

Submission

*Victorian Government  
Land Management Strategy*

*October 2021*



**Animal  
Justice  
Party**



## Animal Justice Party

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### *The Animal Justice Party 2021*

#### Images

Front cover: Woowookarung Regional Park, Natalie Kopas 2021

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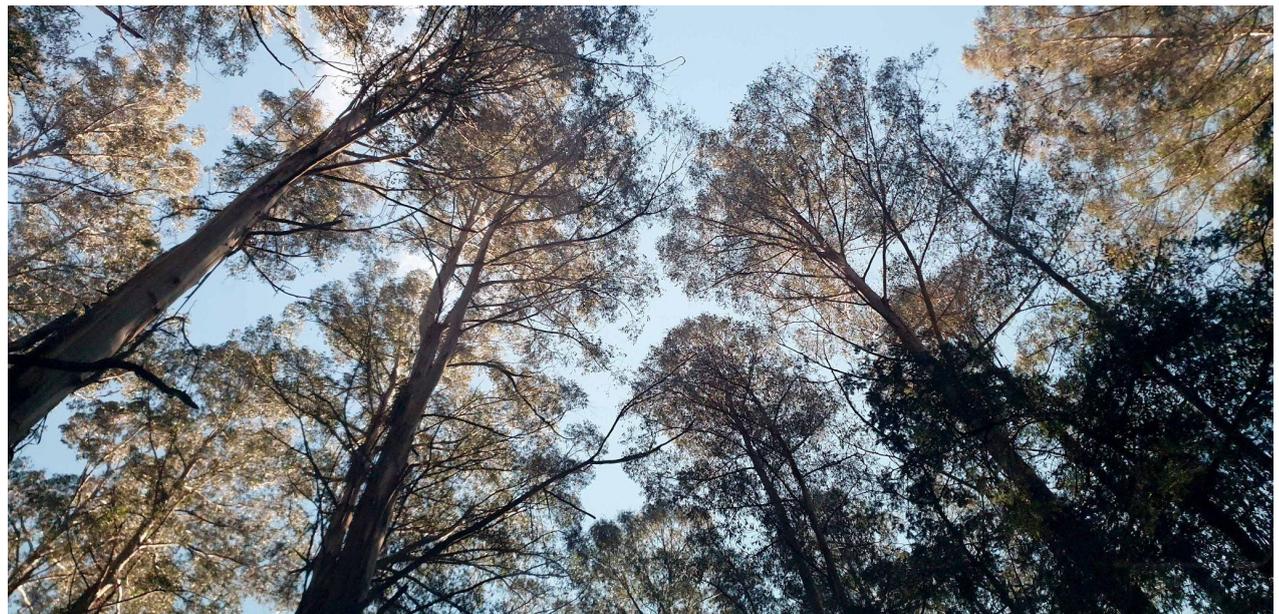
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*The Animal Justice Party acknowledges the First Nations peoples as the custodians of the land on which we live and work.*

## About the Animal Justice Party

The Animal Justice Party (the AJP) is a political party established in 2009 to secure the interests of animals and nature through Australia's democratic institutions of government. Our vision is a planet on which animals and nature have the right to live and thrive free from negative human interference and a human society which functions with kindness and compassion within its ecological limits as a responsible member of the Earth community. The AJP seeks to foster respect, kindness, and compassion towards all species particularly in the way governments design and deliver initiatives, and the manner in which these initiatives function.

In New South Wales the AJP has two elected representatives in the Legislative Council of NSW, Mark Pearson MLC and Emma Hurst MLC. In Victoria, the AJP has an elected representative in the Legislative Council, Andy Meddick MLC, and two councillors in Local Government, Councillors Julie Sloan and Charlie Vincent.

This submission was prepared by the Victorian Submissions Working Group within the AJP. The working group makes this submission on behalf of the AJP with the approval and the endorsement of the Board of Directors.

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## Introduction

Victoria's Parks comprise 18 percent of land in Victoria; 4.1 million hectares of public land which comprises over 3,000 individual parks, reserves and marine reserves<sup>1</sup>. The environmental diversity which this covers is everything from urban parks containing playgrounds in cities, to marine reserves whose seafloor is a playground for fish and other aquatic creatures and bushland which is home to an abundance of wildlife.

Human health and wellbeing are intricately connected to the health and wellbeing of other species, ecosystems and the planet as a whole. We require basic resources for survival; air, water, food, energy and shelter. These essential resources come from nature and they are part of nature's services to all species and individuals, *i.e.* ecosystem services<sup>2,3</sup>, and they include:

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[https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.vic-engage.files/7516/3169/3065/Parks\\_Victoria\\_Final\\_DRAFT\\_Land\\_Management\\_Strategy.pdf](https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.vic-engage.files/7516/3169/3065/Parks_Victoria_Final_DRAFT_Land_Management_Strategy.pdf)

<sup>2</sup> Birkhofer, K. et al (2015) Ecosystem services—current challenges and opportunities for ecological research. *Frontiers in Ecology and Evolution*. 12 January 2015. <https://doi.org/10.3389/fevo.2014.00087>

<sup>3</sup> IPBES. (2019). Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (Version 1). Zenodo. <https://doi.org/10.5281/zenodo.3831674>

- provisioning services, such as water, food and fibre;
- regulating services, such as climate regulation and flood regulation; and
- cultural services, such as spiritual, emotional, recreational and aesthetic benefits.

Our survival and the survival of other species depends on ecosystem services and, therefore, depends on a healthy environment. However, three major crises are threatening life on Earth - biodiversity emergency, climate emergency and emerging diseases<sup>4,5,6</sup>.

The AJP applauds the aspirations of this draft *Land Management Strategy (LMS)*. Recognising the intrinsic value of our natural environment as well as its importance to wildlife, humans and climate change is a positive step and embedding these values in future management and strategies is crucial.

According to the Victorian Government's consultation:

*"Parks Victoria has developed a draft Land Management Strategy that sets out a clear vision and long-term strategies and priorities for the protection, management and use of Parks Victoria managed land for the next decade. This is the first time Parks Victoria has embarked on preparing a state-wide land management strategy. Once finalised, the Land Management Strategy will provide us with an overarching and consistent state-wide guide for the management of our parks across the state."*<sup>7</sup>

The draft Land Management Strategy has identified eight key outcomes to guide future park management. Our submission tackles this critical reform by discussing these priority outcomes developed by the Victorian Government; recommendations are provided throughout our submission. This submission is guided by our mission and vision and underpinned by our policies. The AJP has policies on animals, environment and human issues<sup>8</sup>. Our policies on bats and flying foxes<sup>9</sup>, brumbies<sup>10</sup>, climate change<sup>11</sup>, energy<sup>12</sup>, environment<sup>13</sup>, environmental law<sup>14</sup>, introduced

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<sup>4</sup> Grandcolas P. & Justine J-L. (2020) COVID-19 or the pandemic of mistreated biodiversity. *The Conversation* 30/4/2020 <https://theconversation.com/covid-19-or-the-pandemic-of-mistreated-biodiversity-136447> accessed 11/8/2021

<sup>5</sup> Armstrong F. Capon A. & McFarlane R. (2020) Coronavirus is a wake-up call: Our war with the environment is leading to pandemics. *The Conversation* 31/3/2020

<https://theconversation.com/coronavirus-is-a-wake-up-call-our-war-with-the-environment-is-leading-to-pandemics-135023> accessed 11/8/2021

<sup>6</sup> IPBES (2020) Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services. Daszak, P., das Neves, C., Amuasi, J., Hayman, D., Kuiken, T., Roche, B., Zambrana-Torrel, C., Buss, P., Dunderova, H., Feferholtz, Y., Foldvari, G., Igbinsosa, E., Junglen, S., Liu, Q., Suzan, G., Uhart, M., Wannous, C., Woolaston, K., Mosig Reidl, P., O'Brien, K., Pascual, U., Stoett, P., Li, H., Ngo, H. T., IPBES secretariat, Bonn, Germany, DOI:10.5281/zenodo.4147317

<sup>7</sup> <https://engage.vic.gov.au/lms>

<sup>8</sup> Animal Justice Party Policies <https://animaljusticeparty.org/policies/>

<sup>9</sup> Animal Justice Party *Bats and Flying Foxes Policy* <https://animaljusticeparty.org/policieslist/animals/bats-and-flying-foxes/>

<sup>10</sup> Animal Justice Party *Brumbies Policy* <https://animaljusticeparty.org/policieslist/animals/brumbies/>

<sup>11</sup> Animal Justice Party *Climate Change Policy* <https://animaljusticeparty.org/wp-content/uploads/2018/06/climate-changeA4.pdf>

<sup>12</sup> Animal Justice Party *Energy Policy* <https://animaljusticeparty.org/wp-content/uploads/2019/04/ENERGY-NAT-Basic.pdf>

<sup>13</sup> Animal Justice Party *Environment Policy* <https://animaljusticeparty.org/policieslist/environment/environment/>

<sup>14</sup> Animal Justice Party *Environmental Law Policy*

[https://animaljusticeparty.org/wp-content/uploads/2019/04/ENVIRONMENTAL\\_LAW-NAT-Basic.pdf](https://animaljusticeparty.org/wp-content/uploads/2019/04/ENVIRONMENTAL_LAW-NAT-Basic.pdf)

animals<sup>15</sup>, kangaroos<sup>16</sup>, koalas<sup>17</sup>, land clearing<sup>18</sup>, marine animals<sup>19</sup>, mental health<sup>20</sup>, native birds<sup>21</sup>, platypus<sup>22</sup>, waste<sup>23</sup>, wildlife care<sup>24</sup>, wildlife protection<sup>25</sup> and wombats<sup>26</sup> are particularly relevant to this consultation.

Thank you for the opportunity to contribute to this consultation.

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## 1. Managing Country Together

Human activity is exacerbating biodiversity loss and ecosystem decline through climate change, pollution, exploitation, land clearing and change in land practices. The increasing impact is multifaceted; health and wellbeing, in terms of a reduction in ecological services and cultural, in terms of connection to place. This is particularly significant for First Nations people who have a continued spiritual connection to the land and waters going back over 65,000 years. First Nations people care for Country and have an ongoing spiritual, economic, social and environmental connection to the land, sea, sky and waterways.

The AJP has a position on First Nations people<sup>27</sup>. The AJP basically supports the eight priorities identified in the draft LMS, but is concerned that the focus on 'cultural values' may negatively impact wildlife and biodiversity.

The Animal Justice Party (AJP) recognises the horrific treatment of First Nations people since European arrival and endorses every effort to rectify these long standing injustices. We understand that First Nations communities that were here before colonisation, had a complex system of relationships and management of self, other people and their wider world that enabled them to thrive on a continent that was, in itself, a complex environment. First Nations people were caretakers of the continent and its inhabitants for tens of thousands of years and sovereignty was never ceded.

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<sup>15</sup> Animal Justice Party *Introduced Animals Policy*

<https://animaljusticeparty.org/wp-content/uploads/2021/05/IntroducedAnimalsMay2021.pdf>

<sup>16</sup> Animal Justice Party *Kangaroos Policy* <https://animaljusticeparty.org/policieslist/animals/kangaroos/>

<sup>17</sup> Animal Justice Party *Koalas Policy* <https://animaljusticeparty.org/policieslist/animals/koalas/>

<sup>18</sup> Animal Justice Party *Land Clearing Policy* <https://animaljusticeparty.org/wp-content/uploads/2017/11/land-clearingA4.pdf>

<sup>19</sup> Animal Justice Party *Marine Animals Policy* <https://animaljusticeparty.org/wp-content/uploads/2017/11/marine-animalsA4.pdf>

<sup>20</sup> Animal Justice Party *Mental Health Policy* <https://animaljusticeparty.org/wp-content/uploads/2018/04/mental-healthA4.pdf>

<sup>21</sup> Animal Justice Party *Native Birds Policy* <http://animaljusticeparty.org/policieslist/animals/native-birds/>

<sup>22</sup> Animal Justice Party *Platypus Policy* <https://animaljusticeparty.org/wp-content/uploads/2018/06/platypusA4.pdf>

<sup>23</sup> Animal Justice Party *Waste Policy*

<https://animaljusticeparty.org/wp-content/uploads/2020/05/Animal-Justice-Party-Waste-Information-Sheet-May-2020.pdf>

<sup>24</sup> Animal Justice Party *Wildlife Care Policy* <https://animaljusticeparty.org/wp-content/uploads/2021/02/Wildlife-care.pdf>

<sup>25</sup> Animal Justice Party *Wildlife Protection Policy* <https://animaljusticeparty.org/wp-content/uploads/2021/02/Wildlife-Protection2021.pdf>

<sup>26</sup> Animal Justice Party *Wombats Policy* <https://animaljusticeparty.org/policieslist/animals/wombats/>

<sup>27</sup> Animal Justice Party *Position: First Nations people* <https://animaljusticeparty.org/wp-content/uploads/2020/11/FirstNations.pdf>

The AJP supports establishing one or more Makarrata Commissions to facilitate truth-telling and agreement-making between First Nations peoples and various governments. All governments must comply with their obligations under the United Nations Declaration on the Rights of Indigenous Peoples<sup>28</sup> and the AJP supports the articles therein.

There are future opportunities to highlight the rich cultural heritage of Victoria's Parks by creating signage at key areas, particularly along bike or walking trails, or lookouts that identify sites of cultural significance and First Nations storytelling, if appropriate. This can increase community and visitor awareness, and foster understanding and promote interest in the cultural value of the region.

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### **Recommendations:**

1. Consult and collaborate with First Nations People to inform the community of cultural knowledge and practices that connect them to Country and allow them to adapt and interpret changes on Country.
  2. Enable Traditional Custodians to enact their right to self-determination in management of the natural environment immediately.
  3. Ensure that there is a process of consultation with Traditional Custodians.
  4. Ensure that any plans for Victorian Parks that potentially affect the Aboriginal community are identified early and prioritised for discussion and consultation.
  5. There must be a strong commitment to respecting and acting on the views of the local community who will be the most affected by any proposed changes.
  6. Consider signage at key points describing sites of cultural or historical significance and to support First Nations storytelling, if appropriate.
  7. Investigate future cultural walking tours, led by local First Nations people.
  8. Represent and consider Victoria's wildlife and biodiversity positively and with due care and respect; Ensure that 'cultural values' do not have negative impacts.
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## **2. Protecting Victoria's Natural Riches**

Destruction of the natural world is **ECOCIDE**; the deliberate or negligent destruction of the natural world which threatens the health and survival of all species and ecosystems, including humans. International legal experts recently defined ecocide as "unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts."<sup>29</sup> A global organisation is

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<sup>28</sup> <https://humanrights.gov.au/our-work/un-declaration-rights-indigenous-peoples-1>

<sup>29</sup> Saddique H (2021) Legal experts worldwide draw up 'historic' definition of ecocide. The Guardian. 23 Jun 2021 <https://www.theguardian.com/environment/2021/jun/22/legal-experts-worldwide-draw-up-historic-definition-of-ecocide>

lobbying the International Criminal Court to make ecocide the fifth international crime, alongside genocide, war crimes, crimes against humanity and crimes of aggression<sup>30</sup>. The AJP asserts that destruction of the natural world is an existential threat and that ecocide should be a crime.

The AJP basically supports the identified priorities in this area, however we are concerned about the reported outcome. Natural systems and ‘cultural values’ are frequently at odds, so conflating the two into a single outcome is concerning. Human activity is responsible for the climate emergency and the biodiversity emergency, so great care must be taken in ‘protecting and restoring cultural values’. Some Victorians consider brumbies in the Victorian high country to be of heritage and cultural value, yet they are introduced species who are destroying the ecosystem. A very small number of Victorians hold a licence to shoot ducks (0.4 percent<sup>31</sup>), most Victorians do not support duck shooting<sup>32</sup>, yet the shooters are permitted by the Victorian Government to kill animals, decrease biodiversity and damage sensitive wetlands, many of which are Ramsar-listed. So, the AJP would like more clarity on the outcome of ‘cultural values’ and detail of how the ‘cultural values’ will not impact the natural systems.

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### **Recommendations:**

9. Acknowledge and appreciate the importance of biodiversity and environmental health and integrity to the health and wellbeing of all species, including humans, and that the right to a healthy environment is a human right.
10. Declare a biodiversity emergency and recognise the five main drivers of biodiversity loss and ecosystem decline (*i.e.* exploitation, habitat loss, pollution, climate damage and introduced (non-native) species), acknowledge the way that human activities negatively impact these drivers and develop and enact a strategic system-based policy to effectively tackle biodiversity loss and ecosystem decline in Australia.
11. Declare a climate emergency, recognise the main contributors of greenhouse gas emissions and develop and enact a strategic system-based policy to tackle climate change and reach a zero emissions state.
12. Recognise ecocide as a serious criminal offence and create laws and penalties to reflect the seriousness of this crime.
13. Carefully consider any ‘cultural’ activities to ensure they do not negatively impact wildlife or the environment.

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<sup>30</sup> Stop Ecocide: Change the law, protect the Earth. <https://www.stopecocide.earth/>

<sup>31</sup>GMA (2018) Game Licence Statistics: Summary Report - 2018. Game Management Authority [http://www.gma.vic.gov.au/\\_\\_data/assets/pdf\\_file/0018/443214/Game-Licence-Statistics-Summary-Report-2017-18.pdf](http://www.gma.vic.gov.au/__data/assets/pdf_file/0018/443214/Game-Licence-Statistics-Summary-Report-2017-18.pdf)

<sup>32</sup>Roy Morgan (2007) Majority Of Victorians Want Duck Shooting Banned. 12 Nov 2007. Finding No. 4239 Topic: Special Poll Country: Australia. <http://roymorgan.com.au/findings/finding-4239-201302262309>

## 2.1 Invest in addressing threatening processes through conservation programs, including the eradication or reduction of invasive and pest species, to build the resilience of natural systems in parks.

The “threatening processes” are the five major drivers of biodiversity loss and ecosystem decline, widely recognised<sup>33</sup> as:

1. Exploitation - including abuse and disregard;
2. Habitat loss - though land clearing and changed land use);
3. Pollution - including poisons used to “eradicate or reduce invasive and pest species”;
4. Climate change and
5. Introduced species.

We must acknowledge the way that human activities negatively impact these five drivers and develop and enact a strategic system-based policy to effectively tackle **all drivers** of biodiversity loss and ecosystem decline (as we have stated in Recommendation 10). Focusing only on introduced species is not the solution, particularly when main methods are chemical pollutants (*i.e.* poisons) that contribute to the driver of pollution.

The AJP acknowledges that terrestrial and aquatic animals who were introduced into Australia by humans over the past 250 years have deleterious environmental and economic impacts.

Since 1770, over 3,000 non-native species of plants and animals, including at least 73 species of vertebrates have been introduced to Australia. Introduced animal species have been imported for a variety of exploitative reasons including animal agriculture (*e.g.*, sheep, cows, pigs, goats, buffaloes, European honey bees), hunting and fishing (*e.g.*, rabbits, foxes, deer, European carp), labour and transport (*e.g.*, horses, donkeys, camels), companionship and ornamental use (*e.g.* dogs, cats, birds, turtles, snakes, fish) and attempts at biocontrol (*e.g.*, ferrets, sparrows, myna birds, cane toads). Other species were introduced accidentally (*e.g.*, rats and mice).

Once in Australia, many of these animals were deliberately, negligently or accidentally released, and some have established free-living populations in a variety of environments. In most cases, these introductions and releases were made in utter ignorance of the impact they may have on Australia’s biodiversity and environment. Importantly, these animals had no control over their fate; they did not give their consent to be introduced to Australia. Species that were introduced and managed to thrive (*e.g.* fox) are now often referred to by vilifying language, such as ‘pest’, ‘invasive’ or ‘vermin’.

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<sup>33</sup>IPBES (2020) Models of drivers of biodiversity and ecosystem change. <https://ipbes.net/models-driversbiodiversity-ecosystem-change>

Some species are impacting their local environment through predation on native species, competition for food or shelter, soil compaction or erosion, water turbidity, and generally contribute to biodiversity loss and ecosystem decline. Industry bodies argue that some introduced species also have an economic impact, especially when they prey upon, compete with, or spread diseases to other introduced animals who are exploited for agriculture. However, in most cases where the needs of different species conflict with each other, adjustments can be made using crop and animal protection measures, making cruel, lethal methods an unacceptable “solution”.

Ironically, the control of introduced species is often justified in order to allow other introduced species such as sheep and cows, to graze pasture on fragile soils or to protect introduced crops – activities which are also detrimental to the environment. In addition, control actions may impact non-target species, both domestic and native, through indiscriminate poisoning and trapping and contribute to biodiversity loss and ecosystem decline. Yet, Australia continues to deliberately import and release non-native species.

Why are some introduced species, such as rabbits vilified, yet the impacts of others are rarely discussed? There are 28 million cows and 65 million sheep in Australia, yet we rarely hear about the biodiversity loss and environmental damage caused by these introduced species, despite 46 percent of Australia’s land mass being used for grazing of native vegetation<sup>34</sup>.

Humans are responsible for the impact of introduced species, through poor decision-making, lack of foresight, and/or disregard for native species and the environment. While we urgently need to address the impacts of introduced species on Australia’s biodiversity and environment, we must not shift the blame by vilifying them. Importantly, we must recognise that environmental damage and biodiversity loss are currently being exacerbated by current government policies on land clearing, pollution, and climate change. Humanity must address all drivers of biodiversity loss and environmental damage, take appropriate accountability for all introduced species including those exploited for agriculture, and employ rational and humane strategies to reduce the impacts.

The AJP recognises that there is no simple solution to controlling the impact of introduced species, however, we believe that only non-lethal, humane, effective and species-specific methods are acceptable. Too many of the current methods used are not only cruel but also non-targeted, inadvertently harming native animals and the local environment.

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<sup>34</sup> <https://soe.environment.gov.au/theme/land/topic/land-use-and-management>

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**Recommendations:**

14. Investigate non-chemical methods of ‘weed’ control such as steam weeding and burning.
15. Stop the use of vilifying language to refer to introduced species.
16. Ensure that methods used to control introduced species or mitigate their damage are non-lethal, humane, effective and species-specific – for instance, deterrence and harbour removal. Support research into effective fertility control.<sup>35</sup>
17. Ensure that strategies to maximise ecosystem resilience cover all ecosystems including forest, coastal, marine, peri-urban and grasslands.
18. Promote responsible animal guardianship including keeping companion animals safe in their homes (*e.g.* in cat enclosures), and preventing abandonment and accidental breeding. This will prevent the animals from causing environmental damage and reduce the predation of native animals (see our Companion Animal policy<sup>36</sup>)<sup>37</sup>.
19. Reduce the impact of introduced animals by rewilding and restoring endemic ecosystems to allow native species to thrive.

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**2.2 Improve ecosystem protection and restoration, including active intervention such as the reintroduction of threatened species and species with cultural values and uses that are in decline to support resilience of natural systems and cultural connections.**

In this priority the term ‘cultural values and uses’ is concerning; at the beginning of this section we highlighted this concern and stated that natural systems and ‘cultural values’ are frequently at odds. Some ‘cultural values and uses’ could include brumbies in the high country, duck and quail shooting, kangaroo shooting, fishing, four-wheel driving through forests and various other human activities that exploit (use, abuse, disregard) animals and the environment. The AJP does not support these activities.

In terms of conservation and species survival, we hear people talk about ecology, that is the way an individual or species interacts with its environment. To survive, species and individuals need key resources (*i.e.* air, water, food, shelter). These essential resources come from nature, from the environment, and they are part of nature's services to all species and individuals - ecosystem services<sup>38</sup>. Individuals and species get their basic resources from their habitat, which is their main connection with the environment.

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<sup>35</sup> <http://animaljusticeparty.org/policieslist/animals/introduced-animals/>

<sup>36</sup> <http://animaljusticeparty.org/policieslist/animals/companion-animals/>

<sup>37</sup> <http://animaljusticeparty.org/policieslist/animals/introduced-animals/>

<sup>38</sup> Birkhofer, K. *et al.* (2015) Ecosystem services—current challenges and opportunities for ecological research. *Frontiers in Ecology and Evolution*. 12 January 2015. <https://doi.org/10.3389/fevo.2014.00087>

A major difference between individuals and species in terms of survival is that species must breed in order to survive, while breeding is not critical for individual survival. Fertility and reproduction are therefore paramount to species survival. When under intense and prolonged stress, an individual needs to conserve energy and use it in the most efficient way. They may need to halt certain processes. Since reproduction is not necessary for the survival of the individual, it can be halted without jeopardising the individual's survival. So the reproductive system is the first system to shut down when the individual is under intense and prolonged stress, such as in drought, low food supply or chronic habitat loss.

Recovery plans must recognise the importance of both ecology and reproductive biology, and employ experts in each area. Conservation actions must include reproductive biology strategies and initiatives, not just ecological ones. This should include assisted reproductive technology (ART) methods, such as biobanking, artificial insemination and cross-fostering<sup>39</sup>.

The complexity of maintaining biodiversity means we cannot predict the impact of changes in the population size or habits of one animal on the overall ecosystem. For this reason, all possible steps must be taken to protect and reintroduce threatened species where possible. Programs such as the recent reintroduction of two eastern barred Bandicoots in Western Victoria<sup>40</sup> and ongoing conservation with the critically endangered orange bellied parrot<sup>41</sup> are essential.

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### **Native Vegetation Protection**

In Victoria we have made some progress to protect and enhance native vegetation, but a much bigger effort is required. We still have a permanent loss of native vegetation of approximately 2500 hectares per year. We need greater protection for trees that provide important habitat for native fauna and our latest understanding of the future impact of salinity and reduction in water quality calls for a much greater effort in coastal regions.

Retention and management of native vegetation is the primary way to conserve natural biodiversity across the landscape and priorities for vegetation management should be specific for each area. The long-term goal should be to reverse the decline in vegetation and avoid clearing where possible<sup>42</sup>. Where clearing is inevitable, lost vegetation must be offset in an

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<sup>39</sup>Johnston S.D., Holt W.V. (2019) Using the Koala (*Phascolarctos cinereus*) as a Case Study to Illustrate the Development of Artificial Breeding Technology in Marsupials: an Update. In: Comizzoli P., Brown J., Holt W. (eds) Reproductive Sciences in Animal Conservation. Advances in Experimental Medicine and Biology, vol 1200. Springer, Cham.  
[https://doi.org/10.1007/978-3-030-23633-5\\_12](https://doi.org/10.1007/978-3-030-23633-5_12)

<sup>40</sup> <https://www.parks.vic.gov.au/news/2021/06/21/06/26/native-bandicoots-reintroduced-to-western-victoria>

<sup>41</sup> <https://www.awe.gov.au/environment/biodiversity/threatened/recovery-plans/orange-bellied-parrot-2016>

<sup>42</sup>

[https://www.environment.vic.gov.au/\\_\\_data/assets/pdf\\_file/0021/90363/Native\\_Vegetation\\_Management\\_-\\_A\\_Framework\\_for\\_Action.pdf](https://www.environment.vic.gov.au/__data/assets/pdf_file/0021/90363/Native_Vegetation_Management_-_A_Framework_for_Action.pdf)

accountable and effective manner<sup>43,44</sup>, otherwise species habitat will continue to decline. Offsetting must be an absolute **last resort**, not an easy, 'go to' option, as is frequently the case.

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**Recommendation:**

20. Include strategies and initiatives based in reproductive biology, including assisted reproductive technology (ART).
  21. Expand current, and develop new, programs to support the reintroduction of threatened and vulnerable species of wildlife.
  22. Protect coastal and remnant grasslands – even small reserves, by strengthening biodiversity regulations in the planning scheme.
  23. Stop clearing land and destroying grasslands and trees for development.
  24. Ensure there is no loss of biodiversity, habitat or ecosystems as a result of the removal, destruction or lopping of native vegetation.
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### **2.3 Incorporate research, citizen science and Traditional Owner knowledge into evidence-based management underpinned by Conservation Action Plans.**

Conservation Action Plans must include measures such as monitoring of vulnerable wildlife populations and proactive steps to assist where necessary.

Individual populations must be regularly monitored to track population trends, and local impacts and threats must be assessed. Where possible the local threats must be managed to mitigate the decline.

Genetic structure and variability also must be researched and understood. Importantly, we must conserve genetic variability through natural populations in appropriate habitat, but we also need contingency plans. Genetic variability of diverse populations should be biobanked through cryopreservation of oocytes, spermatozoa and somatic cells. Assisted reproductive technology (ART), including artificial insemination, can be used if and when required<sup>45</sup>. This will need adequate and continued funding to support biobanks and ART programs.

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<sup>43</sup>Ives, C.D. and Bekessy, S.A. (2015), The ethics of offsetting nature. *Frontiers in Ecology and the Environment*, 13: 568-573. <https://doi.org/10.1890/150021>

<sup>44</sup>Lindenmeyer DB, et al. (2017) The anatomy of a failed offset. *Biological Conservation*, 210, Part A: 286-292. <https://doi.org/10.1016/j.biocon.2017.04.022>

<sup>45</sup>Johnston S.D., Holt W.V. (2019) Using the Koala (*Phascolarctos cinereus*) as a Case Study to Illustrate the Development of Artificial Breeding Technology in Marsupials: an Update. In: Comizzoli P., Brown J., Holt W. (eds) *Reproductive Sciences in Animal Conservation*. *Advances in Experimental Medicine and Biology*, vol 1200. Springer, Cham. [https://doi.org/10.1007/978-3-030-23633-5\\_12](https://doi.org/10.1007/978-3-030-23633-5_12)

Translocation, bushfire and climate change have affected where wildlife live. These impacts on distribution need to be assessed and addressed.

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**Recommendations:**

25. Collect robust, evidence-based population data to appreciate and understand the distribution of vulnerable populations of wildlife.
  26. Provide adequate funding to develop and manage biobanking facilities.
  27. Ensure the genetic variability of diverse populations is secured in biobanks (oocytes, spermatozoa and somatic cells).
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**2.4 Address critical information gaps to increase understanding of the environmental and social values and benefits of parks, including management effectiveness and outcomes.**

The AJP wants to protect and enhance all biodiversity and ecosystems. Humans must coexist with wildlife since our survival depends on it.

The AJP recognises the importance that biodiversity plays for birdlife (and all other life). Australian ecosystems are vital for the survival of internationally significant migratory bird species. Many areas of wetland and coast provide key habitats for these migratory species, so loss of biodiversity in Australia has ramifications that extend beyond our borders<sup>46</sup>.

The increased impacts of climate change will further impact biodiversity and ecosystems. Strengthening the protection of biodiversity and the environment will assist government and councils to mitigate the adverse impacts of anthropogenic climate change, and will also contribute to environment protection across the wider area.

We need to use native plants and habitat to tackle the climate emergency, the biodiversity emergency and to improve the health of all Victorians. Tree planting and revegetation works must be conducted with the dual aims of using as many plants indigenous to the region as possible and also prioritising vegetation that provides food and habitat to the fauna identified as being most at risk in the region. This creates the best chance to support their long-term survival.

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**Recommendations:**

28. Create opportunities for community consultations to improve transparency in decision making and increase community engagement.

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<sup>46</sup> <http://animaljusticeparty.org/policieslist/animals/native-birds/>

29. Reduce human appropriation of native wildlife habitat<sup>47</sup>.
30. Expand education about the value of native wildlife and their interactions within ecosystems<sup>48</sup>.
31. Increase support for long-term monitoring of the health of native bird populations<sup>49</sup>.

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## **2.5 Develop proposals for, and seek to establish, landscape-scale sanctuaries focused on threatened species, large-scale threat and restoration programs and increased citizen science, volunteer and Traditional Owner participation.**

### **Threatened Species**

An example of improving ecosystems and reintroducing protected species concurrently is at Mount Rothwell Conservation and Research Centre on the northern outskirts of Geelong<sup>12</sup>. Mt Rothwell has the world's most successful captive breeding program for the eastern quoll — an animal that only exists in the wild, in declining numbers, in Tasmania. It is also home to 80 percent of mainland Australia's eastern barred bandicoots — the only stable, self-sustaining population. Mt Rothwell demonstrates that when introduced predators are eliminated, endangered, native species can flourish. Dingoes have been introduced to act as apex predators to balance the ecosystem and deter foxes and cats from entering the area (Figure 2).



**Figure 2.** Native dingoes are used to deter foxes and wild cats. *Source: <https://www.mtrothwell.com.au/>*

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<sup>47</sup> <http://animaljusticeparty.org/policieslist/animals/native-birds/>

<sup>48</sup> <http://animaljusticeparty.org/policieslist/animals/native-birds/>

<sup>49</sup> <http://animaljusticeparty.org/policieslist/animals/native-birds/>

***Recommendation:***

32. Expand funding for sanctuaries and wildlife rescue and rehabilitation projects.
  33. Develop programs where threatened species can safely exist by introducing our native apex predator, the dingo to control introduced species such as foxes and cats.
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**Community Science**

Community science (also known as citizen science) projects can be a very effective and inclusive way to engage local community members of all abilities<sup>50</sup>, as well as promoting a sense of pride and stewardship and potentially capturing a volunteer workforce that will assist with ongoing maintenance and protection activities. The data collected may also be invaluable in guiding future decision making.

Collaboration with established groups such as Landcare, Field Nats and other wildlife groups is important, but small-scale or one-off events such as Waterwatch<sup>51</sup>, Clean up Australia Day<sup>52</sup> or summer/winter/backyard bird counts<sup>53</sup> can be a great way to include those who might not want to, or be able to commit to a group regularly, but would like to be involved in community volunteering activities. These are also excellent activities to connect and unite people of all ages, backgrounds and abilities both socially and with the natural environment and the lives of non-human animals.

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***Recommendations:***

34. Investigate the viability of employing community science projects such as ‘waterwatch’.
  35. Consider community engagement activities such as clean up days and tree planting days.
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<sup>50</sup>Garrison H, et al (2021) Involving society in science: Reflections on meaningful and impactful stakeholder engagement in fundamental research. EMBO Rep (2021)22:e54000 <https://doi.org/10.15252/embr.202154000>

<sup>51</sup> <http://www.vic.waterwatch.org.au/>

<sup>52</sup>

[https://www.cleanup.org.au/?gclid=Cj0KCQjw4eaJBhDMARIsANhrQAAdiWe8BfwilFhGIKIISL12J9iyRL7o3dW62jx7Dz1CWEbng5j00d4aAoZFEALw\\_wcB](https://www.cleanup.org.au/?gclid=Cj0KCQjw4eaJBhDMARIsANhrQAAdiWe8BfwilFhGIKIISL12J9iyRL7o3dW62jx7Dz1CWEbng5j00d4aAoZFEALw_wcB)

<sup>53</sup> <https://aussiebirdcount.org.au/>

## **2.7 Respect natural processes in planning for, and managing risks to, coastal and marine park habitats and assets from coastal hazards and events linked to climate change.**

Climate change is causing more intense flooding of inland waterways, such as rivers and creeks, and will also cause sea level rises and coastal inundation<sup>54</sup>. Coastal inundation and sea level rises impact non-human animal life before they impact human life. Coastal and tidal ecosystems are particularly diverse and fragile, and we would like to see clear guidelines to mitigate and reduce the impacts of climate change on coastal ecosystems.

Any future plans for our coastal and marine environments must consider their intrinsic value, their ecological benefits and the impacts on local communities from any degradation to the natural coastal vegetation and environment.

Riparian ecosystems need diverse and healthy biodiversity to be resilient to erosion<sup>55</sup>. The width of the vegetation zone, the continuity of the vegetation corridor throughout the riparian zone and the diversity of structural vegetation are critical to healthy, resilient riparian ecosystems.

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### ***Recommendations:***

36. Develop considered vegetation plans to minimise risks of flooding and erosion.
37. Urgently improve riparian vegetation along all waterways, in both lower and upper banks to mitigate erosion caused by flooding.
38. Ensure that riparian ecosystems have diverse and healthy biodiversity so they are resilient to erosion; in particular the width of the vegetation zone, the continuity of the vegetation corridor throughout the riparian zone and the diversity of structural vegetation.
39. Assess the impact of rising seas levels on coastal ecosystems by developing appropriate modelling research.
40. Explore how we can support our fragile coastal vegetation and create more robust ecosystems.
41. Acquire and rewild freehold land in coastal areas where inundation is a threat; manage and support these habitats after rewilding.
42. Develop guidelines for the mitigation and reduction of the impacts of climate change on coastal ecosystems.
43. Explore how we can support our fragile coastal vegetation and create more robust ecosystems.
44. Introduce habitat protection as a fundamental and consistent planning principle in all regions and sectors.

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<sup>54</sup><https://theconversation.com/yes-australia-is-a-land-of-flooding-rains-but-climate-change-could-be-making-it-worse-157586>

<sup>55</sup><https://www.water.vic.gov.au/waterways-and-catchments/riparian-land/riparian-land/technical-information-and-reports/impacts-of-riparian-land-on-erosion>

### 3. Adapting to Climate Change

The *United Nations Global Biodiversity Outlook 5* report recognises the biodiversity emergency and that we need to act with urgency to modify our actions in key areas<sup>56</sup>. It identifies eight critical transitions that are required to shift to a "sustainable coexistence with nature". Agriculture is directly or indirectly impacted by most of these transitions. If Australia can act with urgency to employ this plan, we will be well-placed to preserve biodiversity and ecosystems and support the health and well-being of all Australians, regardless of species. The eight transitions are:

1. The land and forests transition: conserve intact ecosystems, restore ecosystems, combat and reverse degradation, and avoid and reduce land-use change.
2. The sustainable fisheries and oceans transition: protect and restore marine and coastal ecosystems, and manage all ocean activities to ensure sustainability.
3. The sustainable freshwater transition: an integrated approach to guarantee water for nature and people, improve water quality, protect critical habitats, control introduced species and safeguard connectivity to allow the recovery of freshwater systems from mountains to coasts.
4. The sustainable agriculture transition: redesign agricultural systems through agro-ecological and biodiversity-sensitive practices.
5. The sustainable food systems transition: enable sustainable and healthy diets with an emphasis on diverse foods, mostly plant-based, and reduce consumption of animal products and production of waste.
6. The biodiversity-inclusive One Health transition: manage ecosystems, including agricultural and urban ecosystems and wildlife, through an integrated approach to promote healthy ecosystems and healthy people.
7. The sustainable climate action transition: employing nature-based solutions, alongside a rapid phase-out of fossil fuel use, to reduce the scale and impacts of climate change, while providing positive benefits for biodiversity and other sustainable development goals.
8. The cities and infrastructure transition: deploy 'green infrastructure' and make space for nature within built landscapes to improve the health and quality of life for citizens and to reduce the environmental footprint of cities and infrastructure.

Land management plans must strike a balance between providing places where people can connect with and enjoy time in nature, and prioritising the protection and rehabilitation of our parks and reserves as important wildlife habitat and important for mitigating the effects of climate change. We will need to modify how we interact with parks, as areas may need to be closed to human interference for protection of the area, or due to safety concerns following fire and flood.

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<sup>56</sup> Secretariat of the Convention on Biological Diversity (2020) *Global Biodiversity Outlook 5*. Montreal. <https://www.cbd.int/gbo/gbo5/publication/gbo-5-en.pdf>

The AJP supports the priorities, outcome and outcome indicators in this section. Some specific points are made below under the priority headings.

### **3.1 Implement conservation management and Traditional Owner applied knowledge and practice to improve the resilience of ecological systems and species in a changing climate.**

*“Although starting from vastly different perspectives, it is contended in this submission that modern science and Traditional Owner (TO) knowledge and land management combined offer a way forward for improved outcomes.”<sup>57</sup>*

### **3.3 Further develop contingency planning for responses to extreme events, including worst-case scenarios, guided by scientific evidence and Traditional Owner knowledge.**

One of the most extreme catastrophic events which occurs in Australia is bush fires such as the megafires that occurred between July 2019 and February 2020 which were made at least 30% more likely by the climate crisis<sup>58</sup>, and were unprecedented in their extent and severity within Australia’s subtropical, Mediterranean and temperate bioregions<sup>2</sup>. They burnt 97,000 km<sup>2</sup> of southern and eastern Australia, sweeping through diverse natural ecosystems, including those that do not normally burn such as World Heritage-listed Gondwana rainforest<sup>3</sup>. It is estimated that 3 billion animals perished.

Biodiversity conservation has typically been a secondary goal<sup>59</sup> in fire management, with animal welfare generally overlooked. Since these 2019-2020 mega-fires, some states have made substantial efforts to factor the needs of plants and animals into planned burning strategies. Victoria leads the states here, and has factored the needs of plants into planned burning strategies for several decades, although there is much room for improvement. Since 2015, DELWP has attempted to incorporate the needs of animals via a policy position<sup>60</sup>; however it focuses on populations and species and fails to recognise individuals.

Biodiversity in Australia<sup>61</sup> and Victoria<sup>62</sup> is in dire straits. Since these catastrophic fires Victoria has defined a set of standards, policies and processes to help the government and community respond to the needs of wildlife during and following a fire emergency<sup>63</sup>. The Animal Justice Party (AJP) has requested the State to provide funding and resources for rescue groups. The AJP

<sup>57</sup>

[https://www.parliament.vic.gov.au/images/stories/committees/SCEP/Ecosystem\\_Decline/submissions/S699\\_-\\_Dr\\_Ian\\_Mansergh\\_Report\\_dacted.pdf](https://www.parliament.vic.gov.au/images/stories/committees/SCEP/Ecosystem_Decline/submissions/S699_-_Dr_Ian_Mansergh_Report_dacted.pdf)

<sup>58</sup> van Oldenborgh GJ et al. (2021). Attribution of the Australian bushfire risk to anthropogenic climate change. *Natural Hazards and Earth System Sciences* 21:941–960.

<sup>59</sup> DELWP (2015) Monitoring, Evaluation and Reporting Framework for Bushfire Management on Public Land Victorian Department of Environment, Land, Water and Planning. Melbourne, Australia.

<https://www.ffm.vic.gov.au/monitoring-evaluating-and-reporting?a=25734>

<sup>60</sup> DELWP (2015) DELWP Policy Position – Measuring ecosystem resilience in strategic bushfire management planning:1–5. Victorian Department of Environment, Land, Water and Planning. Melbourne, Australia.

<sup>61</sup> Samuel, G 2020, Independent Review of the EPBC Act—Final Report, Department of Agriculture, Water and the Environment, Canberra, June. CC BY 4.0. <https://epbactreview.environment.gov.au/resources/final-report>

<sup>62</sup> Commissioner for Environmental Sustainability (2018) State of the Environment 2018 Report. Office of the Commissioner for Environmental Sustainability Victoria; Melbourne. [https://www.ces.vic.gov.au/sites/default/files/SoE2018\\_SummaryReport.pdf](https://www.ces.vic.gov.au/sites/default/files/SoE2018_SummaryReport.pdf)

<sup>63</sup> DELWP (2021) Department of Environment, Land, Water and Planning. Department of Environment, Land, Water and Planning. [https://www.wildlife.vic.gov.au/\\_\\_data/assets/pdf\\_file/0019/511624/Victorian-response-plan-for-wildlife-impacted-by-fire-FINAL-Feb-2021.pdf](https://www.wildlife.vic.gov.au/__data/assets/pdf_file/0019/511624/Victorian-response-plan-for-wildlife-impacted-by-fire-FINAL-Feb-2021.pdf)

has also requested that animal rescue organisations be part of the emergency response teams following a fire with the *Wildlife Rescue Victoria Bill 2020* brought before Parliament in 2020. As a result the *Wildlife Welfare Bushfire Response 2020 Action Plan*<sup>64</sup> has been developed.

However, the actions and deliverables listed in the Action Plan are inadequate. Immediate measures must be taken to counter the compounding effect of climate change<sup>65</sup> on the Australian landscape.

Proper fire management can help maintain open forests and landscapes to sustain biodiversity so they are not overwhelmed by fire. DELWP is doing some good work in this area, however efforts are hampered by inadequate monitoring and lack of resources and knowledge about plant and animal response to fire, along with inadequate recognition of First Nations people as custodians of this knowledge. This knowledge and practice can be easily integrated into contemporary fire management by government agencies for the betterment of all Australians and the Country on which we all depend; however it must be adequately respected, planned and resourced.

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### **Recommendations:**

45. Coordinate and fully fund wildlife rescue services and integrate them as part of fire management plans.
46. Ensure that after fires the environment is rested from human activity to give ecosystems a chance to recover.
47. Ensure appropriate funding and staffing for fire-fighting and rescue of animals, people, property and infrastructure.
48. Acknowledge the devastating impacts of bushfire on biodiversity and the flow-on effect this will have on environmental and climatic conditions in Australia. Urgently adopt measures to mitigate the effects of biodiversity loss.
49. Ensure appropriate funding and staffing to monitor and maintain forests and landscapes to sustain biodiversity so that they are not overwhelmed by fire.
50. Recognise that First Nations people are experts in managing this continent safely with fire and reducing fire risk.
51. Consult with indigenous fire experts at the Firesticks Alliance<sup>66</sup>

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<sup>64</sup> DELWP (2020) Wildlife Welfare Bushfire Response 2020 Action Plan. Biodiversity Division, Department of Environment, Land, Water and Planning.

[https://www.wildlife.vic.gov.au/\\_\\_data/assets/pdf\\_file/0026/503891/Wildlife-Welfare-Action-Plan-2020-Final-signed-LD.pdf](https://www.wildlife.vic.gov.au/__data/assets/pdf_file/0026/503891/Wildlife-Welfare-Action-Plan-2020-Final-signed-LD.pdf)

<sup>65</sup> Climate Council (2019) 'This is Not Normal': Climate change and escalating bushfire risk. Briefing Paper - 12 Nov 2019.

[https://www.climatecouncil.org.au/wp-content/uploads/2019/11/bushfire-briefing-paper\\_18-november.pdf](https://www.climatecouncil.org.au/wp-content/uploads/2019/11/bushfire-briefing-paper_18-november.pdf)

<sup>66</sup> Firesticks Alliance. Cultural burning: health communities, healthy landscapes. <https://www.firesticks.org.au/>

52. Adopt the recommendations from the '*National Indigenous Dialogue on Climate Change*'<sup>67</sup>
53. Invite First Nations People trained in cultural burning to work authoritatively and collaboratively with government to lead fire management nationally and in all states and territories.
54. Integrate Cultural traditional burning practices with contemporary fire management, recognising the integration as part of an evolving knowledge base.
55. Employ First Nations people to take care of Country. Consider the cost as an investment against the grave environmental cost of not taking care of Country.
56. Create opportunities for collaboration between First Nations fire practitioners and all levels of government so that non-Indigenous people can learn and integrate ancient knowledge of the Australian landscape into our contemporary land management strategies.

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### **3.6 Support opportunities for carbon regulation and carbon sequestration in natural systems within parks.**

#### **Marine Reserves**

Commonwealth marine areas are significant ecological areas around the coast of Australia, and are matters of environmental significance under the *Environment Protection Biodiversity Conservation Act (Cth)*<sup>68</sup>.

For example, the Great Southern Reef spans the entire southern coast of Australia and includes extensive kelp seaweed forests which support a variety of marine species including molluscs, crustaceans, fish and echinoderms<sup>69</sup>. One of the charismatic species of fish in this ecosystem is the Weedy Seadragon, which has been recorded along this coastline<sup>70</sup>. Significantly, this species is listed on the IUCN Red List (*least concern* with a decreasing population)<sup>71</sup>.

Coastal ecosystems can help to protect Australia's coastal communities from rising seas<sup>72</sup>. This alternative approach will save money and store carbon along the way, and is a better option than costly seawalls and levees. Plants in coastal and marine ecosystems have significant capacity to

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<sup>67</sup> see pg 7 - Statement from Traditions Owners, In Morgan M, et al. 2019. National Dialogue on Climate Change. Earth Systems and Climate Change Hub Report No. 11, NESP Earth Systems and Climate Change Hub, Australia. <https://publications.csiro.au/rpr/download?pid=csiro:EP198062&dsid=DS1>

<sup>68</sup> Australian Government (2021) Commonwealth Marine Areas. <https://www.environment.gov.au/epbc/what-is-protected/commonwealth-marine-areas>

<sup>69</sup> Australian Academy of Science (2018) Who's heard of the Great Southern Reef? <https://www.science.org.au/curious/earth-environment/whos-heard-great-southern-reef>

<sup>70</sup> Atlas of Living Australia (2021) [https://bie.ala.org.au/species/urn:lsid:biodiversity.org.au:afd.taxon:64a63130-12c0-4147-aafa-43f372888f0a#tab\\_recordsView](https://bie.ala.org.au/species/urn:lsid:biodiversity.org.au:afd.taxon:64a63130-12c0-4147-aafa-43f372888f0a#tab_recordsView)

<sup>71</sup> IUCN (2021) Red List: Weedy Seadragon. <https://www.iucnredlist.org/species/17177/67624517>

<sup>72</sup> Rogers K *et al.* (2014) How wetlands can help us adapt to rising seas. The Conversation. 1 April 2014. <https://theconversation.com/how-wetlands-can-help-us-adapt-to-rising-seas-23962>

store carbon<sup>73</sup>. This “blue carbon” includes tidal marshes, seagrass beds, mangroves and kelp forests, which contribute significantly to carbon sequestration, regulating the natural carbon cycle and therefore battling climate damage<sup>74</sup>. However, rising ocean temperatures are threatening these ecosystems driving biodiversity loss and ecosystem decline<sup>75</sup>.

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### **Recommendations:**

57. Develop and enact conservation action plans to assess and mitigate the impact of ocean warming on breeding grounds for marine life, seagrass growth and survival rates and the resultant decrease in carbon sequestration.
  58. Foster stewardship of coastal and marine areas by supporting local environment groups, developing eco-tourism programs and supporting community science programs.
  59. Investigate other methods to protect marine plants which are significant carbon sinks and therefore must be protected and restored.
  60. Develop conservation action plans to assess and support our fragile coastal vegetation and create more robust ecosystems. Employ community science programs where appropriate<sup>76,77</sup>.
  61. Develop and manage wetland ecosystems along the coast to help manage coastal inundation and improve carbon sequestering.
  62. Explore the possibility of expanding current small-scale seagrass replanting projects and their impact on carbon sequestration.
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### **Land Reserves**

Carbon sequestration is the process of removal and storage of carbon (*i.e.* carbon dioxide, CO<sub>2</sub>) from the atmosphere in carbon sinks (such as forests, woody plants, mangroves or soils).

Growing trees is a very efficient way of absorbing carbon dioxide but wood continues to store carbon even when trees are turned into house frames, floorboards or furniture. Wood also has a much smaller carbon footprint than popular building materials such as steel, aluminium and concrete. The simple act of planting trees stores carbon so efficiently that approximately half the dry weight of a tree is carbon.<sup>78</sup>

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<sup>73</sup> Fourqurean J et al. (2012) Seagrass ecosystems as a globally significant carbon stock. <https://www.nature.com/articles/ngeo1477>

<sup>74</sup> Filbee-Dexter K & Wernberg T (2020) Substantial blue carbon in overlooked Australian kelp forests. <https://www.nature.com/articles/s41598-020-69258-7>

<sup>75</sup> Wernberg T et al. (2016) Climate-driven regime shift of a temperate marine ecosystem. <https://science.sciencemag.org/content/353/6295/169.full>

<sup>76</sup> <http://www.environmentbellarine.org.au/resources/Coastal%20Erosion%20Monitoring.pdf>

<sup>77</sup> <https://www.landcarer.com.au/stories/292/biodiversity-on-the-bellarine/>

<sup>78</sup> <https://www.forestrycorporation.com.au/sustainability/carbon-and-forests>

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**Recommendations:**

63. Plant trees to sequester carbon and provide important habitat.
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## **4. Enriching the Visitor Experience**

Access to nature, green space and open space is vital to human health and wellbeing. Human disconnect with nature is a major factor in the exploitation and apathy for wildlife, biodiversity and the environment. The AJP supports actions that connect and engage humans with nature, in particular actions and initiatives that foster empathy for, and stewardship of, wildlife and the environment.

The AJP supports the priorities, outcome and outcome indicators in this section. However, we would like to see awareness of, and connection with, wildlife and nature captured in this section and measured in a meaningful way. Three in five Australian households include companion animals; Victoria's parks should include amenities and facilities for dogs wherever possible. Some specific points are made below under priority headings.

### **4.3 Ensure park design and planning provides for inclusive experiences and access for people from culturally and linguistically diverse and low socioeconomic communities, people with a disability, the elderly, and teenagers.**

Parks and nature spaces must be accessible to all and include inclusive spaces that meet the needs of our diverse community. We must ensure that there are easily accessible facilities for people with all abilities and also that parks contain a range of different environments which will create the most welcoming and inclusive spaces.

A park should have shelter and shade, paths which are easily traversable, amenities, such as toilets, bins, seats and water fountains, which are easily accessible and play equipment which caters to a range of ages and abilities. There may be areas which are designed and maintained or have a garden-like appearance, but there should also be areas which allow quiet reflection and natural areas, where wildlife can live their lives and be observed and enjoyed without interference and the natural ecosystem is allowed to flourish.

Many parks still consist of an oval, a generic plastic slide and swing set and a couple of park benches; this is the model we need to move away from, as we create more inclusive spaces in nature for *all* to enjoy. Nature play should be a guiding principle in park design to encourage children, adolescents and adults to engage with and respect nature<sup>79</sup>; the design should cater to varied capabilities.

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<sup>79</sup><https://www.natureplay.org.au/>

Play equipment must cater to a range of ages, mobility levels, developmental stages, sensitivities and also allow imaginative play. Using natural materials, rather than garish plastics can be more soothing and encourage creative play<sup>80</sup>. Equipment can be more inclusive; for example, many parks have wheelchair accessible swings such as the ‘liberty swing’<sup>81</sup> but few contain other equipment such as slides, swings and merry-go-rounds<sup>82</sup>, which can be accessed by those in a wheelchair. Including these would give people using wheelchairs and mobility aids a choice of play equipment, rather than only granting them the opportunity to access one ‘token’ piece of equipment; it would create a much more inclusive play space.

Nature play must be incorporated into parks to encourage people of diverse capabilities and varied ages to engage with and respect nature<sup>83</sup>.

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### **Recommendations:**

64. Respect and act on the views of the local community members who will be the most affected by any proposed changes to park designs. Provide opportunities for giving feedback during planning stages.
65. Ensure feedback opportunities are delivered via a range of methods, to accommodate individual differences in information assimilation and response, and also to capture those who are culturally and linguistically diverse, or who have a range of technological skills.
66. Ensure community consultations are advertised to the community via a variety of methods, with different means to submit responses and adequate time frames to allow all those who want to comment to have that opportunity.
67. Provide endemic shade trees to provide cool areas for sitting in warmer months which are accessible to all; this will improve the experience for people, enhance the biodiversity and ecosystem and tackle local heating (therefore address climate change).
68. Provide diverse sitting areas which are accessible to all and provide options for varied weather conditions (*e.g.* some are protected from wind, rain and sun).
69. Provide in-ground sprinklers in play areas which can be accessed by people in a wheelchair so that they can enjoy water activities.
70. Ensure signage and facilities are checked regularly and well-maintained for convenience and safety.
71. Consider the materials used to produce play equipment and the impact of this on people with disability.
72. Consider the size and scope of the variety of play equipment to cater to people with different abilities.

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<sup>80</sup> <https://www.sciencedaily.com/releases/2012/10/121011135036.htm>

<sup>81</sup> <https://www.libertyswing.com.au/>

<sup>82</sup> <https://specialneedsplayequipment.com.au/wheelchair-playground-equipment-commercial-wheelchair-disabled-playgrounds>

<sup>83</sup> <https://www.natureplay.org.au/>

73. Incorporate nature play design that caters for all abilities and encourages diverse people to engage with and respect nature.
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#### **4.4 Support events in parks that are sustainable and that maximise benefits and minimise adverse impacts on park values.**

A range of educational opportunities may take place in parks, this may consist of school groups, community groups or tourism operators engaging in formal presentations or education sessions and activities, or it may be a self-guided learning opportunity, such as following a nature, historical or cultural heritage trail. Planning must consider how to ensure these activities are as inclusive of all people as possible.

A framework is required to help evaluate proposed events and activities in terms of their sustainability and values and to guide decision making in supporting these events.

Fireworks should be banned in all Victorian parks; they create noise pollution, air pollution and light pollution; they terrify native animals and companion animals. They are also a fire hazard and cause physical injuries to humans. There are sustainable alternatives.

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#### ***Recommendations:***

74. Develop a framework to evaluate and guide decision making on the suitability of proposed events .
75. Ban fireworks from all Victorian Parks; create significant penalties for anyone found setting off fireworks.
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#### **4.6 Promote and foster the understanding of health and wellbeing benefits of being in, and engaging with, parks.**

Humans are part of nature, and spending time in nature has mental health benefits including improvements in cognition, mood, emotions, connectedness and experience<sup>84</sup>. A recent UK study of almost 20,000 people demonstrated that spending at least two hours per week in nature improved health and wellbeing, and maximum benefit was experienced from spending up to five

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<sup>84</sup> Weir K. (2020) Nurtured by nature. American Psychological Association. <https://www.apa.org/monitor/2020/04/nurtured-nature>

hours per week in nature<sup>85</sup>. In addition to time spent in nature, the health of the environment and the richness of biodiversity also influence the mental health benefits<sup>86</sup>.

There is greater use of public park spaces and nature-based tourism in Victoria due to the increase in employees working from home, COVID-19 lockdowns, and restricted travel. Victorians need access to nature; to quality green and blue space in which to spend time to support and maintain our mental health. All aspects of Victoria's environment are critical to our mental health and our general health; forests, grasslands, woodlands, wetlands, waterways and coastal and marine ecosystems. All of these ecosystems must be protected and conserved. Biodiversity-sensitive urban planning is a critical strategy to improve our mental health<sup>87</sup>. ALL Victorians should have access to healthy areas of nature within close proximity of homes and workplaces, as well as large, biodiverse, healthy ecosystems.

The best health and wellbeing “program” is nature itself; simply being in nature. Given the well-documented benefits that nature has on the overall health and wellbeing of people,<sup>88,89</sup> it is imperative that the health, safety and wellbeing of animals, ecosystems and the broader environment is protected and enhanced. In fact, the richness of biodiversity and the health of the environment influence the mental health benefits of being in nature<sup>90</sup>.

All humans have a right to a healthy environment.

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### **Recommendations:**

76. Develop and enact a strategic plan to establish, promote and maintain natural areas as significant areas for people to engage with and value nature, in particular birdlife and marine life.
77. Acknowledge that a healthy environment is a human right; list this right in the *Victorian Charter of Human Rights and Responsibilities Act 2006* and any human rights charters or bills in Local Government Areas.
78. Enact a holistic health approach, such as One Health, across all of government.
79. Protect and conserve all of Victoria's biodiversity and ecosystems by enacting the Victorian Government Biodiversity Plan (*Biodiversity 2037*).

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<sup>85</sup> White, MP, *et al.* Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Sci Rep* 9, 7730 (2019). <https://doi.org/10.1038/s41598-019-44097-3>.

<sup>86</sup> Wyles, KJ *et al.* (2017) Are Some Natural Environments More Psychologically Beneficial Than Others? The Importance of Type and Quality on Connectedness to Nature and Psychological Restoration. *Environment & Behavior*, <https://doi.org/10.1177/0013916517738312>

<sup>87</sup> Myers Z (2020) Biodiversity and our brains: how ecology and mental health go together in our cities. *The Conversation*. January 2, 2020. <https://theconversation.com/biodiversity-and-our-brains-how-ecology-and-mental-health-go-together-in-our-cities-126760>

<sup>88</sup> Weir K. (2020) Nurtured by nature. *American Psychological Association*. <https://www.apa.org/monitor/2020/04/nurtured-nature>

<sup>89</sup> White, MP, *et al.* Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Sci Rep* 9, 7730 (2019). <https://doi.org/10.1038/s41598-019-44097-3>.

<sup>90</sup> Wyles, KJ *et al.* (2017) Are Some Natural Environments More Psychologically Beneficial Than Others? The Importance of Type and Quality on Connectedness to Nature and Psychological Restoration. *Environment & Behavior*, <https://doi.org/10.1177/0013916517738312>

80. Provide shade trees to provide cool areas for sitting in warmer months which are accessible to all.
81. Provide sitting areas which are protected from the wind and rain and are accessible to all.
82. Provide in-ground sprinklers in play areas which can be accessed by people in a wheelchair so that they can enjoy water activities.
83. Ensure signage and facilities are checked regularly and well-maintained for convenience and safety.
84. Consider the materials used to produce play equipment and the impact of this on people with disability.
85. Consider the size and scope of the variety of play equipment to cater to people with different abilities.
86. Incorporate nature play design that caters for all abilities and encourages diverse people to engage with and respect nature.
87. Expand the scope of current websites to provide detailed information about parks and open space so it is more relevant to those with disability to assist with planning park visits. Alternatively, develop a new, interactive app or website to highlight this specific information.
88. Expand the 'social scripts' to include more parks and nature areas.

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#### **4.8 Plan for and support a diversity of contemporary activities appropriate to the setting and location to encourage active and healthy people and communities.**

Companion and therapy animals play an important role in the lives of many people.

Companion and therapy animals can help alleviate stress, anxiety, depression, and feelings of loneliness and social isolation, and simply provide companionship and familiarity<sup>91</sup>. Interactions with animals can help people manage physical<sup>92</sup> and mental health<sup>93</sup>, and also facilitate social interaction<sup>94</sup>. A recent systematic review of evidence reported that people living with mental health problems gained support from companion animals, stating "*Qualitative studies illuminated the intensiveness of connectivity people with companion animals reported, and the multi-faceted ways in which pets contributed to the work associated with managing a mental health condition, particularly in times of crisis.*"<sup>95</sup>

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<sup>91</sup> Jasmin Jau & David Hodgson (2018) How interaction with animals can benefit mental health: A phenomenological study. *Social Work in Mental Health*, 16:1, 20-33, DOI: 10.1080/15332985.2017.1302037

<sup>92</sup>Allen, Karen, Barbara E. Shykoff, and Joseph L. Izzo Jr. "Pet ownership, but not ACE inhibitor therapy, blunts home blood pressure responses to mental stress." *Hypertension* 38, no. 4 (2001): 815-820. <https://www.ahajournals.org/doi/full/10.1161/hyp.38.4.815>

<sup>93</sup> Casciotti D & Zuckerman D (n.d.) The Benefits of Pets for Human Health. National Center for Health Research. <http://www.center4research.org/benefits-pets-human-health/>

<sup>94</sup><https://www.tandfonline.com/doi/abs/10.2752/089279304785643203>

<sup>95</sup> Brooks HL, et al. (2018) The power of support from companion animals for people living with mental health problems: a systematic review and narrative synthesis of the evidence. *BMC Psychiatry*. 18(1):31. doi: 10.1186/s12888-018-1613-2.

Ensuring that our parks accommodate companion animals and that they contain clearly defined and signed areas where people can spend time in nature together with their companion animals is important to Victorians.

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**Recommendations:**

89. Include facilities and amenities for companion and therapy animals in planning processes.
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## **5. Managing the Landscape through Partnerships**

The AJP supports the priorities, outcome and outcome indicators in this section.

### **5.1 Establish and support partnerships with public land managers and neighbouring private landowners to enable more effective and efficient programs across tenures.**

Most losses of wildlife have occurred on private land. Landowners should be custodians of the species on their land.

Wildlife should not be regarded as being “owned” by the land holder but as a precious resource to maintain biodiversity. Landowners’ duties should include providing vegetation, shelter and allowing natural food to thrive instead of clearing land for monocultures or animal agriculture. In some areas the economic value of wildlife could provide an income for the landholder, for example, bird watching.

Killing of wildlife should not be permitted to protect introduced species such as sheep and cows, which can be protected by other methods. Native herbivores (*e.g.* kangaroos, wombats) can coexist with introduced herbivores, and foxes and dingoes can be deterred by non-lethal methods (*e.g.* fox lights, exclusion fencing, maremma dogs).

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**Recommendations:**

90. Landowners have a duty of care to protect wildlife, wildlife habitat and biodiversity on their property; the draft Land Management Strategy who support this duty
  91. Mandatory minimum standards to conserve wildlife habitat should be applied to activities that impact wildlife habitat
  92. Develop an incentive program to support landowners to conserve areas of wildlife habitat. Ensure there is an ongoing compliance component to receive incentives.
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## **5.2 Establish and support more effective partnerships with land management and conservation agencies, researchers, educational institutions and interest groups to maximise the use of expertise, knowledge and capacity.**

The role of Local Government Areas (LGAs) must be respected and effective collaboration must be fostered between the Victorian Government and LGAs.

## **5.3 Recognise and celebrate the role of volunteers in protecting natural and cultural values in parks and contributing to communities, provide effective support for volunteers, and increase the number of people involved in volunteering.**

Gardens for Wildlife<sup>96</sup> is an excellent example of a community program that protects and enhances wildlife and habitats.

Wildlife rescue and rehabilitation can give people an avenue for selfless contribution that can enhance self image. But wildlife care also involves mental health risks. Animal rescuers are frequently under-resourced and may be disturbed by the human cruelty whose consequences they may have to deal with.

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### **Recommendations:**

93. Create opportunities for community consultations to improve transparency in decision making and increase community engagement.
94. Promote and support volunteer groups such as 'Friends of', wildlife rescue, clean up groups as they fulfil a valuable role in maintaining Victoria's parks.
95. Expand funding for sanctuaries and wildlife rescue and rehabilitation projects.

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## **6. Recognising Connections to Place**

The AJP supports the priorities, outcome and outcome indicators in this section. Some specific comments are made below under priority headings.

The AJP values the rich diversity of human life<sup>97</sup>. Regardless of a person's age, race, colour, ethnic, regional or national origin, language, accent, socio-economic background, physical/mental attributes and disabilities, illness, gender, gender reassignment, sexual orientation, marital status, pregnancy and maternity, occupation - or lack of, as well as religious, philosophical or spiritual beliefs, the AJP believes that all people deserve to be treated equally, with dignity and respect. The AJP therefore supports the inclusion of diversity in the priorities.

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<sup>96</sup>Gardens for Wildlife <https://gardensforwildlifevictoria.com/>

<sup>97</sup>Animal Justice Party *Position: Equality* <https://animaljusticeparty.org/wp-content/uploads/2021/02/Equality-1.pdf>

### **6.1 Acknowledge the close relationship between people and the natural environment, and that many places hold significant history for all people.**

Our natural environment has many significant areas for First Nations People, which we discussed earlier. However, Victoria's parks and reserves may hold significance for people of other cultures also. Most people will have memories of time spent in nature from their childhood, and for many, these memories of picnics, camping, tree climbing, swimming, hiking and playing may be some of their happiest. It is important to realise the connections with our natural environment will influence people's daily recreation, and also their ongoing behaviour in visiting and caring for our parks.

Programs and events which introduce people to nature and to caring for nature must be supported. Programs should be targeted at diverse demographics. For example Guides and Scouts, extended school programs such as year nine experiences, and community science projects. Specific programs can be created for cultural and language diverse groups, the elderly and others.

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### **6.7 Integrate safety, especially of women, children and LGBTIQA+ people in park planning and management as well as through application of CPTED principles.**

While CPTED principles can be applied to improve safety for humans, they can impair conditions for biodiversity and ecosystems (*e.g.* reduced windbreaks). So these competing interests must be balanced.

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#### ***Recommendations:***

96. Support and encourage programs which foster an appreciation of our natural environment.
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## 7. Contributing to the Visitor Economy

Nature-based tourism is to be encouraged, as it will provide the community with a better opportunity to connect with the natural environment and its non-human inhabitants, and to improve their inherent value. This also comes with its own challenges, in that a human presence does need to be managed in wild places; we could look to recent innovations in Tasmania (Three Capes Track<sup>98</sup>) and South Australia (Kangaroo Island Wilderness Trail<sup>99</sup>) as exemplars of what this might look like.

Eco-tourism was on the rise pre-pandemic, across the general population, who were looking to spend more time in nature and lessen their environmental footprint whilst travelling<sup>100</sup>, so this value should be incorporated into future planning.

It is important to employ long-term thinking when planning for Victoria's parks, to ensure we protect the ecological and biodiversity values of the area, as well as ensuring that residents and visitors can enjoy the beauty and tranquility of the region without having a negative impact on the very values that draw people to the area.

The AJP basically supports the priorities, outcome and outcome indicators in this section. We have concerns about exploitation, use and abuse of wildlife and the environment.

### **7.1 Ensure that existing and proposed private operations add value and deliver benefits for parks, meet legislation and planning requirements and are consistent with park environmental, cultural, heritage and social objectives.**

The AJP recognises native, wild animals as individuals with unique needs, and believes that humanity has a duty to allow them to live their lives unimpeded and unharmed by human actions, to the greatest extent possible. We support proactive measures to protect species and their habitats, and to reduce or mitigate human impacts by tackling the drivers of biodiversity loss and ecosystem decline.

We have an obligation to protect our natural environment and wildlife for their inherent worth, as well as their unique role as part of our biodiverse ecosystem.

Native animals, whether common or threatened, are entitled to live their lives according to their species' needs and individual preferences; our main duty is to co-exist with them. When we are responsible, as a species or individual, for causing harm to wildlife, we have a duty to redress this harm in a way that respects their interests, needs and capacity to live independently. A multitude of actions can be taken to protect wildlife and reduce or mitigate human impacts.

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<sup>98</sup> <https://www.threecapestrack.com.au>

<sup>99</sup> <https://www.kangarooislandwildernesstrail.sa.gov.au/home>

<sup>100</sup> <https://www.nielsen.com/au/en/insights/article/2019/eco-tourism-is-not-just-for-greenies/>

Threatened species and ecological communities benefit from stronger protection in law, but this protection is also ineffective<sup>101</sup>, as the law does not impose sufficient obligations on landholders and governments. There are also delays in listing threatened species and habitats, and failures to protect critical habitat and implement recovery actions. This has been well-documented in submissions and hearings to the ongoing *Victorian Parliamentary Inquiry into Ecosystem Decline*<sup>102</sup>. Further, when obligations are imposed, insufficient resources are dedicated to implementing the required measures, and to monitoring compliance and recovery. As a result, Australia leads the world in mammal extinctions, with many wildlife species in continuous decline<sup>103</sup>.

Logging in our native forests must stop. The many species that call these ecosystems home are being obliterated and our biodiversity decimated. Scientific research tells us that Melbourne's water supply is under threat from logging<sup>104</sup> and that the forest soil needs decades, maybe a century, to recover from logging and fires<sup>105</sup>. Not only are our magnificent, native forests destroyed through logging, but they are mostly used for pulp, which could easily be substituted from plantation timber, and environmental accounting indicates that there are not even economic benefits of logging<sup>106</sup>. Two recent independent reviews have delivered damning reports on the state of Victoria's natural heritage and the lack of governance and leadership from the Victorian Government.

The report from the Commissioner for Environmental Sustainability, the *Victorian State of the Environment 2018 Report*, informs us that only 11% of the assessed status indicators are rated as "good", only 10% are improving, and 30% are deteriorating<sup>107</sup>. The report made 20 recommendations including the appointment of a Chief Biodiversity Scientist. Expert scientists have noted the appalling assessment outlined in this report<sup>108</sup>.

The report of the *Independent Review of Timber Harvesting Regulation*<sup>109</sup> was provided to the Victorian Government in 2018 and it described DELWP as "*neither an effective nor respected regulator*". A damning assessment. The report made 14 recommendations, and the Secretary of DELWP, in the department's reply to the Independent Review, stated that DELWP has accepted all 14 recommendations. Additionally, DELWP's regulatory functions will now be overseen and managed by the Office of the Conservation Regulator, which will be led by the Chief Conservation Regulator.

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<sup>101</sup><https://www.theguardian.com/environment/2020/may/08/australian-government-stops-listing-major-threats-to-species-under-environment-laws>

<sup>102</sup> Parliamentary Inquiry into Ecosystem Decline in Victoria. <https://www.parliament.vic.gov.au/epc-lc/article/4453>

<sup>103</sup> <https://www.wwf.org.au/knowledge-centre/living-planet-report#gs.lhk66c>

<sup>104</sup> <https://theconversation.com/logging-must-stop-in-melbournes-biggest-water-supply-catchment-106922>

<sup>105</sup> <https://theconversation.com/forest-soil-needs-decades-or-centuries-to-recover-from-fires-and-logging-110171>

<sup>106</sup> <https://theconversation.com/money-cant-buy-me-love-but-you-can-put-a-price-on-a-tree-84357>

<sup>107</sup> <https://www.ces.vic.gov.au/sites/default/files/SoE-2018-summary-report.pdf>

<sup>108</sup> <https://theconversation.com/what-australia-can-learn-from-victorias-shocking-biodiversity-record-113757>

<sup>109</sup> [https://www.forestsandreserves.vic.gov.au/\\_\\_data/assets/pdf\\_file/0021/414165/Independent-Review-of-Timber-Harvesting-Regulation-Report.pdf](https://www.forestsandreserves.vic.gov.au/__data/assets/pdf_file/0021/414165/Independent-Review-of-Timber-Harvesting-Regulation-Report.pdf)

We have a duty of care to our wildlife, the environment and ecological services required by all life in Victoria, including humans. Victoria's forests are extraordinary ecosystems and home to unique species. They form part of the "lungs of the earth", and are physically connected to our water catchments. The Federal and Victorian Governments choose to log our native forests, which is:

- destroying unique ecosystems and decimating biodiversity,
  - contributing to the climate emergency through climate damage (*i.e.* human-generated climate change), and
  - threatening our water supply.
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**Recommendations:**

97. Vigorously oppose habitat destruction and fragmentation by advocating against native forest logging.
  98. Advocate for proactive measures, including provision of financial incentives, to restore and preserve functional ecosystems through rewilding.
  99. Insist that those partner agencies whose remit is enforcement of wildlife protection laws, take proactive, effective and prompt measures to protect threatened species and ecological communities.
  100. Support land management, acquisition and retention to protect and conserve wildlife habitat.
  101. Advocate for the transition to 100% plantation forestry and ensure that costs of fencing out wildlife are factored into the cost of timber production. Current licensing practices that allow the wholesale destruction of wildlife must cease.
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**7.2 Work to ensure that private operations and Parks Victoria's own business operations in the parks are efficient and sustainable and support employment, access, quality park experiences and regional growth.**

Victorians have an expectation that not only does legislation exist to protect wildlife and land, but that the values of protection, restoration and conservation will be the guiding principles across all areas of parks management. Activities which contravene this expectation by viewing wildlife as a commodity to use and abuse for selfish, economic or so called 'recreational' purposes must therefore not be permitted across our parks and reserves whether conducted by Parks' Victoria, or by third-party businesses or operators.

For example, the Victorian Government ran a trial to determine if commercial use of kangaroos was viable and sustainable, (Kangaroo Pet Food Trial). A government department assessment of

the trial recommended it should not continue; one concern was that it was an "*unacceptable risk to the sustainability of kangaroo populations*"<sup>110</sup>. However, the Victorian Government ignored this recommendation from their own department and established a permanent commercial program to kill kangaroos and process them as food for companion animals.

The Victorian Government has a Sustainable Hunting Action Plan (SHAP) that "*supports and guides the game hunting industry's long term growth*"<sup>111</sup>. The SHAP has four objectives:

1. promoting responsible hunting,
2. growing hunting's benefits,
3. improving hunting opportunities, and
4. ensuring sustainable hunting.

Ducks and quails are both listed under "game" in Victoria, and each year the Victorian Government endorses duck and quail shooting seasons which occur on wetlands. The *Eastern Australian Waterbird Survey*, completed each year by the research team led by Professor Richard Kingsford at the University of New South Wales, is the expert Australian source for waterbird numbers<sup>112</sup>. This report is used by the Victorian Government to determine duck shooting quotas (*i.e.* bag limits). The 2020 report states that waterbird numbers, including ducks, are in continued decline;

*"Breeding species' richness and breeding abundance, decreased considerably compared to the previous year"*

*"All game species abundances were well below long term averages...Grey teal declined significantly from the previous year"*

Australia is a signatory to the Ramsar convention; the international agreement to conserve wetlands<sup>113</sup>. Wetlands are sensitive ecosystems that provide ecosystem services related to water<sup>114</sup>. Duck shooters damage wetlands, through stomping and crushing habitat and nests, camping, pollution from general waste and shotgun cartridges and they damage sites of significance to First Nations Peoples<sup>115</sup>. Duck shooting is clearly not sustainable.

With one million animal species at risk of extinction, according to the United Nations IPBES report<sup>116</sup>, the protection of wildlife is paramount. Recognising that wildlife exist for their own

<sup>110</sup> DELWP (2019) Kangaroo Pet Food Trail Evaluation Report. Department of Environment, Land, Water and Planning, Victorian Government. [https://www.wildlife.vic.gov.au/\\_\\_data/assets/pdf\\_file/0019/412723/KPFT-Evaluation-Report\\_Dec\\_2018a.pdf](https://www.wildlife.vic.gov.au/__data/assets/pdf_file/0019/412723/KPFT-Evaluation-Report_Dec_2018a.pdf)

<sup>111</sup> Victorian Government (2021). Game Hunting - The Sustainable Hunting Action Plan. Department of Jobs, Precincts and Regions. <https://djpr.vic.gov.au/game-hunting/action-plan>

<sup>112</sup> Porter, JL, Kingsford RT, Francis R & Brandis K (2020) Aerial Survey of Wetland Birds in Eastern Australian -October 2020 Annual Summary Report. University of New South Wales.

<https://www.ecosystem.unsw.edu.au/sites/default/files/2021-02/2020-Eastern-Australia-Waterbird-Survey-Summary-Report.pdf>

<sup>113</sup> Australian Government (2021) Australian Ramsar Wetlands - Internationally important wetlands.

<https://www.environment.gov.au/water/wetlands/australian-wetlands-database/australian-ramsar-wetlands>

<sup>114</sup> IUCN (2021) Wetland Ecosystems. Commission on Ecosystem Management, IUCN.

<https://www.iucn.org/commissions/commission-ecosystem-management/our-work/cems-specialist-groups/wetland-ecosystems>

<sup>115</sup> Kearney M (2017) Environmentalists say duck hunting poses threat to Lake Boort's Indigenous history. The Bendigo Advertiser. 22Nov2017. <https://www.bendigoadvertiser.com.au/story/5071299/duck-hunting-blamed-for-damage-to-indigenous-history/>

<sup>116</sup> IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. 56 pages. <https://ipbes.net/global-assessment>

intrinsic value, rather than human use, is an important step towards preventing wildlife extinction.

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***Recommendations:***

102. Ensure that any external activities or businesses operating in parks are of a nature that will encourage peaceful, respectful coexistence between humans and wildlife, rather than a culture of exploiting, destroying or displacing wildlife.
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## **8. Managing Infrastructure and Operations**

The AJP supports the priorities, outcome and outcome indicators in this section.

### **8.1 Plan, build and manage infrastructure based on universal design principles to ensure it is safe, fit for-purpose, adaptive where practicable, sustainable, secure, provides value for money, and meets increased and diverse visitation needs.**

We must move towards more progressive and environmentally-friendly technology, which includes creating environmentally sustainable infrastructure, and planning ways to upgrade existing buildings and infrastructure affordably, to also align with those goals. As the population is expected to continue growing, the demand for recreation in parks and nature spaces will also be on the rise, so planning, design and upgrades of facilities and amenities must be in line with expected future use and visitation rates.

Nature offers critical solutions to managing heat, and we must be innovative with ways to combat the heat created from surfaces such as concrete, bitumen, brick and metal. Innovative approaches to manage heat must be mandated in planning<sup>117</sup>. Water-sensitive urban design (WSUD)<sup>118</sup> and biodiversity-sensitive urban design (BSUD)<sup>119</sup> should be mandated for all park planning, including paths, amenities and facilities and carparks.

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<sup>117</sup> Coutts A, Harris R 2013. Urban Heat Island Report: A multi-scale assessment of urban heating in Melbourne during an extreme heat event: policy approaches for adaptation, Victorian Centre for Climate Change Adaptation Research. <http://www.vcccar.org.au/sites/default/files/publications/Multiscale%20assessment%20urban%20heating%20Technical%20Report.pdf>

<sup>118</sup> Sharma A, Gardner T, Begbie D (2019) Approaches to Water Sensitive Urban Design.

<https://www.sciencedirect.com/book/9780128128435/approaches-to-water-sensitive-urban-design?via=ihub=>

<sup>119</sup> Parris K, et al. (2018) The seven lamps of planning for biodiversity in the city.

<https://www.sciencedirect.com/science/article/pii/S0264275117314245?via%3Dihub>

**Recommendations:**

103. Promote and support sustainable design planning: water-efficient appliances and practices, water-sensitive urban design (WSUD) and biodiversity-sensitive urban design (BSUD), the use of recycled water, constructed wetlands and phytoremediation (treatment of waste water with plants), as well as waterway cleanups.
  104. Mandate heat mitigation practices and water-sensitive urban design (WSUD) and biodiversity-sensitive urban design (BSUD) in all planning.
  105. To rapidly transform to a carbon-free energy infrastructure.
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**Conclusion**

Victoria's parks are in a unique position to change the lives of most Victorians for the better. They provide access to nature, avenues for exercise and exploration, a haven from the stresses of everyday life and a playground for children and adults alike. There is a definite connection between a healthy environment and healthy people. Importantly they also provide habitat for wildlife, protect natural ecosystems, assist with the effects of climate change through carbon sequestration and can assist with the survival of threatened species by providing suitable and safe habitat.

Parks also help the economy in cities and regional areas as they promote tourism which assists with maintaining healthy and economically viable communities. They are a place of education where people can learn about different plants and animals. They reduce the urban heat island effect and provide a place for people to meet and interact. Trees in parks remove pollutants from the air and create a beautiful ambience. Nothing compares with nature's beauty.

***"Time spent amongst the trees is never wasted time".***

*Katrina Mayer*