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- The Bureau of Meteorology and CSIRO reported in their 2018 State of the Climate report that there has been an increase in extreme fire weather, and a longer fire season, across large parts of Australia.

### **ATTACHMENT B**

### **Background**

## **Bushfires and climate change**

- The 2018 State of the Climate report by BOM and CSIRO found:
  - There has been an increase in extreme fire weather, and a longer fire season, across large parts of Australia.
  - The duration, frequency and intensity of heatwaves have increased across large parts of Australia since 1950.
  - Rainfall has decreased in south-west Australia since the 1970s and in the south-east since the 1990s.
  - Regional climate change projections by BOM and CSIRO found that southern and eastern Australia are projected to experience harsher fire weather.
  - Projected warming and drying in southern and eastern Australia is likely to lead to fuel loads that are drier and more ready-to-burn, with increases in average forest fire danger index and a greater number of days with severe fire danger.



# Australia Unprepared for Worsening Extreme Weather

We, the undersigned, who are former senior Australian fire and emergency service leaders, have observed how Australia is experiencing increasingly catastrophic extreme weather events that are putting lives, properties and livelihoods at greater risk and overwhelming our emergency services.

Climate change, driven mainly by the burning of coal, oil and gas, is worsening these extreme weather events, including hot days, heatwaves, heavy rainfall, coastal flooding and catastrophic bushfire weather. Australia has just experienced a summer of record-breaking heat, prolonged heatwaves, and devastating fires and floods - there should be no doubt in anyone's mind: climate change is dangerous and it is affecting all of us now.

### Facts You Need To Know

- > Bushfire seasons are lasting longer and longer.
- > The number of days of Very High to Catastrophic bushfire danger each year are increasing across much of Australia, and are projected to get even worse.
- > Opportunities to carry out hazard reduction burns are decreasing because warmer, drier winters mean prescribed fires can often be too hard to control so fuel loads will increase.
- > Higher temperatures mean that forests and grasslands are drier, ignite more easily and burn more readily, meaning fires are harder to control.
- > 'Dry' lightning storms are increasing in frequency, sparking many remote bushfires that are difficult to reach and
- > Fire seasons across Australia and in the northern hemisphere used to be staggered allowing exchange of vital equipment such as aerial water bombers, trucks and firefighters. The increasing overlap of fire seasons between states and territories and with the USA and Canada will limit our ability to help each other during major emergencies.
- > A warmer atmosphere holds more moisture, increasing the risk of heavier downpours and flooding events like that which recently affected Townsville.
- > Current Federal Government climate policy has resulted in greenhouse gas pollution increasing over the last four years, putting Australian lives at risk. Communities, emergency services and health services across Australia need to be adequately resourced to cope with increasing natural disaster risk.

Tackling climate change effectively requires rapidly and deeply reducing greenhouse gas pollution here in Australia and around the world. We have the solutions at our disposal, we just need the political will to get on with the job.

# "Beirose Hazard Reduction" by Flickr user NSW RFS Media Services licensed under CC BY-NCND 2.0.

### We call on the Prime Minister to:

> Meet with a delegation of former emergency services leaders who will outline, unconstrained by their former employers, how climate change risks are rapidly escalating.

- > Commit to a parliamentary inquiry into whether Australian emergency services are adequately resourced and equipped to cope with increasing natural disaster risks due to climate change.
- Recognise that strategic national firefighting assets like large firefighting aircraft are prohibitively expensive for states and territories, are currently leased from the northern hemisphere, and that increased overlap of fire seasons is restricting access to this equipment during times of need. A cost-benefit analysis of current arrangements and their effectiveness, and how Australia's strategic aerial firefighting needs can be best met and funded, needs to be initiated in consultation with the National Aerial Firefighting Centre.
- > Ensure continued funding for stakeholder-driven research into how we can respond to, mitigate, and increase resilience to bushfires, natural hazards and escalating climate change risks.

### We call on all State and Territory Governments to:

- > Provide increased resources to enable forestry, national parks, urban and rural fire services to increase environmentally sensitive fuel reduction and fire mitigation programs.
- > Focus on climate change adaptation and mitigation programs while taking strong action to significantly reduce state / territory emissions.
- > Cease cutting the budgets and resources of forestry, national parks, urban and rural fire services, both directly and through instruments such as "efficiency dividends", so that the services can increase operational capacity to deal with our "new normal" of catastrophic weather risks.

### This joint statement is signed by:

### Mary Barry

Former CEO, Victorian State Emergency Service

### Neil Bibby AFSM

Former Chief Executive Officer, Country Fire Authority Victoria, and former Deputy Chief Officer, Melbourne Metropolitan Fire Brigade

### Tony Blanks AFSM

Former Fire Unit Manager, Tasmania National Parks, and former Fire Manager, Forestry Tasmania

### Mike Brown AM, AFSM

Former Chief Fire Officer, Tasmania Fire Service

### Naomi Brown

Former CEO, Australasian Fire & Emergency Service Authorities Council

### Bob Conrov

Former Fire Manager, NSW National Parks and Wildlife Service

### Major General Peter Dunn AO (Ret)

Former Commissioner,
ACT Emergency Services Authority

### John Gledhill AFSM

Former Chief Fire Officer, Tasmania Fire Service

### Dr Jeff Godfredson AFSM

Former Chief Fire Officer, Melbourne Metropolitan Fire Brigade

### Dr Wayne Gregson APM

Former Commissioner, WA Dept of Fire & Emergency Services

### Craig Hynes AFSM

Former Chief Operations Officer, WA Fire and Emergency Services Authority

### Lee Johnson AFSM

Former Commissioner Qld Fire & Emergency Services. Director: Bushfire & Natural Hazards Cooperative Research Centre

### Murray Kear AFSM

Former Commissioner, NSW State Emergency Service

### Phil Koperberg AO, AFSM, BEM

Former NSW Minister for the Environment, former Commissioner NSW Rural Fire Service

### Craig Lapsley PSM

Former Emergency Management Commissioner and Fire Services Commissioner, Victoria, former Deputy Chief Officer, Country Fire Authority Victoria

### Andrew Lawson AFSM

Former Deputy Chief Officer, SA Country Fire Service

### Grant Lupton AFSM

Former Chief Fire Officer, South Australian Metropolitan Fire Service

### Greg Mullins AO, AFSM

Former Commissioner Fire & Rescue NSW. Climate Councillor

### Frank Pagano AFSM, ESM

Former Executive Director, Emergency Management Queensland, and former Deputy Commissioner, Queensland Fire & Rescue Service

### Steve Rothwell AFSM

Former Director and Chief Fire Officer, NT Fire & Emergency Services

### Stephen Sutton

Former Chief Fire Control Officer, Bushfires NT

### Ken Thompson AFSM

Former Deputy Commissioner, Fire & Rescue NSW

### Ewan Waller AFSM

Former Chief Fire Officer, Forest Fire Management, Victoria



s22

From: \$22

Sent: Friday, 13 September 2019 2:43 PM

**To:** \$11C \$22

Cc: \$22

>

**Subject:** RE: Meeting with Minister Taylor [DLM=For-Official-Use-Only]

Dear s11C

Thank you for your email.

As you are aware, Minister Taylor would be happy to meet in October to discuss your concerns.

I would also suggest that you send your request to Minister David Littleproud's office. He is the Minister responsible for Natural Disaster and Emergency Management. (cc'd into this email)

Please call if you would like to discuss further.

Kind regards,

s22

### OFFICE OF THE HON ANGUS TAYLOR MP

MEMBER FOR HUME | MINISTER FOR ENERGY AND EMISSIONS REDUCTION SUITE M1. 27 PARLIAMENT HOUSE, CANBERRA ACT 2600

s22

From: s11C s22

Sent: Tuesday, 10 September 2019 4:37 PM

To: Invitations. Taylor \$22

Subject: Re: FW: Meeting with Minister Taylor [DLM=For-Official-Use-Only]

Dear s22

On behalf of Emergency Leaders for Climate Action, thank you for the offer to meet with Minister Taylor on 2 October.

It is unfortunate that the PM has declined to meet with us and that it has taken several months to receive this invitation from Minister Taylor. Sadly, over this period, catastrophic conditions that we predicted have manifested.

Considering the gravity of the situation, a national response from the highest levels of the Australian Government is required. As former emergency services leaders with decades of frontline experience, we

respectfully request an urgent meeting, in Canberra if this is more convenient, with the Prime Minister, yourself, the Natural Disaster and Emergency Management Minister, the Finance Minister, and any associated ministers who you believe should also be involved.

Given the significant danger faced by our emergency services and communities and the need for "step change" in Australia's approach to escalating extreme weather-driven events, I look forward to an urgent acknowledgement and agreement to meet as outlined above.

Yours sincerely,

s11C

On Tue, Sep 10, 2019 at 1:10 PM Invitations. Taylor 522

wrote:

Dear s11C

We received your meeting request below from the Prime Minister's office. I apologise for the delay in responding.

Minister Taylor is interested in meeting with you in regard to Emergency Leaders for Climate Action.

Is Sydney the preferred meeting place for you? If so, Minister Taylor would be able to meet at 12.00pm on 2 October 2019.

The meeting would take place at the Commonwealth Parliamentary Offices, 1 Bligh Street, Sydney.

I look forward to hearing from you,

Kind regards,

s22

### Office of the Hon Angus Taylor MP

Member for Hume | Minister for ENERGY and emissions reduction

Suite M1. 27 Parliament House, CANBERRA ACT 2600

s22

# For Official Use Only

MS19-001040

To: Minister for Energy and Emissions Reduction (For Information)

# **SUMMER READINESS <sub>\$22</sub>**

Recommendation	n:		
1. s22			
			Noted / Please discuss
Minister:			Date:
Comments:			
Clearing	s11C	Assistant Secretary,	s22
Officer:	3110	Energy Security Branch	
Sent: 4/12/2019		,	
Contact Officer:	s22	Director, Emergency	s22
		Management and	
		Preparedness Section	

S:

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3. The outlook for this summer is for an elevated risk of bushfires (particularly in the east), an increased risk of heatwaves, and dust storms (refer <u>Attachment A</u>). s22

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heightened risks \$22

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, the key areas being:

a. hotter, drier conditions and reduced rainfall

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### **Attachments**

A: Summer 2019-20: Weather Outlook

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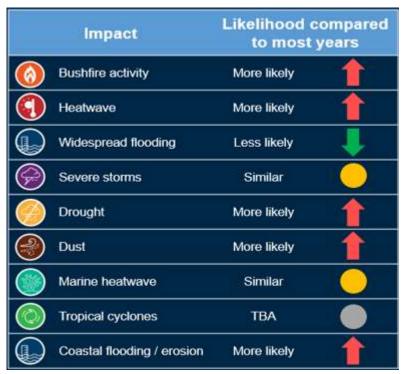
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### Attachment A

### **SUMMER 2019-20: WEATHER OUTLOOK**

- The Bureau of Meteorology (BoM) has provided advice on the outlook for the remainder of 2019 and into early 2020.
- The outlook (<u>Figure 1</u>) is for an increased likelihood of bushfire activity (particularly in the east), an increased risk of heatwaves, and an increased probability of dust storms. Warm and dry conditions are expected to continue through summer. This consists of:
  - above average daytime and overnight temperatures across Australia, increasing the summer heatwave risk and placing extra pressure on generation assets;
  - below average rainfall during the remainder of December. Summer rainfall is likely to be below average in parts of the east but above average in parts of the north-west;
  - continued bushfire activity in much of eastern Australia and parts of the south. Any days with strong winds will increase this risk.
    - : The Forest Fire Danger Index (FFDI) is high, especially around the interconnector corridors for the Queensland-New South Wales interconnector (QNI) and the New South Wales-Victoria interconnector; and
  - dust storms in central New South Wales and in the vicinity of the QNI. Dust storms can be a hazard to the operability of the transmission network as it can cause arcing on high voltage transmission lines.

Figure 1: Extreme and Hazardous Weather Outlook: Summer 2019-20 (Source: BOM, 22 November 2019)



### Rainfall outlook

There has been below average rainfall across most of the continent during November.
 However, the three-month outlook (Figure 2) indicates the rainfall deficit is likely to be largely confined to eastern Australia, including Tasmania.

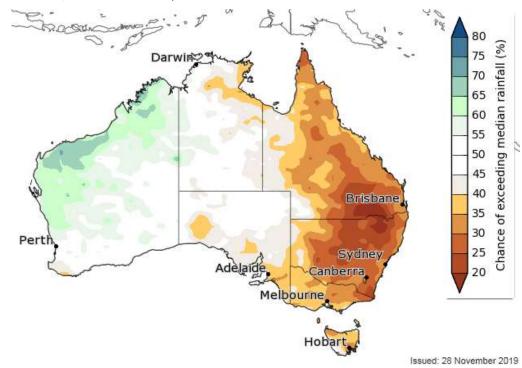


Figure 2: Chance of exceeding median rainfall – December 2019 to February 2020 (Source: BOM, 28 November 2019)

### **Bushfire Activity**

- An early start to the bushfire season has occurred, notably in the south-east, and as
  predicted by the Bushfire and Natural Hazards Cooperative Research Centre (<u>Figure 3</u>).
- The remainder of the fire season has the potential to be active across Australia, following on from a very warm and dry start to the year.
  - The bushfire season is lengthening with more dangerous fire weather days occurring within a season, particularly in the south and east.
  - The FFDI is tracking similar to those conditions preceding the Ash Wednesday and Black Saturday events.
- On 28 November 2019, the Australian Government Crisis Coordination Centre reported that, since 9 September 2019, the total area burnt across New South Wales, Queensland, Victoria, Western Australia, South Australia and Tasmania exceeds 2,119,362 hectares.
- The dry landscape means warm and windy weather has increased the fire risk particularly: along the east coast of Queensland, New South Wales, Victoria and Tasmania; in elevated areas; and parts of southern Western Australia and South Australia.

Above normal fire potential
Normal fire potential

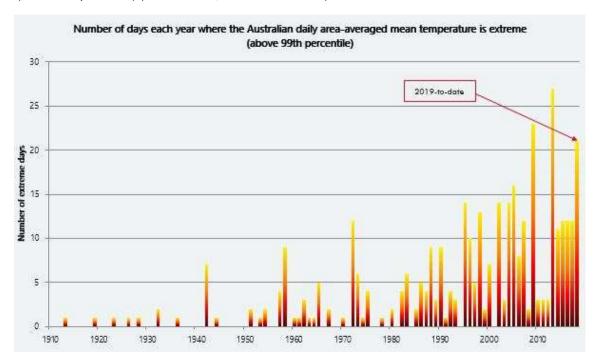
Above normal fire potential

Figure 3: Australian Seasonal Bushfire Outlook (Source: Bushfire and Natural Hazards CRC, August 2019)

### **Heatwaves**

- There is an increased risk of extreme heat developing across central, southern and eastern Australia. More than 20 extreme heat days have occurred in 2019 to date (Figure 5), and all capital cities s22 have exceeded their average number of days of extreme heat.
- BoM have advised that low rainfall, high daytime temperatures and very much below average soil moisture levels across most of the continent have primed the landscape for heatwaves over summer.

Figure 5: Number of days each year where the Australian daily area-average mean temperature is extreme (above 99<sup>th</sup> percentile) (Source: BOM, 22 November 2019)



Attachment B

- s22

Key risks in 2019-20 include:

Heightened risk of bushfires, heatwaves and dust storms in eastern Australia.

- Maximising the availability of transmission networks: AEMO has coordinated with transmission network service providers (TNSPs) to ensure that transmission networks are available to carry the required levels of electricity supply.
  - : Key risks for transmission infrastructure include outages due to bushfires and dust storms, both of which are forecast to be more severe than average in 2019-20.

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