



Environmental
Defenders Office

**Submission to Major Event Review for Victoria's Fire
Impacted Forests – Summary Report**

31 August 2021

About EDO

EDO is a community legal centre specialising in public interest environmental law. We help people who want to protect the environment through law. Our reputation is built on:

Successful environmental outcomes using the law. With over 30 years' experience in environmental law, EDO has a proven track record in achieving positive environmental outcomes for the community.

Broad environmental expertise. EDO is the acknowledged expert when it comes to the law and how it applies to the environment. We help the community to solve environmental issues by providing legal and scientific advice, community legal education and proposals for better laws.

Independent and accessible services. As a non-government and not-for-profit legal centre, our services are provided without fear or favour. Anyone can contact us to get free initial legal advice about an environmental problem, with many of our services targeted at rural and regional communities.

Environmental Defenders Office is a legal centre dedicated to protecting the environment.

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Submitted to:

Independent Panel
Major Event Review of Victoria's Regional Forest Agreements

Lodged online

<https://engage.vic.gov.au/major-event-review-victorias-regional-forest-agreements>

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INTRODUCTION

Environmental Defenders Office (**EDO**) is a community legal centre specialising in public interest environmental law. We have a long history of providing legal advice on forestry issues and advocating for law reform, with a focus on ensuring sound laws are in place to protect the environment, and that the community has the right to properly participate in environmental decision-making, oversight and enforcement.

EDO welcomes the opportunity to make a submission to the Major Event Review of Victoria's Regional Forest Agreements (**RFAs**). The Major Event Review provisions of the Victorian RFAs provide the opportunity to assess the impacts of the catastrophic 2019-2020 bushfire season on the operation of the Victorian RFAs. Importantly, the Major Event Review will be informed by science, Traditional Owner knowledge and public consultation.

We are concerned that there has been a significant delay in carrying out the review after the 2019-2020 bushfires (although we do recognise disruptions caused by Covid-19), and that forestry operations in RFA areas have been allowed to continue despite initial analysis demonstrating the extent of impacts of the fires on the CAR reserve system, and despite the initial decision to commence a Major Event Review. This undermines the intent of the Major Event Review mechanism as a way of responding to major events like the 2019-2020 bushfires, including through the recommendation of remedial action.

Our overarching recommendation, therefore, is that all native forestry operations in fire-affected native forests and unburnt areas serving as species-recovery refugia should be suspended, pending the outcomes of the Major Event Review, including the implementation of any remedial actions recommended by the Major Event Review (Recommendation 1).

Our submission is structured as follows:

1. Key Recommendations
2. Overarching comments on Regional Forest Agreements
 - 2.1 Brief overview of Regional Forest Agreements
 - 2.2 Summary of key concerns
3. Forestry values, impacts of the 2019-2020 bushfire season and climate change
4. Key issues for the Major Event Review
 - 4.1 Inadequacy of the CAR reserve system
 - 4.2 Impacts on threatened species and ecological communities
 - 4.3 Review of sustainable harvest volumes
 - 4.4 Salvage operations
 - 4.5 Impacts on Aboriginal Cultural Heritage
 - 4.6 Relationship between native forest logging and bushfire risk
 - 4.7 Effectiveness of the Major Event Review mechanism
5. Conclusion

1. Key Recommendations

Our recommendations reflect the key issues identified in our submission for consideration by the Major Event Review. By addressing these key issues as recommended, we expect the Major Event Review to be in a position to identify and recommend appropriate remedial action to address the impacts of the 2019-2020 bushfires and the future operation of the RFAs in Victoria.

Recommendation 1: All native forestry operations in fire-affected native forests and unburnt areas serving as species-recovery refugia should be suspended, pending the outcomes of the Major Event Review, including the implementation of any remedial actions recommended by the Major Event Review.

Recommendation 2: The Major Event Review should draw on existing analysis of the impacts of the 2019-2020 bushfires, including impacts on biodiversity, and identify and address any gaps in analysis undertaken to date.

Recommendation 3: The Major Event Review should consider the impacts of the 2019-2020 bushfires against the backdrop of a warming climate and the accompanying cumulative threats facing forest ecosystems in Victoria and make recommendations for remedial action accordingly.

Recommendation 4: The Major Event Review should undertake an assessment of the adequacy of the CAR reserve system post-bushfires. This should be undertaken by reference to the JANIS criteria and must consider whether the CAR reserve system satisfies those criteria in the post-bushfire context. The assessment should also incorporate specific analysis of whether the CAR reserve system is providing a safe haven network of ecological refuges across the state.

Recommendation 5: Based on its assessment of the adequacy of the CAR reserve system, the Major Event Review should make recommendations to ensure that the Victorian RFAs are underpinned by a reserve system that is in fact Comprehensive, Adequate and Representative. Based on existing knowledge, we anticipate that this may require, for example, the dedication of additional dedicated reserves, informal reserves and updated prescriptions.

Recommendation 6: The Major Event Review should make recommendations for updating and strengthening forestry prescriptions, applying current science to take into account the impacts of the bushfires on threatened species and ecological communities. All recommendations for updating and strengthening forestry prescriptions should be implemented before forestry operations (suspended in accordance with Recommendation 1) are allowed to recommence.

Recommendation 7: A comprehensive review of the *Code of Practice for Timber Production 2014* should update and strengthen forestry prescriptions, applying current science, in line with recommendations and remedial action arising from the Major Event Review.

Recommendation 8: The Major Event Review should assess the impacts of the 2019-2020 bushfires on the sustainable volume of timber supply from the RFA regions. This should incorporate consideration of the currently accredited process(es) for forecasting the Harvest Level under each of the Victorian RFAs. It should also account for the need to revise the CAR reserve system to ensure that it remains 'CAR' in the post-bushfire context.

Recommendation 9: The Major Event Review should recommend that the Victorian Government review the Harvest Level as a matter of priority, as required under the Victorian RFAs following a Major Event such as the 2019-2020 bushfires, and noting the express powers under s 18 of the *Sustainable Forests (Timber) Act 2004* (Vic). Any such review should take into account the findings and recommendations of the Major Event Review.

Recommendation 10: The Major Event Review should recommend that forestry rules in Victoria explicitly prohibit or strictly limit salvage logging operations, consistent with expert scientific advice.

Recommendation 11: The Major Event Review should ensure that impacts on Aboriginal cultural heritage are thoroughly considered, through genuine consultation with Traditional Owners, and recommend remedial action to ensure that Aboriginal cultural heritage is protected. Where gaps in knowledge are identified, the Major Event Review should make recommendations for addressing those gaps.

Recommendation 12: The Major Event Review should expressly consider the latest science on the relationship between native forest logging and bushfire risk so that any remedial actions proposed are fit for purpose.

Recommendation 13: The Major Event Review should report on all actions that may be necessary to ensure that RFA forestry operations accord with the objectives of the RFAs, as identified in the NFPS, so that the parties are properly armed to determine whether the RFAs remain fit for purpose.

Recommendation 14: The Major Event Review should report on the effectiveness of the Major Event Review provisions as a mechanism for assessing and responding to catastrophic events.

2. Overarching comments on Regional Forest Agreements

2.1 Brief overview of Regional Forest Agreements

RFAs are intergovernmental agreements between the Commonwealth and State governments intended as long-term plans for the management of Australia's native forests. There are 10 RFAs covering areas in four states – five in Victoria, three in New South Wales and one each in Western Australia and Tasmania.¹

Relevantly, the following background is useful in understanding the premise behind the RFAs:

- In an effort to resolve ongoing conflict between the use (including for timber harvesting) and conservation of native forests, Governments signed on to the 1992 *National Forest Policy Statement* (NFPS).²

¹ For more information on Regional Forest Agreements, see <https://www.agriculture.gov.au/forestry/policies/rfa>

² See <https://www.agriculture.gov.au/forestry/policies/forest-policy-statement>. The NFPS was signed by the Australian Government and all mainland state and territory governments in December 1992 and by the Tasmanian Government in April 1995. The NFPS sets out eleven broad national goals relating to: conservation, wood production and industry development, integrated and coordinated decision making and management, private native forests, plantations, water supply and catchment management, tourism and other economic and social opportunities, employment, workforce education and training, public awareness, education and involvement, and research and development.

- The NFPS recognised the need for a comprehensive, adequate and representative (**CAR**) network of dedicated and secure nature conservation reserves for forests and reserves for protecting wilderness. The NFPS also provides for wood harvesting to be undertaken pursuant to ecologically sustainable forest management (**ESFM**).³
- Under the NFPS, Governments agreed to establish a working group of technical experts⁴ to make recommendations to the Governments on broad criteria on which to base the CAR reserve system. This working group developed the *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia*, otherwise known as the **JANIS criteria**, finalised in 1997.⁵
- RFAs were intended to operationalise the agreement reached under the NFPS. The original suite of RFAs were rolled out between 1997 and 2001 for 20-year terms.
- Pursuant to the *Regional Forest Agreements Act 2002 (RFA Act)* (Cth) and the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**), forestry operations carried out in accordance with an RFA are exempt from assessment and approval requirements under Part 3 of the EPBC Act.⁶
- As the original RFAs have come to the end of their life, each has been renewed for a further term.⁷ In Victoria, the five RFAs were extended for a further 10 years on 30 March 2020. At the time, it was acknowledged that the impacts of the 2019-2020 bushfires were yet to be understood.⁸

2.2. Summary of key concerns

The 2019-2020 bushfire season has fundamentally changed the landscape in which RFAs operate. As discussed below, post-bushfire analysis indicates that the fires “*impacted on a large part of the [CAR reserve system] and other components of the reserve system in eastern Victoria*”.⁹ Specifically, nearly 500,000 ha of national parks and nature conservation reserves, 203,758 ha of special protection zones (**SPZ**) areas and 193,375 ha of forests protected by prescription are within the fire extent.

³ The Government’s approach to ecologically sustainable forest management was guided by Montréal Process, Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests, see <https://www.agriculture.gov.au/forestry/international/forums/montreal>; The Commonwealth Department of Agriculture, Water and the Environment’s website currently explains that: three principles guide today’s concept of ecologically sustainable forest management. They are to: maintain the ecological process within forest, preserve their biological diversity, and obtain for the community the full range of environmental, economic and social benefits from all forest uses within ecological limits, see <https://www.agriculture.gov.au/forestry/policies/rfa/about/esfm>

⁴ The working group was established under a Steering Committee of the Australia and New Zealand Environment and Conservation Council (ANZECC) and the Australian Forestry Council (AFC).

⁵ See *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia*, A Report by the Joint ANZECC / MCFFA National Forest Policy Statement Implementation Sub committee, 1997, available at <https://www.agriculture.gov.au/forestry/policies/rfa/about/protecting-environment>

⁶ See *Environment Protection and Biodiversity Conservation Act 1999* (Cth), section 38.

⁷ See <https://www.agriculture.gov.au/forestry/policies/rfa/regions>.

⁸ See, for example, Commonwealth of Australia and State of Victoria, *Scoping Agreement for the Major Event Review to assess the impacts of the 2019-20 bushfires*, September 2020, p 4, available at <https://www.agriculture.gov.au/sites/default/files/documents/major-event-review-scoping-agreement.pdf>

⁹ 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

Further, the 2019-2020 bushfires demonstrate what has long been known: that climate change poses a serious threat to the viability of our forest ecosystems.

These impacts present significant challenges for the ongoing operation of RFAs, for example, in relation to how the RFAs operate, whether RFA forestry operations can accord with ESFM, the effectiveness of the CAR reserve system, and the effective management and protection of Matters of National Environmental Significance (**MNES**). These are all issues for consideration through the Major Event Review.

Despite these concerns, in March 2020 the Victorian and Commonwealth governments agreed to extend all five of the Victorian RFAs for a further 10 years without proper consideration of the impacts of the fires.

Even before the 2019-2020 bushfire season, EDO has had longstanding concerns that the RFAs across all relevant jurisdictions are failing to deliver outcomes consistent with the principles of ESFM.¹⁰ Our key concerns include:

- **Inadequate State threatened species protections accredited by RFAs:** The RFA framework relies on state-based legal frameworks to provide protections for threatened species. However, previous EDO analysis shows that no State or Territory law has met all the core requirements of best practice threatened species legislation.¹¹ For example, in Victoria, Action Statements for threatened species have included directions for protection in relation to timber harvesting.¹² However, historically, there has been substantial delay in preparing Action Statements as well as concerns regarding the quality of those Action Statements.¹³ Further, the adequacy of prescriptions developed under the forestry codes of practice to

¹⁰ See, for example, EDO's previous reports and submission, including:

- Hammond-Deakin, N. and Higginson, S. (2011) *If a tree falls: Compliance failures in the public forests of New South Wales*, Environmental Defender's Office (NSW) Ltd, Sydney, Australia, available at http://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/284/attachments/original/1380667654/110728when_a_tree_falls.pdf?1380667654
- Feehely, J., Hammond-Deakin, N. and Millner, F. (2013) *One Stop Chop: How Regional Forest Agreements streamline environmental destruction*, Lawyers for Forests, Melbourne Australia, available at https://www.envirojustice.org.au/sites/default/files/files/Submissions%20and%20reports/One_Stop_Chop.pdf
- Environmental Defender's Office, *Submission on the Second and Third five-yearly reviews of the NSW RFAs*, February 2018, available at https://www.edo.org.au/wp-content/uploads/2020/01/180223_RFA_Review_2004-2010_submission_EDO_NSW_letter_FINAL.pdf
- Environmental Defender's Office, *Submission to the New South Wales and Commonwealth Governments on their proposal to renew the NSW Regional Forest Agreements (RFAs)*, March 2018, available at https://www.edo.org.au/wp-content/uploads/2020/01/180312_NSW_RFA_renewal_-_EDO_NSW_submission.pdf

¹¹ See, for example:

- Australian Network of Environmental Defenders Offices, *Assessment of the adequacy of threatened species & planning laws*, September 2014, available at https://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/1668/attachments/original/1410138351/Assessment_of_the_adequacy_of_threatened_species_planning_laws-V5.pdf?1410138351
- Environmental Defenders Office and Places You Love, *'Devolving extinction? The risk of handing environmental responsibilities to state & territories'*, October 2020, available at: <https://www.edo.org.au/wp-content/uploads/2020/10/201004-EDO-PYL-Devolving-Extinction-Report-FINAL.pdf>

¹² We note that management actions are now included in Management Standards and Procedures under the *Code of Practice for Timber Production 2014* rather than Action Statements.

¹³ See, for example, the 2009 report of the Victorian Auditor-General, which found that Action Plans had been developed for less than half of Victoria's listed threatened species, and that at the rate of progress at that time, it would take a further 22 years for the department to complete action statements for the 653 items currently listed as threatened. Victorian Auditor-General, Administration of the Flora and Fauna Guarantee Act 1988, April 2009, available at <https://www.audit.vic.gov.au/sites/default/files/flora-fauna-full-report.pdf>.

manage impacts on threatened species has been seriously questioned in past reviews.¹⁴ The decision of the Full Court of the Federal Court of Australia in *VicForests v Friends of Leadbeater's Possum Inc.* [2021] FCAFC 66 further highlights concerns that RFAs do not ensure that listed species are protected from harm caused by harvesting operations.¹⁵ This is also demonstrated by the failure to halt ongoing declines of numerous forest-dependent threatened species, as evidenced by the listing and up-listing of those species since the commencement of the Victorian RFAs.¹⁶

- **Inadequate reviews of the RFA framework:** RFAs, and the forest management regimes accredited by the agreements, are not reviewed on time or with sufficient regularity. When reviewed, the review is inadequate.
- **Deficient monitoring, compliance and enforcement:** On-ground compliance is a major deficiency. All States have shown a high level of non-compliance with forestry regulations, and a low level of monitoring and enforcement activity by the regulatory authorities
- **Limited third-party participation rights:** In each of the RFA States, public participation in assessment of forestry activities is limited, and significant procedural barriers exist for third party enforcement.

These concerns have only been heightened following the 2019-2020 bushfires.

The Major Event Review therefore provides a critical opportunity to re-evaluate the operation of the RFAs, taking into account the impacts of the 2019-2020 bushfire season. We recognise the Major Event Review is not intended to open the RFAs up to renegotiation or revocation, but instead provides an opportunity to recommend remedial action to address the impacts of the Major Event.¹⁷ Our submission highlights key issues that must be addressed through the review process and makes recommendations for addressing those concerns. By addressing these key issues as recommended, we expect the Major Event Review to recommend remedial action to address the impacts of the 2019-2020 bushfires and the future operation of the RFAs in Victoria.

More broadly, EDO strongly agrees with recent analysis that concludes the current RFAs are no longer tenable¹⁸ and notes that the RFAs incorporate mechanisms for their variation and termination. If the available data – including that collected through this Major Event Review – indicates that some or all of the Victorian RFAs cannot deliver on key objectives (including ESFM and ensuring a CAR reserve system) serious consideration should be given to substantive variations to, or even the early termination of, the RFAs.

¹⁴ See, for example, Jacobs, D *Regional Forest Agreements: limitations and current opportunities*, 2017, 32(4) Australian Environment Review 94

¹⁵ While the Full Court found that VicForest's logging operations were exempt from federal environmental law under the applicable RFA, the Court's decision upheld the findings of the Court at first instance that identified harvesting operations were likely to have had, or likely to have, a significant impact on federally listed threatened species.

¹⁶ For example, the Greater Glider was listed as 'Vulnerable' in 2016 on the EPBC Act's threatened species list and in 2021 is being considered for inclusion in the Endangered category. In 2019, Leadbeater's Possum was reconfirmed as Critically Endangered, and the Yellow Bellied Glider is currently being assessed for inclusion on the threatened species list in the Endangered category, having previously been unlisted.

¹⁷ We note there is little guidance on what would constitute remedial action.

¹⁸ See Environmental Justice Australia, *No longer tenable: Bushfires and Regional Forest Agreements*, March 2020, available at: <https://www.envirojustice.org.au/wp-content/uploads/2020/03/EJA-report-No-longer-tenable-1.pdf>

3. Forest values, impacts of the 2019-2020 bushfire season and climate change

Forest values

The 2018 Australian State of the Forests report states:

*“Australia’s forests are recognised and valued for their diverse ecosystems and unique biodiversity; for their cultural heritage; for their provision of goods and services such as wood, carbon sequestration and storage, and soil and water protection; and for their aesthetic values and recreational opportunities. At the same time, Australia’s forests are subject to a range of pressures, including extreme weather events, drought and climate change; invasive weeds, pests and diseases; changed fire regimes; clearing for urban development, mining, infrastructure or agriculture; and the legacy of previous land-management practices”.*¹⁹

Given the diverse values of forests, and in light of the significant pressures on forests, the community has a strong and legitimate interest in ensuring that the RFAs are able to deliver positive economic, social and environmental outcomes now, and for future generations, consistent with the original intent of the NFPS.

Impacts of the 2019-2020 bushfire season

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,²⁰ an estimated 417 people died due to smoke inhalation,²¹ more than 3,000 homes burnt down,²² and other property and infrastructure was impacted or destroyed. The bushfires also had a devastating impact on our natural environment. Significant ecosystems and landscapes were decimated, including World Heritage-listed National Parks,²³ ancient rainforests²⁴ and waterways,²⁵ including as a result of post-fire flooding. An estimated 950 million tonnes of greenhouse gases were emitted.²⁶ While it is difficult to estimate the exact number of native animals impacted by the fires, some experts originally predicted it could be as

¹⁹ Australia Government, Department of Agriculture and Water Resources, *Australia’s State of the Forests Report 2018*, 2018, available at <https://www.agriculture.gov.au/abares/forestsaustralia/sofr/sofr-2018>

²⁰ 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

²¹ 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>

²² AFAC (Australasian Fire and Emergency Service Authorities Council), *Cumulative Seasonal Summary*, AFAC National Resource Sharing Centre, 28 February 2020. Accessed at <https://twitter.com/AFACnews/status/1233262259612213248/photo/1>.

²³ See, for example, Department of Agriculture, Water and the Environment, *Greater Blue Mountains Area State of Conservation update - April 2020*, 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>

²⁴ See, for example, Queensland Government, *Altered fire regimes pressure on the Gondwana Rainforests*, 2020, available at <https://www.stateoftheenvironment.des.qld.gov.au/heritage/world/altered-fire-regimes-pressure-on-the-gondwana-rainforests-of-australia>

²⁵ NSW Government, *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>

²⁶ DISER, *Estimating greenhouse gas emissions from bushfires in Australia’s temperate forests: focus on 2019-20*, 2020, 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>

many as 800 million in NSW and one billion nationally,²⁷ with more recent analyses suggesting as many as three billion.²⁸

In Victoria, bushfires impacted more than 1.5 million hectares.²⁹ Analysis indicates that 244 species have more than 50% of their modelled habitat within the burnt area, including 215 rare or threatened species and nine ecological vegetation classes (EVCs) with more than 50% of their extent burnt.³⁰

As noted in the Summary Report,³¹ “(w)ithin Victoria’s RFA regions, the fires impacted over 870,000 hectares of State forest, and over 460,000 hectares of national parks and conservation reserves was within the bushfire extent”.³² The Summary Report highlights the substantial impacts that the bushfires have had in Victorian RFA regions, including impacts on the CAR reserve system, impacts on forest industries, impacts on MNES, social and other economic impacts and impacts on cultural and heritage values.

Given the significant impact that the 2019-2020 bushfires have had on wildlife and ecosystems,³³ and on the CAR reserve system, it should not be expected that ‘business-as-usual’ under the RFAs will deliver on the objectives of those agreements.

Relevantly, we note the following key pieces of work undertaken in response to the 2019-2020 bushfires:

- The Victorian Government’s bushfire response, that includes the following key components:
 - A report released in August 2020, *Victoria’s bushfire emergency: biodiversity response and recovery (Version 2)* by Victoria’s Department of Environment, Land, Water and

²⁷ 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>

²⁸ 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

²⁹ 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

³⁰ 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

³¹ State of Victoria Department of Environment, Land, Water and Planning, Victorian Regional Forest Agreements Major Event Review of the 2019-20 bushfires, *Summary report: Information and data to inform public consultation*, 2021, available at https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.vic-engage.files/1016/2319/1313/Summary_Report_May_2021_-_Accessible_Version_002.pdf

³² State of Victoria Department of Environment, Land, Water and Planning, *Victorian Regional Forest Agreements, Major Event Review of the 2019-20 bushfires, Summary report: Information and data to inform public consultation*, 2021, available at https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.vic-engage.files/1016/2319/1313/Summary_Report_May_2021_-_Accessible_Version_002.pdf

³³ In addition to impacts highlighted in the Summary Report, see also, for example: Godfree et al, *Implications of the 2019-2020 megafires for the biogeography and conservation of Australian vegetation*, *Nature Communications* 12 (2021) 1023, available at: <https://www.nature.com/articles/s41467-021-21266-5>; Filkov et al, *Impacts of Australia’s catastrophic 2019/20 bushfire season on communities and environment. Retrospective analysis and current trends*, *Journal of Safety Science and Resilience*, Vol 1, Issue 1, Sept 2020, available at: <https://www.sciencedirect.com/science/article/pii/S2666449620300098>; National Centre for Atmospheric Research/University Corporation for Atmospheric Research. *Bushfires, not pandemic lockdowns, had biggest impact on global climate in 2020: Smoke from Australian fires affected temperatures, storm tracks*. (2021), available at: www.sciencedaily.com/releases/2021/07/210727171604.htm.

Planning (**DELWP**), which assessed the impacts of the 2019-2020 fires as at April 2020.³⁴ That assessment informed the Victorian Government's response and recovery actions, including the Bushfire Biodiversity Response and Recovery program.³⁵

- Relevant to forest management, one of the thematic actions outlined as part of the Bushfire Biodiversity Response and Recovery program is *Landscape Resilience* which “focuses on maximising the long-term state-wide resilience of species and their habitats across the landscape with an emphasis on species of greatest concern”.³⁶ The first key action within this thematic area is to “create and support a safe haven network of ecological refuges across the state”. Allowing logging to continue within forests impacted by these fires, and in the absence of a proper analysis of where these refuges are, is a critical concern.
- A Threatened Species and Communities Risk Assessment, carried out as a requirement of the Victorian RFAs and published in April 2021, was able to consider the impacts of the bushfires on species and communities that have the potential to be impacted by forestry operations.³⁷ Just as important are the independent expert reviews of that Threatened Species and Communities Risk Assessment.³⁸
- We also note advice provided by the Victorian Conservation Regulator on the precautionary approach needed to conserve biodiversity following the 2019-2020 bushfires.³⁹
- The Commonwealth Government's bushfire response, that includes the following:
 - The establishment of a Wildlife and Threatened Species Bushfire Recovery Expert Panel.⁴⁰ The panel developed an interim and revised provisional list of animals requiring urgent management intervention and identified priority management interventions for those species.⁴¹

³⁴ 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

³⁵ The Victorian Government's Bushfire Biodiversity Response and Recovery program is outlined in more detail on its website: <https://www.wildlife.vic.gov.au/home/biodiversity-bushfire-response-and-recovery>

³⁶ As discussed on the following website <https://www.wildlife.vic.gov.au/home/biodiversity-bushfire-response-and-recovery>, accessed on 29 August 2021.

³⁷ See Department of Environment, Land, Water and Planning, *Threatened Species and Communities Risk Assessment - Interim Protections and Management Actions*, April 2021, available at https://www.environment.vic.gov.au/_data/assets/pdf_file/0023/521672/Threatened-Species-and-Communities-Risk-Assessment-Interim-Protections-Report-and-Action-Plan-2021.pdf

³⁸ See <https://www.environment.vic.gov.au/conserving-threatened-species/threatened-species-and-communities-risk-assessment>

³⁹ See, for example, Victorian Conservation Regulator, *Precautionary measures in timber harvesting post to 2019/2020 Victorian bushfires – Regulatory Position Statement*, May 2020. The Conservation Regulator stated “that the precautionary principle is currently triggered by risks of serious and irreversible damage to Victoria's biodiversity posed by timber harvesting operations in light of the 2019/20 Victorian bushfires, and the significant scientific uncertainty about the status of Victoria's biodiversity from these operations in this context”.

⁴⁰ See <https://www.environment.gov.au/biodiversity/bushfire-recovery/bushfire-impacts/expert-panel>; see also <https://www.environment.gov.au/biodiversity/bushfire-recovery/bushfire-impacts>

⁴¹ See <https://www.environment.gov.au/biodiversity/bushfire-recovery/bushfire-impacts/priority-animals>

- The Commonwealth Minister for the Environment announced an interim nomination period to allow for additional consideration of nominations for listing/up-listing species and ecological communities affected by the 2019-2020 bushfires under the EPBC Act, and provided additional resources to facilitate the process of assessing the threatened status of those species.⁴²
- As part of its Bushfire Response Framework WWF-Australia, working with its Eminent Scientists Group, has identified six priority areas for habitat protection and restoration in Queensland, New South Wales and Victoria following the 2019-2020 bushfires.⁴³ The priority areas, covering nearly 5.8 million hectares, warrant enhanced legal protection due to their significance for threatened species and ecosystems as a result of the bushfires. Areas within these priority landscapes include native forests where forestry operations are undertaken, including the East Gippsland area of Victoria. Protecting these intact and unburnt areas, as well as lightly burnt areas,⁴⁴ of high conservation value forest is critical, particularly while burnt areas recover. These remaining areas are essential for providing habitat and refuges for wildlife; providing future climate change refugia; delivering important ecosystem services; assisting impacted ecosystems and landscapes to recover; building resilience and ensuring our remaining natural areas thrive.
- A report by Environmental Justice Australia published in the aftermath of the 2019-2020 bushfire season found, relevantly, that:⁴⁵
 - The effectiveness of RFAs and the CAR reserve system in protecting biodiversity and other forest conservation values was already highly contested prior to the 2019-2020 fires.
 - The fires, particularly through their impacts on the CAR reserve system, have destroyed the policy foundations of the RFA system, rendering it untenable.
 - RFAs today are legally uncertain and failing in practice. Their problems cannot be fixed within the RFA framework because the agreements are predicated on gradual change not catastrophic events. They contain no mechanism for comprehensively altering the terms of the agreement to reset the balance between conservation and production, made necessary by the fires.

⁴² See <https://environment.gov.au/biodiversity/threatened/nominations>. For threatened species listings under the EPBC Act there is an annual assessment process by which the Commonwealth Threatened Species Scientific Committee, and then the Commonwealth Minister for the Environment, considers species and ecological communities for listing under that EPBC Act (including nominations to transfer species or ecological communities between listing categories). In September 2020, the Commonwealth Minister for the Environment announced additional nomination and prioritisation processes to assist in the response to the 2019-2020 bushfires. The theme for the next assessment period, starting 1 October 2021, is “Species and ecological communities that require listing or transfer to a higher listing category as a result of the impacts of the 2019/20 bushfires”. This process is still underway (ie -no species have been listed/uplisted yet as a result of this process). The first round of assessment is due to be completed on 30 October 2021, and the second round on 30 April 2022.

⁴³ 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>

⁴⁴ 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=6360E080DB80E7BEF935A1A4A6BDDAB46BBFDOA7>

⁴⁵ See Environmental Justice Australia, *No longer tenable: Bushfires and Regional Forest Agreements*, March 2020, available at: <https://www.envirojustice.org.au/wp-content/uploads/2020/03/EJA-report-No-longer-tenable-1.pdf>.

These and any other existing pieces of work must be used to inform any recommendations and actions that follow from the Major Event Review. They show that the 2019-2020 bushfires have had a major impact on how the RFAs operate, whether RFA forestry operations can accord with ESFM, the effectiveness of the CAR reserve system, and the effective management and protection of MNES – all of which are key elements for assessment through the Major Event Review.

Importantly, RFA forestry operations that compromise the ability of forest ecosystem to recover from the 2019-2020 bushfires and are not consistent with ESFM should not be permitted. Remedial actions should focus on responding to these issues.

Recommendation 2: The Major Event Review should draw on existing analysis of the impacts of the 2019-2020 bushfires, including impacts on biodiversity, and identify and address any gaps in analysis undertaken to date.

Climate change

Australian mean temperatures are on an upwards trajectory. 2019 was Australia’s warmest year on record, at 1.52 degrees Celsius (°C) above average. 2020 followed on as Australia’s fourth warmest year on record. In *State of the Climate 2020*, the CSIRO and Bureau of Meteorology (**BOM**) reported that Australia’s climate has warmed on average by $1.44 \pm 0.24^{\circ}\text{C}$ since national records began in 1910, “leading to an increase in the frequency of extreme heat events”.⁴⁶ The CSIRO and BOM report that in the coming decades, Australia will continue to experience changes to its climate including:

- a continued warming trend, with more heat extremes;
- a likely increase in time spent in drought across many regions of southern and eastern Australia; and
- “[a] consequential increase in the number of dangerous fire weather days and a longer fire season for southern and eastern Australia”.⁴⁷

Climate change also poses other threats to forest ecosystems. Prior to the renewal of the Victorian RFAs climate change was recognised as one of the greatest pressures faced by the Australian environment. Climate change operates as a standalone risk but also interacts with and amplifies pre-existing pressures – such as invasive species, diseases and pathogens. Among other things, climate change threatens loss of species range and change in the places species are found, changes to species abundance and phenological (life cycle) changes.⁴⁸

In other words, the 2019-2020 bushfires have brought to fore what has long been known: that climate change poses a serious threat to the viability of our forest ecosystems. As such the Major Event Review should not be confined to considering the direct impacts of *these bushfires* on, for example,

⁴⁶ CSIRO and Bureau of Meteorology, *State of the Climate 2020*, p 2, available at <http://www.bom.gov.au/state-of-the-climate/>

⁴⁷ CSIRO and Bureau of Meteorology, *State of the Climate 2020*, p 3, at <http://www.bom.gov.au/state-of-the-climate/>

⁴⁸ As a non-exhaustive list of general Commonwealth sources for these propositions see, e.g., Australian Government (Department of the Environment and Energy), *Australia State of the Environment 2016, Overview*; Australian Government (Department of the Environment and Energy), *Australia State of the Environment 2016, Biodiversity*; Australian Government (Department of the Environment and Energy), *Australia State of the Environment 2016, Atmosphere*; CSIRO & Australian Government (Department of the Environment & Bureau of Meteorology), *Climate Change in Australia: Projections for Australia’s NRM Regions* (2015); M Dunlop & P R Brown, *Implications of climate change for Australia’s National Reserve System: A preliminary assessment*, Report to the Department of Climate Change (2008)

ESFM and the CAR reserve system. The Review should consider the bushfires against the general backdrop of a warming climate and the accompanying cumulative threats facing forest ecosystems in Victoria.

Recommendation 3: The Major Event Review should consider the impacts of the 2019-2020 bushfires against the backdrop of a warming climate and the accompanying cumulative threats facing forest ecosystems in Victoria and make recommendations for remedial action accordingly.

4. Key issues for the Major Event Review

In this section of our submission, we highlight key issues and make recommendations on how these key issues can be addressed by the Major Event Review.

4.1 Inadequacy of the CAR reserve system

As outlined above, the CAR reserve system is a key component of the RFA framework.

The CAR reserve system, as described in the JANIS criteria,⁴⁹ comprises:

- Dedicated reserves: forest areas established by legislation specifically for conservation purposes (for example, national parks, State parks, flora and fauna reserves);
- Informal reserves: areas of State forests and other public land that are set aside for conservation through the Forest Management Zoning Scheme (for example, SPZs); and
- Values protected by prescriptions: areas of State forests and other public land that are protected from timber harvesting and other productive uses via management prescriptions (for example, prescriptions outlined in the *Code of Practice for Timber Production (Code)*).

DELWP's assessment of the impacts of the 2019-2020 bushfires found that the fires "*impacted on a large part of the [CAR reserve system] and other components of the reserve system in eastern Victoria*".⁵⁰ DELWP's findings included the following:

- 25 national parks and conservation reserves have 90–100% of their land within the fire extent at the time of assessment, with nearly 500,000 ha of national parks and nature conservation reserves within the fire extent.⁵¹
- 203,758 ha of SPZ areas are within the fire extent – over 25% of SPZ areas across the entire state.
- 193,375 ha of forests protected by prescription are within the fire extent – comprising over 30% of the area covered by prescription across the state.

⁴⁹ See *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia*, A Report by the Joint ANZECC / MCFFA National Forest Policy Statement Implementation Sub committee, 1997, available at <https://www.agriculture.gov.au/forestry/policies/rfa/about/protecting-environment>

⁵⁰ 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

⁵¹ Key affected national parks in the fire extent include: Alfred National Park (100%), Burrowa - Pine Mountain National Park (100%), Lind National Park (100%), Mt Mitta Mitta Regional Park (100%) Tara Range Park (99%), Mt Elizabeth Nature Conservation Reserve (99%), Croajingolong National Park (87%), Snowy River National Park (76%), Errinundra National Park (66%) and Crawford River Regional Park (58%).

Even before the 2019-2020 bushfires, concerns were raised about the adequacy of the CAR reserve system and its ability to deliver the intended environmental outcomes. For example:

- The Regional Forest Agreements Scientific Advisory Panel (**SAP**) appointed by DELWP to provide expert scientific advice in the lead up to the 2020 renewal of the Victorian RFAs unanimously found that *“the CAR reserve system has not adequately protected biodiversity, and under current management arrangements, will not provide adequate protection in the future”*.⁵² The SAP recommended a series of commitments made in the RFAs to enable refinement and better management of the CAR reserve system, and presented options for improving the CAR reserve system in relation to the objectives of the JANIS criteria are discussed in this section.
- In *Friends of Leadbeater’s Possum Inc v VicForests (No 4)*⁵³ (**FOLP v VicForests**), Mortimer J observed that the CAR reserve system was no panacea for the impact of forestry operations. Specifically:
 - When considering the impact of forestry operations on the Leadbeater’s Possum, Mortimer J found that:

“As the evidence demonstrates, in particular the draft Recovery Plan and the 2019 Conservation Advice, the circumstances have not improved, and the population decline continues. That is why the reserve system provides no panacea, and nor do the prescriptions and measures which have been introduced since 2013. The destruction of any habitat occupied and used, or likely to be occupied and used, by Leadbeater’s Possum will have an impact on the Leadbeater’s Possum as a species that can be described as significant”.⁵⁴
 - Similarly, when considering the impact of forestry operations on the Greater Glider, Mortimer J accepted expert opinion that *“the existence of permanent reserves (whether inside or outside the formal national park system) is no panacea to the crisis facing the Greater Glider”*.⁵⁵ Although the Full Court overturned Mortimer J’s finding that the forestry operations in question were not exempt from EPBC Act assessment and approval requirements, VicForests was unsuccessful in its attempt to overturn the factual findings as to the significant impact of the forestry operations on threatened species, such as those referred to here.
- A detailed analysis of the implementation of the NFPS and JANIS criteria through the RFA process in northern NSW found that *“the process has not delivered the promised*

⁵² Regional Forest Agreements Scientific Advisory Panel (SAP), *Scientific Advice to Support Regional Forest Agreement Negotiations, Final Report*, 20 November 2019, p 14, available at https://www.delwp.vic.gov.au/__data/assets/pdf_file/0031/458356/Scientific-Advisory-Panel-Reports-of-Advice.pdf

⁵³ *Friends of Leadbeater’s Possum Inc v VicForests (No 4)* [2020] FCA 704

⁵⁴ *Friends of Leadbeater’s Possum Inc v VicForests (No 4)* [2020] FCA 704 op. cit. at [1430]

⁵⁵ *Friends of Leadbeater’s Possum Inc v VicForests (No 4)* [2020] FCA 704 op. cit. at [967]. This expert evidence was further discussed at [1446]-[1451].

*comprehensive, adequate and representative reserve system for forest fauna nor ecologically sustainable management for fauna off-reserve*⁵⁶.

As documented, the CAR reserve system was failing to deliver the intended environmental outcomes prior to the bushfires, meaning the 2019-2020 bushfires have made an already inadequate system worse.

Given the CAR reserve system is a fundamental component of the RFA framework, the Major Event Review must include an assessment of the adequacy of the CAR reserve system in the post-bushfires context and make recommendations for addressing any shortcomings of the CAR reserve system that are attributable to bushfire impacts. This would include an assessment of what is required to support species and ecosystem recovering from the bushfires and ensuring that the CAR reserve system is meeting those needs. Particular attention should be paid to the key action identified in the Victorian Government's Bushfire Biodiversity Response and Recovery program – to provide ecological refuges.

Recommendation 4: The Major Event Review should undertake an assessment of the adequacy of the CAR reserve system post-bushfires. This should be undertaken by reference to the JANIS criteria and must consider whether the CAR reserve system satisfies those criteria in the post-bushfire context. The assessment should also incorporate specific analysis of whether the CAR reserve system is providing a safe haven network of ecological refuges across the state.

Recommendation 5: Based on its assessment of the adequacy of the CAR reserve system, the Major Event Review should make recommendations to ensure that the Victorian RFAs are underpinned by a reserve system that is in fact Comprehensive, Adequate and Representative. Based on existing knowledge, we anticipate that this may require, for example, the dedication of additional dedicated reserves, informal reserves and updated prescriptions.

4.2. Impacts on threatened species and ecological communities

Summary of impacts

The Summary Report states:

- The RFAs aim to provide for the protection and management of species and communities listed under the EPBC Act and species and communities under Victoria's *Flora and Fauna Guarantee Act 1988 (FFG Act)* where they are, or have the potential to be, impacted by forestry operations.
- The Victorian Government has undertaken separate assessments, analysing data for thousands of species to understand the impact of the 2019–2020 fires on Victoria's

⁵⁶ Flint, C., D. Pugh, and D. Beaver. 2004. *The good, the bad and the ugly: science, process and politics in forestry reform and the implications for conservation of forest fauna in north-east New South Wales*. Pages 222- 255 in D. Lunney, editor. Conservation of Australia's Forest Fauna. Royal Zoological Society of New South Wales, Mosman, available at <https://meridian.allenpress.com/rzsnsw-other-books/book/605/chapter/12050411/The-good-the-bad-and-the-ugly-science-process-and>. Specifically, the assessment found that "an analysis of reservation target achievement for priority fauna species in the north-east region indicates that the placement of reserves has been reasonably successful in targeting areas of conservation priority, but the scale of the reserve outcome is inadequate to ensure the survival of priority species in north-east NSW". The assessment concluded that despite the implementation of the CAR reserve system "the evidence is that many species of fauna are in serious trouble in north-east NSW and require increased efforts to secure viable populations as a basis for their future survival".

biodiversity, including those listed under the EPBC Act and the FFG Act. This process has highlighted species of immediate concern and identified a range of potential actions that would benefit those species (such as the provision of artificial habitats).

- The Victorian Government assessments identified 244 species with more than 50 per cent of their modelled habitat within the fire extent, including 215 rare or threatened species. Four species are listed under the EPBC Act.⁵⁷ Invertebrate groups and listed communities have also been impacted.

However, the Summary Report does not specify whether or what measures have been implemented, post bushfires, to help with those species' recovery, including whether management actions for threatened species, or prescriptions such as those in the Code, have been amended to reflect those species and communities' post-bushfire status.

We also note that the Summary Report relies on Victorian Government biodiversity impact analysis that dates back to August 2020. Reference to the most up-to-date data is critical. For example, work that is underway as part of the Commonwealth Government's listing assessment process (referred to above) is also likely to be directly relevant to the matters under consideration for this Major Event Review. Information produced for the purpose of this listing assessment process should, relevantly, feed into the Major Event Review process.

Prescriptions for protecting threatened species and their habitats

As noted earlier in our submission (see 2.2. above), prescriptions were already considered to be inadequate prior to the 2019-2020 bushfires.

By way of example, we highlight the substantive evidence that demonstrates the failure of the CAR reserve system, including forestry prescriptions and management actions, to provide protections for Greater Glider and Leadbeater's Possum: see **Appendix 1 - Case studies: How prescriptions and management actions are failing two forest-dependent species - Greater Glider and Leadbeater's Possum.**

The Major Event Review provides a critical opportunity to consider the effectiveness of forestry prescriptions, particularly in the context of bushfire recovery, and making recommendations to strengthen prescriptions (informed by and consistent with best available science) in order to not only halt decline but also facilitate recovery and reversal.

Given the inadequacy of existing prescriptions, and in light of the significant impact of the bushfires on species and the CAR reserve system, a thorough review and update of forestry prescriptions is critical. To avoid further harm, forestry operations should not continue until this process is completed, most importantly in the regions that were most affected by the fires (East Gippsland,

⁵⁷ Since this initial assessment, priority species are being assessed for listing or uplisting under the EPBC Act, see <https://environment.gov.au/biodiversity/threatened/nominations> and our comments in section 3 of this submission.

Gippsland and the North East regions). In some instances, forestry prescriptions may need to strictly limit or prohibit forestry operations in highly impacted areas while forests and species recover.⁵⁸

Recommendation 6: The Major Event Review should make recommendations for updating and strengthening forestry prescriptions, applying current science to take into account the impacts of the bushfires on threatened species and ecological communities. All recommendations for updating and strengthening forestry prescriptions should be implemented before forestry operations (suspended in accordance with Recommendation 1) are allowed to recommence.

2021 Proposed Variation of the Code of Practice for Timber Production

We note that the Code is currently under review⁵⁹ (**2021 Code Review**) and that public consultation on the *2021 Proposed Variation of the Code of Practice for Timber Production* (**proposed Code Variation**) closed on 29 July 2021.

The 2021 Code Review provided an opportunity to update and strengthen prescriptions taking into account the impacts of the 2019-2020 bushfires. However, it is our understanding that the proposed Code Variation does not do this, at least not to the extent required. It is also unclear to what extent, if any, the proposed Code Variation considered the advice of the Conservation Regulator regarding the precautionary approach that should be taken post-bushfires.⁶⁰

Therefore, we recommend that a comprehensive review of the Code is required that incorporates any recommendations arising from the Major Event Review. While this comprehensive review should be done as soon as possible after the Major Event Review reports,⁶¹ it can form part of the comprehensive review of the Code that is required to be done under the Victorian RFAs by December 2023⁶² (i.e. bringing the timeframe for that review forward).

Recommendation 7: A comprehensive review of the *Code of Practice for Timber Production 2014* should update and strengthen forestry prescriptions, applying current science, in line with recommendations and remedial action arising from the Major Event Review.

4.3 Review of sustainable harvest volumes

The Victorian RFAs define ‘Harvest Level’ to mean:

“the volume of Timber Resources that can be harvested from Native Forests in the RFA Region in any financial year, consistent with ESFM, until Native Forest harvesting ceases on 30 June 2030”.

⁵⁸ See, for example, D. B. Lindenmayer, D. R. Foster, J. F. Franklin, M. L. Hunter, R. F. Noss, F.A. Schmiegelow, D. Perry, Salvage Harvesting Policies After Natural Disturbance, Science, March 2004, DOI: 10.1126/science.1093438;

⁵⁹ See <https://engage.vic.gov.au/code-practice-timber-production>

⁶⁰ See, for example, Victorian Conservation Regulator, *Precautionary measures in timber harvesting post to 2019/2020 Victorian bushfires – Regulatory Position Statement*, May 2020, available at https://d3n8a8pro7vnm.cloudfront.net/gecoforests/pages/2363/attachments/original/1607375694/5132_-_Document_for_Release.pdf?1607375694. We understand this statement was to be revised by November 2020.

⁶¹ We understand the Major Event Review Panel intends to submit a final draft of their Report to government by the end of 2021, see <https://www.delwp.vic.gov.au/futureforests/what-were-doing/the-major-event-review-of-regional-forest-agreements>

⁶² For example, see cl 33D of the East Gippsland Regional Forest Agreement, available at https://www.delwp.vic.gov.au/_data/assets/pdf_file/0033/459924/East-Gippsland-RFA.pdf

One of the key purposes of the Major Event Review is to assess the impacts of the 2019-2020 bushfires on the 'Harvest Level'.

In addition to this, in each of the Victorian RFAs Victoria has committed to commencing a review of the Harvest Level within 12 months of any Major Event that has *"the potential to significantly impact the Harvest level"*. We have not identified evidence that Victoria has commenced a review of the Harvest Level pursuant to those provisions – yet there seems to be little doubt that the 2019-2020 bushfires should trigger a review.

We also note that s 18 of the *Sustainable Forests (Timber) Act 2004* (Vic) expressly empowers the Victorian Minister for Agriculture to review the allocation of timber resources to VicForests at any time if the Minister considers that *"there has been a significant variation, as a result of fire, disease or other natural causes, in the timber resources in State forests which are available for timber harvesting in accordance with sustainable forest management"*. When undertaking such a review, the Minister is required, amongst other things, to have regard to the principles of ecologically sustainable development,⁶³ the structure and condition of the forest and its impact on future timber resource availability, and VicForests' compliance with the Code.⁶⁴

It is our understanding that the Minister has not used these provisions to review timber allocations post-bushfires.

In light of the above, the Major Event Review must undertake an assessment of the impacts of the fires on the sustainable volume of timber supply from the RFA regions. Ideally, this should incorporate consideration of the process for forecasting the Harvest Level in each region as is accredited under each of the Victorian RFAs – this is necessary to ensure that the processes are updated if/as necessary to ensure that any harvesting in the post bushfire context is in fact consistent with ESFM.

We anticipate that revising the calculations of Harvest Level following a Major Event is a task that is best placed to occur outside of the Major Event Review. If so, the Victorian Government must prioritise this work (noting again that the Minister is expressly empowered to do so in relation to the public forest estate under the *Sustainable Forests (Timber) Act 2004*). In doing so, account should be taken of the findings of the Major Event Review. The Victorian Government should also engage with the Commonwealth to consider what amendments may be required to the RFA-accredited process(es) for forecasting the Harvest Level to ensure that these processes remain consistent with ESFM in the post-bushfire context.

It goes without saying that wood supply must be calculated after areas necessary for reservation have been identified and excluded from the harvestable areas.⁶⁵ Accordingly, any post bushfire assessments of the sustainable harvest level must account for the need to revise the CAR reserve system component of the RFA framework, including so as to establish sufficient reservations to

⁶³ As defined in s 5 of the *Sustainable Forests (Timber) Act 2004* (Vic).

⁶⁴ *Sustainable Forests (Timber) Act 2004* (Vic), s 19.

⁶⁵ See e.g. Department of Environment, Land, Water and Planning, *Fact sheet 14: Timber values Economic assessment of the timber value of Victoria's forests*, 2019, available at https://www.delwp.vic.gov.au/_data/assets/pdf_file/0035/417896/14-Timber-factsheet-FINAL.pdf: *"Determining the area of forest that is suitable for timber management activities entails a multi-staged approach; where all areas required for biodiversity conservation and regulatory constraints are removed from the scope of the modelling system"*.

support “a safe haven network of ecological refuges across the state”.⁶⁶ To do otherwise would be inconsistent with the NFPS and the principles of ESFM. It would also undermine the Victorian Bushfire Biodiversity Response and Recovery Program in which the Victorian Government is investing \$51.5 million.

Recommendation 8: The Major Event Review should assess the impacts of the 2019-2020 bushfires on the sustainable volume of timber supply from the RFA regions. This should incorporate consideration of the currently accredited process(es) for forecasting the Harvest Level under each of the Victorian RFAs. It should also account for the need to revise the CAR reserve system to ensure that it remains ‘CAR’ in the post-bushfire context.

Recommendation 9: The Major Event Review should recommend that the Victorian Government review the Harvest Level as a matter of priority, as required under the Victorian RFAs following a Major Event such as the 2019-2020 bushfires, and noting the express powers under s 18 of the *Sustainable Forests (Timber) Act 2004* (Vic). Any such review should take into account the findings and recommendations of the Major Event Review.

4.4 Salvage operations

The Summary Report states that salvage operations in burnt Ash forest following the 2019-2020 bushfires are substituting timber harvesting in unburnt areas, with no harvesting of unburnt areas within the fire footprint taking place in 2020.

This is concerning for two main reasons. Firstly, we note that recognised experts in the field have shown that salvage harvesting can have detrimental impacts on native forests post fire⁶⁷ and is, in fact, the most harmful kind of logging.⁶⁸ We also note that in September 2020, the Commonwealth Government’s Wildlife and Threatened Species Bushfire Recovery Expert Panel’s advised that many forest-dependent fauna are disadvantaged by post-fire salvage logging (especially hollow-dependent species),⁶⁹ and that limiting post-fire salvage logging would benefit most species. Despite this, the Victorian Government committed \$11.2 million of funding to VicForests to carry out “extended” timber salvage operations following the 2019-2020 bushfires.⁷⁰

The decision to allow and provide funds for selective logging in certain fire-affected areas flies in the face of substantial evidence warning against post-fire logging.

⁶⁶ See the Victorian Government’s Bushfire Biodiversity Response and Recovery program is outlined in more detail on its website: <https://www.wildlife.vic.gov.au/home/biodiversity-bushfire-response-and-recovery>

⁶⁷ See, for example: D. B. Lindenmayer, D. R. Foster, J. F. Franklin, M. L. Hunter, R. F. Noss, F.A. Schmiegelow, D. Perry, Salvage Harvesting Policies After Natural Disturbance, *Science*, March 2004, DOI: 10.1126/science.1093438; Lindenmayer, D.B. and Sato, C., Hidden collapse is driven by fires and logging in a socioecological forest ecosystem, *Proceedings of the National Academy of Sciences of the United States of America* (PNAS), May 15 2018, 115 (20) 5181-5186; <https://doi.org/10.1073/pnas.1721738115>

⁶⁸ Lindenmayer, D and Robinson, D, ‘Logging is due to start in fire-ravaged forests this week. It’s the last thing our wildlife needs’, *The Conversation* (online, 2 March 2020) <<https://theconversation.com/logging-is-due-to-start-in-fire-ravaged-forests-this-week-its-the-last-thing-our-wildlife-needs-132347>>.

⁶⁹ Department of Agriculture, Water and the Environment, ‘Management Interventions for 119 Priority Animal Species’, published on 9 September 2020.

⁷⁰ Victorian Budget 2020/21 Service Delivery, Budget Paper No. 3, pp. 14 and 19.

While we (and experts) acknowledge that some trees must be removed after fires for safety reasons, research has shown that post-fire logging does widespread damage to forest recovery.⁷¹ For example, detailed studies by the Australian National University, including following Victoria's devastating Black Saturday fires in 2009, showed that post-fire salvage logging hampers species recovery – destroying important areas for refuge, negatively affecting water, increasing sedimentation and catalysing erosion, and increasing future fire risk.⁷²

Secondly, it appears that some harvesting of unburnt areas *was* carried out in 2020⁷³ and is set to continue in 2021, including in the East Gippsland fire footprint.⁷⁴ Indeed, VicForests has stated that they have “*identified unburnt and lightly burnt areas within the fire footprint that can be sustainably harvested in 2021 while minimising risks to biodiversity.*”⁷⁵ This is alarming and the claims to sustainability must be interrogated given there is substantial science that identifies the importance of allowing forests time to recover after fires to ensure, amongst other things, the long-term survival of threatened species.⁷⁶

In light of this, we are highly concerned that salvaging operations have been and continue to be carried out in Victoria following the 2019-2020 bushfires, particularly in the absence of supporting assessments and scientific evidence that demonstrates such harvesting can be carried out in accordance with ESFM.

Recommendation 10: The Major Event Review should recommend that forestry rules in Victoria explicitly prohibit or strictly limit salvage logging operations, consistent with expert scientific advice.

4.5 Impacts on Aboriginal Cultural Heritage

The Summary Report states that:

- Desktop assessments of impacts on Aboriginal cultural heritage were undertaken after the 2019–2020 bushfires, using spatial databases of registered Aboriginal heritage values (i.e. places recorded on the Victorian Aboriginal Heritage Register). On-ground assessments have not yet been undertaken. Further work is required to understand impacts on Aboriginal heritage places.

This important work should be prioritised, including as part of the Major Event Review. It is important that Traditional Owners are properly engaged in this ongoing process. Any work to understand

⁷¹ See, for example, Lindenmayer1, D. et.al., *Effects of logging on fire regimes in moist forests*, Conservation Letters 2 (2009) 271–277; Lindenmayer1, D. et.al., *Please do not disturb ecosystems further*, Nature Ecology and Evolution, 1, 0031 (2017) 1–3.

⁷² Lindenmayer, D and Robinson, D, ‘Logging is due to start in fire-ravaged forests this week. It’s the last thing our wildlife needs’, *The Conversation* (online, 2 March 2020) <<https://theconversation.com/logging-is-due-to-start-in-fire-ravaged-forests-this-week-its-the-last-thing-our-wildlife-needs-132347>>.

⁷³ See, for example: <https://www.abc.net.au/news/2020-12-12/east-gippsland-logging-fire-damaged-forests/12973870>; <https://www.theage.com.au/national/victoria/court-halts-logging-in-unburnt-victorian-native-forest-20200429-p54od0.html>; and <https://www.theguardian.com/environment/2020/dec/08/vicforests-allowed-to-resume-logging-despite-risk-of-irreversible-damage-in-fire-hit-gippsland>.

⁷⁴ See VicForests’ media release of 10 May 2021 here: <https://www.vicforests.com.au/latest-news/latestnews>

⁷⁵ See VicForests’ media release of 10 May 2021 here: <https://www.vicforests.com.au/latest-news/latestnews>

⁷⁶ Mclver, J.D. and Starr, L., ‘A literature review on the environmental effects of postfire logging’, Western Journal of Applied Forestry, Vol. 16, Iss. 4, October 2001, 159-168, <https://doi.org/10.1093/wjaf/16.4.159>; Lindenmayer, D, Kooyman, Taylor, C, Ward, M & Watson, J ‘Recent Australian wildfires made worse by logging and associated forest management’, Nature Ecology and Evolution, 5 May 2020, Vol 4, 898-900

impacts on Aboriginal heritage places must directly inform the identification of remedial action to ensure that those places are properly protected.

Recommendation 11: The Major Event Review should ensure that impacts on Aboriginal cultural heritage are thoroughly considered, through genuine consultation with Traditional Owners, and recommend remedial action to ensure that Aboriginal cultural heritage is protected. Where gaps in knowledge are identified, the Major Event Review should make recommendations for addressing those gaps.

4.6 Relationship between native forest logging and bushfire risk

Since the 2019-2020 fires there has been updated analysis considering the factors that influenced the severity of these fires. This includes recent empirical analysis published in August 2021 that suggests that *“forests managed for timber production near settlements may be at increased risk of high-severity fire”*.⁷⁷

Any increase in the incidence of high-severity fire may undermine other actions taken in pursuit of ESFM and, as we have seen following the 2019-2020 fires, can threaten the viability of the CAR reserve system and the protection of MNES. If the relationship between native forest logging and bushfire risk is not considered as part of the Major Event Review, there is a risk that proposed remedial actions will fail to address a key threat to both forest ecosystems and the viability of forest industries themselves (including plantation forests which are also at risk from bushfires).

Recommendation 12: The Major Event Review should expressly consider the latest science on the relationship between native forest logging and bushfire risk so that any remedial actions proposed are fit for purpose.

4.7 Effectiveness of the Major Event Review mechanism

The Major Event Provisions in the Victorian RFAs were a welcome addition to the Victorian RFA framework⁷⁸ and provide an important mechanism for reviewing the Victorian RFAs following a major event such as the 2019-2020 bushfires. However, the scope for a Major Event Review to translate analysis into actions that protect forest values is yet to be seen.

A Major Event Review is designed to assess the impact of a ‘major event’ on factors that operate as assumptions that are critical to the RFA framework: ESFM, the CAR reserve system, the protection of MNES and ensuring an (ecologically) sustainable harvest level.

It is notable that the Victorian RFAs expressly state that a Major Event Review is not intended to *“open [an] Agreement up for renegotiation”*. However, the purpose of a Major Event Review is to identify *“what, if any, remedial actions need to be undertaken to address the impacts of the Major Event”*.

We would suggest that the purpose of a Major Event Review is self-evidently to ensure that *all necessary action* is taken to address the impacts of a Major Event on the key assumptions that

⁷⁷ D Lindenmayer, C Taylor & W Blanchard, ‘Empirical analysis of the factors influencing fire severity in southeastern Australia’ (2021) 12(8) *Ecosphere* 1-18.

⁷⁸ We note that the Major Event Provisions were inserted during the renewal of the Victorian RFAs, and are exclusive to Victoria.

underpin all RFAs (such as ESFM and the existence of a CAR reserve system). In other words, the analysis required of a Major Event Review must translate into tangible actions that will protect all forest values. If the Major Event Review cannot do this, this simply reinforces existing analysis and concerns that RFAs are not fit-for-purpose in the current era, where escalating threats from a changing climate, including more intense and frequent extreme weather events and ongoing declines in biodiversity, are putting our forests and wildlife, and communities, in danger.

As noted earlier, EDO strongly agrees with recent analysis that concludes the current RFAs are no longer tenable. As such, EDO supports the Victorian Government's 2019 announcement that it will phase out native forest logging by 2030. Importantly, this announcement was made *prior to* the devastating environmental impacts of the 2019-2020 bushfires. The Major Event Review provides an opportunity for the Victorian and Commonwealth Governments to reconsider the viability of native forest logging, including the RFAs as the applicable regulatory framework, in the wake of those fires and in the face of the twin crisis of climate change and biodiversity decline.

This review process, the first of its kind, should incorporate an assessment of whether the Major Event Review provisions are fit for purpose: Are they a suitable mechanism for assessing and responding to catastrophic events and ensuring that the intended objectives and goals of the RFAs, as reflecting those earlier identified in the NFPS, can continue to be met into the future?

Recommendation 13: The Major Event Review should report on all actions that may be necessary to ensure that RFA forestry operations accord with the objectives of the RFAs, as identified in the NFPS, so that the parties are properly armed to determine whether the RFAs remain fit for purpose.

Recommendation 14: The Major Event Review should report on the effectiveness of the Major Event Review provisions as a mechanism for assessing and responding to catastrophic events.

5. Conclusion

The bushfire season of 2019-2020 was unprecedented in Australian bushfire history in terms of scale, intensity and duration. In terms of impacts on areas covered by RFAs in Victoria, the 2019-2020 bushfire season fundamentally changed the landscape, heavily affecting the CAR reserve system of national parks and nature conservation reserves, SPZ areas and forests protected by prescriptions. Further, the 2019-2020 bushfires demonstrate what has long been known: that climate change poses a serious threat to the viability of our forest ecosystems.

Even before the 2019-2020 bushfire season, EDO had longstanding concerns that RFAs across all relevant jurisdictions are failing to deliver outcomes consistent with the principles of ESFM. The impacts of the 2019-2020 bushfire season present further significant challenges for the ongoing operation of RFAs, for example, in relation to how the RFAs operate, whether RFA forestry operations can accord with ESFM, the effectiveness of the CAR reserve system, and the effective management and protection of MNES. These are all issues for consideration through the Major Event Review.

In light of this, our overarching recommendation is that all native forestry operations in fire-affected native forests and unburnt areas serving as species-recovery refugia should be suspended, pending the outcome of the Major Event Review, including the implementation of any remedial actions recommended by the Major Event Review.

Our subsequent recommendations relate directly to the key issues identified in our submission for consideration by the Major Event Review, namely:

- Inadequacy of the CAR reserve system
- Impacts on threatened species and ecological communities
- Review of sustainable harvest volumes
- Salvage operations
- Impacts on Aboriginal Cultural Heritage
- Relationship between native forest logging and bushfire risk
- Effectiveness of the Major Event Review mechanism

If the Review Panel responds to these key issues as recommended, we expect the Major Event Review to be in a position to identify and recommend appropriate remedial action to address the impacts of the 2019-2020 bushfires and the future operation of the RFAs in Victoria.

More broadly, EDO strongly agrees with recent analysis that concludes the current RFAs are no longer tenable and notes that the RFAs incorporate mechanisms for their variation and termination. If the available data – including that collected through this Major Event Review – indicates that some or all of the Victorian RFAs cannot deliver on key objectives (including ESFM and ensuring a CAR reserve system) serious consideration should be given to substantive variations to, or even the early termination of, the RFAs.

Appendix 1 - Case studies: How prescriptions and management actions are failing two forest-dependent species - Greater Glider and Leadbeater's Possum

Case study 1 - Greater Glider

The conservation status of the Greater Glider has been in the spotlight in a number of recent instances:

- In *FOLP v VicForests*⁷⁹ (which was heard *before* the 2019-2020 bushfires), the Court made the following findings on the expert evidence:

969 The Greater Glider was listed in 2016, despite the existence of the reserve system and the range of existing prescriptions such as corridors and stream buffers. Those matters had not arrested the species' decline.

567 ... there has been no evidence identified to the Court, let alone probative scientific evidence (such as a peer-reviewed study) which establishes the effectiveness of the habitat tree prescriptions in the Code and the Management Standards and Procedures for the protection and conservation of the Greater Glider in areas subject to forestry operations in the CH RFA region. Nor is there any such evidence identified to the Court which establishes the effectiveness of the habitat tree prescriptions in the Code and the Management Standards and Procedures for the protection and conservation of the Greater Glider in any other Regional Forest Agreement region, or any comparable situation where forestry operations are conducted. Therefore, even if the habitat tree prescriptions were strictly and properly observed in each and every forestry operation in the impugned coupes, there is no evidence identified to the Court that they are effective. Dr Smith's view is that it is unknown if they are effective.

568 Second, even if the prescriptions could be found to be effective if strictly and properly observed in each and every forestry operation in the impugned coupes, the overwhelming evidence is that they have been poorly implemented, and are highly unlikely to be effective because of the approach taken on the ground.

569 I have spent some time on the issue of habitat tree selection and retention for a number of reasons. First it is a good illustration, and one central to the issues in the proceeding, of the difference between what VicForests might assert about the way it conducts its forestry operations and what happens on the ground. Second, it demonstrates that on a critical conservation measure, there is very poor and ineffective performance in the conduct of forestry operations. Third, it demonstrates VicForests' lack of commitment to these measures, in that my impression of the evidence is that they leave them to contractors at the eleventh hour during the conduct of forestry operations. Fourth, it demonstrates that a forest management prescription for the protection and conservation of threatened species – as the third limb the CAR reserve system – has little or no objective science behind it to demonstrate that it is effective. Fifth, it demonstrates that even if in theory such a prescription is capable of being effective, it is completely ineffective in the way it is implemented at the coupe level, for

⁷⁹ *Friends of Leadbeater's Possum Inc v VicForests (No 4)* [2020] FCA 704

the reasons given by Dr Smith based on his own observations. Those observations sit comfortably with what the Court observed on the view.

We note that these findings were upheld by the Full Court of the Federal Court on appeal.⁸⁰

- The Conservation Advice for Greater Glider approved on 2 May 2016⁸¹ (*before* the 2019-2020 bushfires) (**2016 Conservation Advice**) provides:

In production forests some logging prescriptions have been imposed to reduce impacts upon this species, however these are not adequate to ensure its recovery.

In Victoria, logging of areas where greater gliders occur in densities of greater than two per hectare, or greater than 15 per hour of spotlighting, require a 100 ha special protection zone (Vic DNRE 1995). However, this threshold is quite high given that density estimates in Victoria range from 0.6 to 2.8 individuals per hectare (Henry 1984; van der Ree et al., 2004), and mature tree densities are declining meaning a lower probability that gliders will occur at higher densities (Gaborov pers. comm., 2015). This management requirement may therefore not adequately protect existing habitat and greater glider populations.

Together, these demonstrate that the current system is not working to protect the Greater Glider, which is representative of other listed species suffering the same fate.⁸²

We acknowledge that in November 2019, the Victorian Government announced additional measures intended to support Greater Glider populations⁸³ and released the Greater Glider Action Statement⁸⁴ as part of the Victorian Forestry Plan. The Action Statement identifies a number of management actions intended to achieve the conservation objectives for the Greater Glider, including:

- A prescription to: *[r]etain at least 40% of the basal area of eucalypts across each timber harvesting coupe, prioritising live, hollow bearing trees, wherever a density of Greater Gliders equal to or greater than five individuals per spotlight kilometre (or equivalent measure) is identified. This prescription replaces the existing requirement to establish a Special Protection Zone in cases where greater than 10 individuals per spotlight kilometre (or equivalent measure) are detected in the East Gippsland Forest Management Area; and*
- A direction to: *[i]mmediately protect key areas of habitat across eastern Victoria.*

We understand these ‘key areas’ are known as the Immediate Protection Area (**IPA**) and indicates areas of State forest and other public land where timber harvesting operations are to be excluded.⁸⁵

⁸⁰ *VicForests v Friends of Leadbeater’s Possums Inc.* [2021] FCAFC 66 at [161]-[271].

⁸¹ Available here: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/254-conservation-advice-05052016.pdf>

⁸² David Blair, David Lindenmayer and Lachlan McBurney, *Failing to conserve Leadbeater’s Possum and its Mountain Ash forest habitat*, *Australian Zoologist*, 2018, 39 (3): 443-448, <https://doi.org/10.7882/AZ.2018.008>

⁸³ See: [Additional Environmental Protections \(delwp.vic.gov.au\)](http://delwp.vic.gov.au/Additional-Environmental-Protections).

⁸⁴ Available here: [Greater Glider \(Petauroides volans subsp. volans\) \(delwp.vic.gov.au\)](http://delwp.vic.gov.au/Greater-Glider-(Petauroides-volans-subsp.-volans))

⁸⁵ See: [Immediate Protection Areas IPA - Datasets - Victorian Government Data Directory](http://delwp.vic.gov.au/Immediate-Protection-Areas-IPA-Datasets-Victorian-Government-Data-Directory).

However, we have the following concerns:

- ***The Action Statement does not, at least to the extent required, incorporate the management actions set out in the 2016 Conservation Advice.***

The 2016 Conservation Advice sets out the management actions required to advance the conservation and protection of the Greater Glider, including high priority specific actions such as:

- Constrain impacts of hardwood production through appropriate levels of patch and hollow-bearing tree retention, appropriate rotation cycles, and retention of wildlife corridors between patches;
- Constrain clearing in forests with significant subpopulations, to retain hollow-bearing trees and suitable habitat;
- Avoid fragmentation and habitat loss due to development and upgrades of transparent corridors;
- Monitor the abundance and size structure of critical habitat tree species and their responses to management including before and after prescribed burns, and before and after logging;
- Investigate the numbers, densities and types of hollow-bearing trees that must be retained to ensure viable populations.

However, these actions are not accurately reflected in the Action Statement, nor are they incorporated in the Code.

We also note that the ‘*Guideline for application of modified harvesting rules for Greater Glider*’,⁸⁶ a policy commitment under the Victorian Forestry Plan, does not appear to have been developed, or is at least not publicly available.

- ***The prescription to ‘retain at least 40% of the basal area’ has not been incorporated into the Code, or the proposed Code Variation. It is also unclear whether it will, in practice, improve impacts on, or reduce threats posed to, the Greater Glider from native forest harvesting.***

In *FOLP v VicForests*, the Federal Court found that the practice of retaining 40% is not materially different in terms of its impacts on Greater Gliders as compared to VicForests existing silvicultural methods (found to be a key threat to Greater Glider and causing decline).⁸⁷ The Court referred to expert evidence, which, in relation to the 40% practice, explained:

what it does is add another 15% plus or minus to the 25% that is retained as area that is not permitted to be harvested... it might be better explained as requiring the retention of 15% of area not otherwise required to be set aside (at [1046]).

Again, these factual findings were upheld by the Full Court of the Federal Court on appeal.⁸⁸

⁸⁶ As referred to here: [Timber harvesting regulation | Victorian Government \(www.vic.gov.au\)](https://www.vic.gov.au/timber-harvesting-regulation)

⁸⁷ *Friends of Leadbeater’s Possums v VicForests (No 4)* [2020] FCA 704 at [75], [1038(a)], [1046], [1051]-[1052], [1436], [1454].

⁸⁸ *VicForests v Friends of Leadbeater’s Possum Inc.* [2021] FCAFC 66 at [161]-[271].

- **Additional areas of land have been protected in lieu of the large proportion of the East Gippsland part of the IPA that burned in the 2019-2020 bushfires.**

Given the part of the IPA in the Central Highlands which did not burn includes significant proportion of young logging regrowth that is not high quality habitat for the Greater Glider, we consider the East Gippsland part of the IPA needs to be re-designated over current high quality habitat for the species.

In light of this, we query whether the additional measures will do anything further to prevent the species' decline.

We note that Professor John Woinarski's independent review of the Regional Forest Agreements 'Threatened species and communities risk assessment' of September 2020 supports the view that current measures are failing to halt the decline of forest-dependent species. At page 4, he states:

“Monitoring indicates that at least some Victorian forest-dependent threatened species are undergoing rapid decline (Lindenmayer et al. 2020): self-evidently for such species, the existing protective and other mechanisms are inadequate to maintain existing populations, let alone ensure recovery. Where known, information about population trends should have been foundational for any risk assessment that aims to evaluate whether existing management mechanisms are working effectively, or whether instead additional interim or permanent protections and management actions are necessary”.⁸⁹

This raises the question: what steps need to be taken to halt Greater Glider declines and facilitate recovery and reversal and how can the Major Event Review play a role in this?

In May 2021, the Commonwealth Department of Agriculture, Water and Environment invited public comment on the eligibility of Greater Glider (southern) for inclusion on the EPBC Act threatened species list in the Endangered category and the necessary conservation actions for the species. In our view, the consultation documents released with the invitation provide a useful starting point to address the species' recovery. The documents set out recommended conservation and recovery actions, with the primary conservation outcome being to *“protect sufficient areas of habitat from intense and widespread fire, fragmentation and logging and retain hollow-bearing trees and habitat connectivity”* Conservation and management priorities are then listed and relevantly include:⁹⁰

- Establish and maintain effective prescriptions in production forests to support subpopulations of the Greater Glider. This includes but is not limited to:
 - appropriate levels of habitat retention;
 - logging exclusion and logging rotation cycles;
 - maintenance of wildlife corridors between logged patches;
 - protection of existing hollow-bearing trees with appropriate buffers; and
 - adequate recruitment of hollow-bearing trees.
- Identify key subpopulations and implement appropriate measures to ensure suitable habitat is maintained and protected around these subpopulations, as well as in areas where

⁸⁹ Available at: https://www.environment.vic.gov.au/_data/assets/pdf_file/0019/505243/TSCRA-independent-reviewers-reports.pdf.

⁹⁰ Department of Agriculture, Water and the Environment, 'Consultation on Species Listing Eligibility and Conservation Actions: *Petauroides Volans* (Greater Glider (southern))' available at:

subpopulations have already declined through loss of habitat. When protecting the area, retain sufficient suitable habitat for population viability.

- In the aftermath of bushfires, manage unburnt areas (within or adjacent to recently burnt areas) to reduce risk from future bushfires and protect/maintain this habitat to support population recovery. In particular, protect hollow-bearing trees from post-fire salvage logging and clean-operations.

Put simply, what is needed is expanded reserves and strengthened prescriptions, and these must be informed by, and consistent with, the best available science as to what is required to meet the objective of recovery. Along with recommendations made in the scientific literature,⁹¹ this includes current conservation advices for the Greater Glider (and all forest-dependent species), recovery plans and draft recovery where draft plans have not yet been finalised and the protection of old growth forest consistent with the JANIS criteria.

This is particularly important given the Court's finding in *FOLP v VicForests* that there is currently no effective planned corridor system in Victoria that provides for connectivity between adequate size reserves to facilitate persistence and recovery, consistent with the EPBC Act, JANIS, and the NFPS.⁹²

Case study 2: Leadbeater's Possum

In *FOLP v VicForests*⁹³ the Court found that in relation to the Leadbeater's Possum, current reserves and prescriptions “*have neither slowed nor arrested the species' decline*”⁹⁴ and are “*insufficient and ineffective to halt the declines towards extinction of this species*”.⁹⁵

The Court accepted the following opinion of Professor John Woinarski about the role played by monitoring of prescriptions and conservation measures, and why assessments of their effectiveness play a critical role:

“The Australian government's significant impact guidelines state that in relation to management or mitigation measures ‘you should not conclude that a significant impact is not likely to occur because of management or mitigation measures unless the effectiveness of those measures is well-established (for example through demonstrated application, studies or surveys) and there is a high degree of certainty about the avoidance of impacts or the extent to which impacts will be reduced’. I consider that the management and mitigation measures (as described in VicForest's Harvesting and Regeneration Systems document) have not (yet) been demonstrated to be effective for the conservation of Leadbeater's possum, have not been subject to relevant tailored studies or surveys, and that there is not a high

⁹¹ See, for example: Lindenmayer DB, Blanchard W, Blair D, McBurney L, Taylor C, Scheele BC, Westgate MJ, Robinson N, Foster C (2021) The response of arboreal marsupials to long-term changes in forest disturbance *Animal Conservation*, 24: 246-258. <https://doi.org/10.1111/acv.12634>; Wagner, B., et al, ‘Climate change drives habitat contraction of a nocturnal arboreal marsupial at its physiological limits’ (2020) *Ecosphere* 11(10); Taylor, C., et al (2017) ‘Improving the design of a conservation reserve for a critically endangered species’ *PLoS ONE* 12(1).

⁹² *Friends of Leadbeater's Possum Inc v VicForests (No 4)* [2020] FCA 704 at [75e], [861] – [863], [968], [974] – [975] & [985].

⁹³ *Friends of Leadbeater's Possum Inc v VicForests (No 4)* [2020] FCA 704

⁹⁴ *Friends of Leadbeater's Possum Inc v VicForests (No 4)* [2020] FCA 704 at [1419].

⁹⁵ *Friends of Leadbeater's Possum Inc v VicForests (No 4)* [2020] FCA 704 at [1408]. We note that further findings that prescriptions, including habitat tree retention, fail to arrest decline of Leadbeater Possum are made at [1354]- [1382], which were all upheld on appeal by the Full Court of the Federal Court: See, *VicForests v Friends of Leadbeater's Possum Inc*. FCAFC 66 at [161] – [271].

degree of certainty about the extent to which they will reduce impacts of timber harvesting on Leadbeater's possum beyond that imposed by conventional harvesting techniques".⁹⁶

We note that the comment made by Professor Woinarski in the independent review of the Regional Forest Agreements 'Threatened species and communities risk assessment' of September 2020, noted above in relation to the Greater Glider, apply equally to the Leadbeater's Possum:

*Monitoring indicates that at least some Victorian forest-dependent threatened species are undergoing rapid decline (Lindenmayer et al. 2020): self-evidently for such species, the existing protective and other mechanisms are inadequate to maintain existing populations, let alone ensure recovery. Where known, information about population trends should have been foundational for any risk assessment that aims to evaluate whether existing management mechanisms are working effectively, or whether instead additional interim or permanent protections and management actions are necessary.*⁹⁷

Like with the Greater Glider, this, coupled with the Court's findings in *FOLP v VicForests* highlights the critical need to strengthen management prescriptions for forest-dependent species, like Leadbeater's Possums.

As noted above and the main body of our submission, the Major Event Review should make recommendations to strengthen the CAR reserve system including prescriptions, to not only halt decline but facilitate recovery and reversal. In this regard, we note that recovery is:

- a key statutory object of the EPBC Act and is concerned with "restoration of species to sustainable, long term survival levels in the wild";
- a key object of the Code;⁹⁸
- what the FFG Act requires in section 4; and
- necessary for consistency with the NFPS object of "maintenance of ecological processes and conservation of biodiversity (particularly endangered species)" (at p. 7) and JANIS under the requirement of 'adequacy' (at parts 3.2 and 6.1.2(4)-(6)).

The RFAs incorporate or implement each of these Acts, the Code and policies. Accordingly, the required changes are those necessary to meet the objective of facilitating recovery and reversing – not only halting – declines.

Prescriptions and management actions must be informed by and consistent with the best available science as to what is required to meet the objective of recovery. Along with recommendations made in the scientific literature,⁹⁹ this includes current conservation advices for the Leadbeater's Possum

⁹⁶ *Friends of Leadbeater's Possum Inc v VicForests (No 4)* [2020] FCA 704 at [1566].

⁹⁷ Available at: https://www.environment.vic.gov.au/_data/assets/pdf_file/0019/505243/TSCRA-independent-reviewers-reports.pdf.

⁹⁸ *Friends of Leadbeater's Possum Inc v VicForests (No 4)* [2020] FCA 704 at [626] – [632], upheld on appeal at *VicForests v Friends of Leadbeater's Possum Inc*. FCAFC 66 at [187] – [190].

⁹⁹ See, for example:

Lindenmayer DB, Blanchard W, Blair D, McBurney L, Taylor C, Scheele BC, Westgate MJ, Robinson N, Foster C (2021) The response of arboreal marsupials to long-term changes in forest disturbance *Animal Conservation*, 24: 246-258. <https://doi.org/10.1111/acv.12634>;

Wagner, B., et al, 'Climate change drives habitat contraction of a nocturnal arboreal marsupial at its physiological limits' (2020) *Ecosphere* 11(10); Taylor, C., et al (2017) 'Improving the design of a conservation reserve for a critically endangered

(and all forest-dependent species), recovery plans and draft recovery where draft plans have not yet been finalised and the protection of old growth forest consistent with the JANIS criteria.

We note that the 2016 draft recovery plan for the Leadbeater's Possum states (at p. 38):¹⁰⁰

“ Given the current Critically Endangered status of Leadbeater's possum, and its predicted severe ongoing decline, including significant risks of extinction, all current and prospective suitable habitat is critical for its survival, and necessary for its recovery”.

The Conservation Advice for the Critically Endangered Leadbeater's Possum, which has been in effect since 22 June 2019¹⁰¹ summarises the threats impacting the Leadbeater's Possum in approximate order of severity of risk. For habitat loss and fragmentation, these include collapse of hollow-bearing trees (which is influenced by fire and logging), extensive wildfire (which leads to direct mortality and loss of habitat and extent and fragmentation) and logging.

Importantly, the Conservation Advice states (at p. 3) that Leadbeater's Possums do not occur on burned sites, including those subject to low and moderate severity fire, clear-fell logged, or regenerated montane Ash forest where hollow-bearing trees are largely absent (Lindenmayer et al. 2013b; Lumsden et al. 2013) until required conditions have returned.

The Conservation Advice then sets out a number of conservation management and priorities, including:

- Protect all known colonies of Leadbeater's Possum in state forest, with a timber harvesting exclusion zone around all known (post 1998) verified records;
- Ensure no timber harvesting is permitted in any area of the Central Highlands montane Ash forests unless comprehensive pre-harvest surveys (as per the approved Leadbeater's Possum survey standards) demonstrate, with a high level of confidence, absence of Leadbeater's Possum from the prospective harvest area;
- Retain and protect, with appropriate buffers, all live and dead trees that are either large (>150 cm DBH) or hollow-bearing (where >80 cm DBH) in montane Ash forests within the distribution of Leadbeater's Possum;
- Review the conservation effectiveness of other timber harvesting regulatory prescriptions and related guidelines relevant to the protection of Leadbeater's Possum and its habitat and revise where required;
- Undertake landscape scale land-use planning that provides options for conservation of suitable habitat now and in the future to ensure an acceptably high likelihood of persistence (i.e. at least 99 percent over 100 year period) for Leadbeater's Possum;

species' PLoS ONE 12(1);

Lindenmayer, D., et al (2013) 'New Restoration Forest Management Prescriptions to Conserve Leadbeater's Possum and Rebuild the Cover of Ecologically Mature Forest in the Central Highlands of Victoria'. Fenner School of Environment and Society, ANU College of Medicine, Biology and Environment;

Leadbeater's Possum Advisory Group, 'Leadbeater's Possum Recommendations: Report to the Minister for Environment and Climate Change and the Minister for Agriculture and Food Security, 20 January 2014.

¹⁰⁰ Available at: <https://www.environment.gov.au/system/files/resources/6e2618ee-b799-4505-ac96-b3b3e0eb99c4/files/draft-national-recovery-plan-leadbeaters-possum.pdf>

¹⁰¹ Available at: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/273-conservation-advice-22062019.pdf>

- Expand the dedicated reserve system to incorporate sufficient areas of current and future suitable habitat to ensure that it is adequate to maintain and enhance the long-term population viability of Leadbeater’s Possum;
- Develop a priority suite of responsive actions designed to maintain or recover populations as rapidly as possible after extensive bushfire;
- Establish appropriate governance and protocols to be able to respond to emergency events, such as significant losses of possums to extensive bushfire;
- Investigate key aspects of the post-fire ecology of Leadbeater’s Possum, especially in relation to the 2009 bushfires. This research should include at least:
 - assessment of current hollow availability and the importance of large dead and any live hollow-bearing trees in the burnt landscape;
 - investigation of hollow development within trees that were 1939 regrowth before being burnt, to determine their potential to provide denning sites into the future;
 - investigation of the persistence of colonies within fire refuges surrounded by burnt areas, to determine if they will be effective sources for natural recolonisation or if translocations will be required to accelerate recolonisation of the regenerated burnt areas; and
 - monitoring of rates of natural recolonisation of forest regrowing after fire.

In light of the critical statement in the draft recovery plan, and given that the priority actions in the Conservation Advice are not reflected in the management prescriptions in the Code, the Major Event Review must recommend the revision and strengthening of the Code, including by incorporating the best available science.

As noted above, this is particularly important given the Court’s finding in *FOLP v VicForests* that there is currently no effective planned corridor system in Victoria that provides for connectivity between adequate size reserves to facilitate persistence and recovery, consistent with the EPBC Act, JANIS, and the NFPS.¹⁰²

For further guidance as to appropriate prescriptions for species such as the Leadbeater’s Possum and the Greater Glider, we recommend the Panel look to the Federal Court’s findings on evidence in *FOLP v VicForests* as to what is considered necessary for the recovery of this species.¹⁰³

We also recommend a review of the available literature, such as that listed in footnote 89 above.

Finally, if the Major Event Review recommends the strengthening of management prescriptions for threatened species, we urge the Panel not to adopt the interim protections and management actions, which were developed by the Victorian Government as part of the Threatened Species and Communities Risk Assessment in April 2021, as they do not provide the necessary level of protection required (see the independent expert reviews of the Threatened Species and Communities Risk Assessment¹⁰⁴).

¹⁰² *Friends of Leadbeater’s Possum Inc v VicForests (No 4)* [2020] FCA 704 at [75e], [861] – [863], [968], [974] – [975] & [985].

¹⁰³ See, for example, *Friends of Leadbeater’s Possum Inc v VicForests (No 4)* [2020] FCA 704 at [1262] & [1411] – [1420], and the Leadbeater’s Possum Advisory Group’s ‘Leadbeater’s Possum Recommendations: Report to the Minister for Environment and Climate Change and the Minister for Agriculture and Food Security’, which is cited in paragraph [1262].

¹⁰⁴ Available at: https://www.environment.vic.gov.au/_data/assets/pdf_file/0019/505243/TSCRA-independent-reviewers-reports.pdf.