



Environmental  
Defenders Office

**PART OF THE DEFENDING THE UNBURNT SERIES**

# **Overview – What is Defending the Unburnt?**

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# DEFENDING THE UNBURNT

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**In the wake of Australia's 2019-2020 bushfires, the protection of critical unburnt habitat emerged as a priority for securing the future of many threatened species, sustaining important ecosystem services and helping impacted ecosystems and landscapes to recover. To secure these critical areas, increased use of existing legal mechanisms and stronger environmental laws will be needed to enhance protection in priority landscapes.**

### *Impacts of the 2019-2020 bushfire season*

The bushfire season of 2019-2020 is unprecedented in terms of scale, intensity and duration in Australian bushfire history. Around the country 33 lives were lost,<sup>1</sup> an estimated 417 people died due to smoke inhalation,<sup>2</sup> more than 3,000 homes burnt down,<sup>3</sup> and property and infrastructure was destroyed including thousands of farms and forest communities. The bushfires also had a devastating impact on our natural environment. Significant ecosystems and landscapes were decimated, including World Heritage-listed National Parks,<sup>4</sup> ancient rainforests<sup>5</sup> and even waterways, following post-fire flooding.<sup>6</sup> An estimated 830 million tonnes of greenhouse gases were emitted.<sup>7</sup>

While it is difficult to estimate the exact number of native animals impacted by the fires, some experts originally predicted it could be as many as 800 million in NSW and one billion nationally,<sup>8</sup> with more recent analyses suggesting as many as three billion nationally.<sup>9</sup>

In NSW bushfires burnt over 5.52 million hectares of land.<sup>10</sup> The fire ground in NSW covered approximately 7% of the state, including 2.7 million hectares in national parks (37% of the NSW park system), and that the habitat of more than 293 threatened animals and 680 threatened plants has been impacted.<sup>11</sup> In Victoria bushfires impacted more than 1.5 million hectares.<sup>12</sup> Analysis indicates that 244 species have more than 50% of their modelled habitat within the burnt area, including 215 rare or threatened species and nine ecological vegetation classes (EVCs) with more than 50% of their extent burnt.<sup>13</sup> More than 7 million hectares were burnt in bushfires in Queensland.<sup>14</sup> In Queensland are still under assessment.<sup>15</sup>

**Protecting intact and unburnt areas of high conservation value is critical, as well as lightly burnt areas,<sup>16</sup> particularly while burnt areas and impacted species recover.** These remaining areas are essential for providing habitat and refuge for wildlife; providing future climate change refugia; delivering important ecosystem services, assisting impacted ecosystems and landscapes to recover; building resilience and ensuring our remaining natural areas thrive. The time required for recovery of threatened and sensitive species after average fires ranges from around 10 years up to 120 years for some species.<sup>17</sup>

**It is also crucial that environmental assessment, decision-making and policy settings take into account the impacts of the bushfires.** The 2019-2020 bushfire season changed the Australian landscape and the environmental baseline of our biodiversity conservation and natural resource management frameworks. Widespread damage to ecosystems, landscapes and the significant loss of

wildlife caused by the fires means that any assumptions underpinning environmental assessment, decision-making and policy settings must be re-visited to consider the impacts of the bushfires.

Many environmental indicators were in decline even before the catastrophic bushfire season.<sup>18</sup> Ongoing threats to the environment (including habitat clearing and fragmentation from development, land clearing and forestry) have now been compounded by the damage caused by the bushfires. The bushfires followed years of drought in south-eastern Australia, with low rainfall records and high temperature records broken due to global heating. This means that protecting intact and unburnt areas, and accounting for bushfire impacts in decision-making, is more important than ever.

### *Identifying priority unburnt landscapes*

As part of its Bushfire Response Framework, WWF-Australia identified six priority areas for habitat protection and restoration in Queensland, New South Wales and Victoria.<sup>19</sup> That work has been endorsed by WWF's Eminent Scientists Group, comprising some of Australia's leading and most distinguished conservation scientists. The priority areas, covering nearly 5.8 million hectares, warrant enhanced legal protection due to their significance for threatened species and ecosystems as a result of the bushfires.

In total, the six priority landscapes are home to at least 62 plant and 21 animal species, and 18 ecological communities, listed as threatened under national environmental laws. Koalas are found in all six areas, while most of the other threatened species, including the long-footed potoroo, the peppered tree frog, the Blue Mountains water skink and the Clarence River cod, are only found in one or a few of the landscapes. Threatened plants, largely unique to these areas, include the Bordered Guinea Flower, New England Gentian, and the Swamp Mint-bush. Threatened ecological communities include the critically endangered Southern Highlands Shale Forest and Woodland, which had declined by up to 90% of its original pre-European extent even before the bushfires.



**Figure 1. Six priority landscapes identified by WWF-Australia, with examples of an iconic wildlife in each that requires stronger protection after the fires.**

### **Defending the Unburnt**

In the wake of Australia’s 2019-2020 bushfires, the protection of critical unburnt habitat has emerged as a priority for securing the future of many threatened species, sustaining important ecosystem services and helping impacted ecosystems and landscapes to recover.

To achieve this, Environmental Defenders Office is working in collaboration with WWF-Australia to protect these priority landscapes – **to defend the unburnt**. This work will include helping communities to understand and use existing legal mechanisms to protect the unburnt; pushing for appropriate consideration of the impacts of the bushfires in environmental assessments and decision-making; and advocating for stronger biodiversity conservation and natural resource management policies and laws.

## Endnotes/References

- <sup>1</sup> Parliament of Australia, 2020, *2019–20 Australian bushfires—frequently asked questions: a quick guide*, available at [https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_Departments/Parliamentary\\_Library/pubs/rp/rp1920/Quick\\_Guides/AustralianBushfires](https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1920/Quick_Guides/AustralianBushfires). We note that some reports state 34 deaths, however we have been unable to confirm this number.
- <sup>2</sup> Arriagada, N.B, et a;2020, *Unprecedented smoke-related health burden associated with the 2019–20 bushfires in eastern Australia*. *Med J Aust* 2020; 213 (6): 282-283. Available at <https://www.mja.com.au/journal/2020/213/6/unprecedented-smoke-related-health-burden-associated-2019-20-bushfires-eastern>
- <sup>3</sup> AFAC (Australasian Fire and Emergency Service Authorities Council) (2020) *Cumulative Seasonal Summary*, AFAC National Resource Sharing Centre, 28 February 2020. Accessed at <https://twitter.com/AFACnews/status/1233262259612213248/photo/1>.
- <sup>4</sup> See, for example, Department of Agriculture, Water and the Environment, 2020. *Greater Blue Mountains Area State of Conservation update - April 2020*, available at <http://www.environment.gov.au/system/files/resources/2073fd28-88e8-42f6-8b2a-20a811f7a279/files/greater-blue-mountains-area-state-conservation-update-april-2020.pdf>
- <sup>5</sup> See, for example, Queensland Government, 2020, *Altered fire regimes pressure on the Gondwana Rainforests*. Available for viewing at <https://www.stateoftheenvironment.des.qld.gov.au/heritage/world/altered-fire-regimes-pressure-on-the-gondwana-rainforests-of-australia>
- <sup>6</sup> NSW Government, 2020. *Bushfire impacts on water quality, February 2020*, available at <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/water/20p2093-bushfire-impacts-on-water-quality.pdf>
- <sup>7</sup> DISER, 2020, *Estimating greenhouse gas emissions from bushfires in Australia’s temperate forests: focus on 2019-20*, Australian Government, available at <https://www.industry.gov.au/data-and-publications/estimating-greenhouse-gas-emissions-from-bushfires-in-australias-temperate-forests-focus-on-2019-20>
- <sup>8</sup> Professor Chris Dickman, Faculty of Science, University of Sydney. For an explanation of Professor Dickman’s estimates see <https://www.sydney.edu.au/news-opinion/news/2020/01/08/australian-bushfires-more-than-one-billion-animals-impacted.html>
- <sup>9</sup> WWF-Australia, *Impacts of the Unprecedented 2019-20 Bushfires On Australian Animals*, November 2020, available at [https://www.wwf.org.au/ArticleDocuments/353/WWF\\_Impacts-of-the-unprecedented-2019-2020-bushfires-on-Australian-animals.pdf.aspx](https://www.wwf.org.au/ArticleDocuments/353/WWF_Impacts-of-the-unprecedented-2019-2020-bushfires-on-Australian-animals.pdf.aspx)
- <sup>10</sup> NSW Independent Bushfire Inquiry, *Final Report of the NSW Bushfire Inquiry*, 31 July 2020, available at <https://www.dpc.nsw.gov.au/assets/dpc-nsw-gov-au/publications/NSW-Bushfire-Inquiry-1630/Final-Report-of-the-NSW-Bushfire-Inquiry.pdf>
- <sup>11</sup> See NSW Department of Planning, Industry and Environment, *Understanding the effects of the 2019–20 fires*, available at <https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/fire/park-recovery-and-rehabilitation/recovering-from-2019-20-fires/understanding-the-impact-of-the-2019-20-fires>
- <sup>12</sup> Bushfire Recovery Victoria, *Eastern Victorian Fires 2019–20 State Recovery Plan*, August 2020, available at [https://www.vic.gov.au/sites/default/files/2021-04/BRV\\_Statewide%20Recovery%20Plan.pdf](https://www.vic.gov.au/sites/default/files/2021-04/BRV_Statewide%20Recovery%20Plan.pdf)
- <sup>13</sup> Department of Environment, Land, Water and Planning, *Victoria’s bushfire emergency: biodiversity response and recovery - Version 2*, August 2020, available at [https://www.wildlife.vic.gov.au/\\_data/assets/pdf\\_file/0030/484743/Victorias-bushfire-emergency-Biodiversity-response-and-recovery-Version-2-1.pdf](https://www.wildlife.vic.gov.au/_data/assets/pdf_file/0030/484743/Victorias-bushfire-emergency-Biodiversity-response-and-recovery-Version-2-1.pdf)
- <sup>14</sup> Queensland Government, *2019 Queensland Bushfires - State Recovery Plan 2019-2022*, August 2020, available at <https://www.qra.qld.gov.au/2019-queensland-bushfires>
- <sup>15</sup> The Queensland Government’s State Recovery Plan 2019-2022 indicates that “further fine scale analysis of fire extent, severity and field surveys are needed to confirm distribution and level of impact for priority species and locations, see Queensland Government, *2019 Queensland Bushfires - State Recovery Plan 2019-2022*, August 2020, op.cit.
- <sup>16</sup> The importance of protecting lightly burnt and some moderately burnt areas from forestry operations post-bushfires was highlighted in the following report: Smith, Dr A. *Review of CFIOA Mitigation Conditions for Timber Harvesting in Burnt Landscapes - A Report to the NSW Environment Protection Authority*, September 2020, available at <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/forestry/review-of-cfoa-mitigation-conditions-for-timber-harvesting-in-burnt-landscapes.pdf?la=en&hash=6360E080DB80E7BEF935A1A4A6BDDAB46BBFD0A7>
- <sup>17</sup> Smith, Dr A. *Review of CFIOA Mitigation Conditions for Timber Harvesting in Burnt Landscapes - A Report to the NSW Environment Protection Authority*, September 2020, available at <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/forestry/review-of-cfoa-mitigation-conditions-for-timber-harvesting-in-burnt-landscapes.pdf?la=en&hash=6360E080DB80E7BEF935A1A4A6BDDAB46BBFD0A7>
- <sup>18</sup> See Australian State of the Environment Report 2016, available at <https://soe.environment.gov.au/>; see also NSW State of the Environment Report 2018, available at <https://soe.epa.nsw.gov.au/>; see also Queensland State of the Environment Report 2017 available at <https://www.stateoftheenvironment.des.qld.gov.au/>; see also Victorian State of the Environment Report 2018, available at <https://www.ces.vic.gov.au/reports/state-environment-2018>.
- <sup>19</sup> WWF Australia, *Defending the Unburnt*, April 2021, available at <https://www.wwf.org.au/what-we-do/2-billion-trees/protecting-the-unburnt-six#gs.ud2uij>