

The health case for ending native forest logging and establishing the Great Forest National Park in Victoria

Overview

Victoria's native forests provide a broad range of critical services that help us to survive and thrive. When forests are degraded or lost, the essentials for life are compromised – our water resources, the air we breathe and the stability of our weather and climate. We also undermine the vital contributions our forests make to our physical and psychological health and wellbeing.

Victoria's native forests have immense intrinsic value and should be protected for their own sake. They also deserve protection for the sake of the innumerable species that rely on an intact complex forest environment. Simultaneously however, the reality of how much our health depends on our forests must be recognised.

This statement outlines the benefits of forests to health and the adverse health impacts that flow from ongoing native forest logging. It also presents the health case for the establishment of a Great Forest National Park in the Central Highlands and Gippsland regions of Victoria.

Background

Victoria is the most heavily cleared state in Australia, with approximately 66% of its native vegetation and over half of its forest areas lost since colonisation.¹ For Victoria's spectacular mountain ash old growth forests, less than 1.1% of the original extent remains.²

The 2019-20 Black Summer bushfires had devastating impacts on Victoria's remaining forested areas, with 1.5 million hectares of forested land burnt.³ The fire extent included at least 60% of Victoria's national parks and nature conservation reserves and 70% of Victoria's warm temperate rainforests. One hundred and eighty-five of Victoria's rare and threatened animals and plants had over 50% of their known habitat destroyed.⁴

Yet despite this, Victoria's native forests continue to be logged at a rate of approximately 3,000 hectares per year,⁵ equating to an area close to the size of five football fields every day. Of logs obtained, only 14% end up as timber products used in buildings and furniture, with the remainder either converted to paper, packaging and disposable pallets (26%) or burnt or left to decompose at the logging site (60%).⁶

Importantly, there is no financial viability in native forest logging, with VicForests posting a loss of \$23 million in 2021 after government grants of \$18 million were excluded from profits.⁷ The Parliamentary Budget Office has calculated that ending native forest logging in 2023 will save Victoria \$205 million over the next decade.⁸

¹Corey JA. Bradshaw, Little left to lose: deforestation and forest degradation in Australia since European colonization, *Journal of Plant Ecology*, 5(1), 2012, Pages 109–120

²Lindenmayer, D. (2011). Victoria's Mountain Ash forests are becoming a landscape trap. *Park Watch*, (247), 12–13.

³Victorian Government. Victoria's bushfire emergency: Biodiversity response and recovery. https://www.wildlife.vic.gov.au/_data/assets/pdf_file/0034/449746/Victorias-bushfire-emergency-Biodiversity-response-and-recovery-Version-1-23-January-2020.pdf

⁴Ibid at 17

⁵Victorian Association of Forest industries. Industry Review 2018. <http://www.vafi.org.au/wp-content/uploads/2019/08/VAFI049-Industry-Review-2018-final.pdf>

⁶<https://theconversation.com/logged-native-forests-mostly-end-up-in-landfill-not-in-buildings-and-furniture-115054>

⁷<https://www.vicforests.com.au/static/uploads/files/vf-annual-report-2021-final-161121-wfdkuowjlnpm.pdf>

⁸<https://greens.org.au/vic/end-logging>

WORTH MORE STANDING – THE BENEFITS OF INTACT FORESTS

As doctors, we wish to draw attention to the myriad of ways that Victoria's forests support our health. They release oxygen to the atmosphere and draw down pollutants and carbon dioxide to maintain our air quality. They act as vital carbon sinks in the face of climate change, with Victoria's Mountain Ash forests known to be the most carbon dense in the world.⁹

Forests are also critically important determinants of water availability and quality. Forests, along with their soils, act like sponges that absorb water when it is plentiful and release it when it is scarce. In Melbourne, there is good evidence that the forested catchment area maintains a more constant supply in times of drought.¹⁰ Forest cover also protects the water in catchments by preventing soil erosion and other damage which can pollute water.

In addition, forests serve as vital places for recreation, physical and psychological restoration and spiritual fulfillment.¹¹ In Victoria, there are around 23 million visits to our forests for these purposes each year.¹² There is extensive evidence of a range of health benefits that ensue from simply being in forests. Some of these include improved heart rate, blood pressure and immune function; reduced stress, anxiety, depression and burnout syndrome; and faster recovery from illness.¹³ There is also increasing recognition of the opportunities forests provide for both preventive and therapeutic health interventions for a wide range of health problems, particularly mental illness.

Moreover, protected forests provide places for healthy long-term jobs in the areas of eco-tourism, recreation, education, research and health interventions. As an example of the latter, in Japan, forests are protected and accredited for forest bathing or 'shinrin yoku' and physicians refer patients at high risk of stress related illness to these forests for specified periods of time. Forest bathing has not only become a major component of preventive health care and healing in Japanese medicine but also as a major source of 'green jobs' in the Japanese forest sector.¹⁴

Replacing the vast array of ecosystem services forests that provide to our health would be extremely costly, if not impossible.

HEALTH IMPACTS OF NATIVE FOREST LOGGING

By way of contrast to the benefits of intact forests, a range of negative health impacts arise from continued native forest logging.

1. Loss of Carbon Storage

While intact old growth forests act as vital carbon storage, disturbing these forests leads to release of carbon to the atmosphere that can take decades to centuries to recapture with regrowth. This

⁹Keith H, Mackey BG and Lindenmayer DB. Re-evaluation of forest biomass carbon stocks and lessons from the world's most carbon-dense forests. *Proceedings of the National Academy of Sciences*. 106:11635–11640 (2009)

¹⁰Stolton S & Dudley N. Managing forests for cleaner water for urban populations. <http://www.fao.org/docrep/010/a1598e/a1598e10.htm>

¹¹Doctors for the Environment. Biodiversity Policy. <https://www.dea.org.au/wp-content/uploads/2019/11/DEA-Biodiversity-Policy-11-19.pdf>

¹²Commissioner for the Environmental Sustainability of Victoria. State of the forests 2018 report.

¹³ Oh, B., Lee, K.J., Zaslowski, C. *et al.* Health and well-being benefits of spending time in forests: systematic review. *Environ Health Prev Med* **22**, 71 (2017).

¹⁴Food and Agriculture Organisation of the United Nations. Green jobs in the forest sector. https://www.greengrowthknowledge.org/sites/default/files/uploads/Alicja%20Kacprzak%20e2%80%93%20Green%20Jobs%20in%20the%20Forest%20Sector_1.pdf

negative carbon balance is inconsistent with Victoria's ambitions to minimise its influence on climate change.

The health impacts of climate change are broad and mediated by increases in extreme weather events, altered distributions of vector borne and other climate-sensitive diseases, air pollution, reductions in crop yields, fish stocks and freshwater availability, social unrest, and population displacement.¹⁵ These exposures underlie health effects including physical trauma, heat stress illness, cardiovascular and respiratory disease, vector-borne disease, infectious gastrointestinal disease and psychological stress.¹⁶ Because of these impacts, climate change has been recognised as the greatest health threat facing humanity this century.¹⁷ In Australia, the health effects of climate change are increasingly felt, leading a growing number of health organisations including Doctors for the Environment Australia and the Australian Medical Association to declare climate change a public health emergency.¹⁸

Importantly, research from the Australian National University has shown that ending native logging in Australia's South-eastern forests could reduce Australia's total greenhouse gas emissions by up to 24%.¹⁹ This makes forest protection a critically important component of effective climate change mitigation policy.

2. Increased bushfire risk in logged forests

There is also clear evidence to show that logging increases the risk of bushfires. Old wet forests are less prone to burning, yet after logging, there is increased risk of subsequent high severity crown-consuming fires,²⁰ with the increased flammability persisting for up to 40 years after the event.²¹ Indeed, research has shown that in Australia's 2019-20 bushfires, past logging increased the probability of canopy damage by 5–20%.²²

The risks this poses to health were exemplified by Australia's 2019-20 'Black Summer' bushfires. Thirty-three people died in these fires, while thousands lost homes and properties and many more were displaced. It has been estimated that the smoke pollution over eastern Australia was responsible for 1305 presentations to emergency departments with asthma, over 3000 hospitalisations for heart and lung problems and 417 excess deaths.²³ From the perspective of mental health, the impacts of the fire and smoke as well as from the loss of wildlife and the places we love are likely to be substantial and evident for decades.²⁴

Less known by the general population, but all too familiar to the people living near logging operations, are the impacts of smoke pollution from the intensive burning of debris left behind after clear-fell logging. These burns generate far more smoke than fires that occur for hazard reduction

¹⁵https://www.racp.edu.au/docs/default-source/advocacy-library/climate-change-and-health-position-statement.pdf?sfvrsn=5235361a_5

¹⁶https://www.racp.edu.au/docs/default-source/advocacy-library/climate-change-and-health-position-statement.pdf?sfvrsn=5235361a_5

¹⁷<https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

¹⁸<https://dea.org.au/climate-health-emergency-declaration/>

¹⁹<https://press-files.anu.edu.au/downloads/press/p56611/pdf/book.pdf>

²⁰<https://ro.uow.edu.au/smhpapers/138/>

²¹Taylor C, McCarthy MA, Lindenmeyer DB. Nonlinear Effects of Stand Age on Fire Severity. *Conservation Letters*. 7:355-370 (2018)

²²<https://www.nature.com/articles/s41559-022-01717-y>

²³Arriagada, NB, Palmer, AJ, Bowman, DMS, Morgan, GG, Jalaludin, BB, Johnston FH. Unprecedented smoke-related health burden associated with the 2019-20 bushfires in eastern Australia. *Medical Journal of Australia*. 2020; 213(6)282-3.

²⁴https://mspgh.unimelb.edu.au/__data/assets/pdf_file/0009/3645090/BB-10-years-report_spread.pdf

and contribute to industrial levels of air pollution on a regular basis.²⁵ Logging burns would not be needed and the associated smoke not generated if these forests were not logged in the first place.

3. Threatened water supplies to Melbourne and rural communities

The water catchment areas of the Central Highlands ensure that Melbourne and rural communities adjacent to the forests have some of the best drinking water in the world. However, by logging in the vicinity of these catchments, we place our water supplies at risk.

Research indicates that logging in the Thompson Water Catchment is currently leading to loss of 15,000 megalitres of water annually, equivalent to the amount used by 250,000 people.²⁶ In contrast, modelling has found that if logging had ceased in 1995, Melbourne would have had an extra 14 billion litres of water per year by 2050.²⁷ An economic assessment has previously found that the value of water is 25.5 times greater than the value of the timber and pulp produced from logging in catchments.²⁸

As Melbourne's population continues to grow, water security is becoming a more urgent issue. This makes it critical that logging in our pristine water catchment areas is ceased as a matter of urgency.

4. Loss of biodiversity

Biodiversity refers to the rich array of all life on earth²⁹ The more biodiverse an ecosystem, the more it is stable and the more functions it provides. Conversely, loss of biodiversity significantly disrupts ecosystem functioning, which has direct and indirect impacts on human health and well-being.

The sheer variety of forest types in eastern Victoria gives rise to extraordinary biodiversity. The Central Highlands of Victoria is home to the world's tallest flowering plant, the Mountain Ash, as well as hundreds of rare and threatened species.³⁰ However, logging has caused precipitous declines in the populations of large, old-cavity trees which numerous species depend on for survival.³¹ Logging has also repeatedly been identified in threatened species habitat, even when those species are detected inside logging coupes.³² Populations of endangered greater gliders have declined by between 50-80 per cent in areas subject to native forest logging in Eastern Victoria. Logging continues to damage the habitat of critically endangered Leadbeater's Possum, contributing to the virtual demise of the species.³³ If logging is allowed to continue to 2030 as planned, numerous other species will undoubtedly be pushed towards extinction. In turn, our forest ecosystems will be increasingly less able to support human health.

²⁵<https://theconversation.com/logging-burns-conceal-industrial-pollution-in-the-name-of-community-safety-96712>

²⁶<https://www.sciencedirect.com/science/article/pii/S0048969719328712>

²⁷<https://www.sciencedirect.com/science/article/pii/S0048969719328712>

²⁸Keith, H., Vardon, M., Stein, J.A. *et al.* Ecosystem accounts define explicit and spatial trade-offs for managing natural resources. *Nat Ecol Evol* 1, 1683–1692 (2017).

²⁹Millennium Ecosystem Assessment (2005). Ecosystems and Human Well-being: Biodiversity Synthesis. World Resources Institute, Washington, DC. <https://www.millenniumassessment.org/documents/document.356.aspx.pdf>. Accessed June 23, 2019.

³⁰https://www.environment.vic.gov.au/__data/assets/pdf_file/0022/51259/Protecting-Victorias-Environment-Biodiversity-2037.pdf

³¹<https://www.leadbeaters.org.au/sending-leadbeaters-possum-down-the-road-to-extinction/>

³²https://assets.nationbuilder.com/victorianforestalliance/pages/29/attachments/original/1664756969/Forest_Protection_Fast_Facts_1.6_DIGITAL.pdf?1664756969

³³<https://vnpa.org.au/todays-parliamentary-inquiry-report-reveals-tragic-state-of-victorian-biodiversity>/<https://www.who.int/news-room/fact-sheets/detail/biodiversity-and-health>

5. Impacts First Nations wellbeing and connection to Country

For many First Nations peoples, forests are far more than the physical landscape, instead embodying all aspects of First Nations existence - culture, language, spirituality and law.³⁴ Victoria's forests have been described as a 'keeping place' by Traditional Owners, a place to secure the story of the land and provide spiritual nourishment that can be passed down to future generations.³⁵ Destruction of land, waters, totems and sacred places from industrial logging has the potential to cause profound harm to first Nations peoples.

While the Victorian Government is working towards Treaty with First Nations peoples, the impact of logging is being ignored. In a letter to the Victorian Government in 2019, Elders and Traditional Owners from lands across the forests of the Central Highlands stated: "we never gave permission to VicForests to destroy our precious forests and the cultural heritage contained within them... [Continued logging until 2030] is outrageous and offensive to us... We refuse this and demand an immediate stop to logging on our Country".

As yet, there has been no acknowledgement of this letter by the State Government. This lack of response adds to the health and other injustices of dispossession and colonisation and is the antithesis of reconciliation.

BENEFITS OF A GREAT FOREST NATIONAL PARK FOR HEALTH

Currently, national park areas around Melbourne are small and fragmented, covering a total of 168,891 hectares, in contrast to those around Sydney which cover 1,094,207 hectares.³⁶ While the recent commitment by the Victorian Government to establish 65,106 hectares of new national parks in the state's central west is very much welcomed,³⁷ this still leaves a major national park deficit relative to our large and growing population.

The proposed Great Forest National Park would connect existing protected areas in Victoria's Central Highlands and add 355,000 hectares of new protected forests.³⁸ The flow-on benefits to health and well-being of Victorians would be enormous.

- **Climate change mitigation:** Protection of forested areas would preserve critical existing carbon stocks and allow previously logged or burnt forest areas to regrow, fulfilling their carbon storage potential. In turn, this would reduce the broad range of risks climate change poses to health.
- **Enhanced water security:** Declaring the GFNP would mean that our water catchment areas are protected in perpetuity. This would ensure our growing population continues to have access to the pure water provided by our forests that it needs.
- **Increased access to nature:** The evidence is clear that time spent in nature is good for us. By providing Victorians with greater areas of protected forest to visit, broad physical, psychological and spiritual health benefits would be expected to follow.
- **Economic return:** Intact, Victoria's forests represent one of our greatest assets. A GFNP would create major opportunities for eco-tourism and associated job creation, with local communities

³⁴ <https://www.commonground.org.au/learn/diverse-first-nations-identities>

³⁵ <https://www.greatforestnationalpark.com.au/park-science.html>

³⁶ https://www.greatforestnationalpark.com.au/uploads/1/5/5/7/15574924/great_forest_national_park_-_summary_report-a3.pdf p.10

³⁷ <https://www.premier.vic.gov.au/new-national-parks-and-reserves-victoria>

³⁸ <https://www.greatforestnationalpark.com.au/park-science.html>

particularly benefitting. Substantial economic return is predicted,³⁹ in contrast to the current situation where Victorians are paying for our forests to be logged.

- **Biodiversity preservation:** The proposed areas for inclusion in the GFNP are based on high conservation values. As such, creation of the GFNP will provide protection to some of Victoria's most important ecosystems and species that in turn are critical to our continuing health and well-being.

As a result of these benefits, DEAs calls for the following:

- **Urgent actions to bring forward the 2030 exit from native forest logging, including immediate roll-out of measures to support workers and the forestry industry.**
- **Full consultation and shared decision making with First Nations Elders and Traditional Owners.**
- **Declaration of the Great Forest National Park in this term of office.**

³⁹ <https://www.greatforestnationalpark.com.au/park-economy.html>