



Environmental
Defenders Office

Defending the Unburnt:

**Wildlife can't wait: Ensuring timely protection of
our threatened biodiversity**

November 2022

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This report is produced as part of our Defending the Unburnt collaboration with WWF-Australia.

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Executive Summary and Key Recommendations

The bushfire season of 2019-2020 was unprecedented in terms of scale, intensity and duration in Australian bushfire history. In addition to the catastrophic impacts the bushfires had on communities, property and infrastructure, the bushfires also had a devastating impact on our natural environment. Significant ecosystems and landscapes were decimated, including World Heritage-listed national parks, ancient rainforests and even waterways, following post-fire flooding. 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, with more recent analyses suggesting as many as three billion nationally.

The Federal and State governments have put resources towards assessing impacts on species, and recovery efforts. However, despite those efforts, over two years on from the bushfires:

- the conservation status of some bushfire-impacted species is still under assessment, leaving species at risk of further decline despite the catastrophic impacts that have occurred;
- while targeted bushfire recovery initiatives are being implemented, there has been no wholesale review of pre-existing conservation plans or programs to ensure they are up-to-date post-bushfires; and
- there has been no wholesale review of specific threatened species protections to ensure they are fit-for-purpose following the 2019-2020 bushfires.

Further, in most instances, already inadequate threatened species frameworks persist. Activities that impact on threatened species, such as development, infrastructure, land clearing and resource extraction have been allowed to continue 'business-as usual' without taking into account the impacts of the bushfires, or implementing additional measures that could ameliorate impacts on bushfire-affected threatened species.

The 2019-2020 bushfire season has highlighted the failings of our environmental laws to be able to respond to such major events in an immediate and holistic way; and those fires are unlikely to be an isolated event. The impacts of climate change, including an increase in extreme weather events and more intense fire seasons, will continue to threaten Australia's wildlife.

As such, legal frameworks must be strengthened to ensure additional measures are available and triggered to support recovery following the 2019-2020 bushfires, and to respond to other future events. This should include:

- Provisions for rapid provisional listing or uplisting of threatened species, until full assessments can be completed;
- Mandatory reviews of threatened species lists following a major event;
- Mandatory reviews and updating of threatened species protections following a major event; and
- Provisions for varying, suspending or revoking existing approvals.

Our key recommendations are set out on the following pages.



With risks to wildlife only expected to increase into the future, timely, practical and responsive legal provisions for threatened species protection are a necessary part of the required recovery and management response.

Key Recommendations:

Recommendation 1: Introduce listing provisions for threatened species in each jurisdiction, that allow species to be rapidly listed on a provisional basis until such time as a more thorough assessment can be conducted. To provide consistency between jurisdictions, a best practice national standard and model provision should be developed.

Recommendation 2: Explicitly allow species to be rapidly listed on a provisional basis following a major event that results in, or is likely to result in, a material change in conservation status or viability of a species (e.g. by including a specific subsection to this effect in provisional listing provisions).

Recommendation 3: Develop guidance material on the application of provisional listing criteria.

Recommendation 4: Clarify the interaction between provisional listing provisions and the common assessment method (CAM), by ensuring legislation explicitly provides that:

- a) a provisional listing determination can be made outside of the usual CAM process; and
- b) requirements to make a final determination as to whether a species should be permanently listed following a provisional listing, are consistent with the process for assessment under the CAM (including in relation to full assessment requirements and timing).

Recommendation 5: Remove inappropriate restrictions (e.g. s158A of the EPBC Act) that limit the ability of approval authorities to take into account listing events (both provisional listing and regular listing) when assessing impacts of activities on threatened species.

Recommendation 6: Ensure that listing events are appropriately taken into account in assessment and approval processes, including that:

- Decisions must consider all current listings at the time of the decision (except in limited circumstances).
- A decision maker should be allowed to revisit decisions made before the final approval decision following a listing event (for example, a controlled action decision under the EPBC Act).
- Decision makers should be able to require the proponent to provide additional information relating to impacts on a listed species during the assessment process, including after a listing event.

Recommendation 7: Require threatened species lists to be reviewed following a major event to determine whether any changes are required, in addition to regular, periodic reviews of threatened species lists.

Recommendation 8: Incorporate major event review provisions into all relevant environmental legislation across all jurisdictions. Provisions should:

- a) Include clear legislative criteria for determining whether a review should be triggered, and mandate reviews in appropriate circumstances.
- b) Clearly define ‘major event’. It should include, but not be limited to, bushfires, droughts, floods, disease, and biosecurity events. Provisions should also allow for cumulative impacts to be considered.
- c) Allow for temporary suspension of activities until the review is undertaken and relevant recommendations implemented.
- d) Set out a clear, transparent process for undertaking a review.
- e) Allow for effective, responsive action to be undertaken in response to a review.

Recommendation 9: Implement standard conditions of consent that trigger a review of operations and relevant conditions within a specified time period following a major event. Conditions should require proponents to submit a report to the approval authority indicating what impact the major event may have on operations and the ability of the proponent to meet approval conditions, including in relation to threatened species protection.

Recommendation 10: Give approval authorities the power to:

- a) vary approval conditions, under prescribed circumstances; and
- b) suspend or revoke approvals in limited circumstances, including where activities would have a substantially greater impact than those identified at the time of the action’s approval.

These powers should be able to be exercised taking into account listing events, if the relevant criteria are otherwise satisfied (i.e. provisions like s158A of the EPBC Act should not prevent approval authorities from exercising these powers).

Key terms

The following key terms are used throughout this report:

- **list/listing decision** refers to a decision to list or uplist (to a higher conservation status) a species or ecological community as threatened (including vulnerable, endangered or critically endangered) pursuant to the legal provisions of a relevant jurisdiction.
- **provisional listing**, refers to rapid listing, in accordance with provisional criteria, until such time as a full assessment is carried out.
- **threatened species** refers to species and ecological communities listed, or eligible to be listed, as threatened under relevant legislation (across various categories including vulnerable, endangered and critically endangered).
- **major event** is used to refer to an event that leads to a material change in conservation status or viability of a species, and which may require rapid intervention. For example, this may include a bushfire event, flood event, drought or outbreak of disease. The characterisation of major event is discussed in more detail at 2.3.



Defending the Unburnt

In the wake of Australia's 2019-2020 bushfires, the protection of unburnt habitat has become an urgent priority.

Much of the land that survived the bushfires is now a vital refuge for biodiversity, particularly threatened species. Six priority landscapes have been identified by WWF-Australia in Queensland, New South Wales (NSW) and Victoria as requiring immediate protection.¹ Unburnt and lightly burnt² areas will be key to securing the future of many threatened species and ensuring important ecosystem services are sustained while impacted landscapes recover.

In collaboration with WWF-Australia, the Environmental Defenders Office (EDO) is working to ensure that our laws are used to adequately protect these priority areas from further impacts, including impacts from inappropriate development, land clearing, and logging.





One:

Impacts of the 2019–2020 bushfires, and future threats and risks to wildlife

1.1 The plight of Australia's wildlife

Biodiversity refers to the complexity of biological life, including genetic diversity within species, between species and between ecosystems.³ Australia's biodiversity includes our unique native wildlife and plant species. According to the Department of Climate Change, Energy, the Environment and Water (**DCCEEW**):

"Australia is home to between 600,000 and 700,000 species, many of which are found nowhere else in the world. About 84 per cent of plants, 83 per cent of mammals, and 45 per cent of birds are only found in Australia".⁴

The 2016 State of the Environment report states:

"The value of Australia's biodiversity is difficult to measure, but biodiversity is a key part of Australia's national identity, and is integral to subsistence and cultural activity for Indigenous Australians. It is also fundamentally important to environmental services that support human health and wellbeing, and economically important to a wide range of industries (e.g. tourism, agriculture, pharmaceuticals)."

Australia's biodiversity is under increased threat and has, overall, continued to decline.⁵ According to the most recent 2021 State of the Environment report:

- *"In June 2021, 533 animal and 1,385 plant species were listed under the EPBC Act... The list includes 105 species that are Extinct or Extinct in the Wild".*
- *"The number of threatened species listed under the EPBC Act has risen for almost all taxa over the past 5 years".*
- *"We can expect further extinctions of Australian species over the next two decades unless current management effort and investment are substantially increased. Conservation actions are linked to reduced rates of decline for threatened Australian plants, mammals and birds, but they have not been sufficient to reverse declines overall".*



- “Many of the pressures on biodiversity in Australia have increased in intensity in the past 5 years. Habitat loss and degradation and invasive species result in persistent and sometimes irreversible impacts on biodiversity across almost all areas of Australia. Many Australian ecosystems are experiencing cumulative and compounding pressures, leading to ecosystem collapse characterised by loss of key defining features and functions”.⁶

Inadequate and poorly implemented environmental laws have failed to reverse the trend in biodiversity decline. For example, Professor Graeme Samuel, in his 2020 Independent Review of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*, concluded that “(t)he EPBC Act is ineffective. It does not enable the Commonwealth to effectively protect environmental matters that are important for the nation. It is not fit to address current or future environmental challenges”.⁷ In a 2021-22 audit of the management of threatened species and ecological communities under the EPBC Act, the Australian National Audit Office concluded that “(t)he administration of threatened species

and ecological communities under the EPBC Act is partly effective. The department is unable to demonstrate it is efficient. There is limited evidence that desired outcomes are being achieved, due to the department's lack of monitoring, reporting and support for the implementation of conservation advice, recovery plans and threat abatement plans”.⁸

State and territory laws are no better. A 2014 assessment of the adequacy of threatened species and planning law undertaken by EDO found that no state or territory law currently meets all the core requirements of best practice threatened species legislation.⁹

Clearly, there is a need for broad reform of the laws that are intended to conserve our wildlife and natural places. This Discussion Paper considers the specific need for legal measures to ensure timely protection of wildlife and plants following a major event that leads to a material change in conservation status or viability of a species and which may require rapid intervention. These measures would operate alongside strengthened provisions to conserve our wildlife and natural places.

1.2 The 2019–2020 bushfires — impacts and aftermath

The bushfire season of 2019-2020 was unprecedented in terms of scale, intensity and duration in Australian bushfire history. Around the country 33 lives were lost,¹⁰ an estimated 417 people died due to smoke inhalation,¹¹ more than 3,000 homes burnt down¹² and property and infrastructure was destroyed including thousands of farms and forest communities. The bushfires also had a devastating impact on our natural environment. An estimated 830 million tonnes of greenhouse gases were emitted.¹³ Significant ecosystems and landscapes were decimated, including World Heritage-listed National Parks,¹⁴ ancient rainforests¹⁵ and even waterways, following post-fire flooding.¹⁶ In particular:

- In NSW bushfires burnt over 5.52 million hectares of land.¹⁷ 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 the habitat of more than 293 threatened animals and 680 threatened plants has been impacted.¹⁸
- In Victoria bushfires impacted more than 1.5 million hectares of land.¹⁹ Analysis indicates that 244 species have more than 50% of their modelled habitat²⁰ within the burnt area, including 215 rare or threatened species and nine ecological vegetation classes with more than 50% of their extent burnt.²¹
- More than 7 million hectares were burnt in bushfires in Queensland,²² the impacts from which are still under assessment.²³



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,²⁴ with more recent analyses suggesting as many as three billion nationally.²⁵ Similarly, while difficult to measure, it is estimated 3 – 7.2 billion trees were burned.²⁶

The Federal and State governments have put resources towards assessing impacts on species, and recovery efforts. For example:

- In March 2020, the Commonwealth Government released a provisional list of animals requiring urgent management intervention.²⁷ The list was developed by the Wildlife and Threatened Species Bushfire Recovery Expert Panel convened by the Commonwealth Threatened Species Commissioner at the request of the Commonwealth Environment Minister.²⁸ The list identifies 119 species as having the highest priority for urgent management intervention, and informed the Government's response to the impacts of the 2019-20 bushfires on wildlife and habitat.
- In October 2020, the Commonwealth Environment Minister announced in addition to the normal annual nomination process for threatened species, the Threatened Species Scientific Committee (**TSSC**) would conduct a series of interim nomination and prioritisation processes over the following two years to allow further bushfire-affected species to be considered for assessment.²⁹ The Commonwealth government has also provided funding to undertake mapping and monitoring of species post-bushfires and support further scientific assessment, planning and coordination.³⁰

- In NSW, the Department of Planning, Industry and Environment has analysed and published information on the impacts of the 2019-2020 bushfires in NSW, including most recently, the *NSW Wildlife and Conservation Bushfire Recovery: Medium-term response plan* which includes updated post-bushfire data and a five-year plan to support the recovery of biodiversity in NSW following the 2019-2020 bushfires.³¹ It also developed its own state-specific priority fauna list that considers additional information and factors relevant to NSW, such as the impact of drought.³² Action 1.3.1 of the *NSW Wildlife and Conservation Bushfire Recovery: Medium-term response plan* requires the NSW Threatened Species Scientific Committee (**NSW TSSC**) to review the conservation status of fire affected species and ecological communities under the *Biodiversity Conservation Act 2016* (NSW) (**BC Act**).
- The *Queensland Government's 2019 Queensland Bushfires - State Recovery Plan 2019-2022* identifies impacts of the bushfires in Queensland and recovery strategies. However, it has limited analysis and actions relating to impacts on threatened species, indicating 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*”.³³ The Queensland government is implementing a *2019–20 bushfires: Threatened species recovery program* identifying priority species and actions for recovery.³⁴ The Queensland Species Technical Committee (**STC**) is able to consider listed threatened species

that require rapid reassessment, including in response to an urgent emerging threat (such as an extensive or intense bushfire).³⁵

- The Victorian Department of Environment, Land, Water and Planning (**DELWP**) has analysed and published information on the impacts of the 2019-2020 bushfires,³⁶ including its biodiversity response titled *Victoria's bushfire emergency: biodiversity response and recovery - Version 2*, published in August 2020.³⁷ Additionally, Victoria has been in the process of undertaking a Conservation Status Assessment following amendments to the *Flora and Fauna Guarantee Act 1988* (Vic) (**FFG Act**) to bring Victoria in line with the Common Assessment Method (**CAM**). The Conservation Status Assessment has considered impacts of the 2019-2020 bushfires. DELWP's website indicates that “*species regarded as fire sensitive have been re-considered, and some may have been upgraded to a higher status (on the basis of an increased past or future decline) if the expert assessor believes that this is warranted*”, however it was acknowledged that “*limited access to fire areas means it will take some time to determine how these species have been affected and if their status has changed*”.³⁸

However, despite those governments' efforts, two years on from the bushfires:

- the conservation status of many bushfire-impacted species is still under assessment, with the timeframe for completing assessments for a large number of species recently extended,³⁹

leaving species at risk of further decline despite the catastrophic impacts that have occurred;

- while bushfire recovery initiatives are being implemented, it is unclear if they will continue to be resourced beyond the initial funding outlay or whether there is effective monitoring to assess whether those programs have led to improved outcomes for threatened species;
- there has been no wholesale review of pre-existing conservation plans or programs to ensure they are up-to-date post-bushfires (and in fact, the former Morrison government made the decision that recovery plans for over 176 species would no longer be required⁴⁰);
- there has been no wholesale review of specific threatened species protections to ensure they are fit-for-purpose following the 2019-2020 bushfires;
- salvage logging (logging in areas impacted by bushfires or other incidents (floods, disease etc.) in order to mitigate economic loss) has been allowed in bushfire impacted areas despite concerns that such operations will hinder recovery efforts and further impact threatened species and ecosystems⁴¹; and,
- development projects, including those that propose to remove unburnt habitat, continue to be assessed and approved, without taking into the real conservation status of threatened species.

1.3 Future threats and risk to wildlife

Australia's climate has warmed by approximately 1.4 °C since 1910 and average temperatures are projected to rise further.⁴² Australia is already experiencing the impacts of climate change, which include the warming and acidification of oceans, sea level rise, decreased rainfall in southern parts of the country and increased rainfall in the north, and the long-term increase in extreme fire weather. Extreme heat days, longer dry spells, and harsher fire weather will increasingly become the norm.⁴³

The Intergovernmental Panel on Climate Change (IPCC) is highly confident that *(w)ithout additional mitigation efforts beyond those in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread, and irreversible impacts globally...*⁴⁴

The impacts of climate change, including an increase in extreme weather events and more intense fire seasons, will continue to threaten Australia's wildlife. As noted by the Royal Commission into National Natural Disaster Arrangements Report in October 2020:

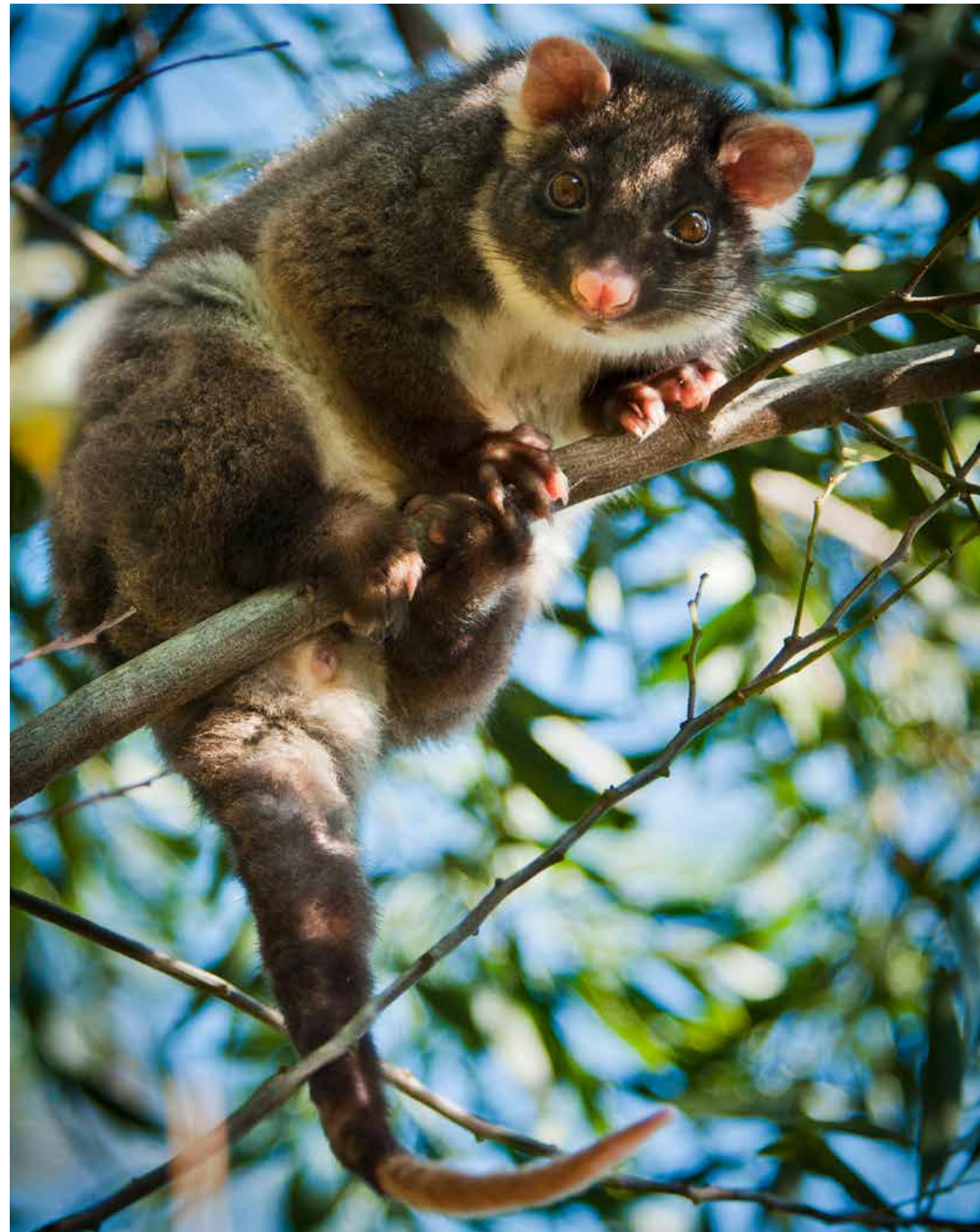
- *"Climate change has already increased the frequency and intensity of extreme weather and climate systems that influence natural hazards.*
- *Further global warming over the next two decades is inevitable. As a result, sea-levels are projected to continue to rise. Tropical cyclones are projected to decrease in number, but increase in intensity. Floods and bushfires are expected to become more frequent and intense.*

- *We can also expect more concurrent and consecutive hazard events. For example, in the last 12 months there was drought, heatwaves and bushfires, followed by severe storms, flooding and a pandemic. Concurrent and consecutive hazard events increase the pressure on exposed and vulnerable communities. Each subsequent hazard event can add to the scale of the damage caused by a previous hazard event. There are likely to be natural disasters that are national in scale and consequence".*⁴⁵

This has played out recently, with Queensland, NSW and Victoria experiencing multiple, unprecedented floods across vast areas of the landscape during 2022. Concerningly, flooding events have occurred in many of the same areas as the bushfires, further compromising already reduced populations of species. Reports indicate that the floods have had devastating impacts on wildlife in flood-affected areas,⁴⁶ yet the extent of the impacts is still unknown.⁴⁷

Climate change impacts also compound other threats to threatened species. For example, species will not only be affected by direct impacts such as fires or floods but will be more susceptible to other key threats such as disease, invasive species and pests, and habitat loss.

It is within this context that this Discussion Paper examines the specific need for additional legal measures to ensure timely protection of wildlife and plants as they face ongoing threats, including from a changing climate.





Two: Additional legal measures to protect impacted wildlife and plants

Despite the impacts of the bushfires, in most instances, inadequate rules for threatened species protection persist.⁴⁸ Activities that impact on threatened species such as development, infrastructure, land clearing and resource extraction have been allowed to continue ‘business-as usual’ without taking into account the impacts of the bushfires or implementing additional measures that could ameliorate impacts on bushfire-affected threatened species.

While the achievements of recovery efforts should not be dismissed, outcomes could be improved by providing new additional powers to support recovery efforts following a major event (in addition to overarching reform that strengthen threatened species laws more broadly). This could include:

- Provisions for rapid provisional listing or uplisting of threatened species (section 2.1);
- Mandatory reviews of threatened species lists (section 2.2);
- Mandatory reviews and updating threatened species protections (section 2.3); and
- Provisions for varying, suspending or revoking existing approvals (section 2.4).

The examples highlighted in this report are drawn from NSW, Queensland and Victoria, and the Commonwealth *Environment Protection Conservation Act 1999* (Cth) (**EPBC Act**), as these are where Defending the Unburnt priority areas have been identified, but the recommendations would apply to other jurisdictions more broadly.



2.1 Rapid provisional listing or uplisting of threatened species

2.1.1 Overview

It appears that the first decisions made regarding the listing or uplisting of bushfire impacted species under the EPBC Act occurred in December 2021, some 20 months (or 600+ days) after the end of the 2019-2020 bushfire season (on 31 March 2020) and despite increased resourcing for the nomination and assessment of bushfire-impacted species.⁴⁹ According to a report of the Australian National Audit Office, as at February 2022, 222 species are currently under assessment for listing, with many of these being bushfire-impacted species (following the focus on prioritising bushfire impacted species for assessment in the 2020 and 2021 in nomination processes).⁵⁰ Many species that were due to have their assessments delivered in April 2022 have had assessment timeframes extended until October 2022 or April 2023.⁵¹

State listing processes have been less transparent, however it is understood that:

- In NSW, the Government’s *NSW Wildlife and Conservation Bushfire Recovery: Medium-term response plan* includes the specific action that the NSW Threatened Species Scientific Committee will “review the conservation status of fire affected species and ecological communities under the *NSW Biodiversity Conservation Act 2016*” (Action 1.3.1).⁵² However, there is limited information about how this review will be carried out, including what priorities have been identified by the TSSC, and the timing and reporting of this action.
- In Victoria, following amendments to the *Flora and Fauna Guarantee Act 1988* (Vic) that came into force in June 2020, threatened species lists have been systematically reviewed to establish a single comprehensive list of threatened flora and fauna species, in line with the Common Assessment Method (**CAM**). It is understood that bushfire impacts were given some consideration during this process,⁵³ however publicly available information on how this was undertaken is limited.

- In Queensland, the Government is implementing its *2019–20 bushfires: Threatened species recovery program*⁵⁴ to support the recovery of priority threatened species and their habitats as part of the *Queensland Bushfire Recovery Program*. While the program focuses on priority recovery actions for priority species, there does not appear to be any specific actions related to reviewing and updating threatened species lists.

Once species are listed in one jurisdiction, the CAM (see 2.1.2 below) provides a streamlined process to allow state and Federal threatened species lists to be aligned. However, the CAM does not overcome any initial delays in assessing and listing species.

Provisional listing provisions for threatened species and ecological communities could assist in overcoming delays in having species assessed and listed following a major event. NSW is the only Australian jurisdiction with provisional listing powers for threatened species. Despite previous recommendations to include provisional listing provisions in our national environmental laws, this has not occurred, even though similar provisions

exist for Commonwealth and National heritage. **Table 1** outlines various examples of existing or previously recommended provisional listing provisions.

The 2019-2020 bushfires and the subsequent two-year period has once again highlighted the need for laws to be improved to better support rapid and effective action following events that have significant impacts on wildlife. As Professor Graeme Samuel acknowledged in the Independent Review of the EPBC Act, “(a)s a result of an inefficient, drawn out listing process, there is no avenue for quickly listing newly threatened species in response to natural disasters such as the 2019–20 Black Summer bushfires”.⁵⁵



Table 1 - Examples of existing or previously recommended provisional listing-style provisions

Example	Key components
Section 341JK of the EPBC Act	341JK Minister may include place in Commonwealth Heritage List if under threat (1) If the Minister believes: a) a place has or may have one or more Commonwealth Heritage values; and b) any of those values is under threat of a significant adverse impact ; and c) that threat is both likely and imminent ; the Minister may, by instrument published in the <i>Gazette</i> , include in the Commonwealth Heritage List the place and the Commonwealth Heritage values the Minister believes the place has or may have.
Section 324JL of the EPBC Act	324JL Minister may include place in National Heritage List if under threat (1) If the Minister believes that: a) a place has or may have one or more National Heritage values; and b) any of those values is under threat of a significant adverse impact ; and c) that threat is both likely and imminent ; the Minister may, by instrument published in the <i>Gazette</i> , include in the National Heritage List the place and the National Heritage values the Minister believes the place has or may have.
Section 4.23 of the NSW Biodiversity Conservation Act	4.23 Eligibility for provisional listing (1) A species is eligible to be provisionally listed under this Division if, in the opinion of the Scientific Committee— (a) the species— i. although not previously known to have existed in NSW, is believed on current knowledge to be native to NSW, or ii. is subject to an immediate and significant threat of extinction , or iii. was presumed to be extinct or extinct in the wild but has been rediscovered, and (b) the species is not listed in Schedule 1 as an endangered or critically endangered species.

Example	Key components
Recommendation 16 of the First Independent Review of the EPBC Act (Hawke Review) ⁶⁶	Recommendation 16 The Review recommends that the Act be amended to give the Environment Minister the power to make emergency listings of threatened species and ecological communities, provided the Minister believes that: (1) the native species or ecological community meets the criteria for the listing category for which it is nominated; and (2) a threat to the native species or ecological community is severe and imminent.
Environment Protection and Biodiversity Conservation Amendment (Emergency Listings) Bill 2011	Schedule 1, clause 4, proposed s 194V 194V Minister may include species in threatened species list if under threat (1) If the Minister believes that: a) a native species is eligible to be included in a category in the threatened species list; and b) the native species is under threat of a significant adverse impact ; and c) the threat is both likely and imminent; the Minister may, by instrument published in the <i>Gazette</i> , include the species in the threatened species list.
Species at Risk Act 2002 (Canada)	Section 28 (1) Any person who considers that there is an imminent threat to the survival of a wildlife species may apply to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) for an assessment of the threat for the purpose of having the species listed on an emergency basis under subsection 29(1) as an endangered species. (2) The application must include relevant information indicating that there is an imminent threat to the survival of the species. (3) The Minister may, after consultation with the Minister responsible for the Parks Canada Agency, the Minister of Fisheries and Oceans and the Canadian Endangered Species Conservation Council, make regulations respecting the making of applications to COSEWIC under subsection (1) and the dealing with of those applications by COSEWIC.



In general, these examples share a number of common elements (although the wording, and therefore legal application of these components, differ in each example). They require that a species:

- meet the criteria of existing categories for listing; and
- be under immediate or imminent threat of a severe or significant adverse impact or of threat to the survival of the species.

Relevant legislation also includes requirements for making a final decision about whether a matter should remain listed.

Interestingly, it is noted that:

- The predecessor to s4.23 of the NSW BC Act, s28 of the *Threatened Species Conservation Act 1995* (NSW), did not include an equivalent subsection to 4.23(a)ii, namely that species be subject to an immediate and significant threat of extinction. The second reading speech for the Biodiversity Conservation Bill 2016 does not explain inclusion of this subsection in s4.23 of the BC Act, but it is consistent with other examples or recommendations for provisional listing.
- Some guidance on what constitutes a ‘significant adverse impact’ for the purpose of sections 341JK and 324JL of the EPBC Act is found in the *Matters of National Environmental Significance - Significant impact guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999*. However, those guidelines are not legally binding. They are primarily intended to assist a person who proposes to take an action to decide whether they should submit a referral for a decision by the Environment Minister on whether assessment and approval is required under the EPBC Act, rather than assist in the application of s341JK and s324JL directly. Additionally, those guidelines have limited application for provisions in other legislation (as opposed to the EPBC Act).

- There is little guidance for any of the examples listed in Table 1 on what constitutes ‘imminent’ or ‘immediate’. While the provisional listing provisions in the BC Act have been used on an emergency basis where a newly-discovered species is at risk from a specific development proposal,⁵⁷ without further guidance it is unclear how broad the application of provisional listing provisions may be.
- Although used in a slightly different context, the concept of ‘ascertained danger’ adopted by the International Union for the Conservation of Nature (IUCN) in establishing its ‘danger list’ for natural sites may be a useful starting point to developing further guidance on ‘imminent’.⁵⁸ The premise behind the IUCN’s ‘danger list’ could provide a model for how guidance on ‘imminent’ or ‘immediate’ could be characterised.

To the best of our knowledge, the provisional listing provisions in the BC Act have not been used following a major event that has significantly impacted on the conservation status of a species (e.g. bushfire). A nomination was made to list the koala on an emergency basis under the BC Act following the 2019-2020 bushfires. However, the NSW TSSC, acknowledging that a full assessment was already underway by the Commonwealth, elected to await the Commonwealth assessment and make a full determination in accordance with the CAM, rather than to list the koala provisionally – see **Case Study 1**, below.



In our view, provisional listing provisions could be a useful tool in protecting threatened species on a provisional basis following a major event, until such time as a proper assessment is carried out and decision can be made as to whether a species should remain listed. This would be consistent with the precautionary principle, which provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

2.1.2 Key considerations for how provisional listing provisions should operate

i) Key elements of provisional listing provisions

As noted above, existing or recommended provisional listing provisions generally adopt a number of common elements. These, and other possible elements, are considered in more detail below in Table 2.

Table 2 - Possible elements to provisional listing provisions

Element	EDO comment
Meet the criteria of existing categories for listing	Given that one purpose of provisional listing is to act quickly to establish protections for a species at risk, provisional listing provisions should adopt a precautionary approach, and allow species to be listed if scientific expert opinion is that a species is likely to meet criteria for listing. For example, allowing provisional listing on the basis that meeting the requisite criteria can be reasonably inferred or is likely would provide more flexibility in heightened threat situations. Provisions can then require a full assessment and final determination to be made within a specified time period.
Be under immediate or imminent threat of a severe or significant adverse impact or of threat to the survival of the species	This element is best suited to circumstances where there is a future threat (e.g. imminent clearing for development). The wording of this element varies slightly between jurisdictions and has the effect that thresholds vary slightly. For example, when applied in practice, ‘threat of a significant adverse impact’ found in the EPBC Act is likely to mean something different to ‘significant threat of extinction’ found in the BC Act (NSW). Additionally, in some instances the wording differs from more commonly used elements in other provisions, creating confusion. ⁵⁹ There should be clear guidance on how these elements of existing provisional listings should be applied. It is proposed that a different threshold test be applied for circumstances where provisional listing is used as a tool to support the recovery and protection of species following a major event – see below.
Impacted following a major event that leads to a material change in conservation status or viability of a species or ecological community	Provisional listing provisions should be available as a tool to support the recovery and protection of species. Provisions should include a specific subsection that explicitly allows species to be listed following a major event that has, or is likely to have, a material change in conservation status or viability of the species or community. Under this specific subsection, the requirement that there be an ‘immediate or imminent threat of a severe or significant adverse impact’ would not apply. Rather, the appropriate test would be whether there had been a material change in conservation status or viability of a species or ecological community.
Changes to category	Provisions should clearly provide that changes to the category under which threatened species is listed can be made under provisional listing provisions (e.g. uplisting).

ii) Interaction between provisional listing provisions and the Common Assessment Method

• Overview of the Common Assessment Method (CAM)

The CAM establishes a single method for assessing species for listing that satisfies Commonwealth, and state and territory requirements, allowing eligible species to be listed on the Commonwealth EPBC Act threatened species list and relevant state or territory threatened species lists. The CAM adopts consistent categories and criteria across all jurisdictions. It is based on the best practice standard developed by the International Union for Conservation of Nature (IUCN), as used to create the Red List of Threatened Species, with some amendments to suit the Australian context.⁶⁰

Currently, the Commonwealth Government and all state and territory governments (except South Australia) have signed a Memorandum of Understanding agreeing on the CAM.⁶¹

In summary, the CAM operates as follows:

- The EPBC Act list will contain threatened species from all jurisdictions assessed as eligible under the EPBC Act using the CAM. State and territory lists will only include those species that occur in their jurisdiction.

- The agreed categories are: Vulnerable, Endangered, Critically Endangered, Extinct in the Wild, or Extinct. Additionally, fish can also be listed as Conservation Dependent.
- To achieve consistency and avoid confusion, species will be listed in the same category in each participating jurisdiction; currently listed species will be progressively transitioned to an appropriate and agreed national threat category and all new assessments in participating jurisdictions will be undertaken using the common assessment method.
- Species that have been determined to be unlikely to be nationally threatened will not be included on the EPBC Act list of threatened species, but be listed by the relevant jurisdictions as a state or territory threatened species.
- A species will be assessed by only one jurisdiction (either a state or territory government, or the Commonwealth government). The outcome of that assessment may be adopted by other states and territories where the species occurs, as well as the Commonwealth Government under the EPBC Act. For example, a species that occurs in just one state may be assessed by that state and listed on both the state and EPBC lists. A species that occurs in multiple jurisdictions will, in most instances, be assessed by the Commonwealth and included on the EPBC list and the lists of each state and/or territory in which the species occurs.



- Under the CAM, species are assessed at the national scale, using the agreed criteria, categories, thresholds and definitions. For some states or territories, this is a substantial change from current practice and may require changes to administrative arrangements or legislative amendments to implement the CAM.
- Populations of species are eligible for assessment and listing if the population is geographically isolated and is distinct and able to be defined in a way that differentiates it from all other populations, and as long as the parent taxon is not listed as nationally threatened.⁶² For example, the Bulloo Grey Grasswren (*Amytornis barbatus barbatus*) is listed as critically endangered under the EPBC Act. It is confined to the Bulloo River drainage system in south west QLD and north west NSW and is a recognised sub-species of grey grasswren (*Amytornis barbatus*) which is found more widely across Australia and is not listed.
- **Interaction between the CAM and section 4.16 of the BC Act (NSW)**

It appears that the CAM has had the perverse outcome of affecting the use of the provisional listing provisions in the NSW BC Act – see **Case Study 1 – Nomination to list the koala under provisional listing provisions in NSW.**

The CAM should not prevent the proper use of provisional listing provisions; any jurisdiction should be able to utilise provisional listing provisions to protect threatened species while CAM assessments and processes, which take longer and determine final listing status, run their course.



Case Study 1

Nomination to list the koala under provisional listing provisions in NSW

Following the 2019-2020 bushfire season, the International Fund for Animal Welfare (IFAW) commissioned an assessment of changes to the distribution and abundance of koalas in NSW as measured across three generations of koalas and culminating in the 2019-20 fire season.

The assessment report, prepared by the Biolink research group, found:

- A minimum of 6,382 koalas are estimated to have perished in the 2019-2020 bushfires, representing 15% of the NSW population;
- Up to two-thirds of the NSW population has been lost due to drought, bushfires and human-made causes over the last three koala generations; and
- the impacts of climate change, including the resulting increased risk of high frequency bushfires, pose an immediate, ongoing and significant threat of extinction to the NSW koala population.⁶³

Off the back of the report, in March 2020, IFAW wrote to the NSW TSSC to nominate the state-wide NSW koala population for provisional listing as an endangered species on an emergency basis, pursuant to Part 4, Division 4 of the BC Act. The nomination was co-signed by Friends of the Koala, Humane Society International (HSI), and Port Macquarie Koala Hospital.

At the same time, IFAW, together with WWF-Australia and HSI put forward a nomination to uplist the Koala (combined populations of Queensland, NSW and the Australian Capital Territory) from vulnerable to endangered under the EPBC Act. In this instance, as the nominated species spanned multiple states, the Commonwealth government led the assessment for the nomination under the EPBC Act pursuant to the CAM.

In September 2021 the NSW TSSC advised that, while it had carried out an assessment for the provisional listing of the koala, it would be preferable to conduct a full listing review as soon as possible after a decision by the Commonwealth rather than to list the koala provisionally.⁶⁴

In February 2022, then Federal Environment Minister, Sussan Ley, made the decision to uplist the Koala (combined populations of Queensland, NSW and the Australian Capital Territory) as endangered under the EPBC Act.⁶⁵

The NSW TSSC subsequently determined to list the koala as endangered under the BC Act on 20 May 2022, over two years since the koala was first nominated for provisional listing on an emergency basis in NSW.

There is nothing in the BC Act that explicitly precluded the NSW TSSC from provisionally listing the koala in NSW, despite the ongoing assessment by the Commonwealth government. The decision not to make a decision under the provisional listing provisions undermines the intent of those provisions – to provide provisional protection to threatened species pending a final decision. It is disappointing that with NSW being the only jurisdiction with provisional listing provisions, and the most severely affected by the 2019-20 bushfires, these were not used to provide much-needed protection for the species to recover immediately following the bushfires.

It also raises questions about the interaction of the CAM with the provisional listing provisions under the BC Act. Any uncertainty that persists about how nominations for provisional listing should be dealt with if species are also being assessed under the CAM by another jurisdiction is likely to arise again in the future.

To ensure that there are no perverse outcomes arising from the interaction of the CAM and rapid provisional listing provisions, legislation should explicitly provide that:

- a) a provisional listing determination can be made outside of the usual CAM process; and
- b) requirements to make a final determination as to whether a species should be permanently listed following a provisional listing, are consistent with the process for assessment under the CAM (including in relation to full assessment requirements and timing).

iii) *Interaction between listing decision and development assessment processes*

The interaction between listing decisions (both provisional listing and regular listing) and development assessment processes needs to be revised, having regard to the outcome that listing provisions are trying to achieve – namely the protection of threatened species.

This was a key issue that arose during the Senate Inquiry into the Environment Protection and Biodiversity Conservation Amendment (Emergency Listings) Bill 2011 (**2011 Emergency Listings Bill**).⁶⁶

The 2011 Emergency Listings Bill was introduced by Senator Larissa Waters (Greens) following the Commonwealth Government's failure to implement Recommendation 16 of the Hawke Review. The Bill sought to amend the EPBC Act in two substantive ways, namely:

- create provisional listing procedures for threatened species and ecological communities; and
- amend s158A of the EPBC Act to require that any provisional listings be considered by the Environment Minister when making environment assessment or approval decisions.

Section 158A of the EPBC Act provides that a 'listing event'⁶⁷ does not affect a decision as to whether an action is an approved action (primary decision) or any other approval process decision⁶⁸ made before the listing event occurred; nor can a decision be revoked, varied, suspended, challenged, reviewed, set aside or called into question because of, or for reasons relating to, the listing event.

Section 158A allows the Minister to disregard listing decisions when making certain decisions under the EPBC Act, once a controlled action decision⁶⁹ has been made. This can have substantial practical implications. For example, several years can lapse

between an initial controlled action decision and a final approval decision, so there is certainly time for a major event, for a species to be listed or even for a species previously listed as extinct to be rediscovered during that period. Yet if this occurs, the final decision - whether to approve an action, and what conditions to apply to it - cannot consider the new/updated listing status of the species, even if the proposed action is likely to significantly impact the species. This is contrary to what most people would fairly expect to apply, particularly if species previously considered extinct are rediscovered, or if ecological conditions change rapidly (for example, following a major event) and highly valuable and irreplaceable species and ecosystems are at risk of being destroyed. The practical implications of s158A are highlighted in **Case Study 2**.

Section 158A of the EPBC Act was introduced to provide certainty to project proponents during the assessment process, however broad restrictions preventing listing events to be considered hinder the ability of environmental legislation to effectively protect threatened species. This is particularly so given the increasing frequency and widespread impact of major events in the past few years. As such, a blanket restriction fails to get the balance

right. Further discussion on achieving that balance, and key recommendations, are outlined in more detail below.

In NSW, where provisional listing provisions exist, there is no section equivalent to s158A of the EPBC Act that creates a blanket restriction on considering threatened species listings during the development assessment process. This means that species listed on a provisional basis (and also through the regular listing process) may be able to be considered during the assessment process. While the BC Regulation may make provision for the effect of listing events, the current BC Regulation only does so in limited circumstances.⁷⁰

The absurdity of blanket restrictions like those found in s158A of the EPBC Act has been highlighted following the 2019-2020 bushfires. On the one hand the Commonwealth Government has invested significant funding and resources on mapping and monitoring species post-bushfires, prioritising species for reassessment against threatened species criteria, and restoration and recovery projects. On the other, the Minister has no power to require development applications to consider any subsequent listing of threatened species once a controlled action decision has been made.



Case Study 2

Bushfire impacted species may still face the bulldozers

Following the 2019-2020 bushfires, the Commonwealth Government established an interim species nomination process. This was in addition to the normal annual nomination process for threatened species and allowed bushfire-affected species to be considered for assessment. The Government provided additional departmental capacity to support that process.

The TSSC has begun to make final determinations with respect to bushfire-impacted species. For example, it has determined to list both the Yellow-bellied glider (south-eastern)⁷¹ and the Long-nosed Potoroo (southern mainland)⁷² in the vulnerable category of the threatened species list under the EPBC Act, effective 2 March 2022. In doing so, the TSSC found that:

- “The main factors that make the yellow-bellied glider (south-eastern) eligible for listing in the Vulnerable category are population reduction and habitat destruction following the 2019–20 bushfires and continuing population decline due to land clearing, fragmentation, extensive severe fires, and climate change” and that during the 2019-2020 bushfires “an unusually large area burned at high severity... intersecting with 41 percent of the distribution of the yellow-bellied glider”;⁷³ and
- “The main factors that make the Long-nosed Potoroo (southern mainland) eligible for listing in the Vulnerable category are the predicted decline of 33 percent in the next three generations as a result of the 2019-2020 bushfires... the species is unlikely to recover to pre-fire population abundance before the next major bushfire event impacting a significant proportion of the species’ range”.⁷⁴

It is also worth noting that in recommending recovery actions for both the Yellow-bellied glider (south-eastern) and Long-nosed Potoroo (southern mainland), the Wildlife and Threatened Species Bushfire Recovery Expert Panel recommended the following:

1. careful management of unburnt areas, and
2. avoid clearing that results in population fragmentation, and
3. adapt forestry prescriptions to prevent habitat patches becoming too small to support viable populations, and
4. avoid salvage logging in burnt parts of their range.⁷⁵

Despite the important work that has occurred to assess the impacts of the bushfires on these two threatened species and listing them as vulnerable under the EPBC Act, s158A allows the Minister to disregard the listing of these species during the assessment of any projects for which a controlled action decision had already been made. This means that development may be able to proceed under the EPBC Act despite potentially significant impacts on the Yellow-bellied glider or Long-nosed Potoroo, putting those bushfire impacted species further at risk.

Examples of projects that may undermine bushfire recovery efforts due to the operation of s158A of the EPBC Act include:

- Residential development at Manyana on the NSW South Coast (EPBC Act referral 2020/8704): The township of Manyana was significantly impacted by the 2019-2020 bushfires. The proposed residential subdivision will require clearing approximately 17.18 ha of vegetation.⁷⁶ Both the yellow-bellied glider and long-nosed potoroo are known to occur locally. However, because the controlled action decision for the project was made on 16 August 2020 (which is after the

fires), the listing of the yellow-bellied glider as vulnerable under the EPBC Act does not need to be considered in continuing the assessment of that project.

- Glendell Mine Continued Operations Project, near Ravensworth, NSW: The Glendell Mine forms part of the Mount Owen Complex located in the Hunter Coalfields. The Glendell Continuation Operations Project (**the Project**) would extend existing operations by establishing a new mining area (the Glendell Pit Extension) to the north of the current Glendell Pit. This would require approximately 750 ha of additional land to be cleared.⁷⁷ This includes the clearance of native vegetation and associated impacts to biodiversity, including the potential for impacts to threatened flora and fauna species and communities. The Project was declared to be a ‘controlled action’ under the EPBC Act in June 2019, due to its potential impacts on listed threatened species and communities and water resources.⁷⁸ Although the yellow-bellied glider’s range covers the Project area,⁷⁹ impacts on the yellow-bellied glider cannot be considered under the EPBC Act, as the species was listed after the controlled action decision. In October 2022 the Project was refused by the NSW Independent Planning Commission due to impacts on heritage.⁸⁰

It is noted that impacts may need to be considered under relevant state laws.



Problematic provisions, such as s158A of the EPBC Act, evidently require immediate reform to ensure that the most up-to-date information is before decision makers when making decisions, and appropriate intervention is allowed when warranted. At the same time, it is recognised that a balance needs to be achieved so as not to cause undue hardship to project proponents. To achieve this, we make the following recommendations:

- Decisions not yet made (e.g. final approvals) must consider all current listings at the time of the decision. This is unlikely to cause significant hardship or undue prejudice for project proponents, as they should not have substantially relied on a decision that has not yet been made. Any reliance on an interim decision and any inconvenience and cost (e.g. conducting further assessment/s and/or updating assessment documentation) is outweighed by the potential irreversible or long-term harm that may be caused to a species that is known to be at risk. This would ensure decisions are made based on the best available information, and avoid the absurd situation where a listing made shortly after an application is first lodged, when environmental impact assessment may still be in preliminary stages, can be ignored. There may be some limited circumstances where it would be unreasonable to require this (for example, late in the process, after a final assessment report has been provided to a decision maker for determination and where a species is at the lowest risk of extinction – similar to current provisions in NSW (see above), and provisions could allow for an exemption in such limited circumstances).

- A decision maker should be allowed to revisit decisions made before the final approval decision (for example, a controlled action decision). It is likely that this could occur without causing unjustified, disproportionate or excessive inconvenience or prejudice to the proponent. Indeed, the EPBC Act already provides the Minister with the power to revoke or amend a controlled action decision if circumstances change or new information comes to light (except, due to the operation of s158A, in the case of listing events).⁸¹ Allowing this to occur following the listing or uplisting of a species would ensure consistency with other parts of the EPBC Act.
- Decision makers should be able to require the proponent to provide additional information relating to impacts on a listed species during the assessment process. This is consistent with existing provisions that allow decision makers to request additional information from proponents,⁸² and would ensure that decisions are made based on the best available information.
- Decision makers should have limited powers to amend or revoke final approval decisions (this is discussed in further detail at 2.4 below).

To provide consistency between jurisdictions, a best practice national standard and model provision should be developed.⁸³

2.1.3 Recommendations for rapid provisional listing or uplisting

Based on the analysis above, the following recommendations are made:

Recommendation 1: Introduce listing provisions for threatened species in each jurisdiction, that allow species to be rapidly listed on a provisional basis until such time as a more thorough assessment can be conducted. To provide consistency between jurisdictions, a best practice national standard and model provision should be developed.

Recommendation 2: Explicitly allow species to be rapidly listed on a provisional basis following a major event that results in, or is likely to result in, a material change in conservation status or viability of a species (e.g. by including a specific subsection to this effect in provisional listing provisions).

Recommendation 3: Develop guidance material on the application of provisional listing criteria.

Recommendation 4: Clarify the interaction between provisional listing provisions and the common assessment method (CAM), by ensuring legislation explicitly provides that:

- a) a provisional listing determination can be made outside of the usual CAM process; and
- b) requirements to make a final determination as to whether a species should be permanently listed following a provisional listing, are consistent with the process for assessment under the CAM (including in relation to full assessment requirements and timing).

Recommendation 5: Remove inappropriate restrictions (e.g. s158A of the EPBC Act) that limit the ability of approval authorities to take into account listing events (both provisional listing and regular listing) when assessing impacts of activities on threatened species.

Recommendation 6: Ensure that listing events are appropriately taken into account in assessment and approval processes, including that:

- Decisions must consider all current listings at the time of the decision (except in limited circumstances).
- A decision maker should be allowed to revisit decisions made before the final approval decision following a listing event (for example, a controlled action decision under the EPBC Act).
- Decision makers should be able to require the proponent to provide additional information relating to impacts on a listed species during the assessment process, including after a listing event.

2.2. Provisions requiring reviews of threatened species lists

2.2.1 Overview

In addition to provisions that allow provisional listing of species on an emergency basis, legislation should also require threatened species lists to be reviewed following a major event to determine whether any changes are required. This would compel an overarching review of the conservation status of all impacted threatened species, rather than the list being updated on an ad hoc basis - which may be the case when single species are nominated for listing by an interested third party. As part of the review, the TSSC could determine whether species should be prioritised for priority listing in the first instance, and then undertake subsequent, more comprehensive reviews at a later date.

Currently, several jurisdictions require threatened species lists to be reviewed at regular intervals.

For example:

- In NSW, s4.18 of the BC Act provides that the Scientific Committee must keep the lists of species and ecological communities under review and must, at least every 5 years,⁸⁴ determine whether any changes to the lists are necessary. The purpose of this provision is, presumably, to ensure that lists are kept up-to-

date and reflect the current understanding of the conservation status of species. However, there is little guidance on the process for undertaking such reviews, and the former NSW Office of Environment and Heritage has acknowledged that “(i)n practice, comprehensive reviews involving all listed species are not undertaken due to the significant costs involved”.⁸⁵

- In Victoria, s16K of the FFG Act requires the Minister to ensure that the Threatened Species List is reviewed for the purposes of identifying any necessary changes at intervals of no more than 5 years.

After events like the 2019-2020 bushfires or 2022 floods, which have had a significant impact on threatened species, the task of reviewing threatened species lists should not be delayed until the next 5-year review. While reviews could be undertaken earlier under current provisions in NSW and Victoria, limited resources mean this unlikely to be prioritised without specific legislative provisions requiring it to be done. In jurisdictions where there are no requirements to review these lists, appropriate provisions should be introduced, including requirements to review lists after a major event.

2.2.2 Key considerations

As noted above, existing requirements to review threatened species lists are not adequately met due to limited resources, so similar problems may arise if additional requirements are introduced.

This should not however preclude requirements being introduced. It is recommended that, in addition to provisional listing provisions, environmental laws contain provisions that require a comprehensive review of threatened species lists following a major event. This should include detailed provisions outlining the process for undertaking the review. The characterisation of major event is discussed in more detail at 2.3.

2.2.3 Recommendations for requiring reviews of threatened species lists

Recommendation 7: Require threatened species lists to be reviewed following a major event to determine whether any changes are required, in addition to regular, periodic reviews of threatened species lists.



2.3. Review and updating threatened species protections following a major event

2.3.1 Overview

The listing of a species as threatened, or an uplisting to a higher threat category, can establish new or further protections for those species in several ways.

For species not previously listed, listing as a threatened species may trigger additional impact assessment requirements under both the EPBC Act, and relevant state or territory legislation, particularly if a proposed development or activity is likely to significantly impact that species. Assessment requirements will differ in each jurisdiction, and on individual circumstances.

Also, in general, environmental laws contain overarching provisions that make it an offence to harm threatened species (although various defences are available, including having a relevant permit or approval). Therefore, the listing of a species as threatened would, in general, enable those offence provisions. Uplisting of a species to a higher threat category may also trigger increased penalties.⁸⁶

However, additional protections may be established in other ways, including through species-specific protections. For example:

- Conservation laws may require recovery plans (or equivalent) to be made outlining necessary action needed to protect a particular species. For example:
 - Under the EPBC Act, the Minister may adopt recovery plans for threatened species that set out the research and management actions necessary to stop the decline of, and support the recovery of, listed threatened species.
 - The BC Act (NSW) requires the Environment Agency Head to establish a Biodiversity Conservation Program that sets out strategies and framework for maximising the long-term security of threatened species. The Biodiversity Conservation Program is required to be reviewed every five years.⁸⁷
 - The FFG Act (Vic) requires an Action Statement to be prepared for listed threatened species,⁸⁸ and the Secretary may make a management plan for any taxon or community of flora or fauna or potentially threatening process.⁸⁹
 - Under the *Nature Conservation Act 1992* (Qld) (**NC Act**), the Minister may make a conservation plan for wildlife.⁹⁰

- Forestry rules may contain species-specific protections to limit the impacts of forestry operation on those species.
 - Integrated Forestry Operation Approvals (**IFOAs**) in NSW contain species-specific prescriptions aimed at mitigating impacts on threatened species.⁹¹ Species-specific prescriptions are also in Private Native Forestry Codes.⁹²
 - Similarly, threatened species prescriptions are set out in the *Victorian Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2021*.⁹³
- Planning and development laws may include species-specific rules – such as a koala planning policy, or species-specific biodiversity offsetting requirements. For example:
 - NSW has a specific planning policy for koalas that sets out various development controls for development undertaken in certain areas of koala habitat.⁹⁴
 - The Queensland Environmental Offsets Policy has specific requirements for koala habitat offsets in south-east Queensland.⁹⁵

Other planning and development rules or policy settings may also provide broader protection for threatened species – for example, identification of wildlife corridors or environmentally sensitive areas in plans.

In each of these examples, protections or policy settings may require revision following a major event that impacts on the conservation status of a species. However, in most instances, there are no legal requirements compelling a review of threatened species protections following a major event, meaning that protections may be outdated. Inadequate protections can undermine recovery efforts and put species at a greater risk of extinction.

New provisions should be introduced that trigger a review of relevant rules relating to threatened species protection following a major event. This is something that Professor Graeme Samuel envisaged in national environment laws; that is, in recommending new National Environmental Standards under the EPBC Act, Professor Samuel recommended that “(s)tandards should be subject to both regular reviews and reviews in response to changing, unforeseen or emergency situations, such as the 2019-20 Black Summer bushfires”.⁹⁶

Two examples of provisions that may trigger a review following an event akin to the 2019-2020 bushfires have been identified - the key elements of these provisions are set out on **Table 3**. Both examples relate to rules for forestry operations, and are not mandatory. The full provisions are set out in **Annexure 1 - Examples of provisions that trigger a review of environmental protection policy settings following major event**.



Table 3 - Examples of review triggers following a major event.

Key element of review trigger	Victorian East Gippsland Regional Forest Agreement ⁹⁷	Private Native Forestry Code of Practice for Northern NSW
Review is not mandatory – it is at the discretion of a prescribed decision maker(s).	Can only be undertaken if both Parties to the Agreement jointly agree to undertake the review.	The Minister administering the <i>Local Land Services Act 2013</i> can request harvest operations are reviewed. the Chief Executive Officer of the Environment Protection Authority can inform the Chief Executive Officer of Local Land Services that a review under clause 4.3(5) of this Code may be required.
A review can be undertaken following an ‘event’. The event is clearly defined for the purpose of the relevant provisions.	‘Major Event’ means a substantial change in circumstances that has the potential to significantly impact upon: a) the objectives and operation of this Agreement; b) the comprehensiveness, adequacy or representativeness of the CAR Reserve System; c) ESFM; d) one or more MNES; or e) the stability of Forest Industries, within the RFA Region, and includes (but is not limited to) natural events such as bushfires, floods and disease.	‘Unforeseen event’ is described as an event (such as wildfire, mass dieback or a forest biosecurity event) that has caused, or has the potential risk of causing serious or irreversible environmental damage on private land at a bioregional scale.
Provisions specify what is to be reviewed.	The review can assess the impacts of the Major Event on the operation of the Agreement; ecologically sustainable forest management (ESFM); Comprehensive, Adequate and Representative (CAR) Reserve System; effective management and protection of matter of national environmental significance (MNES); Harvest Level; or long-term stability of Forests and Forest Industries (see relevant definitions of terms in clause 2 the Victorian East Gippsland Regional Forest Agreement).	A site assessment will occur prior to harvest operations commencing to determine whether site scale environmental risks: a) can be managed within the existing provisions of the Code, or b) cannot be mitigated or managed to avoid serious or irreversible environmental damage.

Key element of review trigger	Victorian East Gippsland Regional Forest Agreement ⁹⁷	Private Native Forestry Code of Practice for Northern NSW
Provisions specific what action can be taken.	The purpose of a Major Event Review is not to open the Agreement up to renegotiation, but to assess the impacts of the Major Event on the matters identified in clause 32A for the purposes of considering what, if any, remedial action needs to be undertaken to address the impacts of the Major Event.	If environmental risks cannot be mitigated or managed to avoid serious or irreversible environmental damage. Local Land Services can require the landholder to suspend or reschedule harvest operations but will agree with the landholder(s) on a timeframe for reassessing the site.
Process for review.	Clause 32B outlines various process requirements, including that the review: a) be conducted by a Panel constituted in accordance with clause 31D b) is to be jointly funded by the Parties in accordance with clause 32C; c) must include public consultation d) can constitute a Five-yearly Review in certain circumstances.	In this case, the review provisions trigger a site assessment carried out by the Local Land Service.



2.3.2. Key considerations for how a review trigger might operate

Having regard to the elements identified in the examples in 2.3.1, and the broader objective of ensuring that environmental protections are fit for purpose following a major event, key considerations for reform include the following:

- There should be a clear legislative process and criteria for determining whether a review should be triggered. It may be appropriate to make certain review triggers mandatory in some circumstances.
- Provisions identified in Table 3 provide a useful model for how a ‘major event’ could be defined. For example, a major event could be framed as something that leads to a material change in conservation status or viability of a species, and could specifically reference bushfires, floods, disease, biosecurity event etc. Consideration should be given to how cumulative impacts of multiple events may also trigger ‘major event’ review provisions.
- Provisions could be framed broadly – for example, a single provision requiring an overarching review of whether threatened species protections within a certain Act or Code continue to be consistent with broad objectives (as set out in the Act or Code). Alternatively, multiple specific provisions within specific parts of an Act may be more effective, for example a requirement to review the NSW Biodiversity Conservation Program, or relevant parts thereof, following a major event (in addition to a five-year review), or a requirement to review species specific prescriptions in the Coastal Integrated Forestry Operations Approval following a major event.

- Consistent with the precautionary principle, provisions should allow for activities to be temporarily suspended while the review is undertaken and recommendations implemented in order to avoid further adverse impacts on threatened species and ecosystems.
- Provisions should allow for effective, responsive action to be undertaken in response to a review. There is no point in undertaking a review if there are limited powers to take action to remedy key concerns identified during a review. Again, specific provisions relevant to specific parts of an Act may be more effective than general, overarching provisions.
- Provisions should contain a clear process for undertaking a review. It is important that the review process is transparent and key information is publicly available, and that there are opportunities for public participation where relevant.
- Existing requirements for reviews to be undertaken at regular intervals should be retained.

It is likely that review provisions may need to differ across different legislative frameworks. Consideration will need to be given to determining how best to incorporate major event review provisions, including identifying specific threatened species protections that may require review following a major event, and how the major event review should be undertaken.

2.3.3. Recommendations for review and updating threatened species protections following a major event

Recommendation 8: Incorporate major event review provisions into all relevant environmental legislation across all jurisdictions. Provisions should:

- a) Include clear legislative criteria for determining whether a review should be triggered, and mandate reviews in appropriate circumstances.
- b) Clearly define ‘major event’. It should include, but not be limited to, bushfires, droughts, floods, disease, and biosecurity events. Provisions should also allow for cumulative impacts to be considered.
- c) Allow for temporary suspension of activities until the review is undertaken and relevant recommendations implemented.
- d) Set out a clear, transparent process for undertaking a review.
- e) Allow for effective, responsive action to be undertaken in response to a review.



2.4. Provisions for varying, suspending or revoking approvals

2.4.1 Overview

Major events, such as the 2019-2020 bushfires or 2022 floods, may have such catastrophic impacts that certain approved activities should no longer be allowed to proceed as originally approved.

For example, a situation may arise where an existing approval permits the clearing of an area of habitat that, following a major event, is now a critical remaining stand of habitat for a particular species. Approval frameworks need to provide the ability for decision makers to intervene in circumstances where, if an approved action were to proceed, there is a high likelihood that a species would become extinct.

This could be achieved in a number of ways, for example:

- Standard conditions of consent that trigger a review of relevant conditions following a major event.

- Powers for decision makers to vary approvals or approval conditions, including in response to a material change in circumstances or a major event review.
- Powers for decision makers to suspend or revoke approvals.

In this section the term ‘**approval**’ is used to broadly cover permission to undertake an activity and could include an approval, consent, licence or permit for activities. ‘**Activity**’ includes, for example, development, land clearing or forestry. ‘**Approval authority**’ refers to the person that grants approval to an activity.

Examples of existing provisions that allow approval to be varied, suspended or revoked are set in **Table 4**.

Table 4 - Examples of powers to vary, suspend or revoke approvals.

Example	EDO comment
<p>Part 9 Division 3 of the EPBC Act Under Part 9 Division 3 of the EPBC Act there are powers for the Minister to:</p> <ul style="list-style-type: none">• vary an approval, including by revoking, varying or adding conditions (section 143),• suspend an approval (section 144), or• revoke an approval (section 145). <p>The Minister can use these powers where an approved action is likely to have a significant impact, which:</p> <ul style="list-style-type: none">• was not identified at the time of the action’s approval; or• is substantially greater than the impact identified at the time of the action’s approval.	<p>Section 158A of the EPBC Act prevents the Minister using these powers relying on a listing event.</p>
<p>Section 4.57 Environmental Planning and Assessment Act 1979 (NSW) If it appears to either:</p> <ul style="list-style-type: none">- the Planning Secretary, having regard to a proposed state environmental planning policy, or- a council, having regard to a proposed local environment plan that any development should not be carried out or completed, or should not be carried out or completed except with modifications, the Planning Secretary or council may, by instrument in writing, revoke or modify that consent. <p>A person aggrieved by the decision is entitled to compensation for expenditure incurred pursuant to the consent during the period between the date on which the consent becomes effective and notice is given of the notice revocation or modification of the consent.</p>	<p>It is unclear why this provision is limited to circumstances where a proposed state environmental planning policy or proposed local environment plan is considered, rather than in circumstances where impacts may be greater than anticipated (as per EPBC Act provisions). Immediately following the 2019-2020 EDO and HSI wrote to the NSW Premier outlining how, amongst other things, section 4.57 could be used to ensure address bushfire impacts.⁹⁸</p>
<p>NSW Coastal Integrated Forestry Operation Approval (IFOA) – Clause 23 - Special provisions requiring a review or amendment to the approval Under clause 23 of the Coastal IFOA, Forestry Corporation of New South Wales (FCNSW) can seek from the NSW Environment Protection Authority ‘site specific operating conditions’ (SSOCs) if it is unable to comply with the ordinary conditions at a particular site.</p>	<p>FCNSW made use of this provision in the immediate aftermath of the fires and requested that the EPA issue SSOCs. The EPA agreed to issue SSOCs for 17 State Forests across coastal NSW. The EPA cannot issue SSOCs in its own right – it can only do so on the request of FCNSW.</p>



Example	EDO comment
Section 57 - Protection of the Environment Operations Act 1997 (NSW) (POEO Act) Under section 57 of the POEO Act, a regulatory authority can vary an environmental protection licence (EPL), including the conditions of an EPL.	Chapter 3 of the POEO Act sets out a framework for regulating polluting activities through EPLs. There are broad powers for the NSW EPA to vary conditions of an EPL.
Section 215 and section 278 - Environmental Protection Act 1994 (Qld) (EP Act) Under section 215 of the EP Act, the administering authority may amend an environmental authority to undertake an environmentally relevant activity (e.g industrial, resource or intensive agricultural activities with the potential to release contaminants into the environment) in a range of circumstances. Under section 278 of the EP Act, the administering authority may cancel or suspend an environmental authority in limited circumstances.	The circumstances in which these existing powers can be used do not extend to new information or a change in impacts due to a major event.

2.4.2 Key considerations

- Existing EPBC Act powers should be available following a listing event

In the case of the EPBC Act, powers to vary, suspend or revoke final decisions already exist, where the Minister identifies a significant impact on a matter of national environmental significance that was not identified at the time of the action’s approval, or is substantially greater than the impact identified at the time of the action’s approval.⁹⁹ These powers should be available following a listing event. The inability to use these powers following a listing event (due to the operation of s158A of the EPBC Act, discussed above at 2.2) prevents the Minister intervening in circumstances where the conservation status of a species has worsened or there is a need for rapid intervention.

- Standard conditions of consent that trigger a review of approvals or approval conditions

At the time that an approval is granted, approval conditions could include a requirement for proponents to review operations and relevant conditions within a specified time period following a major event and submit a report to the approval authority indicating what impact the major event may have on operations and the ability of the proponent to meet approval conditions, including in relation to threatened species protection. That report can inform an approval authorities’ decision to vary, suspend or revoke an approval or conditions of an approval (subject to relevant powers – discussed below).



• **Powers should be introduced to allow decision makers to vary, suspend or revoke approvals**

Powers similar to those in the EPBC Act should be available in all jurisdictions and should be available in response to major events, and in response to a listing event.

In particular:

• **A general power to vary approval conditions** would be consistent with powers available under NSW pollution laws, federal environmental laws and overseas.¹⁰⁰ In a different context, EDO has argued that the ability to vary approval conditions for certain industrial and resource developments would address out-of-date approval conditions that do not meet modern standards of technology, efficiency or environmental compliance.¹⁰¹ Similarly, the ability to vary approval conditions would allow conditions relating to threatened species protection to be updated.

Certain safeguards could be put in place to limit variation powers. For example, variation powers could be available in prescribed circumstances, including, for example, if:

- new information not available at the time of approval comes to light;

- impacts of a proposed activity will be greater than anticipated;
- a major event review (including, for example, review undertaken in accordance with approval conditions that trigger a major event review) identifies that impacts on threatened species will be greater than originally assessed; or
- environmental standards are tightened.

These powers should be available across all types of approvals where there may be an impact on threatened species (e.g. planning approvals, forestry operations approvals).

• **Powers to suspend or revoke approvals** should be available in limited circumstances. For example, in a worst-case scenario the impacts of a major event on a particular species or community may be so severe that if certain approved actions were to proceed, the impacts of the actions would be catastrophic, and could include possible extinction of a species. In these circumstances, an approval authority should be able to either suspend an approval until such time as catastrophic impacts would no longer occur, or revoke an approval. In drafting such legal provisions, consideration should be given as to whether the revocation of an approval would give rise to compensation in certain circumstances.

2.4.3 Recommendations for provisions for varying, suspending or revoking approvals

Recommendation 9: Implement standard conditions of consent that trigger a review of operations and relevant conditions within a specified time period following a major event. Conditions should require proponents to submit a report to the approval authority indicating what impact the major event may have on operations and the ability of the proponent to meet approval conditions, including in relation to threatened species protection.

Recommendation 10: Give approval authorities the power to:

- a) vary approval conditions, under prescribed circumstances; and
- b) suspend or revoke approvals in limited circumstances, including where activities would have a substantially greater impact than those identified at the time of the action's approval.

These powers should be able to be exercised taking into account listing events, if the relevant criteria are otherwise satisfied (i.e. provisions like s158A of the EPBC Act should not prevent approval authorities from exercising these powers).



Annexure 1.

Examples of provisions that trigger a review of environmental protection policy settings following a major event

Victorian Regional Forest Agreements	<p>Victorian East Gippsland Regional Forest Agreement Definitions and General Provisions (Clause 2)</p> <p>“Major Event” means a substantial change in circumstances that has the potential to significantly impact upon:</p> <ul style="list-style-type: none">a. the objectives and operation of this Agreement;b. the comprehensiveness, adequacy or representativeness of the CAR Reserve System;c. ESFM;d. one or more MNES; ore. the stability of Forest Industries, within the RFA Region, and includes (but is not limited to) natural events such as bushfires, floods and disease; <p>“Major Event Review” means a review of the same name undertaken pursuant to clause 32A of this Agreement.</p>
	<p>Major Event Review (Clauses 32A -32E)</p> <p>32A. Subject to clause 32B, within six months of the occurrence of a Major Event, the Parties may jointly agree to conduct a review to assess the impacts of the Major Event on the:</p> <ul style="list-style-type: none">a) operation of the Agreement;b) ESFM;c) CAR Reserve System;d) effective management and protection of MNES;e) Harvest Level; orf) long-term stability of Forests and Forest Industries. <p>32B. A review pursuant to clause 32A of this Agreement:</p> <ul style="list-style-type: none">e) can only be undertaken if both Parties jointly agree to undertake the review;f) is to be conducted by a Panel constituted in accordance with clause 31D of this Agreement;g) is to be jointly funded by the Parties in accordance with clause 32C;h) must include public consultation and an assessment of the impacts of the Major Event on Environment and Heritage Values, Listed Species and Communities, Ecosystem Services, economic and social values; andi) can constitute a Five-yearly Review if it:<ul style="list-style-type: none">i. is agreed by both Parties;ii. is carried out for the whole of the RFA Region;iii. is conducted within one year of the date on which the Five-yearly Review is due to be commenced pursuant to clause 31B(c);

	<ul style="list-style-type: none">iv. meets the purpose and scope of a Five-yearly Review described in clause 30; andv. is conducted in accordance with clauses 31D to 31E. <p>32C. For the purposes of clause 32B(c), the Parties agree that they will share equally the costs associated with activities that the Parties agree are required to be undertaken for each Major Event Review, and that such activities will be set out in a Scoping Agreement prepared in accordance with clause 32D of this Agreement.</p> <p>32D. The Parties must jointly prepare and agree upon the terms of an agreement (the Scoping Agreement) which:</p> <ul style="list-style-type: none">a) sets out the matters which the Panel must consider and report on;b) includes the proposed approach to consultation and engagement with Traditional Owners, stakeholders and communities; andc) identifies any agreed timeframes, priorities, procedures (including the process for ending a review) and funding arrangements. <p>32E. For the avoidance of doubt, the Parties agree that the purpose of a Major Event Review is not to open the Agreement up to renegotiation, but to assess the impacts of the Major Event on the matters identified in clause 32A for the purposes of considering what, if any, remedial action needs to be undertaken to address the impacts of the Major Event.</p>
NSW Private Native Forestry Codes	<p>Private Native Forestry Code of Practice for Northern NSW</p> <p>Clause 4.3 - Monitoring, assessment and adaptive management</p> <p>(5) The Minister administering the <i>Local Land Services Act 2013</i> can request harvest operations are reviewed where an unforeseen event (such as wildfire, mass dieback or a forest biosecurity event) has caused, or has the potential risk of causing serious or irreversible environmental damage on private land at a bioregional scale. In these circumstances Local Land Services will conduct a site assessment within the impacted bioregion(s) identified by the Minister. The site assessment will occur prior to harvest operations commencing to determine whether site scale environmental risks:</p> <ul style="list-style-type: none">a) can be managed within the existing provisions of the Code, orb) cannot be mitigated or managed to avoid serious or irreversible environmental damage. In this event, Local Land Services can require the landholder to suspend or reschedule harvest operations but will agree with the landholder(s) on a timeframe for reassessing the site. <p>(6) Where an unforeseen event (such as wildfire, mass dieback or a forest biosecurity event) has caused, or has the potential risk of causing serious or irreversible environmental damage on private land at a bioregional scale, the Chief Executive Officer of the Environment Protection Authority can inform the Chief Executive Officer of Local Land Services that a review under clause 4.3 (5) of this Code may be required.</p>

End Notes

¹ 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>

² 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=6360E080DB80E7BE-F935A1A4A6BDDAB46BBFD0A7>

³ United Nations, *Convention on Biological Diversity*, 1992

⁴ See <https://www.dcceew.gov.au/environment/biodiversity/threatened>

⁵ Cresswell ID, Murphy H (2016). *Biodiversity: Biodiversity. In: Australia state of the environment 2016*, Australian Government Department of the Environment and Energy, Canberra. <https://soe.environment.gov.au/theme/biodiversity>

⁶ Murphy H & van Leeuwen S (2021). *Australia state of the environment 2021: Biodiversity*, Independent report to the Australian Government Minister for the Environment, Commonwealth of Australia, Canberra, available at <https://soe.dcceew.gov.au/sites/default/files/2022-07/soe2021-biodiversity.pdf>

⁷ Professor Graeme Samuel, *Independent Review of the EPBC Act – Final Report*, October 2020, p 1, op. cit.

⁸ Australian National Audit Office, *Auditor-General Report No.19 2021–22 - Management of Threatened Species and Ecological Communities under the Environment Protection and Biodiversity Conservation Act 1999*, March 2022, p 8, available at https://www.anao.gov.au/sites/default/files/Auditor-General_Report_2021-22_19.pdf

⁹ EDO and Places You Love Alliance, *Assessment of the adequacy of threatened species & planning laws*, 2014, available at <https://www.edo.org.au/wp-content/uploads/2022/07/Assessment-of-the-adequacy-of-threatened-species-planning-laws.pdf>

¹⁰ 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. We note that some reports state 34 deaths, however we have been unable to confirm this number.

¹¹ Arriagada, N.B, et al., 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>

¹² 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>.

¹³ 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>

¹⁴ 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>

¹⁵ 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/alterd-fire-regimes-pressure-on-the-gondwana-rainforests-of-australia>

¹⁶ 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>

¹⁷ 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>

¹⁸ 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>

¹⁹ 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

²⁰ Modelled habitat is habitat that is identified using modelling, based on various environmental factors.

²¹ 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-bush-fire-emergency-Biodiversity-response-and-recovery-Version-2-1.pdf

²² Queensland Government, *2019 Queensland Bushfires - State Recovery Plan 2019-2022*, August 2020, available at <https://www.qra.qld.gov.au/2019-queensland-bushfires>

²³ 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.

²⁴ 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>

²⁵ 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

²⁶ Dr Brett Summerell, The Royal Botanic Garden, Sydney, The impact of fire on plants, January 2020, available at <https://www.rbgsyd.nsw.gov.au/stories/2020/the-impact-of-fire-on-plants>

²⁷ See <https://www.environment.gov.au/biodiversity/bushfire-recovery/priority-animals>

²⁸ See <https://www.environment.gov.au/biodiversity/bushfire-recovery/bushfire-impacts/expert-panel>

²⁹ See <https://www.awe.gov.au/environment/biodiversity/threatened/nominations>

³⁰ See <https://www.awe.gov.au/environment/biodiversity/bushfire-recovery>

³¹ See NSW Wildlife and Conservation Bushfire Recovery: Medium-term response plan, February 2021, available at <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Fire/nsw-wildlife-and-conservation-bushfire-recovery-medium-term-response-plan-200478.pdf>; see also the Wildlife and Conservation Bushfire Recovery: Immediate Response, published in January 2020 and Fire and the Environment 2019–20 Summary, published in May 2020, 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>

³² NSW Priority Species and Communities for Bushfire Impact Assessment and Conservation Action, electronic dataset, Sharing and Enabling Environmental Data, <https://www.seed.nsw.gov.au/need-help/finding-data-on-dataset-catalogue/bushfire-related-datasets>

³³ Queensland Government, *2019 Queensland Bushfires - State Recovery Plan 2019-2022*, August 2020, available at <https://www.qra.qld.gov.au/2019-queensland-bushfires>

³⁴ See <https://www.qld.gov.au/environment/plants-animals/conservation/bushfires-threatened-species-recovery>

³⁵ See <https://environment.des.qld.gov.au/wildlife/threatened-species/reclassification-process/species-technical-committee>

³⁶ See <https://www.wildlife.vic.gov.au/home/biodiversity-bushfire-response-and-recovery>

³⁷ Victoria 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

³⁸ See <https://www.environment.vic.gov.au/conserving-threatened-species/conservation-status-assessment-project>, including “How have the 2019-2020 bushfires affected the project?”

³⁹ See <https://www.dcceew.gov.au/environment/biodiversity/threatened/nominations/extensions>

⁴⁰ See <https://www.dcceew.gov.au/sites/default/files/documents/outcome-recovery-plan-decision-review.pdf>

⁴¹ See, for example, Thorn S, Bässler C, Brandl R, et al. *Impacts of salvage logging on biodiversity: A meta-analysis*, 2018, J Appl Ecol. 2018 available at <https://besjournals.onlinelibrary.wiley.com/doi/epdf/10.1111/1365-2664.12945>; see also Lindenmayer, D. B., and Noss, R. F., *Salvage Logging, Ecosystem Processes, and Biodiversity Conservation*, 2006, Conservation Biology, vol. 20, no. 4, 2006, pp. 949–58.

⁴² See Commonwealth Scientific and Industrial Research Organisation (CSIRO www.climatechangeinaustralia.gov.au/en/changing-climate/national-climate-statement/); see also NSW Department of Planning, Industry and Environment, *AdaptNSW*, <https://climatechange.environment.nsw.gov.au/>

⁴³ The impacts of a warming climate on Australia are set out in more details in Bureau of Meteorology and CSIRO, *State of the Climate 2020* (2020), www.bom.gov.au/state-of-the-climate

⁴⁴ Intergovernmental Panel on Climate Change (IPCC) *Climate Change 2014: Synthesis Report*. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)] (2014) p 17, <http://www.ipcc.ch/report/ar5/syr/>

⁴⁵ *Royal Commission into National Natural Disaster Arrangements, Report*, 28 October 2020, available at <https://naturaldisaster.royalcommission.gov.au/>

⁴⁶ See, for example, ABC News, *Hundreds of dead animals as rescue services struggle with volume of call-outs and impact of floods*, 4 March 2022, available at <https://www.abc.net.au/news/2022-03-04/animals-stranded-drowning-floods-rspca-rescue/100880008>; see also Australian Geographic, Euan Ritchie, Deakin University and Chris J Jolly, Macquarie University, *What are the effects on wildlife during flooding and how can you help?*, 8 March 2022, available at <https://www.australiangeographic.com.au/topics/wildlife/2022/03/what-are-the-effects-on-wildlife-during-flooding-and-how-can-you-help/>

⁴⁷ Unlike the impact assessment undertaken by respective governments following the 2019-2020 bushfires, it is unclear if similar analysis will be done following the 2022 NSW and Queensland floods. The Commonwealth has however committed \$3.5 million to support flood-affected wildlife and habitat, see Media Release, Minister Sussan Ley, *\$3.5 million support for flood-affected wildlife and habitat*, 8 April 2022, <https://minister.awe.gov.au/ley/media-releases/35-million-support-flood-affected-wildlife-and-habitat>

⁴⁸ The inadequacies of threatened species frameworks across Australian jurisdictions have been highlighted in various reports. See for example:

- Australian Network of Environmental Defender's Offices Inc (ANEDO), *Assessment of the adequacy of threatened species & planning laws*, Updated September 2014, available at https://d3n8a8pro7vnmx.cloudfront.net/edonsw/pages/1668/attachments/original/1410138351/Assessment_of_the_adequacy_of_threatened_species__planning_laws-V5.pdf?1410138351
- Queensland Audit Office, *Conserving threatened species Report 7: 2018–19*, November 2018 available https://www.qao.qld.gov.au/sites/default/files/reports/conserving_threatened_species_.pdf
- Victorian Auditor-General's Office, *Protecting Victoria's Biodiversity*, October 2021, available at <https://www.audit.vic.gov.au/sites/default/files/2021-10/20211013-Protecting-Victoria%27s-Biodiversity.pdf>
- Australian National Audit Office, *Auditor-General Report No.19 2021–22 - Management of Threatened Species and Ecological Communities under the Environment Protection and Biodiversity Conservation Act 1999*, March 2022, available at https://www.anao.gov.au/sites/default/files/Auditor-General_Report_2021-22_19.pdf

⁴⁹ Our analysis of additions to the EPBC Act threatened species list (<http://www.environment.gov.au/cgi-tmp/publiclistchanges.3252629439688fc-c943d.html>) indicates that the first species to be bushfire-impacted species to be nominated for listing or uplisting under the EPBC Act were listed in December 2021. It is also noted that, where relevant, bushfire impacts are being considered for species nominated for assessment prior to the 2019-2020 bushfires, but undergoing assessment post-bushfires.

⁵⁰ Australian National Audit Office, *Auditor-General Report No.19 2021–22 - Management of Threatened Species and Ecological Communities under the Environment Protection and Biodiversity Conservation Act 1999*, March 2022, available at https://www.anao.gov.au/sites/default/files/Auditor-General_Report_2021-22_19.pdf

⁵¹ <https://www.dcceew.gov.au/environment/biodiversity/threatened/nominations/extensions>

⁵² Action 1.3.1, available at <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Fire/nsw-wildlife-and-conservation-bushfire-recovery-medium-term-response-plan-200478.pdf>,

⁵³ For example, the Victorian DELWP advised that: “The bushfires of 2019 and 2020 had serious impacts on the habitat of a number of species, and on the species themselves. The full impacts are still to be assessed in the field for many species, though for some species fire area and fire severity mapping indicated the likelihood of impacts. Species regarded as fire sensitive were reconsidered and some were upgraded to a higher status, based on increased past or predicted future decline” – see <https://www.environment.vic.gov.au/conserving-threatened-species/threatened-list>

⁵⁴ See https://www.qld.gov.au/__data/assets/pdf_file/0020/213563/threatened-species-bushfire-recovery-phase1-summary.pdf

⁵⁵ Prof. Graeme Samuel, *Independent Review of the EPBC Act – Final Report*, October 2020, p 128, available at <https://epbcactreview.environment.gov.au/resources/final-report>

⁵⁶ Allan Hawke, *The Australian Environment Act – Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999*, Final Report, October 2009, available at <https://www.dcceew.gov.au/environment/epbc/about/review/epbc-review-2008#final-report>

⁵⁷ For example, *Pittosporum sp.* Coffs Harbour was provisionally listed as critically endangered by the NSW TSSC on 21 February 2022. The species has been recently discovered in the Coffs Harbour area of the New South Wales mid-north coast and recognised as distinct from other known *Pittosporum* species. The provisional determination noted that *Pittosporum sp.* Coffs Harbour is in immediate threat from clearing and road construction works – the largest site, containing an estimated 45% of the total known population, is under threat from the approved highway bypass project at Coffs Harbour. See the *Notice of the Determination for provisional listing of a critically endangered species on an emergency basis*, available at <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Scientific-Committee/Determinations/2022/provisional-listing-pitosporum-sp-coffs-harbour.pdf?la=en&hash=36AB8ABD-CEF9D683C7C7CDA50D5003CCB7481DC6>

⁵⁸ The *Operational Guidelines to the World Heritage Convention* provides a definition of danger as follows (emphasis added):

Ascertained danger: The property is faced with specific and proven **imminent** danger, such as:

- A serious decline in the population of the endangered species** or the other species of outstanding universal value for which the property was legally established to protect, either **by natural factors such as disease** or by man-made factors such as poaching;
- Severe deterioration** of the natural beauty or scientific value of the property, as by human settlement, construction of reservoirs which flood important parts of the property, industrial and agricultural development including use of pesticides and fertilizers, major public works, mining, pollution, logging, firewood collection, etc;
- Human encroachment on boundaries or in upstream areas which threaten the integrity of the property;

For more information, see <https://www.iucn.org/theme/world-heritage/natural-sites/danger-list>

⁵⁹ For example, in the EPBC Act, provisional listing provisions for National and Commonwealth heritage adopt the term ‘significant adverse impact’ which differs from the term ‘significant impact’ used in relevant provisions relating to impacts on matters of national environmental significance.

⁶⁰ See further <https://www.environment.gov.au/biodiversity/threatened/cam>

⁶¹ See <https://www.environment.gov.au/biodiversity/threatened/publications/mou-cam>

⁶² *Intergovernmental Memorandum of Understanding Agreement on a Common Assessment Method for Listing of Threatened Species and Threatened Ecological Communities*, Schedule 1 - Common Assessment Method – Item 2.2

⁶³ Lane, A., Wallis, K., and Phillips, S. 2020. *A review of the conservation status of New South Wales populations of the Koala (Phascolarctos cinereus) leading up to and including part of the 2019/20 fire event*. Report to International Fund for Animal Welfare (IFAW). Biolink Ecological Consultants, Uki NSW, available at <https://www.ifaw.org/au/resources/koala-conservation-status-new-south-wales>

⁶⁴ Personal communication, NSW Threatened Species Scientific Committee, Letter to International Fund for Animal Welfare, dated 24 September 2021.

⁶⁵ See http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=85104

⁶⁶ See https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Completed_inquiries/2010-13/epbce-mergencylistings/index

⁶⁷ 'listing event' as used in the EPBC Act includes:

- a species becoming a listed threatened species
- an ecological community becoming a listed threatened ecological community
- a listed threatened species or a listed threatened ecological community becoming listed in another category representing a higher degree of endangerment

See EPBC Act, s158(1)

⁶⁸ 'Approval process decision' is defined in EPBC Act, s158(1).

⁶⁹ A controlled action decision determines whether an approval to carry out a project is required under the EPBC Act.

⁷⁰ Section 7.10 of the BC Act provides that "The regulations may make provision for or with respect to the effect of amendments to the lists of threatened species and ecological communities during a biodiversity assessment under this Part". Currently, the BC Regulation provides:

7.4 Amendments to list of vulnerable threatened species or ecological communities (s7.10)

(1) This clause applies to a biodiversity assessment under Part 7 of the Act for the purposes of Part 5 of the Environmental Planning and Assessment Act 1979 where the proponent obtains a species impact statement and not a biodiversity assessment report.

(2) The species impact statement is not required to consider the listing under Part 4 of the Act of a vulnerable species or vulnerable ecological community after the principal author signs the statement.

(3) This clause ceases to apply to a species impact statement if the relevant activity subject to biodiversity assessment has not been commenced or approved within 12 months after the statement has been publicly notified by the determining authority.

⁷¹ See *Conservation Advice for Petaurus australis (yellow bellied glider (south-eastern))*, available at <http://www.environment.gov.au/biodiversity/threatened/species/pubs/87600-conservation-advice-02032022.pdf>

⁷² See *Conservation Advice for Potorous tridactylus trisulcatus (southern long-nosed potoroo)*, available at <http://www.environment.gov.au/biodiversity/threatened/species/pubs/86367-conservation-advice-02032022.pdf>

⁷³ See *Conservation Advice for Petaurus australis australis (yellow bellied glider (south-eastern))*, op. cit.

⁷⁴ See *Conservation Advice for Potorous tridactylus trisulcatus (southern long-nosed potoroo)*, op.cit.

⁷⁵ Wildlife and Threatened Species Bushfire Recovery Expert Panel, *Management interventions for 119 priority animal species*, available at <https://www.awe.gov.au/sites/default/files/env/pages/a8d10ce5-6a49-4fc2-b94d-575d6d11c547/files/management-interventions-119-priority-animal-species.pdf>

⁷⁶ Ecoplaning, *Preliminary Documentation Submission* Ref: 2020/8704, June 2021.

⁷⁷ NSW Department of Planning and Environment, *Glendell Mine Continued Operations Project, State Significant Development Assessment SSD 9349*, February 2022, available at <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/02/glendell-continued-operations-project-ssd-9349/departement-of-planning-and-environment-assessment-report/glendell-cop--assessment-report-recommendation.pdf>

⁷⁸ See http://epbcnotices.environment.gov.au/_entity/annotation/d000577b-a0a3-e911-b1b7-005056842ad1/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1654125649928

⁷⁹ See <https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10601#:~:text=The%20Yellow%2Dbellied%20Glider%20is%20found%20along%20the%20eastern%20coast,-from%20southern%20Queensland%20to%20Victoria>

⁸⁰ See <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/02/glendell-continued-operations-project-ssd-9349/determination/221028-glendell-continued-operations--statement-of-reasons.pdf>

⁸¹ For example, s78 of the EPBC Act allows the Minister to reconsider a controlled action decision if there is substantial new information about impacts on a matter of national environmental significance or a substantial change in circumstances that was not foreseen at the time of the first decision that will have relating to impacts impact on a matter of national environmental significance.

⁸² See, for example, EPBC Act s76, 89 and 132.

⁸³ The *Independent Review of the EPBC Act – Final Report*, October 2020 recommended new, legally enforceable National Environmental Standards that set the boundaries for decision-making to deliver the protections needed.

⁸⁴ This differs from earlier provisions in the repealed TSC Act (NSW), which required a review of the schedules of threatened species every two years, see *Threatened Species Conservation Act 1995* (NSW) (repealed), s25A

⁸⁵ NSW Office of Environment and Heritage *Biodiversity Legislation Review OEH Paper 2: Information Provisions*, 2014, p 14, available at <https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-legislation-review-oeh-paper-2-information-provisions>

⁸⁶ For example, under the *Biodiversity Conservation Act 2016* (NSW) penalties for harming endangered and critically endangered threatened species are higher than penalties for harming vulnerable species.

⁸⁷ *Biodiversity Conservation Act 2016* (NSW), Part 4, Div 6.

⁸⁸ *Flora and Fauna Guarantee Act 1988* (Vic), s19.

⁸⁹ *Flora and Fauna Guarantee Act 1988* (Vic), s21.

⁹⁰ *Nature Conservation Act 1992* (Qld), Part 7, Div8.

⁹¹ Available at <https://www.epa.nsw.gov.au/your-environment/native-forestry/integrated-forestry-operations-approvals>

⁹² Available at <https://www.ils.nsw.gov.au/help-and-advice/private-native-forestry/private-native-forestry-code-of-practice>

⁹³ Available at <https://www.vic.gov.au/timber-harvesting>

⁹⁴ See Chapter 3 and Chapter 4 of *State Environmental Planning Policy (Biodiversity and Conservation) 2021*, available at <https://legislation.nsw.gov.au/view/html/inforce/current/epi-2021-0722#ch.4>

⁹⁵ See cl 2A.4 of the *Queensland Environmental Offsets Policy*, available at https://environment.des.qld.gov.au/_data/assets/pdf_file/0022/266062/offsets-policyv1-12.pdf

⁹⁶ *Independent Review of the EPBC Act – Final Report*, October 2020, op. cit., p 50.

⁹⁷ <https://www.agriculture.gov.au/agriculture-land/forestry/policies/rfa/regions/victoria/eastgippsland>

⁹⁸ See Letter from *EDO and HSI to New South Wales Premier, Gladys Berejiklian*, 25 February 2020, available at <https://www.edo.org.au/wp-content/uploads/2020/02/HSI-EDO-Letter-to-NSW-Premier-re-Bushfire-Emergency.pdf>

⁹⁹ See EPBC Act, Part 9, Division 3.

¹⁰⁰ See for example, *Protection of the Environment Operations Act 1997* (NSW), s. 58; *Environment Protection and Biodiversity Conservation Act 1999* (Cth), s. 143(1)(b)-(ba); and the *Clean Air Act* (USA).

¹⁰¹ Environmental Defenders Office, *Submission on the draft Environmental Planning and Assessment Amendment Bill 2017*, March 2017, p 18 – 19, available at https://d3n8a8pro7vnm.cloudfront.net/edonsw/pages/3657/attachments/original/1488778490/Planning_Reform_Bill_2017_EDO_NSW_submission_Mar2017.pdf?1488778490





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