



**Biodiversity
Council**

Biodiversity Council submission to the statutory review of the NSW *Biodiversity Conservation Act 2016*

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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.

The co-authors of this submission include Biodiversity Councillors and external experts on environmental policy, law, markets, economics, ecology, landscape management and decision science.

Executive Summary

The Biodiversity Council welcomes the opportunity to provide a submission to the statutory review of the Biodiversity and Conservation Act 2016 (NSW) (BC Act). The first named purpose of the BC Act is to “to conserve biodiversity at bioregional and State scales”. Unfortunately, the BC Act is not currently achieving its purpose as biodiversity in NSW continues to decline.

There is a great deal of evidence to support this, as shown by an increase in the number of listed threatened species, the decline in abundance of unlisted species, and removal of habitat critical to the persistence of threatened species¹. Habitat loss is the primary driver of extinction, yet clearing rates of intact natural habitat have accelerated since the BC Act was introduced. The NSW State of Environment Report² indicates that four out of five indicators of native vegetation are “getting worse” while the fifth is rated stable at unacceptably poor levels. The State of the Environment Report also states the following:

A new regulatory framework for biodiversity conservation and rural land management was established in 2016/2017 (see Legislation and Policies). The rate of permanent woody vegetation clearing from agriculture and land use change has significantly increased since that time.

The average rate of permanent clearing over seven years from 2009 to 2015 was 13,028 hectares per year (Figure 13.2). The rate of permanent clearing increased to 26,200 hectares per year in 2016, the year before the new regulatory framework (Biodiversity Conservation Act 2016) came into effect in August 2017. The subsequent rate of clearing from 2017 to 2019 was 34,933 hectares per year on average. Some of this included agricultural clearing approved under the previous native vegetation framework.

Agricultural clearing shows almost a threefold increase from 2009–2015 (9,085 hectares/year average) to 2017–2019 (26,633 hectares/year average). Permanent infrastructure clearing approximately doubled in the same period from 3,942 hectares/year average to 8300 hectares/year average.

Therefore, the BC Act is demonstrably not meeting its objectives. There is clear inadequate resourcing of threat abatement, and increased strategy and investment is required to utilise current programs to achieve meaningful change across the landscape, including in high risk and priority areas. NSW needs a stronger Act with greater investment to meet recent national and international commitments and match national and international ambition, such as the Convention on Biological Diversity 2022.

The key opportunities we outline in this submission are designed to:

1. Better recognise First Peoples’ governance, values, priorities, and culture
2. Foster community value for biodiversity and a culture of stewardship

¹ The Australian Threatened Species Index, 2022. <https://tsx.org.au/tsx2022/>

² NSW State of Environment Report, NSW Environment Protection Authority, 2021. <https://www.soe.epa.nsw.gov.au/>

3. Reform the vegetation clearing approvals process to reduce the clearing rate to zero
4. Implement existing provisions of the law
5. Increase recovery and threat abatement efforts using an ecosystem approach
6. Ensure the Threatened Species Scientific Committee is adequately resourced
7. Integrate responsibilities for freshwater biodiversity under the BC Act

Headline recommendations include:

Recommendations 1-5. Better recognise First Peoples' governance, values, priorities and culture, and consult with First Nations people as part of the statutory review.

Recommendations 5-6. Add provisions for explicit investment in Aboriginal controlled protected area management and NSW Aboriginal Ranger programs.

Recommendation 7. Ensure First Peoples access to Country for sustainable commercial activities and cultural practices such as caring for Country, resource use, fire stewardship, bush foods and tourism.

Recommendation 8. Add or reword objectives to address wider aspirations for supporting community outcomes and encouraging increased public value and stewardship for nature.

Recommendation 9. Invest and support the range of programs required to foster community value for nature and successful biodiversity stewardship.

Recommendation 10. Apply a precautionary and sustainable decision making process to vegetation clearing approvals to bring the rate down to zero.

Recommendations 11-13. Review exemptions from provisions of biodiversity legislation under the BC Act to enable a more strategic and consistent approach, and abolish detrimental exemptions.

Recommendation 14. Improve mapping methods and mandate transparent annual public reporting on the monitoring of native vegetation clearing.

Recommendation 15. Increase capacity for extension to land holders, monitoring and compliance on illegal clearing, prioritising police assistance when deemed necessary by agency officers and reviewing penalties to ensure they effect sufficient disincentive.

Recommendations 16-17. Review provisions for State Significant Development and Infrastructure to ensure greater transparency and accountability, and overhaul offset policy to mandate application of the Mitigation Hierarchy

Recommendation 18. Review all instruments and provisions of the BC Act to identify which are not contributing to improved conservation outcomes.

Recommendation 19. Map all ecosystems in New South Wales under the Global Ecosystem Typology, consistent with the IUCN and the Convention on Biological Diversity targets and approach.

Recommendations 20-21. Expand the Save our Species program so that every listed entity has an active project to reduce risk throughout its NSW range, and integrate mechanisms to consider climate change.

Recommendations 22-24. Ensure the Threatened Species Scientific Committee is adequately resourced.

Recommendations 25-26. Consolidate the operation of biodiversity by including freshwater fish in the BC Act, and consider merging the operation of the Threatened Species Scientific Committee (Biodiversity and Fisheries) into one committee.

1. Better recognise First Peoples' governance, values, priorities and culture

Object c) of the BC Act is purportedly to "improve, share and use knowledge, including local and traditional Aboriginal ecological knowledge, about biodiversity conservation". However, the BC Act does not currently include any specific mechanisms to ensure this. In addition, this objective alone does not sufficiently recognise First Peoples' governance, values, priorities and culture.

Australia is a signatory to the United Nations Declaration on the Rights of Indigenous Peoples³ and therefore has an obligation to acknowledge and affirm the unique cultural, spiritual and economic connections First Peoples have with Country and its biodiversity. The BC Act should explicitly recognise that First Peoples are rights holders in their Country, with obligations to care for Country under lore. Currently object c) simply refers to improving, sharing, and using knowledge, and does not recognise the specific role, responsibilities and rights for First Peoples. There are strong precedents for recognising these rights and interests within legislation in various jurisdictions, for example in the Yarra River Protection (Wilip-gin Birrarung murrn) Act 2017⁴.

There is strong evidence globally and in Australia that biodiversity is less subject to decline across Indigenous-managed land and sea territory.⁵ The BC Act should support explicit investment into Indigenous Protected Areas and other First Peoples controlled land management, to ensure appropriate resourcing to support First Peoples' right to care for Country and be involved in land management decision-making from the local to state-wide scale. Australia's Strategy for Nature (2019-2030) considers "Indigenous rangers and Indigenous ranger programs managing land and seascapes" a key objective (Objective 4C). We support expanding investment in NSW Aboriginal Ranger programs to expand the reach and potential of these programs into the future. Finally, we note that it is crucial to ensure that the BC Act explicitly supports First Peoples access to Country for sustainable commercial activities and cultural practices, such as caring for Country, resource use, fire stewardship, bush foods and tourism.

³ United Nations Declaration on the Rights of Indigenous Peoples, 2007.

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

⁴ Yarra River Protection (Wilip-gin Birrarung murrn) Act 2017

<https://www.legislation.vic.gov.au/in-force/acts/yarra-river-protection-wilip-gin-birrarung-murrn-act-2017/008>

⁵ The United Nations Permanent Forum on Indigenous Issues. "Indigenous Peoples' Collective Rights to Lands, Territories and Resources." UN Department of Public Information, n.d.

<https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/04/Indigenous-Peoples-Collective-Rights-to-Lands-Territories-Resources.pdf>; Recio, Eugenia, and Dina Hestad.

"Indigenous Peoples: Defending an Environment for All." International Institute for Sustainable Development, April 2022.

<https://www.iisd.org/system/files/2022-04/still-one-earth-Indigenous-Peoples.pdf>; DPMC.

"Consolidated Report on Indigenous Protected Areas Following Social Return on Investment Analyses." Social Ventures Australia, February 2016

https://www.niaa.gov.au/sites/default/files/publications/SROI-Consolidated-Report-IPA_1.pdf

Recommendation 1. Add an additional object of the BC Act as follows: ‘to ensure recognition of First Peoples as rights holders in their Country and its biodiversity; and protect and promote the unique rights and interests and acknowledge the obligations of First Peoples to protect biodiversity in Australia.’

Recommendation 2. Consult with First Nations people as part of the statutory review, to inform how the BC Act can further incorporate and acknowledge Aboriginal ecological knowledge and ecological knowledge holders.

Recommendation 3. Improve the operationalisation of object c) in the BC Act, e.g.

a) Include provisions that explicitly require or provide opportunities for First Peoples’ ecological knowledge to be included in strategic planning and implementation (e.g. in the Saving Our Species Biodiversity Conservation Program)

Recommendation 4. Recognise Culturally significant species, places, entities and values as critical to local and regional biodiversity conservation. Support First Nations-led initiatives to project and enhance their cultural values.

Recommendation 5. Add provisions for explicit investment into Aboriginal controlled protected area management.

Recommendation 6. Increase investment and funding for NSW Aboriginal Ranger programs.

Recommendation 7. Ensure First Peoples’ access to Country for sustainable commercial activities and cultural practices, such as caring for Country, resource use, fire stewardship, bush foods and tourism.

2. Foster community value for biodiversity and a culture of stewardship

The BC Act does not explicitly foster the public stewardship approaches and biodiversity values that are necessary to set the enabling context for progressive policy and programs protecting biodiversity.

Current aspects of the BC Act that may increase community involvement are primarily targeted at already conservation-minded individuals and communities, such as individuals who will voluntarily enter into agreements and apply for funding. We expect this bias may risk loss of assets in regions and landscape types without high public value for biodiversity. Australia’s Strategy for Nature 2019-2030⁶ states that ‘By connecting people with nature, we enhance their desire to care for nature, which in turn builds knowledge that can be shared to improve our care for nature and the benefits we receive from connecting with nature’. The Strategy’s first goal is to ‘Connect all Australians with nature’, under which sits the following objectives:

1. Encourage Australians to get out into nature

⁶ Australia’s Strategy for Nature 2019-2030, Commonwealth of Australia 2019. <https://www.dceew.gov.au/environment/biodiversity/conservation/strategy>

2. Empower Australians to be active stewards of nature
3. Increase Australians' understanding of the value of nature

Fostering public value of biodiversity and encouraging a cultural shift towards stewardship among the public at large, provides a pathway for potential prevention and mitigation of biodiversity loss to a scale beyond what formal conservation programs alone can achieve. Connecting Australians with nature will increase public support for progressive biodiversity policy and formal conservation programs, as well as uptake of broader pro-biodiversity behaviours (e.g. wildlife gardening), participation in incentive-driven and voluntary conservation programs (e.g. private land conservation), and increased sustainability in land use practices (e.g. improvement of natural assets on farms⁷). Connecting with and spending time in nature also provides community health and wellbeing co-benefits⁸. We suggest the Strategy for Nature goals, and their underlying objectives, therefore present useful guidelines for fostering a cultural shift towards connecting, valuing and acting for nature, that can be explicitly incorporated into the BC Act. In particular, Objective 2 outlines a promising pathway to foster a cultural shift towards responsible stewardship. Stewardship of biodiversity on requires a range of program approaches, particularly on agricultural land, including education (e.g., extension programs), incentives, regulations, voluntary programs, and enforcement⁹.

Recommendation 8. Add or reword objectives to address wider aspirations for supporting community outcomes and encouraging increased public value and stewardship for nature. e.g.

- a) Add an objective explicitly addressing the goal 'to improve public value of native vegetation, threatened species and ecological communities through public engagement and extension services'.
- b) Reword Objective (j) 'to encourage and enable landholders to enter into voluntary agreements over stewardship of land for the conservation of biodiversity'
- c) Reword Objective (c) 'to improve, share and use knowledge between key stakeholders, including local and traditional Aboriginal ecological knowledge, about biodiversity conservation'

⁷ Sustainable Farms. "Ten ways to improve the natural assets on a farm". Fenner School of Environment & Society, Australian National University, Canberra, Australia, 2020.

<https://www.sustainablefarms.org.au/resources/ten-ways-to-improve-natural-assets-on-a-farm/>

⁸ White, M.P., Alcock, I., Grellier, J., Wheeler, B.W., Hartig, T., Warber, S.L., Bone, A., Depledge, M.H. and Fleming, L.E., 2019. Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Scientific reports*, 9(1), pp.1-11.

⁹ Selinske, M., Cooke, B., Torabi, N., Hardy, M.J., Knight, A.T., Bekessy, S.A. 2017. Locating financial incentives among diverse motivations for long-term private land conservation. *Ecology and Society*. 22(5).

Recommendation 9. Invest and support the range of programs required to foster community value for nature and successful biodiversity stewardship, i.e.

a) Improve the effectiveness of the Biodiversity Conservation Trust by including mechanisms to encourage positive feedback and cross-generational support, and enforcement of agreed mitigation actions, for example by:

i) Allocating a greater fraction of funding to securing public tenure of critical biodiversity assets (as done in Western Australia)

ii) Tying eligibility for restoration funding to those properties/owners that have demonstrated retention of valuable assets and avoidance of clearing

b) Invest in other programs on productive agricultural land, i.e.

i) Extension services for landowners to understand the benefits and opportunities provided by protecting and enhancing biodiversity

ii) Low level entry schemes to foster excitement around taking actions that enhance biodiversity on property

iii) Schemes which provide investment in biodiversity stewardship linked, or not, to carbon schemes

c) Invest in public-good initiatives in rural and urban communities to improve the value that people place on native vegetation, threatened species and ecological communities, e.g. extension services, community events, media and social media activity

3. Reform the vegetation clearing approvals process to reduce the clearing rate to zero

Clearing and development approval processes are failing to avoid irreversible losses and mitigate impacts on NSW biodiversity due to ineffective agency practices and loopholes in legislation and regulations.

Clearing approval rates have accelerated since the BC Act came into force¹⁰ and are unsustainably high. The government data on native vegetation extent and clearing underestimates the true rate of loss because methods currently employed cannot reliably detect clearing of vegetation that has sparse woody cover. In addition, exemptions under the Local Land Services (LLS) Act enable landholders to clear up to 1000 ha of native vegetation if it is identified as regrowth < 33 years old. There are no obligations to notify or assess the impacts of such actions, despite recognised high biodiversity values of some regrowth within that age range. Similarly, the LLS Act provides exemptions to clear native vegetation identified as 'Invasive Native Scrub', yet the process for listing these species is opaque and lacks scientific rigour. Because of this, some species listed are dominant species in Endangered

¹⁰ NSW State of Environment Report, NSW Environment Protection Authority, 2021.
<https://www.soe.epa.nsw.gov.au/>

Ecological Communities (e.g. Coolibah eucalypts), enabling protections under the BC Act to be by-passed, leading to ongoing decline of listed threatened biodiversity, contrary to objectives of the BC Act. Finally, provisions for State Significant Development and Infrastructure also contribute to the failure of the BC Act to achieve its objectives. The process for designation of such projects lacks transparency and accountability. Designation essentially guarantees approval and thus removes incentives to avoid or mitigate impacts. In recent years, these provisions are being invoked on a semi-routine basis, rather than in exceptional circumstances in line with their original intention.

Every year, through approvals, exemptions and illegal activity, large blocks of native vegetation are cleared, eroding or eliminating their biodiversity value. For example, recently c. 1000 ha of an Endangered Ecological Community was cleared on the NSW northwestern floodplains and c. 600 ha of a Critically Endangered Ecological Community on the NSW southern tablelands were cleared under LLS exemptions without any assessment. State Significant Developments led to removal and habitat destruction of three Critically Endangered plant species at Moorebank (western Sydney) and Coffs Harbour. In one case the entire wild population is to be removed. Translocation and rehabilitation measures are unlikely to counterbalance these losses, due to limitations on technology and poor quality of translocation sites. The cumulative impact of these losses are substantial on NSW biodiversity assets that are already at high risk, with no foreseeable mechanism or commitment to halt the trend.

In addition, the NSW biodiversity offset policy is not fit to meet its objectives. It fails to conform with international standards that require like-for-like transactions, additionality and appropriate baselines. Current NSW offset policy fails to incentivise impact avoidance in accordance with the Mitigation Hierarchy, resulting in perverse outcomes that accelerate loss of irreplaceable biodiversity assets.

Recommendation 10. Apply a precautionary and sustainable decision making process to vegetation clearing approvals to bring the rate down to zero.

Recommendation 11. Consolidate all exemptions from provisions of biodiversity legislation under the BC Act to enable a more coordinated approach to regulation, full and transparent reporting, and a more strategic and consistent approach to identify small areas of land eligible for exemptions.

Recommendation 12. Abolish detrimental exemptions such as 'Invasive Native Scrub', enabling proper assessments and conditions to be put in place.

Recommendation 13. Define and identify exemptions in a manner that is consistent with the objectives of the BC Act, including:

- a) Providing for assessment of values of older regrowth
- b) Changing the regrowth regulatory threshold threshold from a fixed date (1990) to a shifting baseline (20 years of age), recognising the increasing biodiversity value of regrowth as it ages, and
- c) Substantially reducing the size of the area that can be cleared without approval (e.g. 100 ha).

Recommendation 14. Improve mapping methods (particularly to detect loss of sparse woody vegetation in western NSW) and mandate transparent annual public reporting on the monitoring of native vegetation clearing, including allowing public access to data where possible.

Recommendation 15. Increase capacity for extension to land holders, monitoring and compliance on illegal clearing, prioritising police assistance when deemed necessary by agency officers and reviewing penalties to ensure they effect sufficient disincentive.

Recommendation 16. Review and adjust provisions for State Significant Development and Infrastructure to ensure greater transparency of, and public engagement in designations and improved accountability of biodiversity outcomes. The revised provisions should be governed by the Mitigation Hierarchy to ensure that proponents demonstrate how impacts have been avoided, with residual impacts minimised and then offset. The revised provisions should ensure agility and obligations to adjust design of developments when new biodiversity discoveries are made, especially where statutory impact assessments failed to detect threatened species that were present on the site at the time. This would remove perverse incentives for proponents to ‘shop around’ multiple consultants and would also place the burden of proof where it belongs in order to achieve the objectives of the BC Act.

Recommendation 17. Overhaul offset policy to mandate application of the Mitigation Hierarchy, elevate the role of the Biodiversity Conservation Trust (and the option to pay into the trust rather than offset), and restrict offset transactions to compensate only replaceable or non-threatened assets and prevent impacts on threatened and irreplaceable assets (e.g. old growth forests). Ensure that all principles are implemented in every transaction and meet international standards .

4. Implement existing provisions of the law

The BC Act has a number of provisions designed to help achieve its objectives, but these are not being effectively implemented resulting in ongoing declines in biodiversity, local extinctions and loss of benefits to local communities and the economy.

Many of the failures of the BC Act to meet its objectives eventuate, not because of inadequacies in legislation, but because of failure to implement its provisions effectively or at all. Examples include:

a) In 2016, new provisions to list and protect Areas of Outstanding Biodiversity Value (AOBV) were a positive reform to legislation. AOBVs provide protection for critical sites outside protected areas. Scientifically rigorous listing criteria are prescribed in Regulation and government assessment guidelines have been developed. However, not a single new AOBV has been listed as of April 2023. Only four small sites listed are legacies of past critical habitat listings more than 20 years ago. The Chief Executive of the Department has responsibility for assessment and listing. The singular failure to implement this provision has caused the loss of irreplaceable biodiversity assets that otherwise could have been conserved for future generations.

b) There have been ongoing failures and inconsistencies in the use of exemptions, approvals, extension and compliance on clearing native vegetation. Problems relating to exemptions are discussed in the previous section above. Approvals of development by the Planning Department are inconsistent and often fail to apply appropriate weight to considerations under the BC Act and advice from the relevant environment agency. Extension and compliance of vegetation management activities (approved, exempt and illegal) are substantially under-resourced.

c) Serious and Irreversible Impact (SII) provisions were introduced into the legislation to identify species and ecological community assets in which further losses will result in almost certain extinction (i.e. irreversible impacts). However, SII have not received appropriate implementation in regulatory decisions, with ineffective conditions that do not prevent or avoid loss or degradation. This results in continuing erosion of irreplaceable assets.

Recommendation 18. Review all instruments and provisions of the BC Act to identify which are not contributing to improved conservation outcomes. Adjust policies and practices to ensure they reduce risks to, and loss of biodiversity, and improve restoration outcomes. Specifically,

- a) Transfer responsibility for assessing and listing AOBVs from the department to the TSSC to ensure independence and timely listings;
- b) Urgently identify and list AOBVs that need protection;
- c) Improve outcomes of vegetation clearing approvals to avoid ongoing loss;
- d) implement major enhancements for resourcing extension and compliance of native vegetation management; and
- e) ensure that avoidance of all impacts on SII assets is mandated in the design of all projects seeking approvals under all NSW environment legislation.

5. Increase recovery and threat abatement efforts using an ecosystem approach

Current recovery and threat abatement efforts are insufficient for preventing biodiversity decline. There is a need to improve the scale of biodiversity conservation actions by focusing on ecosystem functionality. Taking this approach will provide the opportunity to include all of biodiversity and its supporting processes. For example, this approach can include organisms that are seldom targeted, yet essential, for biodiversity conservation, such as invertebrates, bacteria, and fungi.

A more comprehensive approach to conservation that focuses on ecosystems is necessary to ensure all key ecosystem components and processes are considered. NSW researchers are leading the world in this area. Ecosystem approaches are already being implemented globally as a means of addressing both biodiversity conservation and sustainability of ecosystem services by evaluating risks and threats, and implementing measures to reduce them. As a

result, these processes are likely to play a role in future ecosystem extent targets, such as in the Convention on Biological Diversity.

Ecosystem approaches are driven through two principal initiatives, which are increasingly identified as the global standard. The IUCN Red-List of Ecosystems¹¹, offers a considerably more effective method for assessing and measuring risk to ecosystems. The IUCN Global Ecosystem Typology¹² offers a new way forward for conservation and identification for mapping and assessment of ecosystems. The Global Ecosystem Typology represents a rigorous and conceptually simple approach to biodiversity conservation at the ecosystem scale¹³.

An ecosystem-scale approach can be implemented in the BC Act by utilising the Global Ecosystem Typology within key mechanisms as outlined in our recommendation below. Such an approach will assist in specification of threatened ecological communities, avoiding land clearing of poorly represented ecosystems (i.e. through representative maps), prioritisation of investment for AOBVs, new National Parks and the Biodiversity Conservation Trust. This approach is consistent with current legislation, simply requiring a reframing of focus to one that integrates the ecosystem approach up front.

We commend the Saving our Species program for achieving local on-ground outcomes and improving agency effectiveness. However, one of the weaknesses of the program is that it has had limited scope across ecosystems, and very few ecosystems included in the program (e.g. Endangered Milton Dry Rainforest) have shown substantial benefits. To improve outcomes for the BC Act, the program should be expanded so that every listed entity (i.e. species, ecological communities, populations and key threatening processes) has an active project to reduce risk throughout its range in NSW.

Recommendation 19. Map all ecosystems in New South Wales under the Global Ecosystem Typology, consistent with the IUCN and the Convention on Biological Diversity targets and approach. This will provide the template for risk assessment of strategic ecosystem approaches to representation that includes all parts of ecosystems, particularly their functional components, currently largely missing from the operation of the Biodiversity Act.

Recommendation 20. Expand the Save our Species program so that every listed entity (i.e. species, ecological communities, populations and key threatening processes) has an active project to reduce risk throughout its NSW range.

¹¹ IUCN-CEM 2022, The IUCN Red List of Ecosystems, Version 2022-1. <https://iucnrl.org/>

¹² Keith, D.A., Ferrer-Paris, J.R., Nicholson, E. and Kingsford, R.T., 2020. IUCN Global Ecosystem Typology 2.0. *International Union for Conservation of Nature*. <https://portals.iucn.org/library/node/49250>, <https://global-ecosystems.org/>

¹³ Keith, D.A., Ferrer-Paris, J.R., Nicholson, E., Bishop, M.J., Polidoro, B.A., Ramirez-Llodra, E., Tozer, M.G., Nel, J.L., Mac Nally, R., Gregr, E.J. and Watermeyer, K.E., 2022. A function-based typology for Earth's ecosystems. *Nature*, 610(7932), pp.513-518.

Recommendation 21. Integrate mechanisms to fulfil object b) of the BC Act 'to support biodiversity conservation in the context of a changing climate', e.g.

- a) Require the Saving Our Species Biodiversity Conservation Program to consider the impacts on climate change on threatened species and ecological communities

6. Ensure the Threatened Species Scientific Committee is adequately resourced

The NSW Threatened Species Scientific Committee (TSSC) is currently not adequately resourced to ensure involvement of leading independent experts and delivery of listings in a timely manner appropriate to current trends of biodiversity loss.

The listing process is one of the strengths of the BC Act, ensuring public participation, scientific rigour and independence. The NSW Threatened Species Scientific Committee is a critical body for ensuring public confidence and scientific rigour in listings of threatened species, ecological communities and key threatening processes. In recent years, many current threatened species listings have become outdated, and the status of very large numbers of species and ecological communities in NSW are yet to be assessed, with a substantial backlog. There are three resourcing issues that pose barriers to effective engagement of the TSSC to enable the BC Act to achieve its objectives:

- a) TSSC members are very poorly remunerated for their professional time (cf remuneration for Commonwealth TSSC), limiting the pool of independent expertise available for appointment and service;
- b) Time commitments of Department of Planning and Environment representatives on TSSC has been capped at 2 days per month since 2018, severely hampering out-of-session work essential to the functioning of the Committee;
- c) Support resources and staff in recent years have been allocated to the department, not to the statutory Committee, misdirecting resources from where they are needed to carry out statutory functions and ensure capacity to deliver timely listings.

Recommendation 22. Equilibrate remuneration of NSW TSSC members to remuneration rates for Commonwealth TSSC members to attract leading experts in conservation science.

Recommendation 23. Remove time commitment restrictions imposed on all NSW government members of the TSSC.

Recommendation 24. Ensure that the TSSC is adequately resourced with support staff to undertake rigorous assessments of entities nominated for listing in a timely manner.

7. Integrate responsibilities for freshwater biodiversity under the BC Act

The BC Act currently 'applies in relation to animals and plants and not (unless otherwise provided) in relation to fish and marine vegetation'. The latter come under the auspices of the Fisheries Act. NSW is the only jurisdiction where responsibility for biodiversity conservation is fragmented in this way. This fundamentally undermines efforts to conserve biodiversity in freshwater and marine ecosystems.

In order to strategically work towards mitigation and prevention of biodiversity loss in the state, management of freshwater biodiversity is as crucial as management for terrestrial biodiversity. It is therefore critical that responsibilities for freshwater biodiversity are integrated into the BC Act to ensure consistent, strategic, landscape and ecosystem scale conservation planning and management. Currently all freshwater biodiversity, apart from fish, are included in the Biodiversity Act. There is a need to consolidate the operation of biodiversity by including freshwater fish in the Biodiversity Act. Further consideration could be given to merging the operation of the Threatened Species Scientific Committees (Biodiversity and Fisheries) into one committee, producing efficiencies, given that they have similar mandates. A combined committee would cover all the major realms, freshwater, terrestrial and marine, in alignment with Commonwealth legislation. It would also consolidate approaches to key threatening processes which are currently duplicated.

Recommendation 25. Consolidate the operation of biodiversity by including freshwater fish in the BC Act.

Recommendation 26. Consider merging the operation of the Threatened Species Scientific Committee (Biodiversity and Fisheries) into one committee.