

**Submission Number: NND.001.00209**

**Submission Of: James (Jim) Robert Simpson**

### Your Details

Email address:

Phone:

Preferred means of contact: Email

What is your submission based on? I am making this submission based on my professional knowledge, qualifications or experience or on behalf of a group or organisation

What is your area of professional expertise?

If you are lodging your submission on behalf of a group or organisation, what is the name of the group or organisation? Climate Realists of Five Dock, NSW Australia

### Your Submission

In your experience, what areas of the bushfire emergency response worked well?

Tragic as are all bushfires, they are by no means unusual. I thought all emergency services, together with the Australian Navy who were called upon on this occasion to evacuate large numbers of residents & festive season, holiday makers from the NSW south coast & Victorian East Gippsland area were an excellent example of Australian emergency resources working together in difficult circumstances to secure the safety of their fellow Australians. Something we ought all be proud of.

In your experience, what areas of the bushfire emergency response didn't work well?

No comment,

In your experience, what needs to change to improve arrangements for preparation, mitigation, response and recovery coordination for national natural disaster arrangements in Australia?

Whilst the Media Release referring to the Terms of Reference makes mention that "The inquiry acknowledges climate change," however, there is no clear definition as to what actually constitutes 'climate change'?

Climate always changes, from one day to the next. As it does from one month, or year to the next. Climate is NEVER stable & never will be. Thus to better understand what is meant by that statement, warrants IMHO a clearer definition.

Separately, for those who elect to live and/or work in the immediate vicinity of extensive bushland, they need to be free from regulatory constraints to more properly safeguard/protect their properties by land clearing & back burning to provide a safety zone (barrier) from the nearby bushland that will inevitably burn yet again.

Is there anything else you would like to tell the Royal Commission?

As reflected in the accompanying PDF Attachment that includes CO2 levels at the time of past major Australian Bushfires in keeping with progressive, miniscule increases (2-3 ppm annually) since the last Little Ice Age ended & shows little evidence of significant variation since.

Bushfires are by no means uncommon in Australia & under the right conditions, will doubtless happen again. We just need to be better prepared to meet the challenge when they reoccur.

Do you agree to your submission being published? Yes I agree to my submission being published in my name

Supporting material provided:

Executive Summary - Past major Aussie Bushfires.pdf

## Aussie Bushfires Executive Summary

Drought & bush fires go hand in glove with one another. They are by no means uncommon in the Australian landscape. This has been so for millions of years & will remain so into the distant future.

The aborigines learned long ago how best to use fire as a tool & a means to manage the bush for their survival.

Many Australian plants & trees evolved over millennia such that they actually require a bushfire to enable their seeds to burst through in preparation for the next drenching cycle that inevitably follows major bush fires.

In the absence of empirical evidence proving otherwise, the claims that CO<sub>2</sub> in our atmosphere is the root cause of 'global warming' (*now morphed into 'climate change'*) has yet to be proven. CO<sub>2</sub> has far more benefits to forests than dangers, since it causes vegetation to grow bigger, more vigorously, thicker & makes forests more resistant to drought.

All of which is excellent for the environment, and also for the fauna that relies upon a healthy forest to thrive. Which is fine, provided nobody wishes to live in the middle of the Australian bush, because it makes for them, a markedly more dangerous place to live.

A little research in chronological order below, immediately prior to European settlement of Australia (in 1788), reveals the following major bush fires throughout Australia (*by no means complete, includes relative & beneficial levels of CO<sub>2</sub>*).

-----

**1770** – (CO<sub>2</sub> Levels 279ppm) [Smoky Cape](#), so named by [Captain Cook](#) when he sailed past on 13 May 1770, writing of "*a point or headland, on which were fires that Caused a great Quantity of smook, which occasioned my giving it the name of Smooky Cape*".<sup>[2]</sup> In those days, *Smook* was the usual spelling of *smoke*. The spelling for the cape now follows the modern spelling. The hills there were an important meeting place for aboriginal people from various surrounding areas. It's possible that Cook saw fires from such a gathering<sup>[3]</sup>, or were simply bushfires as were by no means an uncommon occurrence.

Built in 1891, a lighthouse (*now heritage listed*) was proposed for the cape in 1886. Designed by Colonial architect, James Barnet. It was completed in 1891. Known as the [Smoky Cape Lighthouse](#) it was built from concrete & local granite [aggregate](#) in an octagonal shape at the highest point on the cape.

Smoky Cape, near Kempsey, NSW is a fantastic spot for whale watching, birdwatching & picnicking. Visitors can stay overnight at the lighthouse keepers' cottage. Don't miss the views at nearby [Captain Cook's lookout](#).

**6th Feb 1851**– (CO<sub>2</sub> Levels 285ppm levels) Barely 63 years after European settlement, Australia's first recorded & most extensive Bushfires at that time were known as the '[Black Thursday' Bushfires](#), where, on the 6th Feb 1851 when the temperature hit an incredible 117°F (47°C) at 11am in Melbourne. A quarter of Victoria, 5 million hectares in total, were burnt out. 12 lives were lost, one million sheep & thousands of cattle were lost.

Thomas McCombie recorded the scene in Melbourne on that fateful day: *"For two months preceding, the country had been under the desiccating winds, which appeared to be highly charged with electricity. The herbage was parched up, and everything that the eye could rest upon was dry, dusty, and disagreeable.*

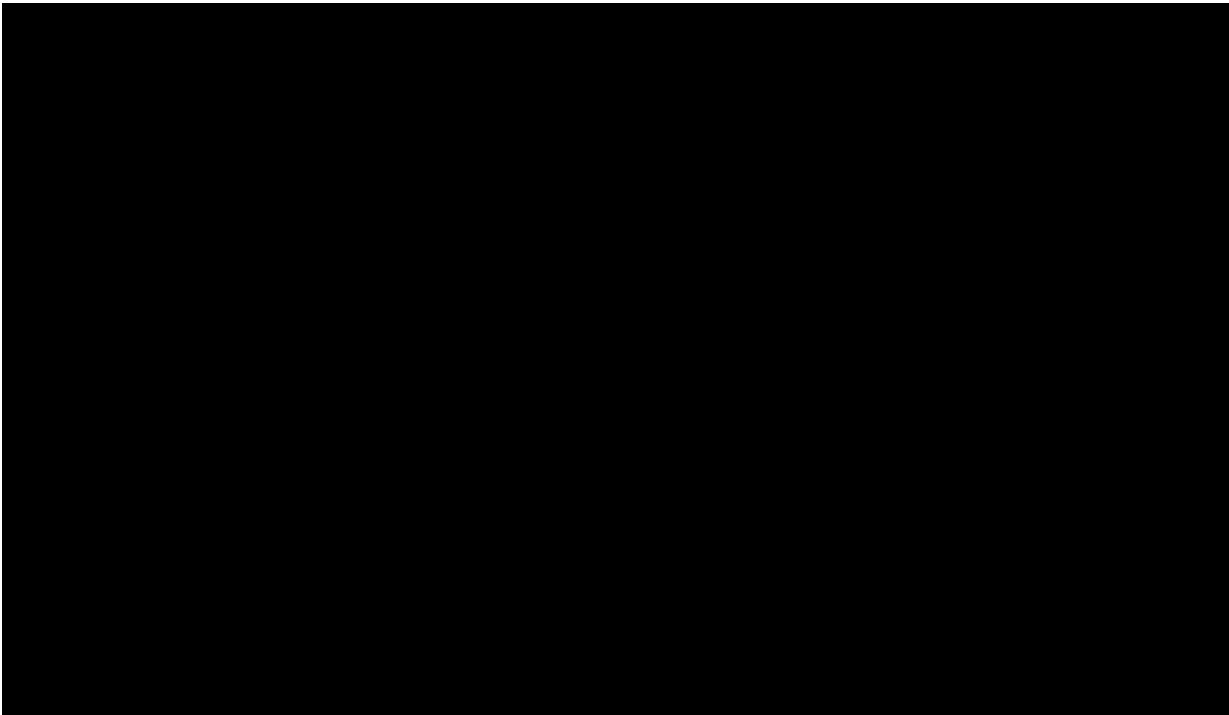
*The 6th of February dawned much as very hot days generally do; the roseate tints of the horizon were rather brighter and more lurid than usual - the glassed glare over the sky more vividly perceptible. The north wind set strongly in early in the morning, and by eleven o'clock in the fore-noon it had increased to almost a hurricane.*

*'In the streets of Melbourne the heat was intense, and the atmosphere densely oppressive. Clouds of smoke and dust hung over the city. The fires which blazed in the surrounding country no doubt increased the suffocating sensation which was generally experienced.*

*It was hardly possible to go abroad; the streets were nearly deserted; and a few of the persons who were compelled to make the effort to traverse them stalked along with their faces closely enveloped in cloth; no man, however bold, appeared able to face the furiously-suffocating blast, which seemed to wither up their physical energies. By noon, the inhabitants, generally, had shut themselves up in their various dwellings, too happy to have got out of the reach of the overpowering blast.*

*They continued to sit until night listening in terror to the howl of this real sirocco. Had any portion of Melbourne ignited the whole of the city must have been reduced to ashes, as no effort of the inhabitants could have prevented the conflagration from extending and becoming general. The citizens were providentially preserved from so terrible a disaster."*

A picture '*tells a thousand words*'. This oil painting (below) of extensive bushfires at Ballarat, Victoria in 1859, was the only means to record such sights prior to the arrival of early camera's & telecommunications facilities that nowadays, we take for granted.



**1895-1903** The [Federation Drought](#) (CO<sub>2</sub> levels 295ppm) - The worst since European settlement. [In January 1896 an extreme 24-day heatwave saw temperatures hit 48C.](#)

It saw people fleeing cities & killed 437, including many children.

The maximum temperature was above 38.9 degrees for over three weeks. Hospitals were overcrowded & people were dropping dead in the streets.

If measured by the enormous stock losses, The Federation Drought ended squatter-dominated pastoralism in New South Wales & Queensland, as bank foreclosures & the resumption of leases led to the partition of large stations for more intensive settlement & agricultural use.

**In 1926**, (CO<sub>2</sub> levels 305ppm) [Gippsland fires & Black Sunday 1<sup>st</sup> February – 10<sup>th</sup> March 1926](#). During the Gippsland fires of 1926, the climax of the bushfires was on Sunday the 14th of March, referred to as Black Sunday.

Black Sunday itself claimed 31 victims in Warburton alone. By the end of the Gippsland fires, a total of 60 people were confirmed dead.

**In 1939** (CO<sub>2</sub> levels 311ppm) In Victoria on the 13th Jan 1939 (*known as 'Black Friday'*) with temperatures above 110°F (45°C) across Victoria & the state in drought, bushfires burned 1.5 to 2 million hectares, consumed 3,700 buildings across the state.

71 lives were lost & five towns **completely destroyed** - never to be rebuilt.

The **Royal Commission** into "Black Friday" concluded that;

*"There had been no fires to equal these in destructiveness or intensity in the history of settlement in this State, **except perhaps the fires of 1851**, which, too, came at summer **culmination of a long drought**".*

*"At midday, in many places, **it was dark as night**. Men carrying hurricane lamps, worked to make safe their families and belongings.*

*Travellers on the highways **were trapped by fires or blazing fallen trees & perished**. Throughout the land there was **daytime darkness**'.*

*"The speed of the fires was appalling. They leaped from mountain peak to mountain peak, or far out into the lower country, **lighting the forests 6 or 7 miles in advance of the main fires**. Blown by a wind of **great force**, they roared as they travelled.*

*Balls of crackling fire sped at a great pace in advance of the fires, consuming with a roaring, explosive noise, all that they touched."*

*"On that day **it appeared that the whole State of Victoria was alight**".*



Judge Stretton wrote in his final report: *"it will appear that no one cause may properly be said to have been the sole cause', however, the fires were 'lit by the hand of man' "*.

**In 1944** (CO<sub>2</sub> levels 310ppm) fires in the [Western Districts of Victoria destroyed more than 500 houses and caused huge losses in the pastoral industry](#). Four or more grass fires near Hamilton, Dunkeld, Skipton & Lake Bolac burned about 440,000 hectares in eight hours.

Between 15 & 20 people died. The total area covered by grass fires that season was about one million hectares

**In 1962**, (CO<sub>2</sub> levels 318ppm) Fires in the [Dandenong Ranges](#) & on the outskirts of Melbourne killed 32 & destroyed more than 450 houses.

**In 1965**, (CO<sub>2</sub> levels 320ppm) fires the in [Gippsland](#) burned for 17 days, covering 300,000 hectares of forest & 15,000 hectares of grassland. More than 60 buildings & 4,000 stock were destroyed.

**In 1967**, (CO<sub>2</sub> levels 322ppm) On February 7, 1967 - Dozens of fires raged across south-east [Tasmania developed into a firestorm](#) . Within a few hours 64 people were dead, 900 injured, 7,000 homeless & tens of thousands of hectares burnt.

The spring of 1966 in Tasmania had brought with it heavy rainfall & *"prolific vegetative growth"* followed by *"abnormally dry conditions"*, according to a report from the committee tasked with investigating the fire & its causes.

The summer of 1966-67 was the driest since 1885. *"By early February grasses & other vegetation had dried out & fuel in-flammability reached a critical level, accentuated by the accumulation of fuel over a period of years in timbered and semi-timbered country,"* the report's authors wrote.

On Tuesday, February 7, the combination of high temperatures, low humidity & extremely strong north-westerly winds *"made disaster inevitable"*, they concluded.

Why was Black Tuesday so devastating? Gerald Crawford from the Tasmania Fire Service (TFS) said the entire south-east of the state was effectively ablaze.

*"You can virtually say there was fire in most places from Southport [up the east coast] to Swansea/Bicheno, inland to Ouse, Hamilton, Bothwell, Jericho, and they were all heading in a south-easterly direction with the wind that was blowing,"* he said.

Some of the blazes coalesced into massive fire fronts.

What was the cost?

- 64 people lost their lives
- 900 people were injured
- 7,000 people were homeless
- 2,640 square kilometres of land burnt
- \$40 million damage in 1967 values

**In 1969**, (CO<sub>2</sub> levels 325ppm) Two hundred & eighty fires broke out on the 8th Jan, 1969. Twelve reached major proportions & burned 250,000 hectares.

Twenty-three people died, including 17 motorists at Lara, trapped on the then highway between [Geelong and Melbourne](#).

The fires also destroyed 230 houses, 21 other buildings & more than 12,000 stock.

**In 1974-1975** (CO<sub>2</sub> levels 330ppm) During the summer between 1974 & 1975, [Australia experienced its worst bushfire season in 30 years](#). Approximately 15 per cent of Australia's physical land mass sustained extensive fire damage. This equates to roughly around 117 million ha.

New South Wales was badly affected with widespread damage to infrastructure, including communications, roads, railways & property fencing. There was also significant damage to the agriculture and horticulture industries, as farmers lost crops & livestock to the fires.

The areas affected included Cobar Shire, Balranald, Glendale & regions around the Lower Hunter. Three people lost their lives in New South Wales. The overall damage cost was estimated at approximately \$A5 million.

**In 1977**, (CO<sub>2</sub> levels 334ppm) widespread fires occurred across the [Western District of Victoria extending over the border to SA](#). The fires killed four people & burned about 103,000 hectares. More than 198,500 stock, 116 houses & 340 other buildings were also lost.

**In 1983**, (CO<sub>2</sub> Levels 341ppm) Known in South Australia as **Ash Wednesday II**,<sup>[3]</sup> were a series of [bushfires](#) that occurred in south-eastern Australia on 16 February 1983, which was [Ash Wednesday](#) in the [Christian](#) calendar.

Within twelve hours, more than 180 [fires](#) fanned by winds of up to 110km/h (68mph) caused widespread destruction across the states of [Victoria](#) & South Australia.<sup>[4]</sup>

Years of severe [drought](#) & extreme weather combined to create one of Australia's worst fire days in a century.<sup>[5]</sup> The fires became the deadliest [bushfire](#) in Australian history until the [Black Saturday bushfires](#) in 2009.

In Victoria 47 people died. There were 28 deaths in South Australia. This included 14 [CFA](#) & 3 [CFS](#) volunteer [fire-fighters](#) who died across both states that day.<sup>[6][7]</sup>

Many fatalities were as a result of [firestorm](#) conditions caused by a sudden & violent wind change in the evening which rapidly changed the direction & size of the fire front.<sup>[8][9]</sup>

The speed & ferocity of the flames, aided by abundant fuels & a landscape immersed in smoke, made fire suppression & containment impossible.<sup>[10]</sup>

In many cases, residents fended for themselves as fires broke communications, cut off escape routes & severed electricity & water supplies.<sup>[11]</sup>

Up to 8,000 people were evacuated in Victoria at the height of the crisis & a state of disaster was declared for the first time in South Australia's history.<sup>[6][8]</sup>

More than 35 townhouses were burned in a small town in Victoria.

Ash Wednesday was one of Australia's costliest natural disasters.<sup>[12]</sup> More than 3,700 buildings were destroyed or damaged & 2,545 individuals & families lost their homes.

Livestock losses were very high, with more than 340,000 sheep, 18,000 cattle & numerous native animals either dead or later destroyed.<sup>[13]</sup>

A total of 4,540 insurance claims were paid totalling \$A176 million with a total estimated cost of well over \$400 million (1983 values) for both states or \$1.3 billion in adjusted terms (2007).<sup>[1][14]</sup>

The emergency saw the largest number of volunteers called to duty from across Australia at the same time—an estimated 130,000 firefighters, defence force personnel, relief workers and support crews.<sup>[15]</sup>

**Between 1996-2006** (CO<sub>2</sub> levels 363ppm) The **2000s drought** in Australia, also known as the [Millennium drought](#) is said by some to be the worst drought recorded since European settlement.

This **ten year drought** affected most of southern Australia, including its largest cities & largest agricultural region (the [Murray–Darling basin](#)).

It commenced with low rainfall conditions in late 1996 through 1997 & worsened through particularly dry years in 2001 & 2002. By 2003 it was recognised as the worst drought on record.

The year 2006 was the driest on record for many parts of the country & conditions remained hot & dry through to early 2010.

**In 2003**, (CO<sub>2</sub> levels 376ppm) [Bushfires in & around Canberra](#) caused severe damage (in the order of \$A350m) to the suburbs & outer areas of [Canberra](#), the capital city of [Australia](#), during 18–22 January 2003.

Almost 70% of the [Australian Capital Territory's](#) (ACT) pastures, pine plantations, and nature parks were severely damaged,<sup>[1]</sup> & most of the world famous [Mount Stromlo Observatory](#) was destroyed.

After burning for a week around the edges of the ACT, the [fires](#) entered the suburbs of Canberra on 18 January 2003. Over the next ten hours, four people died, over 490 were injured & 470 homes were destroyed, or severely damaged, requiring a significant relief & reconstruction effort.

**In 2009 (Jan-Feb)**, (CO<sub>2</sub> levels 386ppm) The **Black Saturday bushfires**<sup>[9]</sup> were a series of [bushfires](#) that ignited or were burning across the [Australian state](#) of [Victoria](#) on &

around Saturday, 7th February 2009. They were among Australia's all-time worst bushfire disasters.

The fires occurred during extreme bushfire weather conditions resulting in Australia's highest ever loss of life from a bushfire;<sup>[10]</sup> there were 173 direct identified fatalities,<sup>[11][6][7]</sup>

That figure was later increased to 180 fatalities, after several people had succumbed to their injuries.<sup>[12]</sup> Many were left homeless as a result.

As many as 400 individual fires were recorded on 7 February.

Following the events of Jan/Feb 2009 & its aftermath, that day has become widely referred to in Australia as Black Saturday.

A Royal Commission, headed by Justice [Bernard Teague](#), followed.

### Overall statistics

It was estimated that the amount of energy released during the firestorm in the Kinglake-Marysville area was equivalent to the amount of energy that would be released by 1,500 [Hiroshima-sized atomic bombs](#).<sup>[163][164]</sup>

Beyond the casualty list detailed above, physical damage caused by the bushfires included:

- 450,000 ha (1,100,000 acres) burnt
- 7,562 people displaced
- Over 3,500 structures destroyed, including:
  - 2,029+ houses
  - 59 commercial properties (shops, pubs, service stations, golf clubs, etc.)
  - 12 community buildings (including 2 police stations, 3 schools, 3 churches, 1 fire station)
  - 399 machinery sheds, 363 hay sheds, 19 dairies, 26 woolsheds, 729 other farm buildings
- Agricultural & horticultural losses:
  - Over 11,800 head of livestock,<sup>[165]</sup> consisting of 2,150 sheep, 1,207 cattle & an unknown number of horses, goats, alpacas, poultry & pigs<sup>[166]</sup>
  - 25,600 tonnes (25,200 long tons; 28,200 short tons) of stored fodder & grain
  - 32,000 tonnes (31,000 long tons; 35,000 short tons) of hay & silage<sup>[165]</sup>
  - 190 ha (470 acres) of standing crops
  - 62,000 ha (150,000 acres) of pasture<sup>[165]</sup>
  - 735 ha (1,820 acres) of fruit trees, olives & vines
  - Over 10,000 kilometres (6,200 mi) of boundary & internal fencing destroyed or damaged<sup>[167]</sup>
  - 7,000 ha (17,000 acres) of plantation timber
- 98,932 ha (244,470 acres) of parks damaged, 90 per cent of which was national park.<sup>[165]</sup> It was claimed that 950 local parks, 70 national parks & reserves & over 600 cultural sites & historic places were impacted or destroyed<sup>[167]</sup>
- 3,921 ha (9,690 acres) of private bushland
- Over 55 businesses destroyed<sup>[168]</sup>
- Electricity supply was disrupted to 60,000 residents<sup>[168]</sup>
- Several mobile phone base stations & telephone exchanges damaged or destroyed<sup>[169]</sup>



### **Economic impact**

The Bushfires Royal Commission gave a "*conservative*" estimate of the total cost of the Black Saturday bushfires of A\$4.4 billion.

This figure included a value of \$645 million placed on the 180 lives lost using an accepted method the government uses to value lives.

However this did not include any assessment of the cost of the injuries received.<sup>[165]</sup> nor of the agricultural losses estimated by the Victorian Dept of Primary Industries shortly after the fires as 11,800 head of livestock, 62,000 hectares (150,000 acres) of grazing [pasture](#), and 32,000 tonnes (31,000 long tons; 35,000 short tons) of [hay](#) and [silage](#).<sup>[165]</sup>

### **International context**

The Black Saturday bushfires in 2009 were the [ninth deadliest bushfire/wildfire event](#) in recorded history.

**Between 2019-2020** (Sept 2019 to early February 2020, CO<sub>2</sub> levels 415ppm) Commonly referred to as the ***Black Summer Bushfires***, raged throughout many parts of Australia following a three-year drought impacting Queensland, New South Wales, Victoria & beyond to South Australia, Kangaroo Island & also along the Eyre Highway across the Nullarbor Plains, Western Australia.

Severe water rationing was implemented as both metropolitan & regional dams throughout Queensland & New South Wales progressively dried up. Many regional towns had to be resupplied with fresh water via road tankers & bottled water.

During December 2019 & January 2020, driven by typical hot summer west, north westerly winds, bushfires (*many reportedly lit by arsonists*) broke containment lines & raged uncontrollably, destroying both private properties, power & terrestrial telecommunications network facilities.

Escape by road became impossible for many coastal communities along the New South Wales south coast & Victorian East Gippsland region as huge bushfires cut off all access to or from by road.

A State of Emergency was declared in both Victoria & New South Wales.

Residents & holiday makers had few options. They were forced to abandon everything as bushfires advanced. Many were ultimately forced to seek shelter from the inferno on coastal beaches & watch as the fires raged throughout their local coastal communities.

The world watched as live TV coverage of the drama was broadcast to the world.

The 2019-2020 Black Summer Bushfire emergency resulted Australia's largest ever peace time exodus, akin to the WW2 evacuations from Dunkirk.

The Australian navy were called upon to rescue some 100,000 residents & Festive Season holiday makers trapped by the advancing inferno from many coastal towns along the New South Wales south coast & Victorian East Gippsland region.

Relief final arrived around the 8<sup>th</sup>-9<sup>th</sup> February 2020 with drenching, soaking rains that quenched the flames & within days, as so often occurs Down Under, drought & bushfires

were transformed virtually overnight thanks to the forces of nature. From one extreme to another virtually overnight.

Extensive heavy rainfall then resulted in localised flooding in many parts of Queensland, NSW & Victoria.

Dams, empty for months, refilled within days. Creeks & rivers commenced flowing again & green shoots appeared virtually overnight with pastures recovering in response to the welcome deluge.

Past water restrictions were lifted on major metropolitan cities like Sydney as water levels lifted (*Warragamba Dam & others*) by more than 50% of their former drought affected levels.

Australia's 2019-2020 Black Summer Bushfires retired into history.

Whilst full details of the impacts & true costs will not become known until the Royal Commission makes public its findings in late August 2020, preliminary reports indicate; 33 lives were lost; some 17m hectares were burned; 3,780 homes were destroyed; & some one billion animals were lost to the inferno.

1<sup>st</sup> April 2020

██████████

Convener

**Climate Realists of Five Dock** (A [Saltbush Shed Meeting Place](#) & [Clintel Partner](#))



*"De Omnibus Dubitandum" – Question Everything!*

Join us for dinner at [Barnwell Park Golf Club](#) most Thursdays from 6:30pm  
551 Lyons Road West, Five Dock NSW 2046, Sydney, Australia

Visit our [YouTube Channel](#)

Mobile: ██████████

**THERE IS NO CLIMATE EMERGENCY**

**Sources:** *From the archives of Australian history (books, art, reports, Royal Commissions etc). Gathered here as a consolidated, Executive Summary for those with an interest in one of Australia's most significant, albeit dangerous, natural events, sometimes 'assisted' by the unwelcome hand of mankind.*