

Final Report

Independent Review of the **Biodiversity Conservation Act 2016**

Acknowledgement of Country

Country is at the centre of Aboriginal people’s identity and sense of belonging, and we recognise and acknowledge that Country has spiritual and cultural significance to all Aboriginal people.

Aboriginal people have inherent rights and obligations to protect the land, waters, sky and natural resources of NSW. They have been stewards and caretakers of the lands and waters of NSW for tens of thousands of years. They are leaders in conserving and protecting biodiversity and have unique perspectives, knowledge and responsibilities to teach, inspire and help care for Country. The health of the natural environment, fresh waters, land and marine animals, plants and people are intimately connected. This connection goes deep and has since the Dreaming.

By respecting and protecting the traditional lands, fresh water and seas, and the biodiversity that thrive within them, we recognise that Country and people nourish one another, and this contributes to the health and wellbeing of Aboriginal languages, cultural practices and stronger communities.

DISCLAIMER: This Review Report was prepared by Dr Ken Henry, Dr John Keniry, Distinguished Professor Michelle Leishman and Mr Mike Mrdak, supported by a secretariat from the Department of Planning and Environment, in good faith exercising all due care and attention, but no representation or warranty, express or implied, is made as to the relevance, accuracy, completeness or fitness for purpose of this document in respect of any particular user’s circumstances. Users of this document should satisfy themselves concerning its application to, and where necessary seek expert advice in respect of, their situation. The views expressed within are not necessarily the views of the Department of Planning and Environment and may not represent department policy.

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Foreword

We started with the available evidence, consulted widely and reviewed numerous submissions. While the *Biodiversity Conservation Act 2016* has been in operation for only five years, we cannot pretend that it is ever likely to achieve its objectives.

Biodiversity is not being conserved at bioregional or State scale. The diversity and quality of ecosystems is not being maintained, nor is their capacity to adapt to change and provide for the needs of future generations being enhanced. Yet these are the principal purposes of the legislation.

It is clear to the Review Panel that the operative provisions of the Act are incapable of supporting its objectives. Too much rests upon the operation of other pieces of legislation that have their own, competing, objectives. This has to be addressed.

Of more concern, the objects of the *Biodiversity Conservation Act 2016* are already obsolete. The crafting of the Act was, understandably, guided by principles of sustainable development. Those principles are no longer fit for purpose. As has been recognised in many global forums over the past few years, the natural environment is now so damaged that we must commit to 'nature positive' if we are to have any confidence that future generations will have the opportunity to be as well off as we are.

The Review Panel appreciates that this implies a major reset in public policy thinking, which many will find challenging. Even though sustainability concepts have been central to policy development for more than a generation, many in the community, and even within government circles, still struggle with the notion that policies to promote human progress should recognise any constraints, social or environmental. Yet the fact of humanity's dependence upon the quality of the biosphere, in both social and economic dimensions, is as immutable as the laws of physics. The case for giving primacy to environmental repair is inescapable. Our future depends upon it.

A nature positive vision implies a substantial re-crafting of the Act, and also of other pieces of legislation affecting land use in the State. In this report, we have aimed to identify the changes that need to be made.

The Review Panel benefited enormously from meeting with, and considering submissions received from, numerous stakeholders. We were impressed by the quality of the submissions.

The Review Panel was also greatly assisted by having access to a team of highly professional, and expert, public servants working in the Environment and Heritage Group of the Department of Planning and Environment. I want to acknowledge Atticus Fleming AM, Brendan Bruce, Michelle Dumazel, Sharon Molloy, Gabrielle Pietrini, Georgina Kelly, and especially Alison Schumacher, Heather Peters, Amy Dumbrell and their teams.

And I want to thank my colleagues on the Review Panel, Dr John Keniry AM, Distinguished Professor Michelle Leishman and Mike Mrdak AO, for their guidance, resilience and camaraderie.

Dr Ken Henry AC, Lead Independent Reviewer

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Panel overview

What the Review Panel has learned

The present Act is not meeting its primary purpose

The Review Panel found that the present *Biodiversity Conservation Act 2016* is not meeting its primary purpose of maintaining a healthy, productive and resilient environment, and is never likely to do so.

Biodiversity across NSW is at risk from a range of environmental disturbances:

- Clearing of native vegetation, intensifying land use, a growing population and associated infrastructure development has led to the destruction, alteration and fragmentation of habitat across the state.
- The effects of climate change are being felt, and are expected to become more pronounced. Projections show that extreme weather events such as bushfires, droughts, heatwaves, storms and floods will become more frequent and severe throughout NSW. Species and ecosystems are already being impacted, limiting their ability to adapt.
- Weeds are out-competing native plants and taking over large swathes of habitat, disrupting the natural balance of ecosystems and reducing species diversity.
- Feral animals are competing with native wildlife for resources, overgrazing native plants, and preying on native animals.
- Some of the biggest fires in NSW have occurred since 2002. The 2019–20 bushfires had a profound impact on biodiversity. Estimates suggest the fires affected more than 5 million hectares of habitat in NSW. These burnt habitats are more prone to altered fire regimes, particularly large-scale fires that burn at high intensity.
- The state's major inland river systems continue to be affected by water extraction, altered river flows, loss of connectivity and catchment changes such as altered land use and vegetation clearing. These affect water availability, river health and ecosystem integrity.
- Native forest logging is damaging forest ecosystems and the habitat of native species.



More than **30%** of **original native vegetation** in NSW has been substantially altered



954 threatened species and **111 threatened ecological communities** currently listed under the Act



In the period 2018-2021, the average annual rate of **clearing of native woody vegetation increased by a third** compared to 2009-2017



All bioregions across NSW have **less than 25%** of their original capacity to retain their biodiversity under the projected rate of climate change

The ability of remaining habitats in NSW to support native plants, animals and ecosystems has reduced to **33% of their original capacity** since European settlement



Only **50%** of **NSW threatened species** expected to survive in 100 years



For the **4 years** since commencement of the Act (2018-2021), over **379,000 hectares of native vegetation** has been cleared in NSW¹



The 2019–20 bushfires affected **more than 5 million hectares** of land in NSW



72 species are extinct in NSW, including **25 mammals**



Feral cats and foxes kill around **7 million native animals** every day in Australia



Approximately **83% of all land clearing** between 2018-2021 occurred for agriculture



Over **90%** of Murray Darling Basin rivers are rated '**poor**' or **worse** for waterway health



Pests and weeds threaten over **70%** of **vulnerable species** and communities in NSW



66% of all **native vegetation clearing** on Rural Regulated Land between 2018-2021 is **unallocated**



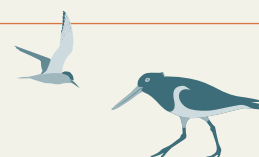
Only **8%** of **freshwater sites** sampled between 2018-2020 were **free from introduced fish**



Less than **10%** of some **grassy woodlands** remain



More than **650 pest animals** have been **introduced** to Australia



Migratory shorebird populations in eastern Australian have **declined by 73%**

¹ Note, some cleared land has been re-vegetated, and canopy cover increases on other land have not been assessed.

Sources: EPA 2021; DPIE 2020c; DPE 2023c; Stobo-Wilson et al 2022; DPE 2023d; Harwood et al 2022; DPIE 2020b; Nebel et al 2008

The principal operative provisions of the Act are deficient

The Review Panel found that the principal operative provisions of the Act, and their delivery, are deficient for the following key reasons:

- The Act's objectives lack primacy, being undermined by a range of other legislation including specific Acts relating to:
 - native vegetation management, including on rural land
 - land use planning and approvals
 - public and private native forestry.
- The effectiveness of the Act to restore, conserve and enhance biodiversity is limited.
- There is very limited data being collected on the effectiveness of the Act and there is little capacity to evaluate whether the Act and the Biodiversity Offsets Scheme are meeting the objects of the Act.
- Key programs are limited in scope, under-resourced and lack sufficient monitoring, reporting and evaluation.
- Key advisory resources, such as the Biodiversity Conservation Advisory Panel, are underutilised.
- The involvement of Aboriginal people in program design and on-ground implementation is not well developed.
 - There is a need to recognise the intrinsic relationship between biodiversity and Aboriginal culture, and embed Aboriginal participation at all levels – advisory, decision-making, implementation and delivery.
 - The Act does not adequately recognise the rights, culture and economic aspirations of Aboriginal people and communities.
- The regulatory provisions of the Act are complex and uncertain, with high compliance costs.
 - The Biodiversity Offsets Scheme provisions have not supported a supply of biodiversity credits sufficient to meet demand. While a significant increase in demand from large infrastructure projects has contributed to the challenge, and much has been done to expand supply, there is an opportunity to do more by adjusting regulatory settings.
 - Environmental considerations, and especially opportunities for avoidance and minimisation of biodiversity impacts, are not considered early enough in the development assessment and approval process.
 - The integrity of the Biodiversity Offsets Scheme is being compromised by payments being made into the Biodiversity Conservation Fund rather than credits being sourced directly. The balance standing in the fund is continually growing.
- Stakeholders lack access to transparent data to inform decisions about biodiversity impacts and biodiversity conservation.
- The Act needs to be strengthened to align with and contribute to national and global frameworks that have come into effect over the last five years, particularly the Kunming-Montreal Global Biodiversity Framework.

The Act's failure to achieve its principal purpose and objectives has serious implications

The failure of the Act to achieve its principal purpose is contributing to the continuing deterioration of the environment. This impacts the wellbeing of all citizens of NSW, particularly Aboriginal people and communities, for whom the loss of biodiversity presents as a loss of cultural integrity.

As in other parts of the industrialised world, the supplies of several ecosystem services critical to production, including fresh water, arable soils and waste absorption, are rapidly declining (IPBES 2019, Dasgupta 2021). Further environmental damage puts at risk prospects for continued growth in the significant portion of the economy that is dependent on healthy ecosystems.

The Review Panel notes that since the Act was legislated, global ambition has moved beyond biodiversity conservation to a ‘nature positive’ framing that emphasises the need to repair past damage and to take urgent action to halt and reverse biodiversity loss, putting nature on a path to recovery, so that thriving ecosystems can support future generations.

The [Second Reading Speech](#) that accompanied the Act’s presentation to the Parliament outlined the broad policy challenge in terms of a need to balance economic, social and environmental considerations. This ecologically sustainable development framing was commonplace at the time.

In the past few years, a consensus has emerged that this balancing act gives insufficient weight to the interests of future generations. The present generation is the principal beneficiary of government efforts to promote economic activity and address obvious social issues, whereas the burden of any consequential environmental damage, especially that which is irreversible, such as species loss, is overwhelmingly borne by future generations. Future generations are also those forced to bear the negative economic and social consequences of long-term environmental degradation.

Nature positive framing seeks to redress this imbalance. The Review Panel supports a nature positive framing of the Act, noting that this requires giving primacy to biodiversity considerations in a manner not previously contemplated.

The Review Panel recognises that achieving nature positive outcomes will pose significant challenges for government in balancing various priorities, for example, housing and associated infrastructure requirements to support a growing population. A nature positive framing of the Act requires a substantial change in mindset, policy and program design, and dedicated resourcing. However, the Review Panel considers that nature positive is not only an environmental necessity, but crucial for underpinning future economic growth and wellbeing.

What the Review Panel would like to see

The future wellbeing of the people of NSW rests upon beginning the repair of nature. The Review Panel considers that:

- In order to meet its objects, the Act should have primacy over competing pieces of legislation.
- Aboriginal people should be fully involved in the design and implementation of policy and programs designed to conserve and restore biodiversity.
- The Act should proactively address climate change impacts on biodiversity and ecosystems and the cumulative impact of biodiversity loss and loss of ecosystem connectivity.
- The Act should guide and promote investment in conservation and restoration activities, and should position NSW to take advantage of an emerging large-scale global investment in nature repair.
- Those affected by the regulatory provisions of the Act should have much greater certainty, face less complexity, and experience lower compliance costs, including through the development of a single spatial tool to clarify regulatory expectations.
- More needs to be done to expand credit supply by assisting landholders to enter Biodiversity Stewardship Agreements and giving greater credit value to restoring sites and protecting connected sites.

- Action should be taken to reduce the demand for credits through giving greater primacy to avoiding and minimising impacts, adjusting thresholds for small development and special measures to deal with very large projects to avoid crowding out the credit market.
- The focus of the Act should be shifted from threatened entities to strategic planning and management of biodiversity to ensure nature positive outcomes.
- All citizens should have confidence in the integrity of the programs administered under the Act.
- The government's response to this review should consider the Australian Government's reform of national legislation, ensuring alignment and streamlining where this does not impede NSW achieving its biodiversity objectives.

List of recommendations

A new nature positive architecture for NSW

Recommendation 1: Amend the Act to commit to an overarching object of ‘nature positive’, where biodiversity is protected, restored and improving, thereby ensuring the integrity of ecosystem services and cultural values, preserving opportunities for future generations.

Within that overarching object, the Act should commit to:

- halting and reversing biodiversity loss and ecosystem collapse
- restoring threatened species and ecosystems, ensuring the ecological and evolutionary potential of species and employing a landscape-level focus to building resilience and adaptive capacity, especially with respect to climate change
- zero human-induced extinctions of known threatened species
- a standard of net gain in biodiversity.

Recommendation 2: Amend the Act to require an independent body to undertake regular reviews (for example, every 5 years) to assess progress in achieving nature positive outcomes. The reviews should examine the extent to which other legislation is impacting the achievement of the objects of the Act, and be undertaken in consultation with the Biodiversity Conservation Advisory Panel and reported to the Minister for the Environment. The reviews should be made public, accompanied by a timely Ministerial response.

Recommendation 3: Tailored engagement with Aboriginal people and organisations should be a priority for government when responding to this review report.

Nature Positive Strategy

Recommendation 4: Amend the Act to require the Minister for the Environment, in consultation with the Biodiversity Conservation Advisory Panel, to develop and publish a Nature Positive Strategy.

Recommendation 5: The Act should establish processes for:

- incorporating traditional Aboriginal culture and knowledge in developing and maintaining the Nature Positive Strategy
- regular review and updating of the new Nature Positive Strategy
- monitoring, evaluation and reporting on progress.

Recommendation 6: The Biodiversity Conservation Trust’s investment planning should be aligned with the principles of the Nature Positive Strategy.

Recommendation 7: Amend the Act to improve the administrative and operational efficiency of the Biodiversity Conservation Trust. This should include consideration of a new type of agreement that excludes incompatible activities.

Nature positive spatial tools

Recommendation 8: Amend the Act to enable the development of a single spatial tool to ensure primacy of biodiversity considerations, support nature positive outcomes, and identify ‘no-go’ areas. The tool should be made by the Minister for the Environment.

Recommendation 9: The Act should establish processes for developing and maintaining the tool, including:

- incorporating traditional Aboriginal ecological knowledge
- public consultation on areas proposed for mapping
- review and amendment of mapped areas.

Recommendation 10: The draft Native Vegetation Regulatory map should continue to be rolled out. It should inform the development of the proposed single spatial tool.

Nature positive development

Recommendation 11: Amend the Act to set an objective for the Biodiversity Offsets Scheme to deliver a net positive biodiversity outcome and consider renaming the scheme to reflect this purpose.

Recommendation 12: Amend the Act to require a net gain for biodiversity by setting credit obligations for all development and clearing assessed through the Biodiversity Offsets Scheme at, say, 120% of calculated biodiversity loss.

Recommendation 13: Amend the Act to give the Minister for the Environment a call-in power to determine if a proposal for local development, or clearing requiring consideration by the Native Vegetation Panel under the *Local Land Services Act 2013* or under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP) would give rise to a serious and irreversible impact.

Recommendation 14: Amend the Act to give the Minister for the Environment a call-in power for major projects in determining a serious and irreversible impact and a concurrence role in determining if that impact should be approved.

Recommendation 15: Set a requirement in the Act to publish reasons for approving serious and irreversible impacts and maintain a statutory register of these decisions. All areas over which the Minister for the Environment considers a project would cause a serious and irreversible impact should be added to the single spatial tool as a 'no-go' area.

Recommendation 16: For local development:

- remove the test of significance pathway, as it results in inconsistent regulation of impacts
- explore ways to adjust the area thresholds and Biodiversity Values Map thresholds to better balance the regulatory burden for small developments with appropriate outcomes for biodiversity
- consider how best discretion is provided for and applied by the Minister for the Environment to switch off the Biodiversity Offsets Scheme for local development in exceptional circumstances.

Recommendation 17: Provide consent authorities with a clear power to retrospectively apply the Biodiversity Offsets Scheme to a development application if there has been pre-emptive clearing under a clearing entitlement to avoid the scheme applying.

Recommendation 18: Require proponents of Part 5 activities under the *Environmental Planning and Assessment Act 1979* to apply the Biodiversity Offsets Scheme if their proposed activity has impacts above the area threshold or affects land identified on the Biodiversity Values Map.

Recommendation 19: Simplify the rules and apply the Biodiversity Values Map and area clearing thresholds consistently to all development and clearing on non-rural land.

Recommendation 20: Amend the Act to require biodiversity certification when land is rezoned

for development where expected impacts trigger the area clearing thresholds or the Biodiversity Values Map.

Recommendation 21: Review the biodiversity certification process to address barriers and improve transparency and confidence in the outcomes it delivers.

Recommendation 22: Amend the Act to require a standard of genuine and demonstrable steps to avoid and minimise impacts. This may include consideration of how avoided land will be managed and maintained into the future.

Recommendation 23: Provide clearer guidance on the requirements to avoid and minimise impacts to biodiversity from development.

Recommendation 24: Require that steps taken to avoid and minimise impacts are included in conditions of consent and published.

Recommendation 25: Record avoided land on the statutory register and identify as ‘no-go’ areas in the single spatial tool.

Recommendation 26: Amend the Act to give the Minister for the Environment sole discretion to discount biodiversity credit requirements.

Recommendation 27: For certain government priority projects that give primacy to the environment:

- amend the Biodiversity Conservation Regulation 2017 to provide an option to enter an agreement with the Minister for the Environment to deliver an offset obligation in a way that provides certainty for biodiversity conservation, is aligned with a regional offset investment plan, delivers on-ground actions and generates credits on a like-for-like basis through entry into Biodiversity Stewardship Agreements, acquisition of land and conservation measures
- require the Minister for the Environment to publish details of any such decision and publicly report on the outcomes achieved.

Recommendation 28: Continue to invest in the Biodiversity Credits Supply Fund to accelerate the supply of in-demand credits and support development of the credit market.

Recommendation 29: Amend the Act to require proponents to demonstrate they have undertaken genuine and demonstrable steps to find like-for-like credits before allowing payment into the Biodiversity Conservation Fund.

Recommendation 30: Amend the Act to allow the Environment Agency Head to publish a list of credit types from time to time and subject to transparent criteria for which payment into the Biodiversity Conservation Fund is not permitted because the credits are readily available on the market.

Recommendation 31: Require the Biodiversity Conservation Trust to acquit obligations that are paid into the Biodiversity Conservation Fund within a set time period. If the time period is not met, require the Trust to publish reasons and a plan for using the funds, consistent with the Nature Positive Strategy and areas of high biodiversity values identified in the single spatial tool. The plan should be approved by the Minister for the Environment.

Recommendation 32: Review the like-for-like credit rules to identify if they can be simplified to support effective operation of the market without compromising biodiversity outcomes.

Recommendation 33: Amend the Regulation to remove the option to meet a credit obligation through a commitment to ecological mine site rehabilitation.

Recommendation 34: Set a requirement in the Act for the Environment Agency Head to maintain a public register of biodiversity credit obligations and how credit obligations are met.

Recommendation 35: Set a requirement in the Act that relevant decision makers must provide the information required for any new statutory registers created, such as for credit obligations, avoided lands and projects with serious and irreversible impacts. Provide support and guidance to local councils and other decision-makers to meet this reporting requirement.

Recommendation 36: Develop fit for purpose digital systems that allow for consistent, real time and automated information collection for all statutory registers.

Recommendation 37: Provide greater incentives, including increased credit yield, to:

- encourage active restoration of degraded ecosystems and the reintroduction of species at biodiversity stewardship sites
- encourage the protection of areas of strategic biodiversity values, such as those that provide habitat connectivity and landscape resilience.

Recommendation 38: Amend the Act to provide the Biodiversity Conservation Trust with power to require landholders to commence active management of biodiversity stewardship sites.

Recommendation 39: Review the additionality provisions of the Act, Regulation and Biodiversity Assessment Method. Consider allowing all land types to participate in the supply of credits, subject to strict application of transparent additionality principles. If public lands are used to generate credits, require independent review of the outcomes achieved, with public reporting.

Recommendation 40: Amend the Act to increase administrative efficiencies and optimise management of the Biodiversity Stewardship Payments Fund. This may include allowing the Biodiversity Stewardships Payments Fund to be managed as a single fund with subaccounts.

Species and ecosystem recovery

Recommendation 41: Amend the Act to ensure the Biodiversity Conservation Program is focused on halting and reversing biodiversity loss and ecosystem collapse, restoring threatened species and ecosystems, and zero human-induced extinctions of known threatened species.

Recommendation 42: Amend the Act to require the Department of Planning and Environment to measure and publicly report on the status and trajectory of each species and ecological community, every five years.

Recommendation 43: As part of the Nature Positive Strategy, the Department of Planning and Environment should publish a statement every 5 years detailing how listed key threatening processes are being addressed.

Recommendation 44: The Department of Planning and Environment should undertake rapid assessments on behalf of the Threatened Species Scientific Committee and advise on priorities for assessment, without compromising the independence of the committee.

Recommendation 45: Examine the administrative arrangements and legislative provisions relating to wildlife use, rescue and rehabilitation to ensure a robust framework.

Recommendation 46: Consider the approach to funding accredited wildlife hospitals and reimbursing veterinary practices for costs incurred in treating injured wildlife.

Data-informed decision-making

Recommendation 47: Charge the Environment Agency Head with responsibility for the collection and management of environmental data to ensure agreed reporting standards and definitions (i.e. a single source of truth).

Recommendation 48: Require other agencies to meet the Department of Planning and Environment's requests for biodiversity data, in a timely fashion and in a format determined by the Department.

Recommendation 49: Invest in contemporary, reliable and decision-ready information systems that enable the capture, storage, management, interrogation and translation of data to inform reporting on biodiversity at landscape scale in real time.

Recommendation 50: Invest in the development of a comprehensive set of natural capital accounts for NSW, suitably regionally disaggregated, that provide science-based natural capital baselines, and report changes in natural capital over time.

Leveraging private investment

Recommendation 51: Continue to explore the role that government might play in driving the development of natural capital markets.

Recommendation 52: Facilitate the investigation and development of instruments and methods that overcome barriers to participating in emerging nature markets and valuing and investing in natural capital.

Recommendation 53: Consider opportunities for, and resolve obstacles to, landholders establishing multiple credit types on a parcel of land.

Recommendation 54: Review incentives for private sector investment and other mechanisms to support private and public land restoration and conservation investment and outcomes.

Intersections with other Acts

Recommendation 55: Consider whether the current institutional arrangements could be improved to ensure environmental considerations have the primacy required for achieving a nature positive outcome.

Recommendation 56: Consider legislative reform to align relevant Acts with a nature positive outcome.

Recommendation 57: Mandate reporting requirements for public authorities to demonstrate progress towards nature positive.

Recommendation 58: Consider including a legislative amendment allowing remediation orders to be registered on title to improve remediation outcomes by passing the remediation obligations to future owners.

About the Review

The *Biodiversity Conservation Act 2016* commenced on 25 August 2017. In accordance with section 14.11 of the Act, the Minister for the Environment must conduct a review of the Act after five years of its provisions coming into effect.

The purpose of the review is to assess the continued relevance of the Act's objectives and the appropriateness of its provisions in achieving those objectives.

An independent review was led by Dr Ken Henry AC, supported by Mr Mike Mrdak AO, Dr John Keniry AM and Distinguished Professor Michelle Leishman (the Review Panel).

The Review Panel examined the effectiveness of the current architecture of the Act and considered the impacts of other legislation on achieving the stated objects of the Act. The scope of the review is detailed in the [Terms of Reference](#).

The review of the Act was carried out separately but at the same time as the statutory review of the native vegetation provisions of the *Local Land Services Act 2013* (LLS Act).

More information on the LLS Act review can be found on the [Local Land Services website](#).

The Review Panel also considered the findings and recommendations of previous reviews that relate to the operation of the Act. These include:

- Audit Office of NSW performance audit into the [management of native vegetation in rural areas and then government response](#).
- [Natural Resources Commission \(NRC\) report](#) on a policy review trigger. The then [government response](#) to the report is available on the NRC website.
- Audit Office of NSW performance audit on the [Effectiveness of the Biodiversity Offsets Scheme and then government response](#).
- Legislative Council inquiry into the [Integrity of the Biodiversity Offsets Scheme](#). The then Government response was tabled in February 2023.

The Review Panel released a consultation paper for public feedback on 28 February 2023. The consultation period was initially for 6 weeks, closing on 11 April, but was extended to 21 April. 193 submissions were received from individuals and stakeholder/non-government organisations and 786 form submissions were received.

Public submissions are available at the [Act review website](#).

During the review period, the Review Panel met with a range of environment, planning, industry, Aboriginal, academic, community and government stakeholders. The Review Panel also attended site visits in the North Coast of NSW and Cooma-Monaro area.

This report has been provided to the Minister for the Environment.

PART 1

Architecture and key pillars

Section 1. Scope and application of the Act

Review findings

Much has changed in the five years since the objects of the Act were crafted. The current objects are no longer fit to address current and future biodiversity challenges.

The objects of the Act emphasise the need to ‘maintain’ a healthy and resilient environment, consistent with the principles of ecologically sustainable development. This ‘protect and conserve’ paradigm is out of step with contemporary global and national ambitions to pursue a ‘nature positive’ future.

The Act is not meeting its objects and is very likely never to do so. In the Review Panel’s view, the policy failure is due to two things. First, many of the operative provisions of the Act are limited in scope. Second, the Act lacks statutory primacy.

The objects and architecture of the Act should be rewritten to align with the ambition of the Global Biodiversity Framework and give effect to a nature positive approach.

The current objects

The underlying purpose of the Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

The first two objects aim to conserve and maintain biodiversity and ecosystem services. The remaining objects provide a general understanding of the purpose of the operative provisions of the Act.

During consultation, the Review Panel heard:

- The objects are not fit for the purpose of halting and reversing biodiversity loss and should be targeted to improve biodiversity condition, recover species and prevent further extinctions.
- The objects of the Act are outdated and need to be brought into line with international and national commitments, with an emphasis on restoration.

International and national reform agendas

Momentum for ambitious reform is building around the world and across a range of sectors.

The consensus among global leaders is that the environment is now so badly degraded that biodiversity agendas must aim for more than just biodiversity conservation. They must instead aim to protect, restore and improve natural ecosystems to reverse the trajectory of decline.

New approaches to valuing biodiversity and integrating natural capital considerations into economic and financial decision-making are gaining traction; governments are recognising the need to partner with the private sector to secure outcomes at scale.

Australia’s environment ministers recognise the need to act now, and agreed to work together to build a nature positive Australia where we protect more of what’s precious, manage nature better for the future and repair more of what’s damaged (DCCEE 2023).

The adoption of the [Kunming-Montreal Global Biodiversity Framework](#) is a significant outcome. This new framework calls for urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet.

The Australian Government's [Nature Positive Plan: better for the environment, better for business](#) (published December 2022) sets out its commitment to reform the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to deliver better environmental protections that support nature positive initiatives.

Environment ministers have agreed to take shared action to address the biodiversity crisis. They have agreed to set ambitious national targets, in line with the Global Biodiversity Framework, by mid-2024.

The Australian Government priority for 2023 is to consult on new nature positive laws and national environmental standards, with details of the legislation to be released for broad consultation in the second half of 2023.

The national reform agenda has direct implications, and opportunities, for NSW legislative and policy settings.

Operationalising the objects of the Act

Through the consultation process, evidence was provided to the Review Panel that highlighted inadequacies with the operation of Act.

A number of stakeholders recommended that the objects of the Act need to be better operationalised and noted that certain objects are not supported by specific provisions, for example, supporting climate change adaptation, promoting landscape connectivity and embedding Aboriginal knowledge.

The Review Panel heard examples of how the Act's objects are undermined by a range of factors, including:

- the limited scope of the Act's operative provisions
- the effect of other legislation
- the complexity and costs associated with the Biodiversity Offsets Scheme
- a lack of monitoring, evaluation and reporting.

Throughout this report, we share what we have heard from stakeholders.

Objects of the *Biodiversity Conservation Act 2016*

The purpose of this Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development,² and in particular—

- a. to conserve biodiversity at bioregional and State scales, and
- b. to maintain the diversity and quality of ecosystems and enhance their capacity to adapt to change and provide for the needs of future generations, and
- c. to improve, share and use knowledge, including local and traditional Aboriginal ecological knowledge, about biodiversity conservation, and
- d. to support biodiversity conservation in the context of a changing climate, and
- e. to support collating and sharing data, and monitoring and reporting on the status of biodiversity and the effectiveness of conservation actions, and
- f. to assess the extinction risk of species and ecological communities, and identify key threatening processes, through an independent and rigorous scientific process, and
- g. to regulate human interactions with wildlife by applying a risk-based approach, and
- h. to support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature, and
- i. to support and guide prioritised and strategic investment in biodiversity conservation, and
- j. to encourage and enable landholders to enter into voluntary agreements over land for the conservation of biodiversity, and
- k. to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity, and
- l. to establish a scientific method for assessing the likely impacts on biodiversity values of proposed development and land use change, for calculating measures to offset those impacts and for assessing improvements in biodiversity values, and
- m. to establish market-based conservation mechanisms through which the biodiversity impacts of development and land use change can be offset at landscape and site scales, and
- n. to support public consultation and participation in biodiversity conservation and decision-making about biodiversity conservation, and
- o. to make expert advice and knowledge available to assist the Minister in the administration of this Act.

² Principles of ecologically sustainable development are described in s 6(2) of the *Protection of the Environment Administration Act 1997* (NSW). They include (a) the precautionary principle, (b) inter-generational equity and (c) conservation of biological diversity and ecological integrity.

Section 2. A new nature positive architecture for NSW

Review findings

Just as NSW has led the country in setting an ambitious plan to reach net zero emissions, the State should now commit to a goal of equivalent ambition for biodiversity. The wellbeing of the people of NSW depends upon a strong policy commitment to ‘nature positive’.

Substantial reform is needed to deliver a nature positive state for NSW. Nature positive demands a shift in mindset and a willingness to prioritise biodiversity concerns in decision-making.

What does nature positive mean?

Nature positive means our environment is being repaired and regenerated. This contrasts with traditional sustainability approaches, which have sought to minimise negative impacts by slowing or stabilising the rate of biodiversity loss.

For centuries, economic development has largely ignored the inescapable primacy of the environment. Ultimately, this has damaged both the environment and development. A nature positive approach recognises nature as essential for human well-being and economic development.

The economic case for a nature positive approach

Human progress relies on industrial production that includes extraction of non-renewable raw materials and ecosystem services like fresh water, forests, marine life, arable soils and various natural waste absorbers. Both raw materials and ecosystem services are provided by nature, generated from a stock of natural capital.

As well as supplying services to industrial production, the stock of natural capital gives humans life-support services, provides cultural values and the opportunity to enjoy environmental amenity.

Environmental degradation and production

The extraction of non-renewable natural resources depletes the stock of natural capital, which has been further depleted by the rate of industrial absorption of ecosystem services exceeding the regenerative capacities of nature. This depletion of natural capital results in a diminishing future capacity to supply ecosystem services critical to production. For example, soil fertility and the waste absorption capacity of the biosphere have declined over time. A degraded biosphere also affords less protection from fire, floods and storms.

Sustainability

There is a significant risk of the stock of natural capital having been so diminished by human activity that it will be incapable of permitting future generations to meet even their material needs (Dasgupta 2021).

Environmental degradation also diminishes the quality of environmental amenity. Human-induced species extinction provides a particularly stark illustration, since it denies every future generation the opportunity to appreciate the existence of something that earlier generations have enjoyed. In that loss of opportunity, there is a loss of wellbeing (Sen 2004).

Most importantly, for Aboriginal people every element of the biosphere has cultural meaning and significance. Thus, a commitment to zero human-induced extinctions is a necessary component of sustainability, and a minimum pre-condition for nature positive.

Despite increasing labour productivity, based on capital accumulation and technological innovation, our human activities have continued to degrade the stock of natural capital, and the rate of degradation is growing. Technological innovation may play a role in compensating for diminishing non-renewable resources and ecosystem services. However, the emerging consensus is that no amount of technological progress can underwrite traditional models of economic growth indefinitely (Dasgupta 2021).

Nature positive and reframing policy design

The dependence of production on a diminishing stock of natural capital provides a motivation for a nature positive approach (a broader rationale is presented in Locke et al. 2021). A more confronting case for 'nature positive' is a growing concern that environmental damage may have already gone too far, and that nature repair and restoration are critical to maintaining our present standard of living.

Without a radical reframing of public policy, humanity faces a future of both environmental degradation and declining living standards. Nature positive requires current policy design that permits environmental degradation to be turned on its head, to give primacy to environmental condition (the stock of natural capital).

New objects

The Review Panel recommends that the current objects of the Act be replaced with new objects that align with a nature positive goal.

Recommendation 1: Amend the Act to commit to an overarching object of 'nature positive', where biodiversity is protected, restored and improving, thereby ensuring the integrity of ecosystem services and cultural values, preserving opportunities for future generations.

Within that overarching object, the Act should commit to:

- halting and reversing biodiversity loss and ecosystem collapse
- restoring threatened species and ecosystems, ensuring the ecological and evolutionary potential of species and employing a landscape-level focus to building resilience and adaptive capacity, especially with respect to climate change
- zero human-induced extinctions of known threatened species
- a standard of net gain in biodiversity.

The Review Panel's view is that, even with fundamental reform of the Act, whole of government action is required to achieve a nature positive outcome. The new architecture will not be successful without better integration and consistency of legislation affecting land use across the State, and outcomes rigorously assessed and publicly reported. The need for better aligned legislation is outlined in Part 3 of this review.

Recommendation 2: Amend the Act to require an independent body to undertake regular reviews (for example, every 5 years) to assess progress in achieving nature positive outcomes. The reviews should examine the extent to which other legislation is impacting the achievement of the objects of the Act, and be undertaken in consultation with the Biodiversity Conservation Advisory Panel and reported to the Minister for the Environment. The reviews should be made public, accompanied by a timely Ministerial response.

Moving to nature positive is also about protecting culture

The Review Panel recognises the deep spiritual and cultural connection of Aboriginal people to the land and water, and its biodiversity. The Review Panel acknowledges that Aboriginal culture and knowledge will underpin a nature positive approach.

While there has been some progress, the Review Panel considers that opportunities to support cultural practice, biodiversity recovery and appropriate use of knowledge shared by Aboriginal people must be substantially improved.

The Review Panel found there is a need to better recognise the intrinsic relationship between biodiversity and Aboriginal culture, and embed Aboriginal participation at all levels – advisory, decision-making, implementation and delivery.

The Review Panel heard:

- Biodiversity, totems, bush tucker and Caring for Country hold significant cultural importance for Aboriginal communities.
- There is an opportunity to foster greater Aboriginal participation in conservation programs such as Saving our Species and for traditional Aboriginal ecological knowledge to be better incorporated into program design and implementation.
- The Biodiversity Offsets Scheme is creating a financial barrier to Aboriginal people to meet social and economic aspirations for managing their land.
- The Act does not recognise the rights of Aboriginal people to biodiversity beyond an individual's 'domestic' use.
- There is a lack of Aboriginal representation on bodies such as the Biodiversity Conservation Advisory Panel, Biodiversity Conservation Trust and the NSW Threatened Species Scientific Committee.

The Review Panel acknowledges that more comprehensive engagement with Aboriginal people is needed beyond the timeframes for this review.

Recommendation 3: Tailored engagement with Aboriginal people and organisations should be a priority for government when responding to this review report.

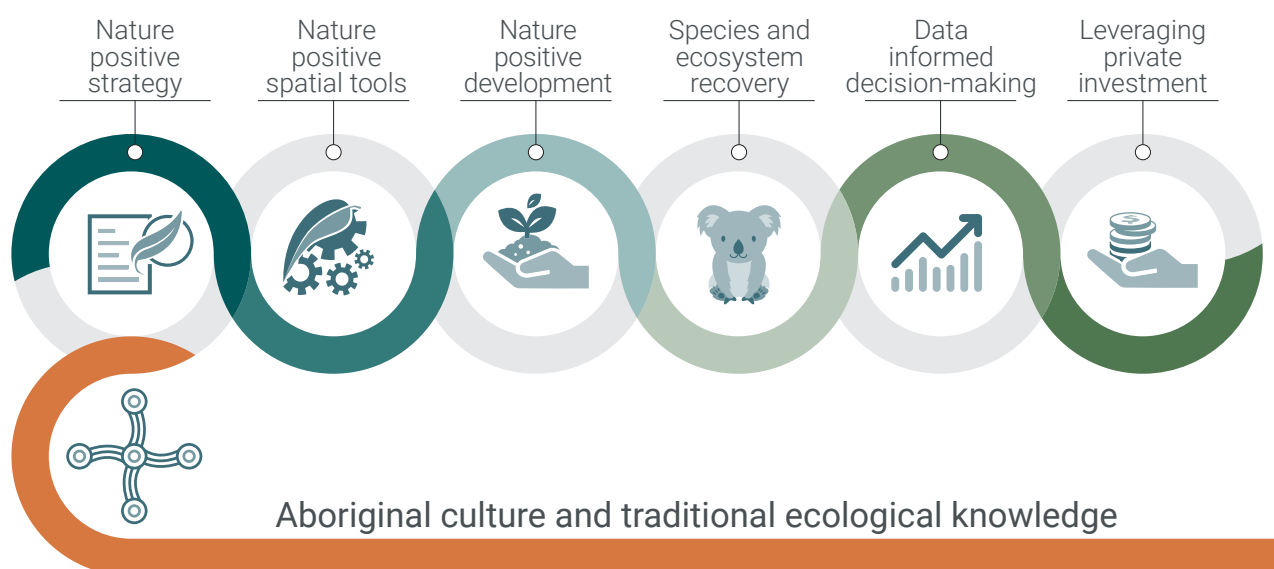
Section 3. Pillars for a nature positive strategy for NSW

The Review Panel recommends fundamental reform, including a new legislative architecture, to deliver nature positive outcomes. The new architecture is centred around six key pillars:

1. Nature positive strategy
2. Nature positive spatial tools
3. Nature positive development
4. Species and ecosystem recovery
5. Data-informed decision-making
6. Leveraging private investment.

These pillars are interconnected. They must work together to achieve a nature positive set of outcomes. And all pillars should be informed by the perspectives of Aboriginal people.

Transforming to nature positive



Pillar 1: Nature positive strategy

Review findings

An integrated Nature Positive Strategy is needed to guide prioritised and strategic actions and investment across different land tenures by government.

There is an opportunity for the Biodiversity Conservation Advisory Panel to have a more active role and support the development of a new Nature Positive Strategy.

Biodiversity Conservation Investment Strategy

The Review Panel notes the legislative intent of a Biodiversity Conservation Investment Strategy (BCIS) was to guide government and the Biodiversity Conservation Trust (BCT) in prioritising investment in biodiversity conservation. In practice, the principles and targets in the current [BCIS](#) serve as a roadmap for the BCT's private land conservation activity.

The Review Panel heard the BCIS has been successful in guiding the BCT's investment, but it has not been used more broadly to guide NSW Government investment in biodiversity conservation.

Since 2017, 430 landholders have entered, or plan to enter, a conservation agreement with the BCT, creating conservation areas across 308,116 hectares. The BCT has invested close to \$250 million to support these agreements.

A new Nature Positive Strategy

The Review Panel considers an overarching Nature Positive Strategy is needed to better support prioritised investment and actions for government across all land tenures.

The Nature Positive Strategy should set principles for achieving nature positive outcomes in NSW, with reference to (but not limited by) national biodiversity targets.

The Nature Positive Strategy should be integrated, connecting multiple programs and initiatives (including the national parks, private land conservation, threat management, threatened species and ecosystem recovery and restoration), and set overarching objectives to promote biodiversity outcomes across both private and public land.

The Nature Positive Strategy could be supported by a series of implementation plans to guide targeted action and integrated implementation. Implementation plans should include outcomes targets, accountabilities and indicators to measure progress.

The Nature Positive Strategy should use a single spatial tool (see Pillar 2) to identify areas of high biodiversity value, priority areas for restoration, connectivity and climate adaptation that should be prioritised for investment. It should draw on high quality data to support the design of policy and on-ground delivery programs (see Pillar 5).

Building on achievements to date, the Review Panel considers there is an opportunity for the BCT to undertake strategic investments, in line with the Nature Positive Strategy, with the assessment of priority ecosystems and an ecosystems-based approach including landscape connectivity and reserve design principles.

The Review Panel heard that the Biodiversity Conservation Advisory Panel, established to provide expert biodiversity advice to the Minister for the Environment, is underutilised. There is an opportunity for the Biodiversity Conservation Advisory Panel to inform the New Nature Positive Strategy.

Recommendation 4: Amend the Act to require the Minister for the Environment, in consultation with the Biodiversity Conservation Advisory Panel, to develop and publish a Nature Positive Strategy.

Recommendation 5: The Act should establish processes for:

- incorporating traditional Aboriginal culture and knowledge in developing and maintaining the Nature Positive Strategy
- regular review and updating of the new Nature Positive Strategy
- monitoring, evaluation and reporting on progress.

Recommendation 6: The Biodiversity Conservation Trust's investment planning should be aligned with the principles of the Nature Positive Strategy.

The Nature Positive Strategy could better support private land conservation

The Review Panel heard the Act supports world leading private land conservation initiatives. These initiatives should be a key component of a Nature Positive Strategy.

The BCT is established under the Act as the statutory authority to enter into private land conservation agreements with interested landholders. The BCT has a range of delivery mechanisms and agreements to suit different landholder needs. These include:

- Wildlife refuge agreements: on title, entry-level agreements with grant funding available for conservation actions.
- Conservation agreements established via the Conservation Partners Program: on title, in-perpetuity partnerships with grant funding available for conservation actions.
- Conservation agreements established via the Conservation Management Program: on-title, in-perpetuity or fixed term agreements with annual conservation management funding for landholders in eligible areas.

Feedback widely supported the continued use of private land conservation agreements and initiatives, while also identifying opportunities to strengthen the role of private land conservation.

The Review Panel heard, in relation to activities undertaken by the BCT, that:

- There are inefficiencies in fund arrangements, terminology and provisions in the Act that are hindering the BCT in delivering best possible outcomes for biodiversity, including engagement with Aboriginal people.
- Stronger provisions are needed to protect land under a conservation agreement from incompatible land use, such as mining exploration. This increased level of security would be attractive to private investors seeking to ensure high integrity nature positive investments.

Recommendation 7: Amend the Act to improve the administrative and operational efficiency of the Biodiversity Conservation Trust. This should include consideration of a new type of agreement that excludes incompatible activities.

Pillar 2: Nature positive spatial tools

Review findings

There is a need for stronger planning to achieve nature positive outcomes, in particular, promoting landscape connectivity and ecosystem resilience.

Strategic land use planning does not currently accord primacy to biodiversity considerations.

Identifying and providing robust information on biodiversity in a single spatial tool will enable upfront consideration of biodiversity, provide certainty and ensure consistent and strategic decisions, supporting nature positive outcomes.

The need for a single spatial tool

The Review Panel heard about the mapping products developed by the Environment and Heritage Group of the Department of Planning and Environment (the Department) to support the operation of the Act and the native vegetation provisions of the LLS Act. These include the:

- Biodiversity Values Map, which is used as a Biodiversity Offsets Scheme entry test for some types of development.
- Native Vegetation Regulatory map prepared under the LLS Act to regulate clearing of native vegetation.
- Map of Priority Investment Areas in the BCIS to guide private land conservation investment.

The Native Vegetation Regulatory map has not, for the most part, yet been published. The Review Panel heard that this has caused frustration for a broad cross-section of stakeholders.

While each tool has been developed to serve a particular purpose, the Review Panel considers that a single spatial tool should be developed to ensure primacy of biodiversity considerations, transparency and consistency, and support nature positive outcomes. The single spatial tool would support better decision-making and provide upfront investment certainty for developers, landholders and government agencies. Each existing tool should be used to inform the single spatial tool.

The single spatial tool should identify areas that cannot be developed or cleared ('no-go' areas). Identification of these areas should be based on the scientific criteria currently used to declare Areas of Outstanding Biodiversity Value (see Role of Outstanding Areas of Biodiversity Value below). They should include recognised 'areas of high biodiversity value', for example, World Heritage areas and Ramsar wetlands, areas of strategic importance to biodiversity such as habitat corridors and climate refugia and areas that have been declared 'avoided' for the purposes of the Biodiversity Offsets Scheme, including as a consequence of biodiversity certification.

The Review Panel considers that each 'no-go' area should be accompanied by a limited list of permitted activities. Permitted activities would be activities that have a negligible impact on the values being protected. In some 'no-go' areas, no activities would be permitted because of the fragility of the protected values.

Consideration could be given as to whether the Minister for the Environment should have the ability to approve impacts in 'no-go' areas in exceptional circumstances (see Part 2). 'No-go' areas should be a consideration for ongoing investment and management (see Pillar 1).

While still in development at the time of this review, the Australian Government's agenda to develop regional plans is built around a three-level identification of environmental values (low, medium and high), using this classification to identify Conservation Priority Areas and Development Priority Areas.

'Areas of high biodiversity value', identified as 'no-go' areas for development and clearing in NSW, could be utilised by the Australian Government's regional planning agenda.

The single spatial tool should also identify priority areas for restoration, landscape connectivity and climate change adaptation. The tool should be updated as new data becomes available.

Recommendation 8: Amend the Act to enable the development of a single spatial tool to ensure primacy of biodiversity considerations, support nature positive outcomes, and identify 'no-go' areas. The tool should be made by the Minister for the Environment.

Recommendation 9: The Act should establish processes for developing and maintaining the tool, including:

- incorporating traditional Aboriginal ecological knowledge
- public consultation on areas proposed for mapping
- review and amendment of mapped areas.

Role of Areas of Outstanding Biodiversity Value

The Review Panel notes the intent of identifying an Area of Outstanding Biodiversity Value (AOBV), utilising scientific criteria based on international standards, is to protect areas of high biodiversity value.

A number of submissions noted that the AOBV provisions of the Act have been underutilised, with no new AOBVs having been declared under the Act. The Review Panel also notes that of the AOBVs (formerly critical habitat declared under the repealed *Threatened Species Conservation Act 1995*), only one – for the endangered population of Little Penguins at Manly – occurs on multiple land tenures. The remaining AOBVs occur within national parks or nature reserves.

The Review Panel considers the intent of AOBVs will be achieved and captured, with their criteria continuing to be utilised, through the single spatial tool and the identification of 'no-go' areas – rendering the process of declaring an AOBV redundant.

Status of the Native Vegetation Regulatory map and other mapping products

The Review Panel notes since the NSW Audit Office's performance audit into the management of native vegetation in 2019, a draft Native Vegetation Regulatory map was released for [11 Local Government Areas](#). The draft map does not have legal effect.

The Review Panel understands the draft Native Vegetation Regulatory map is to be published in stages, with the map being finalised only after its accuracy is fully tested in consultation with landholders.

The Review Panel notes that the Biodiversity Values Map and map of Priority Investment Areas will continue to operate until the single spatial tool is made. Consideration should be given to how best to integrate existing mapping products with the new single spatial tool.

Recommendation 10: The draft Native Vegetation Regulatory map should continue to be rolled out. It should inform the development of the proposed single spatial tool.

Pillar 3: Nature positive development

Review findings

To support a nature positive future, development in NSW must be biodiversity positive, underpinned by best practice principles.

Outcomes achieved through the Biodiversity Offsets Scheme must be strengthened by identifying upfront ‘no-go’ areas where development cannot occur. There should be a clear and enforceable standard, set out in legislation, for avoiding and minimising impacts. Offset obligations must be set above the current no net loss calculations with very limited discretion to move away from the requirements.

The Minister for the Environment must have a central role in determining development impacts that present, or contribute to, a risk of species extinction or ecosystem collapse. There must be greater confidence that like-for-like offsets will be delivered.

While the biodiversity outcomes of the scheme are strengthened, it must also work for participants. The rules around the application of the scheme should be rationalised and more help given to participants in the scheme. While government should continue to support the operation of the market by encouraging a supply of credits to match demand, government’s role should be regularly monitored.

Given the significant investment in in-perpetuity protection being made through the Biodiversity Offsets Scheme, the government should consider tailoring the offsets market to facilitate the delivery of strategic biodiversity outcomes in the State.

Barriers to the supply of credits should be addressed, with landholders incentivised to protect strategically important areas and actively restore degraded sites.

There may be exceptional circumstances where discretion is needed to move away from core principles. In these instances, there must be full transparency and public accountability for decisions. The outcomes of the scheme overall must be more transparent, with tracking and public reporting on the delivery of offset obligations.

The Act settings alone cannot guarantee biodiversity positive development. That rests on primacy being given to the environment in intersecting pieces of legislation.

As the Australian Government reforms the EPBC Act, consideration should be given to ensuring ongoing alignment and streamlining where this does not detract from NSW achieving its biodiversity conservation objectives.

The current Biodiversity Offsets Scheme

Note: Part 2 of this report provides full detail of the Review Panel’s considerations and recommendations in relation to nature positive development.

The Act establishes the Biodiversity Offsets Scheme to avoid, minimise and offset impacts of development on biodiversity, and integrates with the *Environmental Planning and Assessment Act 1979*. The main parts of the scheme established in the Act include:

- entry requirements to determine which developments and activities will be captured by the scheme
- a Biodiversity Assessment Method (BAM) to measure biodiversity loss and gain at development and offset sites to a standard of no net loss of biodiversity, and provisions for accrediting people to apply the method

- rules setting out how decision-makers must consider biodiversity assessment reports, including determining potential serious and irreversible impacts (SAII) and setting credit obligations
- rules for developers to meet their credit obligations, including the option to transfer credit obligations to the BCT by paying into a fund, and the definition of a like-for-like offset
- the creation of biodiversity credits, which quantify biodiversity gains calculated using the BAM (with a large number of credit types, reflecting the range of ecosystems and species in NSW)
- requirements for Biodiversity Stewardship Agreements (BSAs) to create those credits, and requirements for payments to be made into the Biodiversity Stewardship Payments Fund to provide a long-term funding source for management actions established under these agreements
- market-based conservation mechanisms, which enable the transfer of biodiversity credits.

Reviews have identified a range of issues with the scheme

The scheme has been subject to considerable scrutiny since it commenced, and a range of improvements have been made to address issues as they have emerged.

Feedback from participants highlighted that the scheme can be complex to navigate, emphasising the need for more guidance and support. It is evident that the creation of biodiversity credits has not been keeping up with the demand for like-for-like credits. In addition, good quality, accessible market information has been lacking. This has led to a reliance on transferring obligations to the BCT through payments to the Biodiversity Conservation Fund.

Concerns have been raised about a lack of transparency in the scheme's operation and outcomes. For example, there is limited transparency concerning whether developers are avoiding impacts, what credit obligations are being imposed, and how projects are being offset. This has undermined trust and confidence in the scheme.

Several high-profile credit transactions in western Sydney have also raised concerns about potential conflicts of interest, profiteering and lack of transparency by participants in the scheme and government agencies, prompting a Parliamentary Inquiry and informing a performance audit of the scheme by the NSW Audit Office.

Potential for the scheme to deliver much-needed investment in restoration

Despite these issues, funding for ecosystem and threatened species habitat restoration is being achieved through the scheme, by landholders entering into BSAs and selling biodiversity credits. The scheme (including under the previous BioBanking Scheme) has secured 59,521 hectares of land under permanent conservation since 2010 (275 agreements), including 21,902 hectares in 2022-23 (41 agreements creating 180,000 credits) through the new Biodiversity Credits Supply Taskforce.

Biodiversity stewardship sites form part of the broader NSW protected area network. Restoration activities on biodiversity stewardship sites benefit a wide range of threatened and non-threatened biodiversity, in addition to those recognised in biodiversity credits. The sites also help deliver strategic conservation objectives, for example, by improving connectivity between other reserved areas and providing broader ecosystem services, such as the supply of clean air and water, soil conservation and carbon sequestration.

Funds from the sale of biodiversity credits provide annual payments to landholders to ensure delivery of weed and pest management and restoration. Payments of \$11.8 million were made to landholders in the year to 31 March 2023 from the Biodiversity Stewardship Payments Fund, which now totals more than \$240 million.

The NSW biodiversity market is currently worth over \$675 million, based on credit sales since 2010, including under the previous BioBanking Scheme (\$140 million in 2022-23). As a result of growing

awareness of opportunities under the scheme, more regional landholders are seeking support to establish BSAs and to create biodiversity credits to sell. Over 290 Stewardship Expressions of Interest were made by landholders in 2022-23 for support to establish BSAs (around 200,000 hectares), underlining the potential of the scheme to achieve more for conservation. This is an important increase in interest, but much more is needed.

Distribution of Stewardship Expressions of Interest 2022-23



Significant improvements have been made within existing settings

Over the last 18 months, the Department has delivered critical improvements through a comprehensive improvements program that has benefited from independent oversight.

Significant effort and investment have gone into improving the scheme, including:

- supporting landholders to establish BSAs, including offering biodiversity assessments at no upfront cost for in-demand credits (paid when credits are sold), waiving application fees and providing targeted support
- increasing the rate at which land is secured for conservation
- implementing a new charge system for calculating payments into the Biodiversity Conservation Fund to better reflect landholder costs to generate credits and the costs to the BCT of acquiring these credits
- establishing the Biodiversity Credits Supply Fund, which has sourced \$75 million in biodiversity credits since beginning operation in October 2022, to improve market function and provide developers with an alternative means of securing offsets through purchase of like-for-like credits

- engaging the Independent Pricing and Regulatory Tribunal (IPART) to monitor and report on performance and competition in the credits market to support transparency and confidence in the scheme
- developing a compliance and assurance framework for Accredited Assessors and conducting audits to improve the quality and accountability of assessors
- implementing a comprehensive conflict of interest protocol to tightly regulate NSW Government staff participation in the scheme.

Amendments to the Biodiversity Assessment Method would support delivery of the scheme

The BAM is the scientific method of assessing site biodiversity values that underpins the scheme. It sets out requirements for preparing biodiversity assessment reports in line with the provisions of the Act.

The Review Panel notes that the BAM is currently the subject of a five-year review, being undertaken by the Department on behalf of the Minister for the Environment. Close alignment between the Act and BAM reviews is critical. The BAM review is considering the potential to reduce complexity to lower compliance costs and support the market, without compromising the integrity of biodiversity assessments and decision-making. Reducing complexity should lower assessment costs and facilitate a more efficient delivery of biodiversity outcomes. In particular, the BAM review is focusing on its usability in different circumstances (such as large sites or during periods of flood or drought) and exploring whether gain predictions can be strengthened and credit yield increased for strategic protection and restoration.

Post-review, there will continue to be opportunities to make ongoing improvements to the BAM to make biodiversity assessment in NSW faster, easier and cheaper. Careful analysis will be required to ensure that implications for stakeholders and the integrity of operation of the biodiversity offsets market are appropriately considered. The Review Panel heard that further training and guidance is needed to support the application of the BAM.

Legislative reform could address remaining challenges and improve outcomes

The Review Panel considers that while improvements have been delivered, there are still significant issues with the scheme. The diverse and strongly held views the Review Panel heard during consultation, and the outcomes of the NSW Audit Office's performance audit and Parliamentary Inquiry, confirm this.

Improvements delivered to date have been made within the existing legislative framework, limiting what could be achieved. Legislative reforms are now needed to deliver improved biodiversity outcomes, better integrate the scheme into strategic planning processes, reduce complexity and build confidence.

The Review Panel considers that legislative reforms to the scheme should be guided by these principles:

- **Some impacts are unacceptable and cannot be offset.** Such impacts should be identified as 'no-go' areas, where development cannot occur. Site based assessments for development will need to continue to be made outside of 'no-go' areas.
- **The scheme should be nature positive.** Development and clearing contribute to biodiversity loss. The scheme is a critical tool for reversing this trend. It should be leveraged to achieve an overall enhancement of biodiversity.

- **Biodiversity values should be considered early in the planning process and offset strategically where possible.** This provides the opportunity for better avoidance of impacts and more effective conservation of areas of high biodiversity importance and value. It also assists in providing certainty about where development cannot occur.
- **Avoidance is the first and most important step in the hierarchy.** Only after the avoid and minimise steps of the hierarchy have been rigorously applied should offsetting be considered. The avoid and minimise requirements must be set in the legislation, rigorously applied and publicly available.
- **There should be greater certainty that impacts can be offset with like-for-like credits.** After avoiding and mitigating impact, developers should prioritise sourcing like-for-like offsets upfront in the planning process for consideration during the project assessment and determination process. The use of offset options other than the retirement of like-for-like credits should be limited and transparency provided, including for payments into the Biodiversity Conservation Fund. Government should continue with its efforts to facilitate the supply of like-for-like credits.
- **There should be an expectation that the scheme will apply equally to all types of development.** The scheme should apply based on the level of biodiversity risk, not the type of development or who the proponent is undertaking the development. The thresholds for determining if the scheme applies should be clear and easy to apply and not contain subjective tests.
- **There may be exceptional circumstances where discretion is appropriate with full transparency.** Too much discretion and the ability to set conditions outside the scheme runs the risk of undermining biodiversity outcomes and reducing confidence. Where discretion is used, it should be the decision of the Minister for the Environment, with full transparency and accountability assured. Some projects are critical to the delivery of other government priorities that give primacy to the environment or result from exceptional circumstances (such as bushfires and floods) and may warrant discretionary consideration by the Minister for the Environment.
- **The credit market is a tool that can be used to deliver strategic outcomes in an effective and efficient manner.** The government should support the functioning of the market to ensure it delivers outcomes in line with government priorities. The government should use the market as a tool for achieving strategic biodiversity priorities and outcomes.
- **Complexity in the scheme should be reduced without undermining the scheme's scientific integrity or biodiversity outcomes.** Rules for scheme entry and offsetting could be simplified, and more upfront certainty provided about where development cannot occur.
- **To ensure transparency, information on the scheme and the operation of the market should be readily available.** This would support the market functioning and help the community understand and have confidence in scheme decision-making and outcomes. It should include consistent, predictable disclosures to the market, on public registers and in other ways, respecting privacy requirements and considering commercial interests. Regular evaluation based on solid data sets is critical to an effective scheme and building confidence in the processes in the scheme for developers, investors and landholders.

These principles are informed by feedback from stakeholders and the findings and recommendations of the Parliamentary Inquiry into the scheme. They are intended to represent 'best practice' principles for the scheme's design, as called for in Recommendation 1 of the Parliamentary Inquiry.

The review recommendations set out below are underpinned by these principles. However, this review has not been able to consider all scheme settings in detail against these principles. The NSW Government response to this review should be guided by these principles in identifying further reform opportunities or needs. In particular, the Review Panel recommends that these principles

be used to identify opportunities to improve consideration of cumulative impacts and that further measures be implemented to ensure the quality and integrity of biodiversity assessment reports.

Reforms will need to be implemented in a way that allows for a smooth transition to a nature positive approach.

Overview of Biodiversity Offsets Scheme reforms

Given recent scrutiny and the fact that the scheme forms a substantive component of the Act, it was not surprising that stakeholder consultation sessions and submissions were dominated by discussion of the scheme.

The Review Panel heard a strong and clear message from many stakeholders, including regional representatives, that the scheme is adversely impacting the delivery of priority housing and job creation opportunities. The Review Panel considers that there is an opportunity to enhance biodiversity benefits while reducing the compliance burden for stakeholders and supporting the delivery of government development priorities.

There needs to be more initiatives to expand credit supply by assisting landholders to enter BSAs and giving greater value to restoration credits. Action needs to be taken to reduce demand for credits by: according primacy to avoiding and minimising impacts; adjusting thresholds for small developments; and special measures to deal with very large projects to avoid crowding out the credit market.

The Review Panel was impressed with the level of genuine consideration stakeholders had given to improving the scheme's setting. While much of the feedback on how the scheme has been working to date was negative, stakeholders generally agreed that the scheme has a legitimate place in the State's approach to biodiversity assessment and conservation.

This focus on, and interest in improving, the scheme warranted the Review Panel taking a detailed look at the scheme's legislative settings. The key recommendations are illustrated in the figure below, while Part 2 provides full detail of the Review Panel's considerations and recommendations. These recommendations link closely to the recommendations to develop a single spatial tool with identified 'no-go' areas (Pillar 2) and Pillar 1 (the Nature Positive Strategy).

Improvements to the scheme need to be supported through alignment and integration with other Acts and policies. Some of these intersections are identified in Part 3.

The Review Panel observes that the name Biodiversity Offsets Scheme does not align with or adequately represent best practise principles, placing a disproportionate emphasis on offsetting. In considering these recommendations, government should also consider renaming the scheme to better reflect a biodiversity positive objective.

Key Biodiversity Offsets Scheme reform recommendations



Act objective: Nature positive development

Require a net gain for biodiversity under the scheme



Upfront certainty of areas where development cannot occur

- Do not allow development in no-go areas
- Serious and irreversible impacts to only be approved in exceptional circumstances



Rationalise who the scheme applies to

- Apply equally to proponents
- Do not apply to very small developments
- Apply retrospectively to pre-emptive clearing
- Apply to rezoning proposals



Help ensure upfront like-for-like offsets

- Remove use of mine site ecological rehabilitation
- Restrict use of the Biodiversity Conservation Fund
- Rationalise like-for-like rules, if biodiversity outcomes not compromised
- Government facilitates delivery of very large credits obligations with full transparency



Minister for the Environment to have a role in:

- Determining serious and irreversible impacts
- Determining whether to discount credit obligations



Strengthen avoid and minimise requirements

- Standard of genuine and demonstrable steps
- Register avoided land on no-go map



Support the supply of credits

- Government facilitates supply of like-for-like credits
- Incentivise restoration and protection of high value land
- Transparent additionality principles to underpin credit creation on all land types
- Improve management of the Biodiversity Stewardships Payment Fund



Introduce register to improve transparency of outcomes

- Track approved credit obligations and how they are met



Ensure alignment across intersecting Acts

Summary of Nature positive development recommendations (full detail covered in Part 2)

Recommendation 11: Amend the Act to set an objective for the Biodiversity Offsets Scheme to deliver a net positive biodiversity outcome and consider renaming the scheme to reflect this purpose.

Recommendation 12: Amend the Act to require a net gain for biodiversity by setting credit obligations for all development and clearing assessed through the Biodiversity Offsets Scheme at, say, 120% of calculated biodiversity loss.

Recommendation 13: Amend the Act to give the Minister for the Environment a call-in power to determine if a proposal for local development, or clearing requiring consideration by the Native Vegetation Panel under the *Local Land Services Act 2013* or under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP) would give rise to a serious and irreversible impact.

Recommendation 14: Amend the Act to give the Minister for the Environment a call-in power for major projects in determining a serious and irreversible impact and a concurrence role in determining if that impact should be approved.

Recommendation 15: Set a requirement in the Act to publish reasons for approving serious and irreversible impacts and maintain a statutory register of these decisions. All areas over which the Minister for the Environment considers a project would cause a serious and irreversible impact should be added to the single spatial tool as a 'no-go' area.

Recommendation 16: For local development:

- remove the test of significance pathway, as it results in inconsistent regulation of impacts
- explore ways to adjust the area thresholds and Biodiversity Values Map thresholds to better balance the regulatory burden for small developments with appropriate outcomes for biodiversity
- consider how best discretion is provided for and applied by the Minister for the Environment to switch off the Biodiversity Offsets Scheme for local development in exceptional circumstances.

Recommendation 17: Provide consent authorities with a clear power to retrospectively apply the Biodiversity Offsets Scheme to a development application if there has been pre-emptive clearing under a clearing entitlement to avoid the scheme applying.

Recommendation 18: Require proponents of Part 5 activities under the *Environmental Planning and Assessment Act 1979* to apply the Biodiversity Offsets Scheme if their proposed activity has impacts above the area threshold or affects land identified on the Biodiversity Values Map.

Recommendation 19: Simplify the rules and apply the Biodiversity Values Map and area clearing thresholds consistently to all development and clearing on non-rural land.

Recommendation 20: Amend the Act to require biodiversity certification when land is rezoned for development where expected impacts trigger the area clearing thresholds or the Biodiversity Values Map.

Recommendation 21: Review the biodiversity certification process to address barriers and improve transparency and confidence in the outcomes it delivers.

Recommendation 22: Amend the Act to require a standard of genuine and demonstrable steps to avoid and minimise impacts. This may include consideration of how avoided land will be managed and maintained into the future.

Recommendation 23: Provide clearer guidance on the requirements to avoid and minimise impacts to biodiversity from development.

Recommendation 24: Require that steps taken to avoid and minimise impacts are included in conditions of consent and published.

Recommendation 25: Record avoided land on the statutory register and identify as ‘no-go’ areas in the single spatial tool.

Recommendation 26: Amend the Act to give the Minister for the Environment sole discretion to discount biodiversity credit requirements.

Recommendation 27: For certain government priority projects that give primacy to the environment:

- amend the Biodiversity Conservation Regulation 2017 to provide an option to enter an agreement with the Minister for the Environment to deliver an offset obligation in a way that provides certainty for biodiversity conservation, is aligned with a regional offset investment plan, delivers on-ground actions and generates credits on a like-for-like basis through entry into Biodiversity Stewardship Agreements, acquisition of land and conservation measures
- require the Minister for the Environment to publish details of any such decision and publicly report on the outcomes achieved.

Recommendation 28: Continue to invest in the Biodiversity Credits Supply Fund to accelerate the supply of in-demand credits and support development of the credit market.

Recommendation 29: Amend the Act to require proponents to demonstrate they have undertaken genuine and demonstrable steps to find like-for-like credits before allowing payment into the Biodiversity Conservation Fund.

Recommendation 30: Amend the Act to allow the Environment Agency Head to publish a list of credit types from time to time and subject to transparent criteria for which payment into the Biodiversity Conservation Fund is not permitted because the credits are readily available on the market.

Recommendation 31: Require the Biodiversity Conservation Trust to acquit obligations that are paid into the Biodiversity Conservation Fund within a set time period. If the time period is not met, require the Trust to publish reasons and a plan for using the funds, consistent with the Nature Positive Strategy and areas of high biodiversity values identified in the single spatial tool. The plan should be approved by the Minister for the Environment.

Recommendation 32: Review the like-for-like credit rules to identify if they can be simplified to support effective operation of the market without compromising biodiversity outcomes.

Recommendation 33: Amend the Regulation to remove the option to meet a credit obligation through a commitment to ecological mine site rehabilitation.

Recommendation 34: Set a requirement in the Act for the Environment Agency Head to maintain a public register of biodiversity credit obligations and how credit obligations are met.

Recommendation 35: Set a requirement in the Act that relevant decision makers must provide the information required for any new statutory registers created, such as for credit obligations, avoided lands and projects with serious and irreversible impacts. Provide support and guidance to local councils and other decision-makers to meet this reporting requirement.

Recommendation 36: Develop fit for purpose digital systems that allow for consistent, real time and automated information collection for all statutory registers.

Recommendation 37: Provide greater incentives, including increased credit yield, to:

- encourage active restoration of degraded ecosystems and the reintroduction of species at biodiversity stewardship sites
- encourage the protection of areas of strategic biodiversity values, such as those that provide habitat connectivity and landscape resilience.

Recommendation 38: Amend the Act to provide the Biodiversity Conservation Trust with power to require landholders to commence active management of biodiversity stewardship sites.

Recommendation 39: Review the additionality provisions of the Act, Regulation and Biodiversity Assessment Method. Consider allowing all land types to participate in the supply of credits, subject to strict application of transparent additionality principles. If public lands are used to generate credits, require independent review of the outcomes achieved, with public reporting.

Recommendation 40: Amend the Act to increase administrative efficiencies and optimise management of the Biodiversity Stewardship Payments Fund. This may include allowing the Biodiversity Stewardships Payments Fund to be managed as a single fund with subaccounts.

Pillar 4: Species and ecosystem recovery

Review findings

The commitment of Australian Environment Ministers to accelerate work towards zero new extinctions means that merely slowing the rate of biodiversity loss is no longer an acceptable goal.

Investment in threatened species recovery is currently delivered through a range of programs. Achieving ambitious twin objectives of zero human-induced extinctions and nature positive will require a substantial increase in investment above current levels.

The recovery and restoration of species and ecosystems, and achieving zero extinctions, including threat abatement, will be most efficient and effective if delivered within the proposed Nature Positive Strategy (Pillar 1).

The NSW Threatened Species Scientific Committee follows global best practice but is under-resourced and unable to keep the listing of threatened entities under the Act up to date.

Regulatory management of human interactions with native plants and animals, including wildlife rescue and rehabilitation, is complex and overly burdensome, and it is not always clear under what legislation the issues are intended to be addressed.

A more ambitious Biodiversity Conservation Program

The Review Panel examined the objectives of the Biodiversity Conservation Program, which are to:

- a. maximise the long-term security of threatened species and threatened ecological communities in nature
- b. minimise the impacts of key threatening processes on biodiversity and ecological integrity.

The Review Panel considers the objectives of the Biodiversity Conservation Program should be aligned to contemporary targets established under the Global Biodiversity Framework.

The Department currently implements the Biodiversity Conservation Program through the Saving our Species (SoS) program. SoS received favourable feedback from stakeholders, highlighting the Department's engagement and the underpinning prioritisation approaches for cost-effective investments and practical on-ground actions at priority places for threatened species and ecological communities, but there are opportunities for improvement.

The Review Panel considers that SoS could be enhanced with a focus across ecosystems and to demonstrate outcomes for widespread species that require broad-scale habitat management. The Review Panel also considers monitoring and public reporting could be improved to highlight trends and evidence of management effectiveness.

The Review Panel believes there is a need for a greater focus on primary care (loss prevention).

The Review Panel notes that the Act currently requires the development of strategies to achieve the objectives of the Biodiversity Conservation Program in relation to each threatened species and threatened ecological community. It considers the Act should specify that, for all listed threatened species and ecological communities, an action and response plan be prepared. Each plan must identify or set out:

- the current status of the species or ecological community
- the critical threats impacting species or ecosystem viability
- the priority management actions that must be implemented to address those threats
- habitat critical to the survival of the species or 'core areas' of critically endangered and endangered ecological communities.
- how the trajectory of the species and ecological community will be measured.

The Review Panel recognises the diversity of listed key threatening processes and acknowledges that abatement of many processes requires coordinated action at both State and national level.

The Review Panel notes the contribution of programs under the Australian Government’s Natural Heritage Trust and Saving Native Species Program and considers there is opportunity to better align investments to support threatened species and ecological community recovery and restoration.

Recommendation 41: Amend the Act to ensure the Biodiversity Conservation Program is focused on halting and reversing biodiversity loss and ecosystem collapse, restoring threatened species and ecosystems, and zero human-induced extinctions of known threatened species.

Recommendation 42: Amend the Act to require the Department of Planning and Environment to measure and publicly report on the status and trajectory of each species and ecological community, every five years.

Recommendation 43: As part of the Nature Positive Strategy, the Department of Planning and Environment should publish a statement every 5 years detailing how listed key threatening processes are being addressed.

Listing threatened species and ecological communities

- The Review Panel notes Environment Ministers commitment to working towards full implementation of the Common Assessment Method to enable consistent national listing decisions. The Review Panel notes that the Act and supporting regulations already align with the Common Assessment Method for both species and ecological communities and are based on best international standards.
- The NSW Threatened Species Scientific Committee (TSSC) assesses the extinction risk of species and ecological communities. The Review Panel heard that the TSSC has a demanding workload and is not adequately resourced. The Review Panel considers a risk-based approach to prioritising assessments could help and that the Department could be more active in supporting the TSSC and ensuring the lists are up to date.

The Review Panel notes that a strategic method to assess all species known to occur in NSW on a regular basis (such as every 10 years), at least through a rapid assessment, would support active management and intervention to ensure their recovery.

Recommendation 44: The Department of Planning and Environment should undertake rapid assessments on behalf of the Threatened Species Scientific Committee and advise on priorities for assessment, without compromising the independence of the committee.

Other human interactions with native plants and animals

The Review Panel heard concerns about the Act’s licensing framework and approach to human interactions with native plants and animals, including wildlife rescue and rehabilitation. Not all concerns the Review Panel heard relate to biodiversity conservation specifically, and it is not always clear under what legislation the issues are intended to be addressed.

The Review Panel heard a number of concerns, including:

- The Act does not adequately recognise the rights, culture and economic aspirations of Aboriginal people and communities in decisions and policies regarding wildlife use.
- The Act has no enabling powers or framework for establishing plans to manage or protect wildlife that is not threatened, unless it is in relation to a commercial activity.

- There is a need for increased flexibility for emergencies (for example, extreme weather events and bushfires).
- There is insufficient clarity on the definition of ‘animals’ (for example, in relation to liberation).
- There is no capacity to deal with modern conservation activities (for example, translocation).
- There are implementation delays of the risk-based framework to wildlife licensing.
- The Act should have a stronger focus on the welfare of native animals.
- There is a lack of consistent, state-wide standards for wildlife rehabilitation operations. Government’s role should be to set such standards, facilitate training and education, and undertake targeted compliance. This could be supported by an accreditation scheme for wildlife rehabilitation and rescue service providers.
- There is an absence of compliance and auditing.
- The State meets none of the costs of rescue, veterinary treatment or rehabilitation for injured wildlife, even though all native wild animals are its legal property.

The Review Panel notes the significant administrative and regulatory burden the licensing provisions of the Act places on the Department, and that a number of improvements are needed including:

- clarifying terms and concepts, such as ‘harming’ and ‘dealing’
- updating current defences, including for veterinarians authorised under the *Veterinary Practice Act 2003* and persons authorised under the *Prevention of Cruelty to Animals Act 1979*
- developing better systems to capture and publish licensing data.

Recommendation 45: Examine the administrative arrangements and legislative provisions relating to wildlife use, rescue and rehabilitation to ensure a robust framework.

Providing care to sick and injured wildlife and animal welfare issues

The Review Panel notes that providing care to sick and injured wildlife comes at a great financial and emotional cost to professional service providers and volunteers. Legally, wildlife is the property of the State, yet the State bears none of this cost. The expectation placed on members of the general public and veterinarians that they attend to the emergency needs of injured wildlife at their own expense is unreasonable. And it is likely to prove unsustainable, given the rising probability of wildfires, flooding and storm events of increasing frequency and severity.

The Review Panel suggests government consider funding models to support vets and volunteers, including wildlife hospitals, and accredited specialist rehabilitation facilities.

The Review Panel notes the terms of reference for the [Parliamentary Inquiry](#) established on 9 June 2023 to inquire into and report on the veterinary workforce shortage in NSW include the role played by veterinarians in providing care to lost, stray and homeless animals, injured wildlife and during emergency situations.

The Review Panel also notes the government is developing a [reformed animal welfare regulatory framework](#), which seeks to streamline and modernise the current laws, establishing minimum requirements for the care and protection of animals to prevent cruelty to animals. The Review Panel considers wildlife welfare issues would generally best be addressed through reforms to the animal welfare framework.

Recommendation 46: Consider the approach to funding accredited wildlife hospitals and reimbursing veterinary practices for costs incurred in treating injured wildlife.

Pillar 5: Data-informed decision-making

Review findings

There are opportunities to better capture, analyse, manage and utilise biodiversity data to inform decision-making. There are deficiencies in the biodiversity information presently available. Quality, curated data is required to ensure a transparent and open understanding of biodiversity status and trends and the impacts of threats and management interventions.

There is a need to monitor (in close to real time) what is causing the biodiversity decline, and what interventions are working to repair what has been lost. Robust monitoring, evaluation and reporting of outcomes is needed.

There is also a need to apply innovative tools, technology and contemporary platforms to allow large volumes of diverse data to be interrogated and inform action. Monitoring and measuring native vegetation regrowth and the status of regeneration is critical to an understanding of ecosystem health.

Improved environmental data and consistent metrics, including the development of a comprehensive suite of natural capital accounts, are crucial to supporting nature positive outcomes. There needs to be a primary source of truth for environmental data.

Better outcomes data will inform and support conservation and restoration priorities and enable evaluation of the proposed Nature Positive Strategy.

Information and transparency of data

The Review Panel heard that biodiversity data is generated for a number of purposes but is not captured in real time, and not consistently curated and managed in a single centralised repository. There is a need to improve collection, storage, management and access to data to support decision-making, including assessment of cumulative impacts on biodiversity. Enabling the data to be discoverable and available publicly as 'real-time reporting' will further improve openness, monitoring, evaluation, reporting and compliance. Transparency of decision-making can only be achieved through open, quality data.

Better integration of environmental data would allow for a richer understanding of the economy's dependence upon the environment. This would assist in informing economic decisions that impact biodiversity, inform the development of a Nature Positive Strategy and support the development of a comprehensive suite of natural capital accounts. Natural capital accounts should provide a framework to assess natural capital baselines, set science-based targets, and measure and report changes in natural capital over time.

The Review Panel heard that there is no requirement for other government agencies to provide information relating to biodiversity impacts, and that gathering the data from other agencies in the format required has been challenging for the Department.

The Review Panel notes the Environment Ministers' agreement to work together to improve the quality, accessibility and interoperability of environmental data to aid decision-making, and to identify and remove barriers to the sharing of information among jurisdictions (DCCEE 2022a and 2023).

Recommendation 47: Charge the Environment Agency Head with responsibility for the collection and management of environmental data to ensure agreed reporting standards and definitions (i.e. a single source of truth).

Recommendation 48: Require other agencies to meet the Department of Planning and Environment's requests for biodiversity data, in a timely fashion and in a format determined by the Department.

Using best practice science to increase understanding

The Review Panel notes the Biodiversity Indicator Program (BIP) was established to meet the Act's requirement to 'establish programs for the collection, monitoring and assessment of information on biodiversity'. The BIP reports on the status and trends in biodiversity, assisting an understanding of the extent and condition of biodiversity and informing management interventions. These indicators also provide data on the resilience of ecosystems and their ability to adapt to climate change.

While the BIP offers a sophisticated approach to understanding biodiversity across NSW, the Review Panel considers there are opportunities to improve the integration, accessibility and comprehensiveness of the biodiversity status assessment by enhancing the suite of indicators.

The Review Panel notes that the Department is currently refining habitat condition indicators to enable reporting at a finer spatial resolution and in a more timely manner.

Other areas where improvements could be made to enable more comprehensive assessment, management and evaluation include better methods for reporting individual and combined drivers of biodiversity change. These include data concerning fire intensity and frequency, land use change and climate change responses, including spatial resilience.

The Review Panel met with scientific experts and heard about the IUCN Global Ecosystem Typology. The new typology may enhance understanding and management of ecosystems and help identify ecosystems that are critical for biodiversity conservation and ecological functioning. The typology allows comparative reporting and research to paint a coherent state, national and global picture of the status of each ecosystem.

The Review Panel notes that approximately 200 plant community types in NSW have already been incorporated into the typology. There may be opportunities to further integrate the new typology in the threatened species and ecological communities listing process and in the design of the Nature Positive Strategy.

The Review Panel heard that biodiversity information is always evolving and notes that data standards would ensure that data is consistently of high quality, captured in the right format, curated and communicated across different systems.

Recommendation 49: Invest in contemporary, reliable and decision-ready information systems that enable the capture, storage, management, interrogation and translation of data to inform reporting on biodiversity at landscape scale in real time.

Integrity of data to underpin natural capital accounts

The Review Panel notes that improved environmental data and consistent metrics are crucial to support the development of a comprehensive suite of natural capital accounts, monitor landholder efforts to protect and restore their land, and measure change in biodiversity in NSW. Natural capital

accounts should present assessments of the condition – extent, quality and diversity – of key environmental asset classes: native fauna, native vegetation, soils, terrestrial waterways and, where relevant, the marine environment.

There is considerable international and national collaboration on environmental-economic accounting strategies to produce a core set of national environmental economic accounts to inform decision-making in government, community and business.

Better integration of environmental and other sectors' data would provide a richer understanding of the economy's dependence upon the environment, inform decisions, provide new insights for conservation planning, and improve prospects for the development and evaluation of nature positive policies.

Transparency of metrics underpinning the financial instruments used in environmental-economic accounting is vital to building trust in associated decision-making and emerging markets (see Pillar 6). The rigour and calibre of these metrics provide confidence that related policy and on-ground programs are evidence-based. Quality data standards and demonstrable rigour to inform monitoring, evaluation and reporting of environmental and economic outcomes are requisites for private investment.

Recommendation 50: Invest in the development of a comprehensive set of natural capital accounts for NSW, suitably regionally disaggregated, that provide science-based natural capital baselines, and report changes in natural capital over time.

Pillar 6: Leveraging private investment

Review findings

There is growing acknowledgement of the risks that biodiversity loss, ecosystem degradation and the consequential decline of natural capital and ecosystem services pose to business, prompting industry groups, corporates and others to take action.

Given the very high costs of the landscape scale restoration required, substantial private investment will be needed to complement government investment to deliver nature positive outcomes.

To assure large-scale private investment and appropriate returns on investment, biodiversity markets will need to have integrity and be founded in robust data, metrics and reporting systems.

Opportunities to unlock private investment

The effort and cost required to halt and reverse biodiversity loss, and to transition to nature positive, is ambitious and cannot be shouldered by government alone. Collaboration, partnership and investment between the government and private sector stakeholders will be essential to meet nature positive targets, particularly those related to restoration.

The Biodiversity Offsets Scheme can play an important role in incentivising private sector funding for restoration initiatives, but its impact is necessarily limited.

Private investment should be considered broadly and include consideration of investments such as in-kind contributions (time, expertise and effort), as well as economic investments and financial support (philanthropic or for-profit).

Where scaffolded by a strong regulatory framework and government strategies (such as the proposed Nature Positive Strategy – Pillar 1) and methodologies (such as rigorous science-based metrics – Pillar 5), private investment provides a promising vehicle to help achieve nature positive outcomes.

The Review Panel notes the Australian Government's commitment to establish a nature repair market to make it easier for businesses, organisations and individuals to invest in landscape restoration and management.

The Review Panel heard there are opportunities to expand the role of government in the development of market architecture to facilitate private investment in natural capital. Government could support:

- enhancements to the economic viability of restoration
- income diversification opportunities for landholders
- development of partnerships.

The Review Panel supports an increased role for government in identifying opportunities and mitigating risks associated with increased participation in natural capital markets and ensuring that the development of these markets supports biodiversity conservation.

Adoption of the forthcoming Taskforce on Nature-related Financial Disclosures (TNFD) framework should provide an opportunity to shift financial flows away from nature-negative activities towards nature positive. The Review Panel considers the NSW Government should undertake its own TNFD pilot. This would provide a strong market signal on the government's focus on nature risk assessments and disclosures and encourage more widespread TNFD uptake. The findings of a carefully selected

NSW Government TNFD pilot could also provide a useful perspective on hotspots of nature risk and opportunity, which could help inform the proposed Nature Positive Strategy (Pillar 1).

The Review Panel notes that some private landholders across the State are already benefiting from revenue streams derived from Australian Carbon Credit Units (ACCUs). Many of the changes to land use that underpin the generation of ACCUs also deliver biodiversity improvement. The development of high integrity methods for measuring that improvement in biodiversity should be expected to deliver a premium to the landholder. It is also likely that, over time, a private sector demand will emerge for credits tied to biodiversity improvement.

The Review Panel also observes that the government is the owner of substantial tracts of land that could attract private funding for environmental repair, including to purchase credits generated by carbon sequestration or to offset negative biodiversity impacts disclosed under TNFD. The Review Panel encourages the Government to explore these emerging opportunities.

Recommendation 51: Continue to explore the role that government might play in driving the development of natural capital markets.

Recommendation 52: Facilitate the investigation and development of instruments and methods that overcome barriers to participating in emerging nature markets and valuing and investing in natural capital.

Recommendation 53: Consider opportunities for, and resolve obstacles to, landholders establishing multiple credit types on a parcel of land.

Recommendation 54: Review incentives for private sector investment and other mechanisms to support private and public land restoration and conservation investment and outcomes.

PART 2

Nature positive development detail

This Part provides the detailed analysis of the Biodiversity Offsets Scheme settings and recommendations outlined in Part 1, Pillar 3). These recommendations link closely to the recommendations to develop a single spatial tool with identified ‘no-go’ areas (Pillar 2) and the Nature Positive Strategy (Pillar 1). Improvements to the scheme need to be supported through alignment and integration with other Acts and policies. Some of these intersections are identified in Part 3.

Nature positive development

How it currently works

The Biodiversity Offsets Scheme aims to facilitate ecologically sustainable development, contributing to the Act’s over-arching objective. The Act’s purposes list four objectives relevant to the scheme:

- a. to encourage and enable landholders to enter into voluntary agreements over land for the conservation of biodiversity, and
- b. to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity, and
- c. to establish a scientific method for assessing the likely impacts on biodiversity values of proposed development and land use change, for calculating measures to offset those impacts and for assessing improvements in biodiversity values, and
- d. to establish market-based conservation mechanisms through which the biodiversity impacts of development and land use change can be offset at landscape and site scales.

The Act also sets a standard for the BAM applied within the scheme. The BAM must calculate biodiversity losses and gains to a standard of ‘no net loss’ of biodiversity values in NSW. This standard applies only to the BAM. The scheme’s rules allow some decision-makers to avoid the no net loss calculation, reducing credit obligations or approving impacts that could lead to the extinction of a species or ecological community.

Issues

The scheme needs a clear nature positive objective. This would ensure the scheme responds to growing recognition of the action needed to reverse biodiversity decline and aligns with the nature positive approach agreed in the Global Biodiversity Framework and being pursued by the Australian Government. It would also send a clear signal to decision-makers, proponents and the community about the government’s goals and expectations.

A nature positive scheme objective would need to be supported by appropriate scheme settings. Raising the standard of offsetting required to a ‘net gain’ is critical. This will ensure the scheme can deliver net gains in biodiversity and would meet best practice principles for offsetting, as recommended by the Parliamentary Inquiry into the scheme.

The level of action needed to reverse biodiversity decline is significant, so a new offsetting standard for credit obligations needs to be ambitious. While necessarily a matter for judgement, the Review Panel considers that a net gain standard of approximately 120% could be appropriate. To ensure delivery of any new offsetting standard, it should be consistent across all types of development and clearing assessed through the scheme.

Other reforms to scheme settings will also be needed to achieve a nature positive objective. These are discussed in the sections that follow.

In working towards a nature positive objective, the government should ensure the biodiversity credit market can support any increase in ambition. The difficulties proponents have had in finding the biodiversity credits they need has been a consistent concern raised in public consultation. It is

acknowledged that the Credits Supply Taskforce and Biodiversity Credits Supply Fund have made a significant contribution towards improving market liquidity and credit availability to improve market function, but more support may be required to deliver a nature positive objective.

It must also be acknowledged that increasing credit obligations may increase development costs, reducing the financial viability of projects that have a negative impact on biodiversity. That is as it should be. Nevertheless, developers should be supported to find the most cost-effective offsets available.

The Review Panel observes that the name *Biodiversity Offsets Scheme* does not align with or adequately represent best practice principles, placing a disproportionate emphasis on offsetting. In considering these recommendations, the government should also consider renaming the scheme to better reflect a biodiversity positive objective.

Recommendation 11: Amend the Act to set an objective for the Biodiversity Offsets Scheme to deliver a net positive biodiversity outcome and consider renaming the scheme to reflect this purpose.

Recommendation 12: Amend the Act to require a net gain for biodiversity by setting credit obligations for all development and clearing assessed through the Biodiversity Offsets Scheme at, say, 120% of calculated biodiversity loss.

Improve upfront protection and certainty by identifying environmentally significant areas where development will not be permitted

How it currently works

The Act establishes the concept of serious and irreversible impacts (SAIL) to protect biodiversity that is most at-risk from extinction. This is the main mechanism in the scheme for identifying where development should not occur or where it might proceed only in exceptional circumstances.

Decision-makers are responsible for determining if a project is likely to have a SAIL. They must do so in line with principles set out in the Biodiversity Conservation Regulation 2017, which are largely based on the International Union for Conservation of Nature's (IUCN) criteria for assessing critically endangered entities. Decision-makers are supported by guidance published by the Environment Agency Head and a biodiversity assessment report prepared by an accredited assessor.

For some types of development, if SAIL is determined, the decision-maker must refuse consent (local development, clearing under section 60ZF of the LLS Act, Biodiversity and Conservation SEPP). For major projects and in proposals qualifying for biodiversity certification, SAIL can be approved, and the decision-maker is only required to consider if additional measures to mitigate SAIL are needed.

Issues

The current approach may not be delivering the protection needed for the most vulnerable biodiversity. Nor is it giving stakeholders upfront certainty, which is one of the factors that could be undermining confidence in the Biodiversity Offsets Scheme.

Providing upfront certainty on where development cannot occur

The Review Panel notes (Pillar 2) that providing more information upfront on areas where development cannot occur because of the area's environmental significance would give certainty to stakeholders, direct development to areas of lower biodiversity value and increase protections for areas with the highest biodiversity value. Consistent with best practice principles, it would mean that biodiversity protection is considered early, reducing cost, uncertainty and complexity for developers.

The Review Panel recommends that a single spatial tool (Pillar 2) be developed to identify areas where development cannot occur, i.e. 'no-go' areas. 'No-go' areas would include all known areas on which land clearing or development would have a SAI. The single spatial tool is intended to be a 'living' document, being amended as and when new information, including knowledge of additional areas exposed to a SAI, comes to hand. The tool should be accessible from a central location.

Consideration should be given to how best to integrate the single spatial tool with the existing Biodiversity Values Map, which is used as a scheme entry test for some types of development.

Consideration of impacts for individual projects outside the no-go area

Project level assessment of development impacts on biodiversity values will still be needed outside the no-go areas. This will allow residual impacts of those projects to be offset, ensuring nature positive development. Consideration will need to be given to the level of assessment that should be required given the 'no-go' map will capture the most significant known biodiversity values.

A proposal for a development project that would have a SAI outside of the currently mapped 'no-go' area cannot be treated any differently from a project that would have the same impact in an already identified 'no-go' area. Thus, if the assessment of a project reveals a previously unknown SAI, then that area would have to be added, immediately, to the 'no-go' area identified in the single spatial tool to provide certainty for future project proponents.

Currently, a consent authority determines if an impact will result in a SAI. If such a determination is made, then a local development project cannot be approved, while for major projects, the consent authority can approve a SAI and require further measures to address the impact.

Some stakeholders raised concerns that consent authorities are not giving sufficient weight to biodiversity considerations when approving projects with potential SAI. While evidence presented to the Parliamentary Inquiry suggests approval of projects with SAI is a rare occurrence, greater transparency and accountability is needed to ensure confidence in the Biodiversity Offsets Scheme.

For applications for clearing or development on areas outside the 'no-go' areas identified in the single spatial tool at the time, the Review Panel considers that the Minister for the Environment should have a call-in power to determine if a SAI would be caused. If, in the Minister's view, it would, then that area would be added to the 'no-go' area.

If the application is for local development, clearing under section 60ZF of the LLS Act or clearing under the Biodiversity and Conservation SEPP, the application would be refused.

For major projects (State Significant Development and Infrastructure) that can currently be approved with a SAI, the Minister for the Environment should be able to call in a project to determine if an impact is serious and irreversible and have a concurrence role in determining if that impact should be approved. SAI should only be approved for major projects in exceptional circumstances.

The Minister for the Environment should retain responsibility for determining biodiversity certification applications. Again, SAI should only be approved in exceptional circumstances.

For transparency, decision-makers should be required to publish reasons for approving projects with SAI. This information should be made easily accessible to the community through a statutory register.

Separately, consideration should be given to the development of a set of principles to guide decision-making outside of the 'no-go' areas where the threshold for determining a SAI is not met. The general principle should be to ensure that species and ecological communities are not put on a trajectory towards extinction.

Recommendation 13: Amend the Act to give the Minister for the Environment a call-in power to determine if a proposal for local development, or clearing requiring consideration by the Native Vegetation Panel under the *Local Land Services Act 2013* or under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP) would give rise to a serious and irreversible impact.

Recommendation 14: Amend the Act to give the Minister for the Environment a call-in power for major projects in determining a serious and irreversible impact and a concurrence role in determining if that impact should be approved.

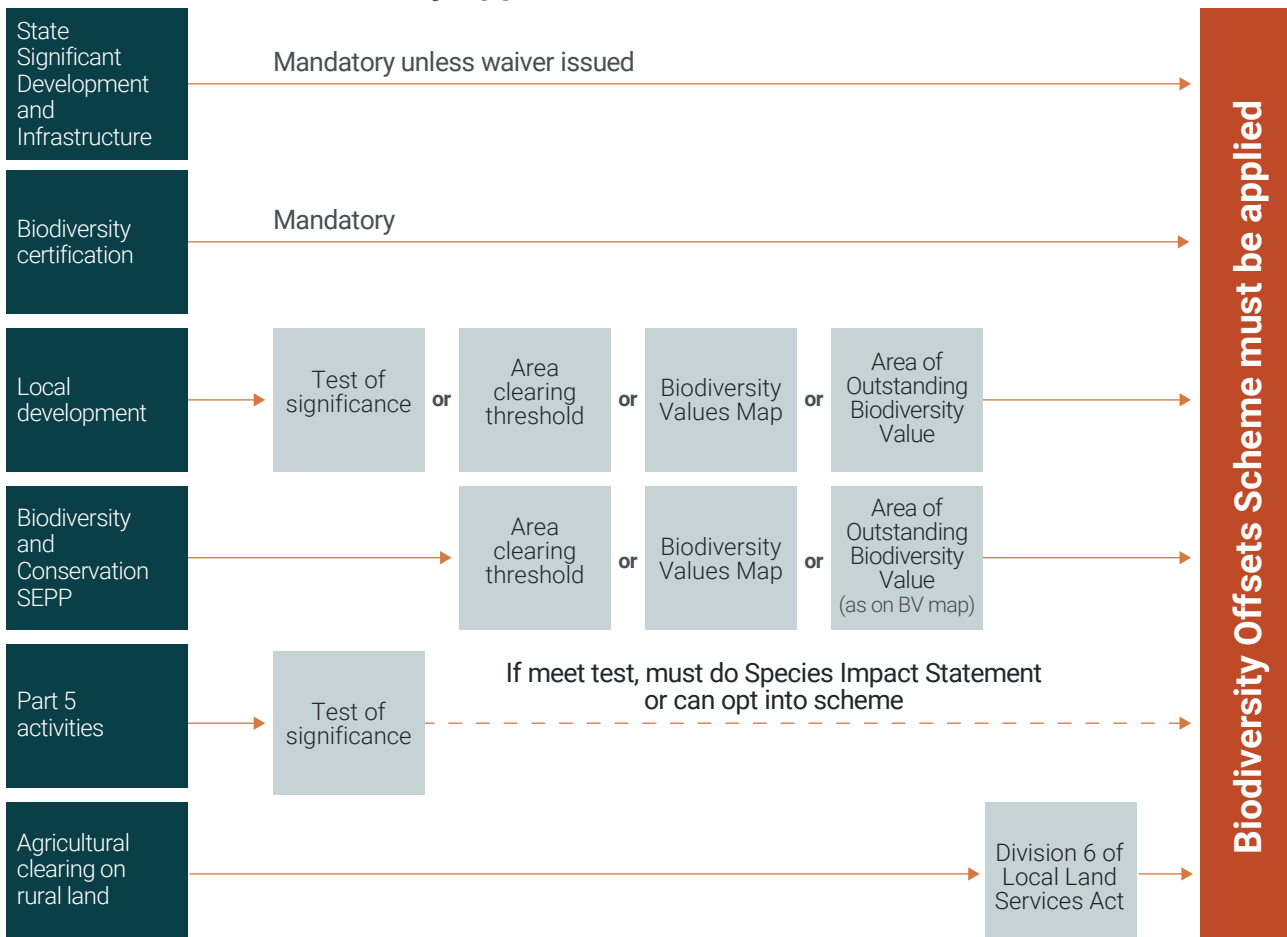
Recommendation 15: Set a requirement in the Act to publish reasons for approving serious and irreversible impacts and maintain a statutory register of these decisions. All areas over which the Minister for the Environment considers a project would cause a serious and irreversible impact should be added to the single spatial tool as a ‘no-go’ area.

Change the types of development and clearing triggering the scheme

How it currently works

The Biodiversity Offsets Scheme applies differently to different types of development and clearing activities. There are six pathways into the scheme (see figure below).

How the scheme currently applies



Issues

Some stakeholders have raised questions about whether the scheme is capturing the right developments. There are concerns the same standard of biodiversity assessment and offsetting is not applied to all types of development and land clearing in NSW, even though impacts may be similar. The multiple entry tests for some types of development create complexity and may not be capturing the right projects. The Review Panel also heard that clearing under other Acts may be inappropriately used to pre-emptively clear for development to avoid application of the scheme.

Agricultural clearing

The Review Panel notes there is inconsistency in the standards that apply to clearing from development and clearing related to agricultural activities on rural land. A developer in regional areas will have to meet a specified regulatory standard, but the same type of biodiversity can be cleared for agricultural reasons by meeting a different standard with less, or no, regulatory oversight.

The Review Panel heard that different standards may be encouraging pre-emptive clearing under the land clearing laws before a development application is made. The Land Management (Native Vegetation) Code allows for a wide range of clearing activities, meaning there has been very limited use (only one instance) of the scheme under the LLS Act. There are other forms of permitted clearing on rural land, such as under the *Rural Fires Act 1997*. Clearing permitted under the Code and other clearing entitlements are not nature positive.

Local development

Conversely, the Review Panel heard there are instances where the scheme has applied to very small developments, such as building a house on a single lot. The scheme applies to local development that impacts on the mapped Biodiversity Values areas, above the area thresholds or if the test of significance is met. The Review Panel heard there has been very limited application of the test of significance to local development and, where it has been applied, it has resulted in inconsistent regulation of biodiversity impacts.

Small impacts are often triggered by the Biodiversity Values Map (which identifies land with high biodiversity values that are particularly sensitive to impacts from development or clearing). The scheme must be applied to any impact on land mapped on the Biodiversity Values Map.

For these very small developments, the final credit obligation may be for 1-4 ecosystem credits. As establishment costs are high, it is often not viable for landholders to establish BSAs that generate only a few credits or to establish a BSA without a committed buyer for most of their credits. Even if the credits are available on the market, the credit holder may be unwilling to sell such a small number of credits because of high transaction costs.

Not surprisingly, small obligations are often paid into the Biodiversity Conservation Fund. The BCT may then struggle to find the credits for the same reasons. Small developers may also find it difficult to navigate the credit market and negotiate with sellers. Paying into the fund provides a simpler option.

The regulatory burden, delays and cost for very small developers can outweigh the biodiversity outcome that is achieved. However, the cumulative loss from many small impacts to land with very high biodiversity values should not be disregarded. If it is decided to not apply the scheme to very small impacts, development assessment and approvals should still require impacts to be avoided and minimised, and other environmental conditions set as required.

Some stakeholders have expressed concerns that the scheme is undermining delivery of other government priorities, including regional housing. For local development, there is no upfront discretion to switch off the scheme based on social or commercial considerations. Discretion comes at the end of the process, where credit obligations may be discounted in limited circumstances. To date, six requests to discount a credit obligation have been received, with one approved.

Some stakeholders have suggested that the regulatory burden of complying with the scheme is too high and the exercise of discretion for local development should come at the start of the process. If discretion to switch off the scheme is considered, it should only be done in exceptional circumstances with requirements to avoid and minimise impacts remaining.

Part 5 activities

The Review Panel considers the process for Part 5 activities has resulted in inconsistent biodiversity outcomes.

A Part 5 activity is a project assessed under Part 5, Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A). The Part 5 pathway is meant to support the cost-effective provision or maintenance of essential infrastructure. As such, it can be used by public authorities to deliver work on infrastructure such as hospitals, schools, roads, railways, water or electricity supply, provided the work is not substantial enough to require development consent.³ This pathway can only be used by public or prescribed authorities, such as local councils, NSW Health, and Water Infrastructure NSW.

Part 5 activities apply the test of significance and can opt to prepare a species impact statement or use the scheme. Species impacts statements have had very limited use and should be removed as an option from the Act. The test of significance captures very few impacts (for example approximately 1.7% of all finalised biodiversity assessments are for Part 5 activities) and can result in inconsistent regulation of biodiversity impacts.

Best practice principles suggest the scheme should apply equally to all development types, including Part 5. There is also a clear community expectation that government be held to the same regulatory standards as private developers.

Clearing on non-rural land

Clearing on non-rural land (such as residential and conservation zones) that is not related to a development is regulated by the Biodiversity and Conservation SEPP. The scheme applies to clearing above the area clearing thresholds or on land mapped on the Biodiversity Values Map and requires approval from the Native Vegetation Panel.

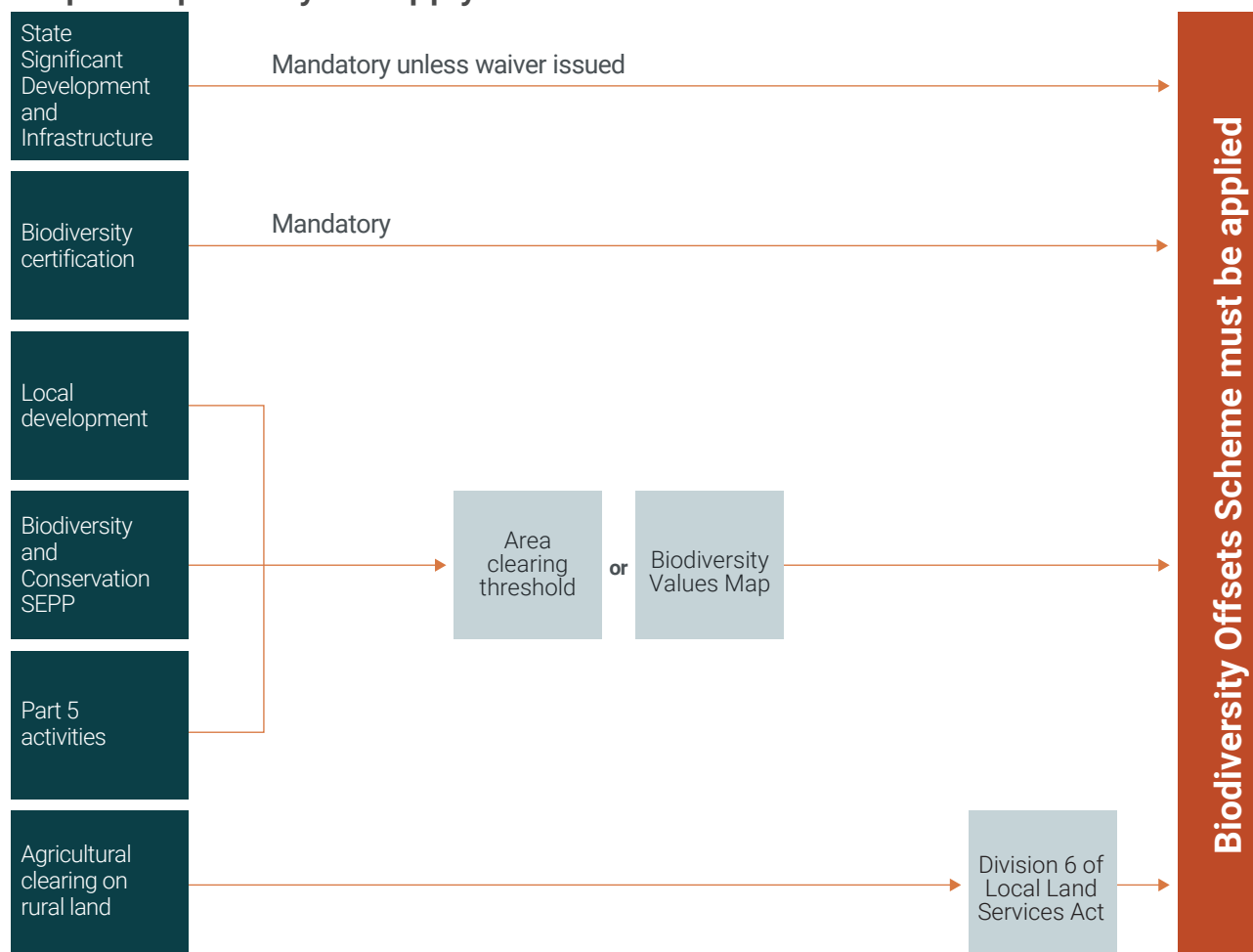
The Review Panel heard there are complicated tiered exemptions when clearing on conservation zoned land that is used for agricultural purposes, and different rules for non-rural land, depending on the rules that applied prior to the SEPP commencing in a local government area. It appears that there has been no use of this pathway, little understanding of it in the regulated community and no compliance activity.

Entry pathways - simple, consistent, appropriately targeted

There are opportunities to improve pathways into the scheme in line with the principles of reducing complexity and ensuring a consistent approach. The diagram below sets out an option to simplify and better target entry for local development and Biodiversity and Conservation SEPP activities, while improving consistency by bringing Part 5 activities into the scheme. The mandatory requirement for major projects (state significant development and infrastructure) appears to be working and should be retained.

³ See further information on the Department's [Development without consent](#) webpage.

Proposed pathways to apply the scheme



Recommendation 16: For local development:

- remove the test of significance pathway, as it results in inconsistent regulation of impacts
- explore ways to adjust the area thresholds and Biodiversity Values Map thresholds to better balance the regulatory burden for small developments with appropriate outcomes for biodiversity
- consider how best discretion is provided for and applied by the Minister for the Environment to switch off the Biodiversity Offsets Scheme for local development in exceptional circumstances.

Recommendation 17: Provide consent authorities with a clear power to retrospectively apply the Biodiversity Offsets Scheme to a development application if there has been pre-emptive clearing under a clearing entitlement to avoid the scheme applying.

Recommendation 18: Require proponents of Part 5 activities under the *Environmental Planning and Assessment Act 1979* to apply the Biodiversity Offsets Scheme if their proposed activity has impacts above the area threshold or affects land identified on the Biodiversity Values Map.

Recommendation 19: Simplify the rules and apply the Biodiversity Values Map and area clearing thresholds consistently to all development and clearing on non-rural land.

Apply the scheme to proposals to rezone land

How it currently works

There is no requirement for planning proposals to apply the scheme when land is being rezoned. Under the EP&A Act, applicants are only required to identify potential impacts on critical habitat or threatened species and outline proposed mitigation strategies.

Biodiversity certification provides an existing mechanism to use the scheme upfront to assess potential impacts, before planning decisions are locked in. Once land is certified, future development applications on that land do not have to apply the scheme.

If biodiversity certification is not done at the rezoning stage, the scheme may then apply when an individual development application is lodged on the rezoned land. Biodiversity impacts are then considered on a project-by-project basis.

Issues

The Review Panel considers better conservation outcomes can be achieved when biodiversity is considered early in the planning process. High value biodiversity assets can be identified and prioritised for protection, and larger areas and important wildlife corridors can be conserved. Applying biodiversity certification at the rezoning stage can also provide information on likely offset costs, helping developers gauge if a development is economically viable. Not all rezoning applications should require the scheme to be applied. The area clearing thresholds and Biodiversity Values Map should trigger the application of the scheme at rezoning.

Barriers to using biodiversity certifications should be addressed. The process can be complex and take several years, assessment costs can be high because of the large areas that need to be surveyed, and there can be difficulty funding offsets upfront and recouping costs from development down the track. This creates financial risks, particularly for non-government applicants. Many of the recommendations in this review will help address these barriers, including increased government support and investment in the supply of credits, additional support and guidance for proponents navigating the scheme and the suggested improvements to the BAM and survey requirements.

Recommendation 20: Amend the Act to require biodiversity certification when land is rezoned for development where expected impacts trigger the area clearing thresholds or the Biodiversity Values Map.

Recommendation 21: Review the biodiversity certification process to address barriers and improve transparency and confidence in the outcomes it delivers.

Strengthen requirements to avoid and minimise impacts

How it currently works

The Act requires proponents to first avoid and minimise impacts. Offsetting is intended to be used as a last resort, only after all reasonable steps to avoid and minimise impacts are exhausted. The BAM provides guidance on how to avoid and minimise impacts, including strategies and actions proponents can take. The steps a proponent will take to avoid and minimise their impact should be outlined in their biodiversity development assessment report, included in conditions of consent, and published.

Issues

Concerns that proponents are skipping the avoid and minimise steps and going straight to offsetting, often through payments into the Biodiversity Conservation Fund, were a common theme in stakeholder feedback.

The Review Panel heard that avoid and minimise actions are included in BDARs and consent conditions for individual projects, but there is no central database or public collation to demonstrate how much avoidance the scheme is achieving, nor where it is occurring. While there are anecdotal indications that developers are redesigning projects to avoid impacts on biodiversity, compelling evidence is lacking.

There is no statutory requirement to manage or continue to protect avoided land. Zoning avoided land for conservation is voluntarily proposed by some proponents and does offer some protection, but does not secure funding for managing the land, often leading to degradation. Options for the ongoing management and protection of avoided land should be considered in the assessment. Avoided land should be mapped as ‘no-go’ areas in the single spatial tool to give regulatory certainty that the avoided land cannot be subject to further development.

Rulings from recent court cases involving development assessed through the scheme also demonstrate the need for clearer guidance and requirements. Courts have refused consent for projects that did not accept design options offered by ecologists to avoid impacts, or adequately support why their impacts were unavoidable.

The Review Panel considers implementing the recommendation to make credit obligations nature positive (e.g. 120% of assessed biodiversity loss) should provide developers with extra incentive to avoid and minimise impacts.

The Review Panel notes stronger requirements are needed to ensure the avoid and minimise hierarchy is rigorously applied, and more guidance is needed to help proponents and decision-makers understand when avoid and minimise steps are sufficient.

Recommendation 22: Amend the Act to require a standard of genuine and demonstrable steps to avoid and minimise impacts. This may include consideration of how avoided land will be managed and maintained into the future.

Recommendation 23: Provide clearer guidance on the requirements to avoid and minimise impacts to biodiversity from development.

Recommendation 24: Require that steps taken to avoid and minimise impacts are included in conditions of consent and published.

Recommendation 25: Record avoided land on the statutory register and identify as ‘no-go’ areas in the single spatial tool.

Limit decision-makers discretion to discount biodiversity credit obligations

How it currently works

A range of decision-makers are responsible for determining development and clearing applications assessed through the scheme. The Act gives decision-makers discretion to set credit obligations and move away from the no net loss standard calculated by the BAM. More discretion is provided for major projects given their wider social and economic benefits. The Minister for Planning or delegate may, but is not required to, set a credit obligation, either based on the BAM or not. For local development, reducing a credit obligation requires concurrence from the Environment Agency Head and reasons must be published.

Issues

The Review Panel heard from stakeholders that the discretion currently available raises doubts about whether the scheme can deliver a 'no net loss' of biodiversity, let alone gains.

For local development, the Department of Planning and Environment has received six requests to discount a credit obligation, with one approved. The Review Panel notes data is not currently available on the extent of discounting for major projects, though it is being collated as part of a monitoring, evaluation, reporting and improvement framework for the scheme.

The Native Vegetation Panel has received one application for agricultural clearing on rural land and discounted the credit obligation from three credits to zero. The Native Vegetation Panel has not received any applications submitted for clearing under the Biodiversity and Conservation SEPP.

The Review Panel considers limiting the power of decision-makers, by locating decision-making power with the Minister for the Environment, is needed to achieve a biodiversity positive outcome and would send a strong signal to proponents about the importance of avoiding impacts on biodiversity.

Recommendation 26: Amend the Act to give the Minister for the Environment sole discretion to discount biodiversity credit requirements.

Strategic delivery of offsets may help achieve more for conservation with improved social co-benefits and transparency

How it currently works

Large projects, including renewable energy and transport, are driving demand for biodiversity credits. There is insufficient supply of the types of credits needed for these projects. Forecasts show the number of credits needed each year through to 2030 will be at least double the number created in 2022-23. Currently, these proponents will need to meet their credit obligations through a mix of purchasing land to establish BSAs, buying credits on the market and paying into the Biodiversity Conservation Fund.

Issues

Unless alternative approaches are found, these projects may need to pay into the Biodiversity Conservation Fund, delaying restoration activities needed to offset the impacts of these projects and making offsets unaffordable, particularly for smaller projects competing for the limited number of available credits. A fragmented approach to the selection of biodiversity stewardship sites reduces biodiversity outcomes compared with a more strategic approach to target this significant investment in conservation to complement the public reserve system.

The anticipated level of investment in biodiversity offsets by 2030 represents a historic opportunity to deliver transformational benefits for conservation in NSW, especially in regional areas. Given the state-wide decline in biodiversity, there is an opportunity to harness and direct this investment through targeted government facilitation of offsets. Government facilitation could allow investment in the highest priority land, maximising connectivity and other landscape-scale objectives, while minimising the cost of infrastructure projects that flows through to taxpayers and consumers.

Strategic government facilitation in creating biodiversity credits to offset these projects may increase certainty and integrity of the scheme by delivering offsets largely ahead of construction. It has potential to promote broader social outcomes, such as opportunities for Aboriginal employment, increasing involvement in program design and on-ground implementation partnerships, and access for public recreation.

The Biodiversity Conservation Regulation could be amended to provide proponents with a way to meet their offset obligation via a direct delivery agreement with the Minister for the Environment. These agreements could be available specifically to proponents with large offset obligations where the project is also delivering government priorities that give primacy to the environment.

The agreement could require the development of a regional offset investment plan, which identifies opportunities to generate required biodiversity credits in a manner that maximises connectivity, protects refugia and integrates ecosystem and species conservation measures, and delivers social co-benefits such as Aboriginal employment and public access. The agreement could specify the investment in a mix of on-ground actions, which, guided by the regional offset investment plan, generate the required credits on a like-for-like basis. These actions could include entry into BSAs with private and Aboriginal landholders, the acquisition of land for addition to the national park estate, and implementation of species conservation measures.

Recommendation 27: For certain government priority projects that give primacy to the environment:

- amend the Biodiversity Conservation Regulation 2017 to provide an option to enter an agreement with the Minister for the Environment to deliver an offset obligation in a way that provides certainty for biodiversity conservation, is aligned with a regional offset investment plan, delivers on-ground actions and generates credits on a like-for-like basis through entry into Biodiversity Stewardship Agreements, acquisition of land and conservation measures
- require the Minister for the Environment to publish details of any such decision and publicly report on the outcomes achieved.

Limit access to the Biodiversity Conservation Fund

How it currently works

The Act allows any developer to meet their credit obligation by paying into the Biodiversity Conservation Fund. The Act does not set any prerequisites to use the fund.

Payment into the fund transfers the obligation to the BCT, which is then responsible for sourcing credits or undertaking actions to meet the obligation. Rules for how the BCT must meet these obligations are set out in the Biodiversity Conservation Regulation. There is no legislative requirement to acquit the obligations within a specific time period, however the BCT Board has adopted a policy of acquitting obligations within 5 years.

The amount that must be paid into the fund is determined using the Biodiversity Offsets Payment Calculator. This improved system was introduced in 2022 to strengthen the fund's ability to secure like-for-like credits and provide a more stable charge amount for using the fund.

Use of the fund is voluntary. Proponents can instead meet their credit obligation using the offset options set out in the Biodiversity Conservation Regulation, such as buying and retiring like-for-like credits or funding conservation actions.

Issues

Stakeholders have consistently raised concerns about the impact of the option to pay into the fund on the credit market and biodiversity outcomes.

The Parliamentary Inquiry recommended the government 'urgently implement an application and review process to ensure proponents have exhausted all other private market avenues prior to paying into the Fund' and have a 'process to demonstrate that genuine like-for-like credits will be available' or could be brought online before receiving payments.

The Review Panel heard from stakeholders that the fund has often been the first choice for developers, even when credits are available on the market. This may be undermining development of the credit market.

The Review Panel notes the supply of credits has significantly improved through the work of the Biodiversity Credits Supply Fund and Taskforce. This has reduced the attractiveness of making a payment to the fund as credits are more readily available on the market.

Stakeholders have raised concerns about the biodiversity impact of payments to the fund due to the time lag between when impacts occur and gains from offsets are delivered. Payment into the fund is not immediately consistent with the best practice principle of securing offsets before impacts.

However, retaining the option to pay into the fund is supported by many development stakeholders as an important tool while the credit market is maturing. The BCT also has the expertise to achieve strategic biodiversity outcomes with the payments and is subject to a high level of oversight and accountability.

The Review Panel is not proposing to amend or restrict the hierarchy of offset options currently available to the BCT.

Recommendation 28: Continue to invest in the Biodiversity Credits Supply Fund to accelerate the supply of in-demand credits and support development of the credit market.

Recommendation 29: Amend the Act to require proponents to demonstrate they have undertaken genuine and demonstrable steps to find like-for-like credits before allowing payment into the Biodiversity Conservation Fund.

Recommendation 30: Amend the Act to allow the Environment Agency Head to publish a list of credit types from time to time and subject to transparent criteria for which payment into the Biodiversity Conservation Fund is not permitted because the credits are readily available on the market.

Recommendation 31: Require the Biodiversity Conservation Trust to acquit obligations that are paid into the Biodiversity Conservation Fund within a set time period. If the time period is not met, require the Trust to publish reasons and a plan for using the funds, consistent with the Nature Positive Strategy and areas of high biodiversity values identified in the single spatial tool. The plan should be approved by the Minister for the Environment.

Rationalise the like-for-like offset rules without compromising biodiversity outcomes

How it currently works

There are two classes of biodiversity credits:

- Ecosystem credits: There are 520 different types of ecosystem credits. These are based on 2500 different plant community types (PCTs), including Threatened Ecological Communities, grouped into offset trading groups. PCTs are the base unit used to identify biodiversity values for ecosystems.
- Species credits: There are around 1000 species credit types. Species credits apply to threatened species where the likelihood of occurrence of a species or elements of a species' habitat cannot reliably be predicted by the PCT. Species credits provide a measure of the suitable habitat area or the number of individuals of a threatened species.

The Biodiversity Conservation Regulation establishes rules for what biodiversity credits are 'like-for-like' and can be used to offset an impact.

Issues

The Review Panel recognises that the large number of different credit types and complex rules for finding like-for-like credit presents a clear challenge for market participants.

It would be useful to review the trading rules and identify if they could be simplified. However, consistent with the principles the Review Panel has set out for scheme reform, this should only be progressed if it can be shown that ecological outcomes would not be compromised. For example, the IBRA subregion restrictions on like-for-like rules could be lifted if it can be shown that the offset trading groups provide sufficient geographical restrictions in themselves (given the plant community types tend to be regionally based).

The Review Panel notes ongoing support for market development, such as that provided through the Biodiversity Credits Supply Fund, would likely be needed to ensure supply can match demand. Market implications of any changes, and how they are implemented, will also need to be considered to maintain market confidence.

Recommendation 32: Review the like-for-like credit rules to identify if they can be simplified to support effective operation of the market without compromising biodiversity outcomes.

Require ecological mine site rehabilitation outside of the scheme

How it currently works

For state significant development or infrastructure mining projects, the offset rules allow an offset obligation to be met through a commitment to undertake ecological rehabilitation of the impacted site. The credit value of this commitment is determined in accordance with an ancillary rule (which has not yet been published), which may set standards for the ecological rehabilitation. If approved, the obligation to undertake ecological rehabilitation, and the standards that must be achieved to use the mine rehabilitation as an offset, will be set out in the conditions of development consent for the mine.

Issues

The IUCN considers that an appropriate application of the mitigation hierarchy should clearly distinguish impact avoidance, minimisation and on-site restoration measures from offsets (IUCN 2016). Using ecological rehabilitation as an offset has been criticised as not delivering genuine like-for-like or additional offsets as the gains are not realised until many years into the future and are uncertain (NSW Parliament 2023b).

Additionally, there is no requirement for areas of mine site ecological rehabilitation to be protected in perpetuity (for example, through a BSA), subjecting these rehabilitated areas to the risk of changed land use in the future. Management practice obligations are also ceased once the rehabilitated area meets the condition state required by the project consent.

There have been welcome improvements in the practices around ecological rehabilitation and strong science supporting measurements of success. This work should not be lost. There should be a requirement to restore the ecological functioning of a mine site post mining. However, the commitment to deliver ecological rehabilitation in the future should not be used to reduce an upfront offset obligation for an immediate impact. There may be merit in government considering options to require the ecological rehabilitation of a mine site under the *Mining Act 1992*, alongside requirements to return a site to a safe and stable landform.

Recommendation 33: Amend the Regulation to remove the option to meet a credit obligation through a commitment to ecological mine site rehabilitation.

Introduce a statutory credit obligation register

How it currently works

The Act establishes the requirement to maintain public registers for the Biodiversity Offsets Scheme and the Regulation sets out the specific registers required and what information they must contain. The Department maintains online public registers for credit supply, credit demand, transactions, accredited assessors and private land conservation agreements (including BSAs).

Issues

There has been criticism about the lack of transparency in the scheme. The Auditor-General's performance audit and the Parliamentary Inquiry into the scheme both concluded the scheme's ecological outcomes were unclear and recommended improved transparency and reporting.

The Review Panel considers there is a clear need for transparency about what credit obligations are being imposed and how they are being met, and decision-making around SAIL. This information is publicly available through individual development applications and consent conditions. However, it is not collated and reported in a way that helps the community understand what outcomes the scheme is delivering overall or for their local area.

The Review Panel notes the Department's work to develop a monitoring, evaluation, reporting and improvement framework is a positive step. However, these efforts are hampered by the lack of legal power to require that information is provided by decision makers in a usable format.

Stakeholders have also raised concerns that the existing registers can be difficult to use and this is an impediment to market activity.

Recommendation 34: Set a requirement in the Act for the Environment Agency Head to maintain a public register of biodiversity credit obligations and how credit obligations are met.

Recommendation 35: Set a requirement in the Act that relevant decision makers must provide the information required for any new statutory registers created, such as for credit obligations, avoided lands and projects with serious and irreversible impacts. Provide support and guidance to local councils and other decision-makers to meet this reporting requirement.

Recommendation 36: Develop fit for purpose digital systems that allow for consistent, real time and automated information collection for all statutory registers.

Improve recognition of species credits and incentivise restoration

How it currently works

Biodiversity credits are created when landholders enter BSAs and agree to protect and manage their land to improve its biodiversity values. Credit types reflect the range of ecosystems and species in NSW.

The credits generated represent the expected gain in biodiversity values for the threatened ecological communities and species present at the site. This gain is based on averted loss (a small component of overall gain), gain from management actions, and gain from active restoration. There are many additional benefits that biodiversity stewardship sites provide in the form of other ecosystem services that are not captured by biodiversity credits.

Issues

Biodiversity restoration is critical to achieving nature positive outcomes. It is not enough to protect existing biodiversity. Degraded areas must be actively restored.

The Review Panel heard from stakeholders that the Biodiversity Offsets Scheme could do more to recognise and incentivise restoration activities. There is some evidence that the amount of credits a landholder receives for delivering active restoration is small and may not be worth the high cost of restoration activities. Credit yields for restoration activities should be reviewed to ensure there is sufficient incentive to restore biodiversity while accurately representing likely gain. Active restoration may include the reintroductions of species to sites.

Scheme data and stakeholder feedback suggest the mismatch between supply and demand is more of an issue for species credits than ecosystem credits.

Developers often assume species are present to avoid the cost and time associated with doing surveys. Previously, species have been undervalued, meaning it was cheaper for developers to assume presence and pay to offset than to survey. This has led to the generation of large obligations for species credits.

Conversely, landholders must survey to confirm a species is present on their biodiversity stewardship site to generate credits. Better alignment of developer and landholder requirements could be beneficial to address this mismatch. Species survey requirements could be rationalised to better recognise species presence and credits could be generated where a species is not present but very likely to return if regeneration occurs.

The Review Panel considers the statutory review of the BAM should consider and address this issue. Ecological monitoring of biodiversity stewardship sites should continue to determine if the anticipated gains are achieved, and any findings integrated into the BAM.

The Review Panel also heard about landholders with BSAs who have not yet sold enough credits to fulfil the required Total Fund Deposit for the site, do not receive annual management payments, and are therefore not legally required to actively manage the site. A small number of these landholders are not motivated to actively manage their site regardless of credit supply availability. For the biodiversity gain on these sites to be realised, there may be circumstances where the BCT needs the power to compel the landholder to take all reasonable steps to commence active management.

Recommendation 37: Provide greater incentives, including increased credit yield, to:

- encourage active restoration of degraded ecosystems and the reintroduction of species at biodiversity stewardship sites
- encourage the protection of areas of strategic biodiversity values, such as those that provide habitat connectivity and landscape resilience.

Recommendation 38: Amend the Act to provide the Biodiversity Conservation Trust with power to require landholders to commence active management of biodiversity stewardship sites.

Allow credit creation on all land types, underpinned by strong additionality considerations

How it currently works

Section 5.7 of the Act and clause 5.1 of the Regulation establishes what land is and is not eligible to be designated as a biodiversity stewardship site and generate biodiversity credits. Land that is reserved under Part 4 or Part 4A of the *National Parks and Wildlife Act 1974*, and land that is a flora reserve or special management zone under the *Forestry Act 2012*, is not eligible to create credits. For other land types, the Minister considers current or previous uses of the land and if there are existing legal obligations to manage the land. These provisions seek to ensure that biodiversity credits are

not generated for management actions that a landholder is already legally required to complete, that is, to ensure 'additionality'.

The BAM contains further additionality considerations. For example, Part 11.9 reduces credit calculations by 20% if land is reserved under Part 5 of the *Crown Land Management Act 2016* or classed as community or operation land under the *Local Government Act 1993*. Credits are also reduced if an existing BSA that is being actively managed is varied to create additional credits.

Issues

These provisions may be unnecessarily restricting the supply of biodiversity credits and may not be evaluating true 'additionality', by failing to properly assess underlying legal obligations for site management.

The *National Parks and Wildlife Amendment Bill 2021*, which was not passed, gave consideration to the development of an additionality test that would allow credits to be generated on national park land. The test aimed to ensure there was no reward for failing to deliver routine park management.

Allowing credits to be generated on park could allow for impacts to national parks to be offset within the park. This would avoid a transfer of biodiversity values from public to private land. If a decision was made to allow land acquired by the National Parks and Wildlife Service to participate in the supply of credits, the land acquisition business case, as a matter of good practice, should include costs associated with restoration and predicted revenue from credit creation.

Other additionality issues have been raised with the Review Panel, including the consequences of tests applied to established biodiversity stewardship sites. The Review Panel heard that these tests discourage the creation of species credits, for which there is large demand but limited supply.

Allowing credit creation across all land tenures and reviewing the additionality provisions may generate an additional supply of credits and enhanced biodiversity outcomes across all land types.

Recommendation 39: Review the additionality provisions of the Act, Regulation and Biodiversity Assessment Method. Consider allowing all land types to participate in the supply of credits, subject to strict application of transparent additionality principles. If public lands are used to generate credits, require independent review of the outcomes achieved, with public reporting.

Biodiversity Stewardship Payments Fund

How it currently works

Total Fund Deposits are paid into the Biodiversity Stewardship Payments Fund when credits are sold. Through the BCT, this fund then makes annual payments to the landholder to cover costs of land management under the BSA management plan.

Issues

Current requirements for managing the Biodiversity Stewardship Payments Fund are complex, and risks associated with fund management are primarily borne by landholders. The framework should be simplified to support an adequate Biodiversity Stewardship Payments Fund over time and ensure residual risk is borne by the NSW Government rather than landholders.

Recommendation 40: Amend the Act to increase administrative efficiencies and optimise management of the Biodiversity Stewardship Payments Fund. This may include allowing the Biodiversity Stewardships Payments Fund to be managed as a single fund with subaccounts.

PART 3

Intersections with other Acts

Review findings

The interplay of state and national legislation and the roles and responsibilities of agencies are complex. In most cases, these intersections do not accord primacy to environmental considerations, and result in outcomes that are not consistent with, and do not support, nature positive outcomes.

Getting to nature positive will require whole of government action and accountability. Legislative reform and corresponding changes to administrative arrangements may be required to align relevant Acts with a nature positive outcome

While not an exhaustive list, the Review Panel identified the following examples of legislation where intersections impact biodiversity outcomes.

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The EPBC Act seeks to protect the environment, in particular matters of national environmental significance. The EPBC Act is undergoing a significant reform process to achieve nature positive outcomes, with wide ranging implications for NSW.

While the review of *Biodiversity Conservation Act 2016 (BC Act)* cannot await outcomes of the EPBC Act reform process, the implementation of reforms in NSW should consider the Australian Government's reforms and deliver alignment and streamlining where this does not detract from NSW achieving its biodiversity conservation objectives.

Biodiversity Offsets Scheme intersections with other Acts

The impacts of development on biodiversity are managed under many different policies and legislation, not just the Biodiversity Offsets Scheme. Additional reviews and reforms will likely be needed to ensure alignment across arrangements. The following are just two examples of the complexity of intersecting legislation.

Environmental Planning and Assessment Act 1979

Some legacy development consents were granted before the BC Act commenced and can proceed with no biodiversity assessment or offsetting because these requirements did not exist when they were approved. There are no legal options to stop these developments proceeding if the proponent had physically commenced work within five years of approval being granted.

To ensure development proceeds in line with current social, cultural and environmental standards, the Review Panel suggests the government should consider whether a periodic refresh of approvals or expiry on new development applications should be required.

Aboriginal Land Rights Act 1983 (ALR Act)

The ALR Act seeks to compensate Aboriginal people for dispossession and support economic self-determination through the return of land. To deliver these objectives, the ALR Act establishes Local Aboriginal Land Councils (LALCs) to acquire and manage land on behalf of Aboriginal communities and to achieve long-term economic outcomes for these communities. The ALR Act requires LALCs to prepare Community, Land and Business Plans that describe the aims of LALCs and strategies by which they can be achieved.

The land claims process does not consider potential biodiversity constraints of claimable land. Returned land is restricted to claimable Crown land and often has high biodiversity value, having been preserved from development. Credit requirements can be high on these lands, reducing the social and economic benefits that developing the land could provide for Aboriginal communities.

The Review Panel heard there is strong concern the objectives of the ALR Act and the BC Act do not align when a LALC seeks to develop returned land. There is no clear government position on which Act should be prioritised.

The Review Panel suggests government should consider what arrangements would better support application of the Biodiversity Offsets Scheme on land subject to a successful land claim under the ALR Act, for example, paying for credit obligations.

Land clearing

Consistent with its Terms of Reference, the Review Panel examined the connection of the LLS Act with the BC Act. It was advised that:

- There has been an increase in the area and rate of woody native vegetation land clearing compared to the rate observed in the period 2009-2017.
- Over 60% of all native vegetation clearing on Rural Regulated Land is “unallocated” – in other words, no specific statutory authority can be identified for this clearing.
- Established ‘set aside’ requirements under the Land Management (Native Vegetation) Code do not fully compensate for clearing under the Code. For example, the area of vegetation protected under a set aside under the LLS Act from 2018 – 2021 is only 71,113 hectares.
- A further 642,675 hectares of native vegetation has been approved to be cleared, but those approvals have not yet been activated. This includes approval to clear 525,865 hectares of invasive native species (INS).
- As INS accounts for a large proportion of clearing, it is important that it does not lead to further loss of biodiversity and environmental values. Auditing and verification of compliance with the INS standards is essential and needs to be strengthened to ensure that INS clearing is achieving environmental benefits.
- Lack of access to the Native Vegetation Regulatory map creates uncertainty for landholders of the approvals required for managing vegetation across their property. This can lead to inadvertent non-compliance.
- The regulatory compliance mechanisms for native vegetation clearing, including investigation and enforcement powers, are contained within the BC Act. Several restrictions are applied to these powers when used for investigating LLS Act matters. These include a higher level of approval before entering land to undertake investigations, and a protection from self-incrimination. These restrictions do not apply when the BC Act’s powers are used to investigate BC Act matters.
- The BC Act allows for remediation orders, including those issued in response to a breach of the LLS Act, to be issued only to a person. This creates difficulties for ongoing remediation and compliance if a remediation order recipient sells the land. A legislative amendment allowing remediation orders to be registered on title to run with the land would provide for improved remediation outcomes by passing the remediation obligations to future owners.

- Greater flexibility in resolving compliance matters could be provided by an amendment to the BC Act to allow the Environment Agency Head as well as the BCT to enter into conservation agreements. This mechanism would allow areas similar to an LLS Act set aside to be established in perpetuity as a means of resolving a compliance matter. This would result in landholders who unlawfully cleared having ongoing obligations similar to landholders who approached *Local Land Services* (LLS) for the necessary approvals prior to clearing.
- Recent improvements in the processing of satellite imagery have allowed for close to real time monitoring of native vegetation clearing. A significant increase in resources for landholder support, monitoring and compliance is required to effectively detect, in close to real time, and investigate clearing events that have no clear statutory authority. Additional resources will also ensure landholders receive early and constructive advice and support routine compliance and auditing to ensure permit conditions are met.
- Efficient administration of the land management framework and promotion of voluntary compliance requires LLS and the Department to work closely together as co-delivery partners. LLS is primarily responsible for extension, engagement and approvals, with the Department responsible for investigation and enforcement. There are opportunities for the two agencies to work more closely to support landholders in voluntarily complying and to ensure consistent messaging. This includes monitoring and auditing of landholder compliance with approvals and set-aside management obligations.
- To improve overall reporting on land clearing, investigations should be prioritised on how to appropriately capture biodiversity values of the immature regrowth of cleared native vegetation.

The 2020 NSW Audit Office's performance audit and the NRC's report on land management also found that monitoring and compliance frameworks need to be strengthened and the lack of a public map reduces clarity and certainty for landholders and increases the risk of unlawful clearing.

While the then government supported the recommendations of the performance audit and supported, or provided in-principle support for, the majority of the NRC's report recommendations, the Review Panel observed that issues highlighted through these processes still exist and have not been sufficiently resolved. This includes ongoing limitations to the oversight of authorisations for land clearing and limited monitoring and enforcement of compliance with the Land Management (Native Vegetation) Code.

Bushfire mitigation and preparedness - Rural Boundary Clearing Code

The Review Panel acknowledges the critical role that bushfire mitigation and preparedness plays in reducing risks to property, community and the environment. The NSW Government introduced the Rural Boundary Clearing Code (RBCC) under the *Rural Fire Act 1997* with the intent to simplify vegetation management for rural landholders, reducing bushfire risk.

The Review Panel notes that by allowing property boundary clearing of 25 metres without onsite approval, or even notification of clearing, and little consideration of environmental impacts, the provisions of the RBCC are inconsistent with nature positive outcomes. The Review Panel would like to see risks to biodiversity reduced without jeopardising the policy objective of the RBCC.

Public and Private Native Forestry

The Review Panel heard that implementation and management of public and private forestry in NSW is complex, with numerous Acts and instruments involved in regulation to safeguard the environment from forestry operations.

The Review Panel acknowledge there are a number of previous and current forestry related reforms, audits and inquiries, including a [NSW Audit Office audit of native forest regulation](#) report released on 22 June 2023, and suggests government consider the impacts of native forestry on achieving a nature positive ambition.

Marine management

The management of marine ecosystems is impacted by multiple acts, including the *Marine Estate Management Act 2014*, *Fisheries Management Act 1994* and BC Act.

The Review Panel heard that the interaction of the Acts creates some regulatory uncertainty for identifying and managing threats, particularly for marine mammals.

The Review Panel notes that the responsibility for assessing the conservation status of species and ecological communities in NSW is split between two scientific entities—the TSSC established under the BC Act and the Scientific Committee under the *Fisheries Management Act 1994*. By bringing these experts together, a more comprehensive and holistic understanding of extinction risk could be achieved.

Biosecurity, pests and weeds

Management of biosecurity issues, including pests and weeds, is outlined in the *Biosecurity Act 2015*. The Review Panel notes that management of feral animals, pests and weeds is a high priority and requires integration across all tenures.

The Review Panel notes the government’s recent engagement of an interim Biosecurity Commissioner who will guide the formation of an independent biosecurity commission and commence work to better understand the extent of pests and weeds on public lands.

Recommendation 55: Consider whether the current institutional arrangements could be improved to ensure environmental considerations have the primacy required for achieving a nature positive outcome.

Recommendation 56: Consider legislative reform to align relevant Acts with a nature positive outcome.

Recommendation 57: Mandate reporting requirements for public authorities to demonstrate progress towards nature positive.

Recommendation 58: Consider including a legislative amendment allowing remediation orders to be registered on title to improve remediation outcomes by passing the remediation obligations to future owners.

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