extreme winds”.

All the above severe weather events occurred in NSW in this past 2019-20 bushfire season. The drought contributed to tinder dryness of forests. Heatwaves occurred with extreme winds, including local extreme winds themselves generated by the fires. The climate change induced dryness, heat and wind, resulted in greatly increased flammability of forests and grasslands producing the destructive bushfires which climate scientists have been predicting for the past 20-30 years.

It is one thing for the inexorable causal link between climate change extreme weather events and extreme bushfires to be *established* through scientific enquiry. However, the very same causal link has also been *observed*, over many years, by forest fire experts as they report on fire risk. Professor Garnaut alludes to this in his Report, noting “During the period 1973-2007, there was a general increase in the **Forest Fire Danger Index** across the east and south-east of the country”. I note that the bushfires in NSW were at their most severe level in the *east* of the state of NSW and especially *south east NSW forests* where fires linked with Victorian bushfires further south. I also note Professor Garnaut reported a worsening trend in the Forest Fire Danger Index, reporting that there were “*statistically significant*” increases in the Index “after the year 2000”. (ibid p.120).

Given the abundance of scientific observation, fire danger risk assessment, and now the lived experience of the citizens of NSW in the form of bushfire deaths, structures and homes destroyed and dangerous smoke haze pollution, I find it remarkable that the NSW Government would call for a Bushfire Inquiry that has, as part of its remit, to “consider and report” to government as to whether or not there was “*any* role of weather, drought [and] climate change” in such fires. The use of such wording purports, or gives the appearance that, the government is unaware of the bleeding obvious. The only conceivable explanation one is left with is wilful ignorance on the part of the NSW Government – a form of denial of a reality it does not want to face.

Denial of climate and its malign impacts on the environment and humans is well documented. Denial comes in many forms, both overt and covert. **Denial of climate change overtly** – flatly denying that any change in climate is happening – although

popular in the past, has gradually diminished in the population of Australia according to social researchers. They report, that as citizens have more and more been confronted (mugged?) by the reality of more heatwaves, droughts, bushfires, storms, cyclones, coastal erosion, destruction of icons like the Great Barrier Reef, and so forth, very few are able maintain the myth that climate change does not exist.

Dr Rebecca Huntley is an Australian social researcher who has spent 15 years listening to Australians talk about climate change, including time with Yale University researchers in America. She believes that the Yale findings concerning Americans, that **only 10% of the population are 'dismissive'** i.e. say climate change is not happening, resonates with her findings about Australians' beliefs. (refer to her Melbourne University Sustainable Society Institute Oration, broadcast, in large part, on ABC RN, Big Ideas, 29 Jan 20). It is logical to conclude then, that in Australia, *overt* denial of the fact that climate change causes increasingly frequent and destructive bushfires is no longer a problem, as only a small fraction of the population now continue to indulge such fantasies.

Covert denial of climate change and its impacts, is, on the other hand, another matter. It is alive and well in Australia, raising its ugly head in multifarious and surreptitious ways, some of which came to the fore during the recent bushfires. Obfuscation - deliberately muddying the waters so as to confuse others – was on display with respect to the causes of, and factors contributing to, the ferocity and destructiveness of the bushfires. For instance, Federal MP Peter Dutton on an ABC radio program headed by Patricia Karvelas, on 5 Feb 20 posed a question as to whether or not the bushfires started in some regions because of climate change, and then answered his own question by saying:

"No, it didn't. It started because somebody lit a match. I mean there are 250 people as I understand it, or more, that have been charged with arson. That's not climate change."

Unsurprisingly, RMIT ABC Fact Check economists and finance editors Josh Gordon and Christine Arampatz found that:

"Bushfire arson is not an insignificant problem. But in the context of the current bushfire crisis, there is simply no evidence that arson was overwhelmingly responsible, or even moderately responsible.

On the contrary, in Victoria, emergency services personnel have been at pains to point out that lightning strikes caused the big fires — in East Gippsland and the north-east.

Likewise, in NSW, emergency services personnel have pointed to dry lightning storms as the cause of most of the big fires".

[refer "Peter Dutton says 250 have been charged with arson. But the data tells a different story", ABC Online 18 Feb 20]

Another ABC investigation revealed that just 1% of the land massed burned in the 2019-2020 bushfires could be attributed to arsonists.

(refer <https://www.abc.net.au/news/2020-01-11/australias-fires-reveal-arson-not-a-major-cause/11855022>)

Creating red herrings such as attributing the unprecedented bush-fires to arsonists is straight out of the climate denialist's obfuscation playbook: "look over here . . . maybe this is the cause". I can only assume that a similar obfuscation is behind creating an inquiry into the bushfires and posing the inane question, as part of that inquiry, as to whether or not the frequency and intensity of the bushfires is due to climate change. This was the favourite **denialist ploy of the tobacco industry** in the 1950's, 60's and 70's as it continually raised the question, long answered by medical experts, as to whether smoking was a cause of lung cancer.

Because continually asking an already answered question amounts to denialist obfuscation on the part of the NSW Government, the matter of the cause of increased frequency and intensity of bushfires **should never have been in the Terms of Reference** of the Independent Bushfire Inquiry. The time has long past when this matter warranted further investigation/inquiry. The jury is in on this issue.

I encourage the leaders of the Inquiry Dave Owens and Mary O'Kane to resist being drawn into climate change denial with respect to this aspect of their Inquiry, and instead focus their time and resources on subject matter that is indeed worthy of inquiry. Namely the **preparation and planning** by agencies, government, other entities and the community for bushfires in NSW, and **responses** to bushfires in the form of efforts to protect life and property etc.

- 2 The **preparation and planning by agencies, government, other entities and the community for bushfires in NSW, including**
- **current laws, practices and strategies,**
 - **land use planning and management,**
 - **building standards** and their application and effect and
 - **coordination and collaboration by the NSW Government** with the Australian Government, other state and territory governments and local governments .

Accepting the truth of what has been stated above in Section 1 (i.e. not participating in covert denial of the impacts of climate change) crucially shapes and determines an evaluation of preparation and planning by agencies and governments for bushfires.

The pivotal role of climate change in driving the ferocity and frequency of bushfires means that the NSW government's land-use planning and management should be driven by concerted measures to combat climate change. That is to say, by government policy and programs that

- a. drive down GHG emissions such as carbon dioxide (e.g. burning less coal) and,
- b. increase GHG abatement by protecting land eco-systems, namely, soils and vegetation such as forests and grasslands (which sequester GHGs).

Bob Debus, former NSW government Attorney General, Minister for Environment and Minister for Emergency Services, underscores the importance of "a" above in a recent article:

*In science-based forums around the world and in the Paris Agreement on Climate Change itself it is accepted that up to 1/3rd of necessary greenhouse gas abatement can be achieved through the **protection and restoration of natural systems**. It is conventionally understood that all intact ecosystems, and especially forests, absorb immense amounts of carbon. Natural forests are far more carbon-dense than tree plantations, which can indeed be almost useless for the purpose.*

*. . . . The most important environmental action we can take is to **preserve existing forest and woodland** and the carbon they will absorb in ever greater amounts as they continue to grow.*

["It's no excuse to trash the planet", Bob Debus, John Menadue – Pearls & Irritations blog, 9 Apr 20]

Dr Clive McAlpine from the University of Queensland underscored the importance of preserving existing forest and woodland to combating climate change (and hence reducing bushfires) 11 years ago.

Dr McAlpine believes that, at least within Australia, land clearing could be of the same level of importance as [reducing] greenhouse gas emissions when it comes to climate change.

... “I think it’s a question of scale. Certainly, on a global scale, carbon dioxide [reduction] is the big thing, but when you come down to a regional scale, **land clearing can be just as important.**”

... The research also has implications for bushfire-prone areas in **Victoria**, where there have been calls to clear large areas of bushland after this year’s **Black Saturday bushfires**.

“The ‘bulldozer solution’ of clearing large tracts of bush to reduce the risk of bushfires will only compound the problem – by clearing the land, you get a hotter land surface, so bushfires will be more severe,” said Dr McAlpine.

“Rather, we need to **restore and actively manage native forests and woodlands** for the multiple ecosystem services they can provide.”

[“Linking land clearing to drought and climate change” article appearing in the CSIRO’s www.ecosmagazine.com, Aug-Sept 2009]

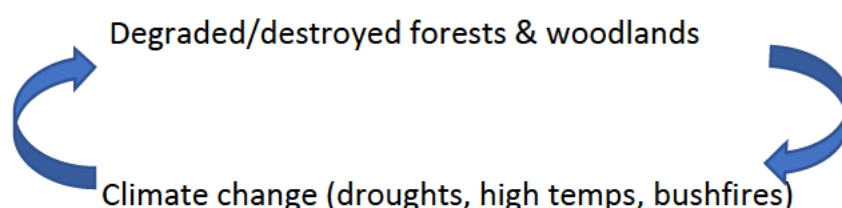
A special report by the IPCC (Intergovernmental Panel on Climate Change) last year (2019) has confirmed Clive McAlpine’s main point: the strong connection between land use and climate change (and, by deduction, add, bushfires). Quoting from this report:

Deforestation or forestation, wherever it occurs, triggers simultaneously warming and cooling of the surface and of the atmosphere via changes in its various characteristics (Pitman 2003; Strengers et al. 2010; Bonan 2008). Following deforestation, warming results from (i) the release of CO₂ and other GHGs in the atmosphere (biogeochemical impact) and subsequent increase in incoming infrared radiation at surface (greenhouse effect)

Deforestation and forestation also alter rainfall and winds (horizontal as well as vertical, as will be further discussed below).

[IPCC Special Report on Climate Change and Land, Chapt 2 “Land-climate interactions”, June 2019, p.176]

Further, I would amplify Clive McAlpine’s comment that “bushfires will become more severe”. The problem is **compounding over time** as the land clearing continues. This is because, the land clearing gives rise to hotter and dryer land surfaces and increased GHG emissions into the atmosphere. Extra GHG in the atmosphere creates the greenhouse effect – trapping of more heat, which in turn degrades forests and woody vegetation through lack of moisture (including more droughts) which also increases forests’ and vegetations’ vulnerability to fire. Thus, a **pernicious feedback loop** sets in between forest degradation and climate change-induced heatwaves and bushfires:



In keeping with this worsening theme, Prof Albert van Dijk of the Australian National University's Fenner School of Environment and Society, released the School's annual "Australia's Environment Summary Report 2019" last month (March 2020). The report's Summary Indicators begins with the overall comment:

*Extremely hot and dry weather in 2019 created the **worst drought and fire conditions in many decades**. Overall environmental condition was the poorest since at least 2000 and below-average in all states and territories.*

However, Albert van Dijk, told The Guardian it would be wrong to think of 2019 as a new low to which we can become accustomed.

"This is not the new normal – this is just getting worse and worse," he said, adding that 2019 had seen a "continuing descent into an ever more dismal future. You start to see ecosystems fall apart and then struggle to recover before the next major disturbance."

[‘Probably the worst year in a century’: the environmental toll of 2019, Graham Readfearn, The Guardian, 30 Mar 20].

Much to the dismay of many members of the UEG and, no doubt, most environmentally literate citizens of NSW, the NSW government policies and practices over the past decade to the present day, have failed to mitigate NSW's worsening drought, heatwave and bushfire situation. All indication are that NSW government land management policies and practices have contributed to the worsening situation by failing to protect and restore NSW's native forests and woodlands. In fact, since the introduction of the **Local Land Services Act** in NSW in August 2017, which weakened land clearing laws, land clearing has increased dramatically. This is evident through satellite-derived data of changes in woody vegetation (trees and forests) released by the NSW government.

A Guardian Australia report of last October (2019) reveals the sorry story in NSW:

*The loss of woody vegetation to agricultural clearing had hovered around **8,000 to 9,000 hectares a year** until 2014-15, but spiked as farmers anticipated a law change based on the Coalition's [2015] election promises. By 2017-18 it had **more than tripled to 27,100 hectares** – that's an area about 100 times the size of Sydney's central business district each year.*

["Stripped bare: Australia's hidden climate crisis – an epidemic of land clearing is sabotaging efforts to address climate change", Guardian Australia, 16 Oct 19]

Unsurprisingly the **NSW Auditor General** was scathing his/her evaluation of the Local Land Services Act describing its land clearing laws as "weak" and "not effectively regulated".

The NSW Nature Conservation Council reports that the NSW government's own **State of the Environment Report 2019** (produced by the NSW Environmental Protection Authority) includes a key finding that there was a 244% increase in approved land-clearing under the Local Land Services Act.

Hence, the NSW government itself, through its current land clearing laws and practices, has recklessly enacted policies that have exacerbated climate change and its concomitant more frequent and severe bushfires.

- 3 **Responses to bushfires, particularly measures to control the spread of the fires and to protect life, property and the environment, including:**
- immediate management, including the issuing of public warnings
 - resourcing, coordination and deployment
 - equipment and communication systems.

In the health and helping professions (e.g. general practice, counselling and psychotherapy, physiotherapy and so on) correct diagnosis is crucial because it determines treatment approaches that will be adopted with the patient/client. Poor diagnosis leads to inappropriate (or even damaging) treatments and to client goals and behaviours that go down wrong pathways, ending in poor patient/client outcomes.

Section 1 of this submission established the overwhelming evidence for the “diagnosis” that the cause of the high frequency and extraordinary intensity of bushfires in NSW is climate change.

Accordingly, in Section 2, given that bushfires occur in “the bush” i.e. have to do with management of land and the flammable woody vegetation growing on the land, I have argued that land management practices that mitigate against climate change are pivotal to successful bushfire management in the long-term. This is a key “treatment” that flows from the correct “diagnosis” of climate change as the primary cause of catastrophic bushfires.

The same “diagnosis-treatment” logic applies with respect to how humans respond to the many ferocious bushfires now upon us. Climate change has meant that we can no longer expect to respond to (“treat”) many bushfires with a “business as usual” approach. We have entered into a new era/context when it comes to bushfires. We have come some way to acknowledging this by adding a new category of fire assessment: “catastrophic”.

Amongst the broad responses to bushfires, taking into account our new climate-induced reality, I suggest the following should apply:

- a. Acknowledgement that fighting bushfires to protect life and limb, where the bushfires are uncontrollable, is futile. Hence, **normal fire-fighting practices and approaches** that have been used for hundreds of years need to be abandoned in the case of 'catastrophic' bushfire conditions. If this does not happen, fire fighters in bushfire brigades will face an unacceptable risk to their lives. I have to wonder how many fire fighters' deaths during our last 2019-20 summer fires were attributable to some degree at least, to a failure to recognise (denial?) the new fire context we are in.
- b. People living on the edge of bushland, or living in bush surrounded by trees, or living along ridge-lines or at the top of steep inclines in bushland, and other such vulnerable locations, need to be advised that **no fire-fighting services will be available to them** to save them and their property should they elect to stay and defend their property. The public warnings to people to leave such areas in last summer's fires were commendable. Perhaps, the warnings could be enhanced by early notifications, coming into bushfire seasons, that such residents have no claim whatsoever on bushfire-fighting services in the event of catastrophic fire conditions.
- c. In any evaluation of fire-fighting approaches post bush-fires, under no circumstance are personnel within the NSW Rural Fire Service (**RFS**) and its brigades **to be scapegoated** for loss of life and property burnt in catastrophic fires. This is a corollary of "b" above – it calls for absolute clarity as to where responsibility lies for keeping people safe in catastrophic fire conditions. It is unjust, in these catastrophic conditions to assign responsibility for the protection of life and limb to fire fighters, when it is impossible for them to fulfil such a responsibility.

At a more immediate, "on-the-ground" level, I offer the following feedback to the Inquiry informed by some UEG members' personal experiences of the bushfires on the NSW south coast, and their personal involvement in responses by Uniting Church agencies as they worked alongside other agencies, the RFS, and government emergency response teams.

Measures to control the spread of fires

Anecdotal evidence suggests that areas that had hazard reduction carried out using Indigenous practices survived much better than areas burnt using European methods. It seems that urgent and serious research into the effectiveness of Indigenous burning methods should be commenced.

Immediate management, including the issuing of public warnings

It is apparent that the method of issuing warnings by text message has its limitations and efforts should be made to improve the efficacy of this system.

Given the uncontrollable nature of catastrophic fire conditions, additional warning systems, set up *well in advance of the fire season*, including direct communication with residents living close to bushland should also be investigated. The work by RMIT researchers documented in the journal article “Self-evacuation archetypes in Australian bushfire” may be useful here (refer <https://www.bnhcrc.com.au/publications/biblio/bnh-5456>). Attitudes of some Australian residents living close to bushland, such as the Threat Denier (who deny a threat exists . . . “those fires are a long way off”) and the Responsibility Denier (who do not believe they are responsible for themselves . . . “the RFS will protect us”) need to be articulated, labelled as belonging to a by-gone era, and the foolhardiness of the attitudes exposed.

The service provided by the ABC in issuing warnings was highly appreciated in many areas. However, the ABC relied heavily on information from the "Fires Near Me" App and the RFS web site, and both these sources were slow to update, and the App was often inaccurate. Resources need to be deployed to improve both these services.

It should be noted that the unprecedented speed with which many of the recent fires moved, gave very little time for warnings to be issued in some areas e.g. the Conjola Park locality.

Resourcing, coordination and deployment

The unprecedented number of concurrent bushfires meant that the resources of the RFS and Fire and Emergency Services were overwhelmed. The RFS has a very large number of volunteer members, many of whom are in the post retirement age bracket.

The RFS provided a magnificent service through the recent summer, with many members (both paid and volunteer) working for excessive hours and days without adequate rest. This may have contributed to poor decision making in some instances, (both at the local and zone levels) including decisions about deployment of resources. It is apparent that more fire-fighting units were needed last summer, but even if they had been available, there wouldn't have been the volunteers necessary to operate them. The RFS needs to boost its recruiting effort and target a younger age group of members.

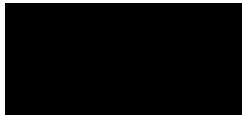
Additionally, the urban NSW Rural Fires Services (F&RNSW) service needs to be expanded in numbers of trained members and fire-fighting units so as to be a more effective component of the bush fire-fighting capability.

Equipment and communication systems.

In some instances during the recent summer, F&RNSW units were deployed in bushland situations. These units are not fully equipped for this kind of fire-fighting and as a result, some units were destroyed by fire and tragically, some fire fighters lost their lives. F&RNSW units need to be upgraded with facilities such as spray curtains so that they are safer to use in bush fire-fighting situations.

Evacuation Centres

More planning and strategic thinking needs to be applied to the location of evacuation centres. In some instances during the last summer, evacuation centres were set up in inappropriate locations and subsequently had to be relocated.



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