Submission to the Inquiry into Australia's Extinction Crisis

April 2023

About The Biodiversity Council

The Biodiversity Council brings together leading experts including Indigenous knowledge holders to promote evidence-based solutions to Australia's biodiversity crisis. The Council was founded by 11 universities with the support of Australian philanthropists.

Overview

Australia is globally recognized for its rich and diverse ecosystems, holding a unique status as one of the world's seventeen "mega-diverse" nations. Our unparalleled biodiversity encompasses a remarkable array of species and ecosystems. This distinction signifies a profound responsibility to steward and safeguard these invaluable natural assets for future generations.

Biodiversity is the variety of all life on Earth; the plants, animals, fungi, microbes, and even us.

It underpins all aspects of our life, from food systems, to culture and identity, to economy, and health. Animals pollinate 90% of crops; 70% of medicines are derived from animals and plants; natural ecosystems remain the only viable large-scale carbon sink; and plants and animals clean our air and water and breakdown wastes.

Despite having some of the most unique plants, animals and ecosystems on the planet, Australia has become the world leader when it comes to the loss of biodiversity. We are ranked 1st globally for the extinction of mammals and are ranked second for the overall loss of biodiversity.[1] We have had three new extinctions since 2009, the Christmas Island Pipistrelle (*Pipistrellus murrayi*), Christmas Island forest skink (*Emoia nativitatis*), and the Bramble Cay melomys (*Melomys rubicola*); and hundreds more species face potential extinction in coming years.[2] The best available science tells us that at least 19 Australian ecosystems are showing signs of collapse[3] and our national list of threatened species and ecological communities has exploded to more than 2000 with the status of many more species currently unclear and threats to biodiversity left largely unchecked.

The World Economic Forum has identified biodiversity loss and ecosystem collapse, together with climate change as the top three risks for the global economy over the next decade.[4] About half of Australia's GDP relies on natural systems. Many species declines have been rapid, are often irreversible, and will continue to have far-reaching consequences for agriculture, water quality, culture, economy and health. The Commonwealth's 2021 State of the Environment report states:

> *Overall, the state and trend of the environment of Australia are poor and deteriorating as a result of increasing pressures from climate change, habitat loss, invasive species, pollution and resource extraction. Changing environmental conditions mean that many species and ecosystems are increasingly threatened. Multiple pressures create cumulative impacts that*

[1] Waldron, A, Miller, DC, Redding, D, Mooers, A, Kuhn, TS, Nibbelink, N, Roberts, JT, Tobias, JA & Gittleman, JL 2017, 'Reductions in global biodiversity loss predicted from conservation spending', Nature, vol. 551, no. 7680, pp. 364-36; Woinarski, JC, Burbidge, AA & Harrison, PL 2015, 'Ongoing unraveling of a continental fauna: decline and extinction of Australian mammals since European settlement', Proceedings of the National Academy of Sciences, vol. 112, no. 15, pp. 4531-4540.

[2] Woinarski, JC, Garnett, ST, Legge, SM & Lindenmayer, DB 2017, 'The contribution of policy, law, management, research, and advocacy failings to the recent extinctions of three Australian vertebrate species', Conservation Biology, vol. 31, no. 1, pp. 13-23.

[3] Bergstrom, DM, Wienecke, BC, van den Hoff, J, Hughes, L, Lindenmayer, DB, Ainsworth, TD, Baker, CM, Bland, L, Bowman, DMJS, Brooks, ST, Canadell, JG, Constable, AJ, Dafforn, KA, Depledge, MH, Dickson, CR, Duke, NC, Helmstedt, KJ, Holz, A, Johnson, CR, McGeoch, MA, Melbourne-Thomas, J, Morgain, R, Nicholson, E, Prober, SM, Raymond, B, Ritchie, EG, Robinson, SA, Ruthrof, KX, Setterfield, SA, Sgrò, CM, Stark, JS, Travers, T, Trebilco, R, Ward, DFL, Wardle, GM, Williams, KJ, Zylstra, PJ & Shaw, JD 2021, 'Combating ecosystem collapse from the tropics to the Antarctic', Global Change Biology, vol. 27, no. 9, pp. 1692-1703.

[4] https://www.weforum.org/publications/global-risks-report-2024/digest/

amplify threats to our environment, and abrupt changes in ecological systems have been recorded in the past 5 years.

Strengthening national nature laws

There is an urgent and existential need to tackle Australia's extinction crisis. This will involve addressing the drivers of decline through strengthened regulatory approaches and investing sufficient funding to tackle major threats and restore ecosystems and wildlife populations. Without more effective environmental protection and regulation and a significant boost in direct investment in conservation, Australia is likely to continue to lead the world in the loss of biodiversity with associated negative impacts for society.

With more than 2000 threatened species and ecosystems on our national list we need transformational change. Australia needs strong laws, policies, institutions, enforcement and funding to reverse the current trajectory of biodiversity decline. The Biodiversity Council has identified 10 essential elements necessary for new environmental laws, policies and institutions to deliver on Australia's nature positive commitment. These 10 elements are presented as an interdependent high-level package. That is, they do not work in isolation and each element is dependent on one another. Underpinning this, will be the need to effectively resource and implement any new system (including resourcing and implementing conservation actions more broadly).

The 10 essential elements needed in national environmental law reforms are spelled out in detail at Attachment A to this submission, and include delivering:

1. Nature positive goals and targets should be measurable and time-bound, and align with international commitments.
2. New, legally binding national environmental standards should be specific enough to deliver protection and restoration.
3. The voice of Indigenous peoples needs to be elevated in decisions that affect culture and Country and protections for culturally significant entities need to be established .
4. All decisions should account for cumulative impacts and there needs to be a comprehensive regional planning regime that will protect the most environmentally sensitive areas from development.
5. There needs to be strong protections for critically important areas for threatened species and ecological communities, accompanied by streamlined and effective recovery strategies and threat abatement plans.
6. There should be rigorous rules about the use of biodiversity offsets to ensure they deliver a nature positive outcome.
7. The new EPA needs to be trusted, accountable, and a truly independent statutory body with an appropriately qualified board that can ensure compliance and enforcement of environmental laws.
8. There needs to be full access to legal review, robust accountability and effective consultation through public participation frameworks.
9. Comprehensive national natural capital accounting should drive improved environmental data management along with strengthened and streamlined listing processes.
10. Environmental laws should take the threat of climate change seriously and explicitly integrate climate considerations into decisions.